

INSIGHTS FROM EMERGING MARKETS

MSMEs and Digital Tool
Use Amidst the COVID-19
Pandemic

MEXICO COUNTRY BRIEF



Shaping a more livable world.

February 2022

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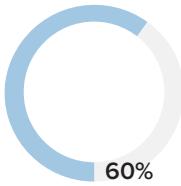
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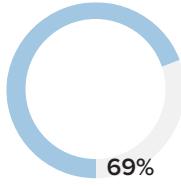
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EXECUTIVE SUMMARY

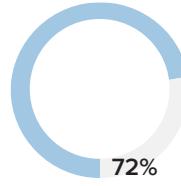
KEY FINDINGS



More than half (60 percent) of surveyed micro, small, and medium enterprises (MSMEs)ⁱ reported that they used digital tools² for business purposes in the past year since COVID-19.



Surveyed online MSMEs looked favorably on digital tool use during the pandemic: more than half (69 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19.³



Surveyed online MSMEs recognized the help that digital tools provided in adapting to the COVID-19 environment: more than half (72 percent) of surveyed online MSMEs reported that Facebook apps⁴ helped them adapt to the COVID-19 environment.

A new survey conducted by DAI and Ipsos from November to December, 2021 found that more than half (60 percent) of surveyed MSMEs were online, meaning that they had reported using digital tools (defined here as internet-based technologies) for business purposes in the past year since COVID-19.^v In addition, survey results found that surveyed MSMEs increased their use of digital tools for business purposes in the past year since the pandemic; 47 percent of surveyed MSMEs reported that they had ever used digital tools

for business purposes prior to the COVID-19 pandemic, which increased to 60 percent of surveyed MSMEs since COVID-19.^{vi} Surveyed MSMEs also recognized that digital tools helped their business adapt to the COVID-19 environment. For example, more than half (69 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19 and 72 percent of surveyed online MSMEs reported that Facebook apps helped them adapt to the COVID-19 environment. More

ⁱ This brief uses the term “micro, small, and medium enterprises” (MSMEs) to refer to the businesses surveyed for this research, in line with the terminology used by multilateral institutions such as the International Finance Corporation and the United Nations. Though the Government of Mexico officially classifies MSMEs by a businesses number of employees, DAI applied a standardized definition for consistency across all survey countries, based on the number of full-time, part-time, or seasonal employees or workers (including the respondent): micro (one employee), small (two to nine employees), and medium (10 to 249 employees).

ⁱⁱ “Digital tools” refers to internet-based technologies and social media. This is a broad term that includes the use of the internet in any of the following activities: social media platforms such as Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram. Other social media platforms such as Twitter, TikTok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, and YouTube. Other messaging applications such as Viber, Line, WeChat, QQ and Telegram. Business software or cloud computing (for example, Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, Amazon Web Services, etc). E-commerce websites, such as Amazon, Alibaba, Etsy, Mercado Libre or Kichink. Email, such as Gmail, Hotmail, or Yahoo. Mobile banking and digital payments, such as PayPal, Venmo, MercadoPago or CoDi. Videoconferencing, such as Zoom, Skype, Google Hangouts or Microsoft Teams.

ⁱⁱⁱ Not all MSMEs who reported ever using digital tools for business purposes were considered “online” for the purposes of this survey. Surveyed MSMEs that did not report using digital tools in the past year were considered “offline,” regardless of their use of digital tools over a year ago and/or prior to the COVID-19 pandemic. Because this subset of MSMEs no longer actively uses digital tools, they are not considered online MSMEs.

^{iv} The term “Facebook apps” refers to Facebook, WhatsApp, and Instagram.

^v This survey collected evidence directly from 1,000 MSME owners and top-level managers in Mexico to understand how MSMEs have used digital tools to carry out business activities, how their digital tool use changed during the COVID-19 pandemic, and the challenges both offline and online MSMEs face in using digital tools.

^{vi} Difference in use of digital tools for business purposes in the past year since COVID-19 and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

specifically, Facebook apps were used by surveyed online MSMEs to communicate with customers (46 percent), market to customers (40 percent), communicate with suppliers (35 percent), and do customer research (31 percent) in the past 30 days.

Surveyed online and offline MSMEs reported facing similar difficulties in using digital tools for business purposes. The two most cited difficulties by surveyed online and offline MSMEs were the same, a lack of knowledge (12 percent and 23 percent, respectively) and poor or no internet connectivity (nine percent and 21 percent, respectively). These similarities indicate that public, private, and development sector stakeholders can provide complimentary assistance to improving online MSMEs use of digital tools while also reducing difficulties that offline MSMEs face. Furthermore, these

two difficulties highlight the importance of addressing MSMEs digital literacy as well as structural issues such as internet access.

With concentrated efforts by policymakers and other stakeholders, Mexico's MSME sector will be well-positioned to integrate and harness the power of digital tools to improve business outcomes and build resilience to future economic shocks. These efforts will ensure that entrepreneurs and business owners across the MSME sector can equitably access and use digital tools to support key business functions. This will, in turn, enable Mexico to accelerate its inclusive economic growth outcomes aligned to the United Nations Sustainable Development Goals (SDGs), a collection of 17 interlinked global development goals agreed to by United Nations Member States in 2015.

METHODOLOGY OVERVIEW

This research was conducted as part of a broader cross-national study of digital tool usage across emerging markets in North America, South America, South Asia, and Southeast Asia. This report provides an overview of findings from interviews that Ipsos conducted with 1,000 micro, small, and medium enterprises (MSMEs) in Mexico via computer-assisted personal interviewing (CAPI) from November 15 to December 2, 2021. Eligibility for the survey was restricted to owners or top-level managers of businesses with 249 or fewer employees operating from a storefront, booth, or with signage. As such, home-based businesses and other businesses without obvious storefronts, booths, and/or signage were not captured in the sample. Official business statistics from the INEGI National Statistical Directory of Economic Units (DENUE) 2021^{vii} were used to allocate the sample across three categories: micro (one employee), small (two to nine employees), and medium (10 to 249 employees) businesses.^{viii} A random walk method was implemented to conduct interviews in six of Mexico's regions. The final survey results presented in this report were weighted based on geography and differential non-response rates by urbanicity and gender of respondent. Due to the limitations of the sampling and availability of official statistics, the sample should not be considered to be representative of formal and informal businesses in Mexico. A complete explanation of the sample design and research methodology is found in [Appendix I](#).

^{vii} Across all business size groupings, employees include the respondent (an owner or top-level manager of the MSME), any full-time employees or workers, and any part-time or seasonal employees or workers.

INTRODUCTION AND BACKGROUND

Mexico is the second-largest economy in Latin America², with a sizeable micro, small, and medium enterprise (MSME)^{viii} sector underpinning its consistent growth, until the COVID-19-induced economic slowdown in 2020.³ By allowing some MSMEs to quickly pivot online and maintain their core business functions⁴, digital tools^{ix} (defined here as internet-based technologies) have become increasingly important to Mexico's MSME community during the pandemic.⁵

A new survey conducted by DAI and Ipsos in November and December, 2021 collected evidence directly from 1,000 MSME owners and top-level managers in Mexico^x to understand how MSMEs have used digital tools to carry out business activities, how their digital tool use changed during the COVID-19 pandemic, and the challenges both offline and online MSMEs faced in using digital tools.^{xi} Research findings also delve into differences in digital tool use across key business segments within Mexico, such as MSMEs that were women-owned, MSMEs in different business sectors, and the differences between microenterprises, small, and medium-sized enterprises.^{xii}

When entrepreneurs across the MSME sector can equitably access and use digital tools in support of key business functions, Mexico will accelerate its inclusive economic growth outcomes aligned to the United Nations Sustainable Development Goals (SDGs), a collection of 17 interlinked global development goals agreed to by United Nation Member States in 2015.



How this research aligns with the Sustainable Development Goals (SDGs)

In 2015, United Nations Member States adopted 17 Sustainable Development Goals (SDGs) as a cornerstone of their 2030 Agenda for Sustainable Development, articulating a shared vision of urgent global priorities for the planet and its people. Recognizing the importance of their urgent call to action, this survey framework and findings tie back to multiple SDGs to inform policy and programs targeting these global goals. After assessing how online and offline MSMEs conducted basic business functions, the survey identified challenges that such MSMEs faced regarding their digital tool usage, or lack thereof. These insights tie to SDG 9: Industry, Innovation, and Infrastructure, which calls for a significant increase in access to information and communications technology and for universal and affordable internet access. The survey also looked at how online MSMEs used digital tools for business purposes; specifically, it explored how their digital tool usage changed during the COVID-19 pandemic. By examining how MSMEs developed their economic resilience through the use of digital tools during the pandemic, this line of inquiry links to SDG 1: No Poverty and SDG 8: Decent Work and Economic Growth. Reporting on the women-owned MSME segment also sheds light on SDG 5: Gender Equality, with women-led enterprises using digital tools to enter the marketplace and contribute to the global economy. By concluding with suggested interventions for public, private, and development sector actors to address MSME challenges in using digital tools, the spirit of the survey embodies SDG 17: Partnerships for the Goals.

^{viii} This brief uses the term "micro, small, and medium enterprises" (MSMEs) to refer to the businesses surveyed for this research, in line with terminology used by multilateral institutions such as the International Finance Corporation and the United Nations. Though the Government of Mexico officially classifies MSMEs by a businesses number of employees, DAI applied a standardized definition for consistency across all survey countries, based on the number of full-time, part-time, or seasonal employees or workers (including the respondent): micro (one employee), small (two to nine employees), and medium (10 to 249 employees).

^{ix} "Digital tools" refers to internet-based technologies and social media. This is a broad term that includes the use of the internet in any of the following activities: social media platforms such as Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram. Other social media platforms such as Twitter, TikTok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, and YouTube. Other messaging applications such as Viber, Line, WeChat, QQ and Telegram. Business software or cloud computing (for example, Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, Amazon Web Services, etc) E-commerce websites, such as Amazon, Alibaba, Etsy, Mercado Libre or Kichink. Email, such as Gmail, Hotmail, or Yahoo. Mobile banking and digital payments, such as PayPal, Venmo, MercadoPago or CoDi. Videoconferencing, such as Zoom, Skype, Google Hangouts or Microsoft Teams.

^x This survey collected evidence directly from 1,000 MSME owners and top-level managers in Mexico. See Appendix I for more details on survey methodology.

^{xi} Not all MSMEs who reported ever using digital tools for business purposes were considered "online" for the purposes of this survey. Surveyed MSMEs that did not report using digital tools in the past year were considered "offline," regardless of their use of digital tools over a year ago and/or prior to the COVID-19 pandemic. Because this subset of MSMEs no longer actively uses digital tools, they are not considered online MSMEs.

^{xii} Research findings reported in this series should not be considered representative of country MSMEs due to the limitations of the surveys. See methodology appendices for more information.

COVID-19 AND MSMEs IN MEXICO

The COVID-19 pandemic severely impacted Mexico's economy, with 2020 recording the largest single-year gross domestic product (GDP) contraction (-8.2 percent) since the Great Depression.⁶ While economic indicators in 2021 signal the economy is beginning to recover, uncertainties surrounding supply chain delays, rising inflation, and possible interest rate hikes could derail the recovery and hamper GDP growth once again.⁷ The economic downturn was especially challenging for Mexico's small and medium enterprises (SMEs)^{xiii}, which account for more than two-thirds of all business activity and 78 percent of employment.⁸ According to Mexico's National Institute of Statistics and Geography (INEGI), more than one million micro, small, and medium enterprises (MSMEs) closed down in 2020, with many more expressing uncertainty about their future prospects due to decreases in income, low demand, and input shortages.⁹ According to the INEGI, MSMEs in non-financial private service establishments were the most affected by business closures, followed by businesses in trade, and manufacturing.¹⁰

To cope with the pandemic's economic disruptions, some of Mexico's MSME community have integrated various digital tools into their business. For example, according to a 2021 survey of micro and small businesses (MSBs)^{xiv} by Visa, more than a third of surveyed MSBs in Mexico increased their use of digital payment platforms to adapt to the pandemic.¹¹ Additionally, a 2021 report by Microsoft found that 42 percent of surveyed SMEs in Mexico implemented substantive technological changes in their operations during the pandemic.¹² Nevertheless, Mexico's MSMEs are still in the early phase of their digital transformation, providing policymakers, private sector actors, and development sector professionals with the opportunity to further assist this important group of businesses in becoming more comfortable with digital tools and expanding their use.

^{xiii} If citing other literature that uses another term to refer to MSMEs, such as small and medium enterprise (SME), small and medium-sized business (SMB), or micro and small businesses (MSBs) we use the term cited in the source document. This is why the term "small and medium-sized enterprises (SMEs)" appears here.

^{xiv} If citing other literature that uses another term to refer to MSMEs, such as small and medium enterprise (SME), small and medium-sized business (SMB), or micro and small businesses (MSBs) we use the term cited in the source document. This is why the term "micro and small businesses (MSBs)" appears here.

SAMPLE OVERVIEW

This survey had 1,000 MSME respondents comprised of business owners and top-level managers; the below percentages provide detail on the sample.



Gender

71% of MSMEs reported that the business had **female owner/s**

55% of MSME respondents were **female**

45% of MSME respondents were **male**



Urbanicity

99% of MSMEs were located in **urban areas**

1% of MSMEs were located in **rural areas**

0% of MSMEs were located in **suburban areas**



Sector

12% of MSMEs reported that their primary product or service was in the **hospitality** sector

5% of MSMEs reported that their primary product or service was in the **manufacturing and industry** sector

38% of MSMEs reported that their primary product or service was in the **retail and e-commerce** sector

4% of MSMEs reported that their primary product or service was in the **professional services** sector

4% of MSMEs reported that their primary product or service was in the **agriculture and food production** sector



Customer base

82% of MSMEs reported that their business primarily served **consumers**

16% of MSMEs reported that their business served **both businesses and consumers**

2% of MSMEs reported that their business primarily served **other businesses**



Business owner education^{xv}

79% of MSMEs had business owners with a **secondary education or higher**

8% of MSMEs had business owners with **less than a secondary education**



Age of business owner

60% of MSMEs had business owners **aged 18-44**

33% of MSMEs had business owners **aged 45+**



Bank account access

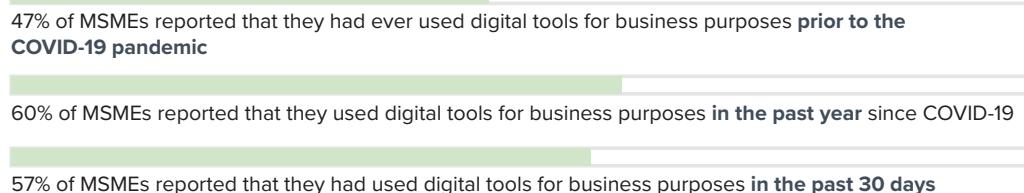
28% of MSMEs reported that they had access to a **bank account**

MSMEs AND DIGITAL TOOL USE: SNAPSHOT IN TIME

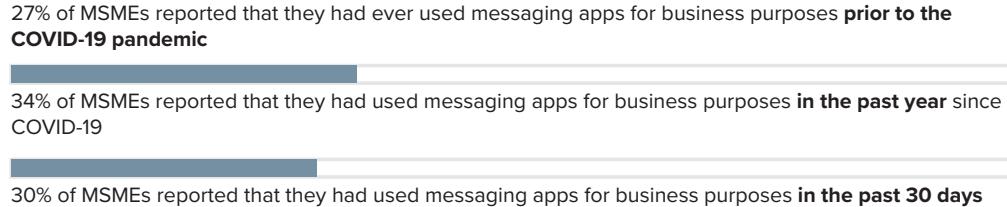
Surveyed MSMEs in Mexico have increased their use of digital tools for business purposes in the past year since the COVID-19 pandemic.^{xvi} Prior to the pandemic, less than half of surveyed MSMEs reported that they used digital tools for business purposes, but in the past year, more than half of surveyed MSMEs reported using digital tools. Furthermore, email was frequently cited as a commonly used digital tool, and more than half of surveyed online MSMEs accessed the internet through a mobile phone.



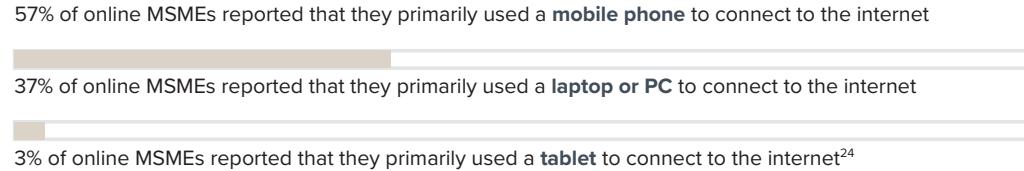
Less than half of surveyed MSMEs reported using digital tools for business purposes before the COVID-19 pandemic, but have markedly increased their use of digital tools during the past year and past 30 days:^{xvii}



Surveyed MSMEs cited email as a frequently used digital tool during all three time periods:



More than half of surveyed online MSMEs used a mobile phone to connect to the internet, while a minority used a laptop or PC:^{xviii}



xvi Difference in use of digital tools for business purposes in the past year since COVID-19 and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

Difference in use of digital tools for business purposes in the past 30 days and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

xvii Difference in use of digital tools for business purposes in the past year since COVID-19 and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

Difference in use of digital tools for business purposes in the past 30 days and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

xviii Difference in use of a laptop or personal computer as primary device to connect to internet and use of a mobile phone as primary device to connect to internet is statistically significant per Chi-squared goodness of fit test, p < .05.



Surveyed women-owned MSMEs increased their digital tool use for business purposes in the past year by a larger margin than surveyed men-owned MSMEs

According to survey results, less than half (44 percent) of surveyed women-owned MSMEs reported that they had used digital tools for business purposes prior to the COVID-19 pandemic, but in the past year since COVID-19, more than half (58 percent) of surveyed women-owned MSMEs reported that they had used digital tools for business purposes.^{xix} This finding about an increase in digital tool use amongst surveyed women-owned MSMEs in the past year since COVID-19, coincides with external research. For example, a June 2021 report from Women's World Banking, reported that the pandemic has accelerated women entrepreneurs' use of digital tools in Mexico.¹³

In addition, an increase in the use of digital tools for business purposes was also present in surveyed men-owned MSMEs, but the percentage point increase was not as large.^{xx} More specifically, more than half (56 percent) of surveyed men-owned MSMEs reported that they had used digital tools for business purposes prior to the COVID-19 pandemic, which increased to 65 percent of surveyed men-owned MSMEs who reported that they had used digital tools for business purposes in the past year since COVID-19.^{xxi} As such, surveyed women-owned MSMEs digital tool use increased by fourteen percentage points from prior to the pandemic to in the past year, while surveyed men-owned MSMEs digital tool use increased by nine percentage points in the same time period.

Survey results also showed that surveyed women-owned and men-owned MSMEs increased their use of specific digital tools for business purposes over the same time period. For instance, 25 percent of surveyed women-owned MSMEs reported that they had used email for business purposes prior to the pandemic, which increased seven percentage points to 32 percent of surveyed women-owned MSMEs in the past year since COVID-19.^{xxii} For comparison, 34 percent of surveyed men-owned MSMEs reported that they had used email for business purposes prior to the pandemic, which increased five percentage points to 39 percent of surveyed men-owned MSMEs in the past year since COVID-19.^{xxiii}

^{xix} Among women-owned businesses, the difference between use of digital tools for business purposes prior to COVID-19 and use of digital tools for business purposes in the past year is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xx} The difference between A) the use of digital tools for business purposes prior to COVID-19 and use of digital tools for business purposes in the past year since COVID-19 among women-owned MSMEs and B) The difference between use of digital tools for business purposes prior to COVID-19 and use of digital tools for business purposes in the past year since COVID-19 among men-owned MSMEs is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xxi} Among men-owned businesses, the difference between use of digital tools for business purposes prior to COVID-19 and use of digital tools for business purposes in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xxii} Among women-owned businesses, the difference between use of email for business purposes prior to COVID-19 and use of email for business purposes in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xxiii} Among men-owned businesses, the difference between use of email for business purposes prior to COVID-19 and use of email for business purposes in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

KEY INSIGHTS FOR POLICYMAKERS



- 47% of surveyed MSMEs reported that they had ever used digital tools for business purposes prior to the COVID-19 pandemic
- 60% of surveyed MSMEs reported that they used digital tools for business purposes in the past year since COVID-19
- 57% of surveyed online MSMEs reported that they primarily used a mobile phone to connect to the internet

Prior to the COVID-19 pandemic, less than half (47 percent) of surveyed MSMEs in Mexico used digital tools for business purposes. However, in the past year since the pandemic, there was a marked increase in surveyed MSMEs use of digital tools. More specifically, 60 percent of surveyed MSMEs reported that they used digital tools for business purposes in the past year since COVID-19, and 57 percent of surveyed MSMEs reported that they had used digital tools for business purposes in the past 30 days.^{xxiv} These survey results indicate that surveyed MSMEs have not only increased their use of digital tools since the pandemic, but that digital tool use from the past 30 days remains higher than prior to the pandemic. Surveyed MSMEs reported using digital tools, such as email, across the three surveyed time periods, with a slight increase in usage during the pandemic. For example, 27 percent of surveyed MSMEs reported that they had ever used email for business purposes prior to the COVID-19 pandemic, and 34 percent of surveyed MSMEs reported that they had used email for business purposes in the past year since COVID-19.^{xxv}

Throughout emerging markets, mobile phones are a key way for individuals to access the internet.¹⁴ According to the survey results, surveyed online MSMEs in Mexico were no exception. More than half (57 percent) of surveyed online MSMEs reported that they primarily used a mobile phone to connect to the internet. Furthermore, survey results showed a minority (37 percent) of surveyed online MSMEs used a laptop or PC to connect to the internet, providing some evidence that a small segment of surveyed online MSMEs in Mexico have the resources and capabilities to use more advanced hardware. Nevertheless, given the large percentage of mobile phones in Mexico¹⁵ as well as the large percentage of surveyed online MSMEs who used a mobile phone for internet access; public, private, and development sector stakeholders could look for opportunities to enhance MSMEs use of mobile internet as an accessible “on ramp” for expanding digital tool use amongst offline MSMEs.

^{xxiv} Difference between the use of digital tools for business purposes prior to COVID-19 and in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

Difference between the use of digital tools for business purposes in the past year since COVID-19 and in the past 30 days is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

Difference between the use of digital tools for business purposes prior to COVID-19 and in the past 30 days is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

^{xxv} Difference between the use of email for business purposes prior to the COVID-19 pandemic and in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

Difference between the use of email for business purposes prior to the COVID-19 pandemic and in the past 30 days is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

HOW MSMEs MANAGE KEY BUSINESS ACTIVITIES

Surveyed MSMEs used a variety of both online and offline tools to manage business activities, with Facebook apps cited by a high percentage of surveyed online MSMEs for conducting various business activities about which they were asked. However, offline methods^{xxvi} had a strong foothold in surveyed MSMEs' operations, suggesting that digital tools augmented and amplified, rather than replaced, more traditional offline methods. An interview with Ale Montemayor, the founder of La Talla Perfecta, highlights how she manages her business through various digital tools. By using digital tools, she has made the shopping experience more efficient for her customers and successfully expanded her business' presence across Mexico and Latin America. See the full case study on [page 17](#).

^{xxvi}

The term "offline methods" includes face-to-face interaction; paper-based methods such as letters, fliers or billboards; and through a telephone call, SMS, or text message (does not include WhatsApp).



Large disparities were found between surveyed microenterprises, small businesses, and medium-sized businesses in their use of digital tools for business purposes

Survey results showed a noticeable difference in digital tool use for business purposes across the three MSME business sizes; microenterprise, small business, and medium-sized business. According to survey results, 27 percent of surveyed microenterprises reported that they had used digital tools for business purposes prior to the COVID-19 pandemic, compared to 48 percent of surveyed small businesses, and 70 percent of surveyed medium-sized businesses.^{xxvii} This survey finding about low digital tool use amongst surveyed microenterprises coincides with external findings, such as a 2018 report from Mastercard's Center for Inclusive Growth. According to the Mastercard report, only 14 percent of microentrepreneurs in their sample used their cell phone for business transactions despite over three-fourths of them owning a cell phone, suggesting that microentrepreneurs underutilized technology in their business.¹⁶

Although survey results did observe a noticeable increase in digital tool use for business purposes in the past year since COVID-19 among all three business sizes,^{xxviii} disparities in digital tool use still persisted between the three groups. For instance, 37 percent of surveyed microenterprises reported that they had used digital tools for business purposes in the past year since COVID-19, compared to 61 percent of surveyed small businesses, and 88 percent of surveyed medium-sized businesses.^{xxix} As such, public, private, and development sector stakeholders could focus efforts on expanding microenterprises use of digital tools in order to focus on the group with the greatest digital lag and room for improvement.

^{xxvii} Difference between microenterprise and small-sized business use of digital tools prior to COVID-19 is statistically significant per Chi-squared test of independence, $p < .05$.

Difference between microenterprise and medium-sized business use of digital tools prior to COVID-19 is statistically significant per Chi-squared test of independence, $p < .05$.

Difference between small and medium-sized business use of digital tools prior to COVID-19 is statistically significant per Chi-squared test of independence, $p < .05$.

^{xxviii} Among microenterprises, the difference between use of digital tools for business purposes prior to COVID-19 and use of digital tools for business purposes in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

Among small-sized businesses, the difference between use of digital tools for business purposes prior to COVID-19 and use of digital tools for business purposes in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

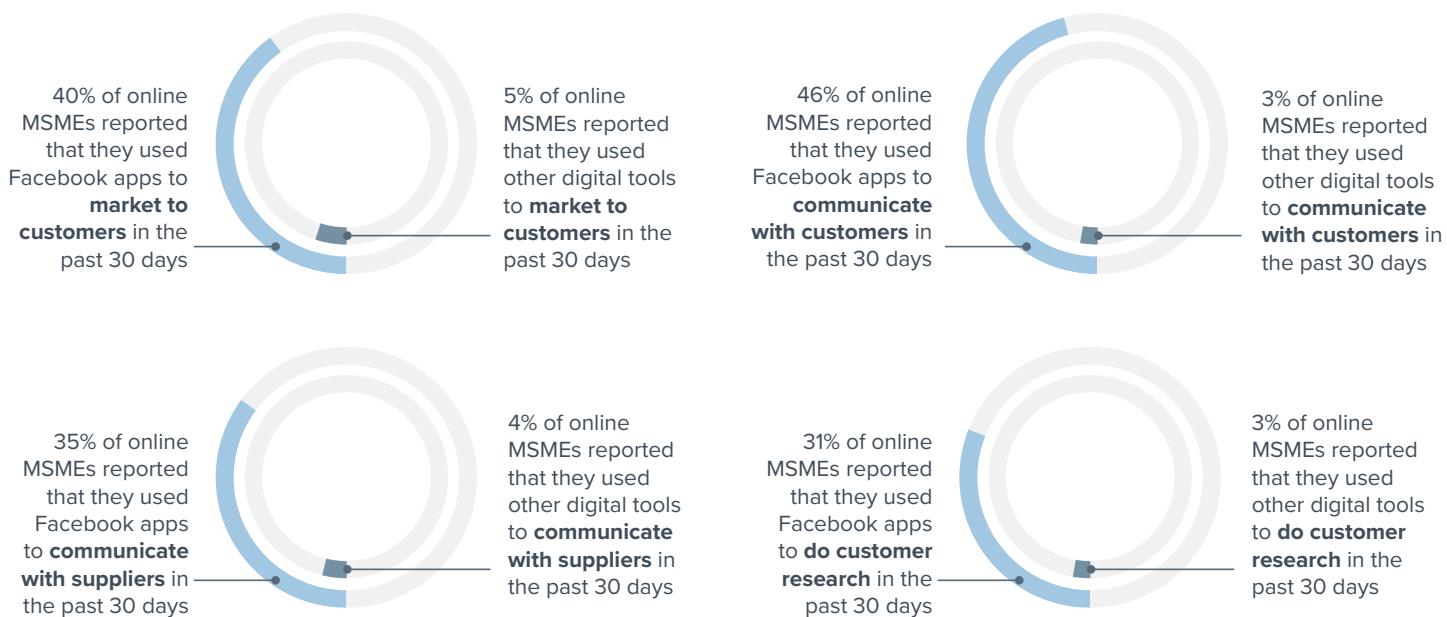
Among medium-sized businesses, the difference between use of digital tools for business purposes prior to COVID-19 and use of digital tools for business purposes in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xxix} Difference between microenterprises and small-sized businesses use of digital tools in the past year since COVID-19 is statistically significant per Chi-squared test of independence, $p < .05$.

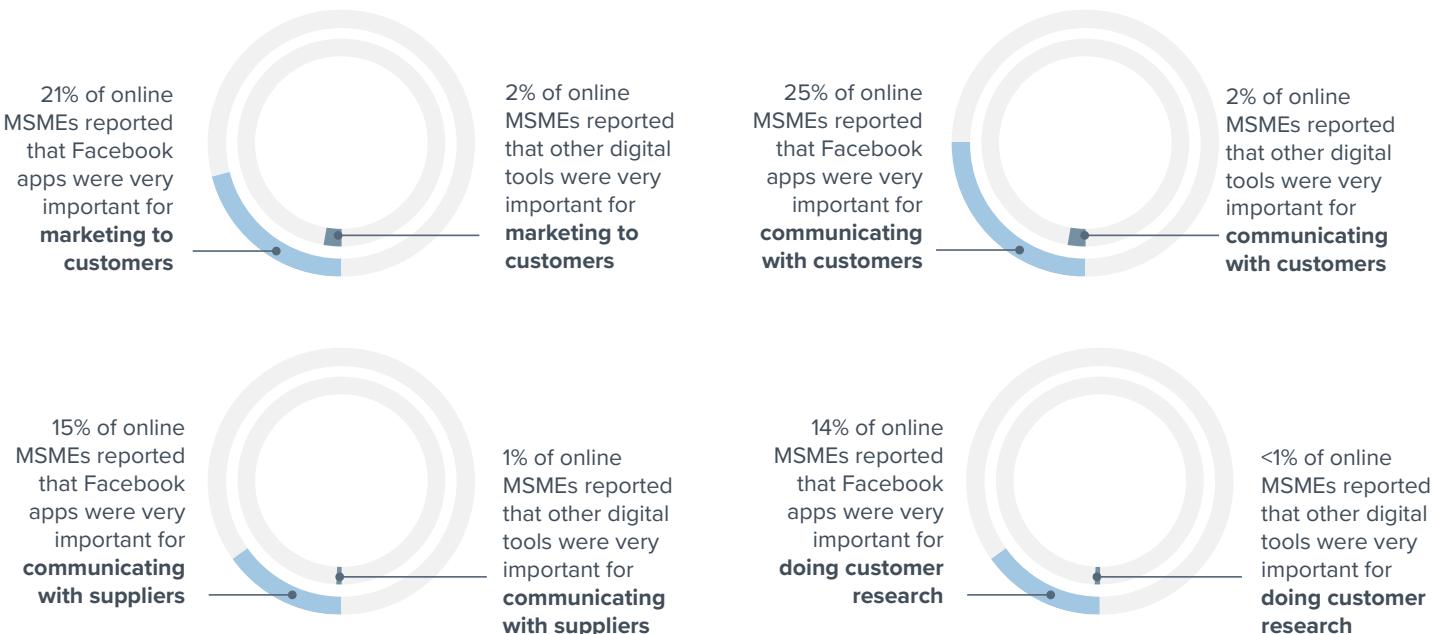
Difference between microenterprises and medium-sized businesses use of digital tools in the past year since COVID-19 is statistically significant per Chi-squared test of independence, $p < .05$.

Difference between small and medium-sized businesses use of digital tools in the past year since COVID-19 is statistically significant per Chi-squared test of independence, $p < .05$.

A higher percentage of surveyed online MSMEs reported using Facebook apps as opposed to other digital tools to conduct various business activities about which they were asked...^{xxx}



...And a higher percentage of surveyed online MSMEs stated that Facebook apps were very important for each business activity about which they were asked compared to other digital tools...^{xxxi}

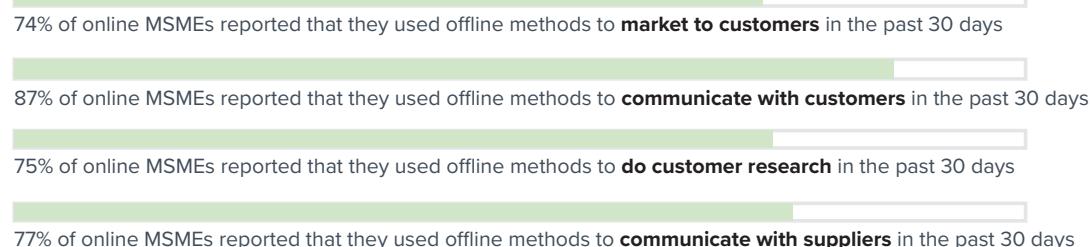


^{xxx} Difference between use of Facebook apps and use of other digital tools is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$, for the following activities: communicating with customers, marketing to customers, communicating with suppliers, doing customer research in the past 30 days.

^{xxxi} Difference between reporting Facebook apps as very important and reporting other digital tools as very important is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$, for the following activities: communicating with customers, marketing to customers, communicating with suppliers, and doing customer research.



...but offline methods^{xxxii} were the most popular method for surveyed online MSMEs to conduct each business activity about which they were asked:



Surveyed MSMEs increased their use of digital tools to sell goods and services during the COVID-19 pandemic^{xxxiii}

Selling goods and services is a key business activity for all MSMEs. In the survey results, 45 percent of surveyed MSMEs reported that they had ever used digital tools to sell goods and services. However, survey results showed an increase in the use of digital tools to sell goods and services during the COVID-19 pandemic; 27 percent of surveyed MSMEs reported that they had ever used digital tools to sell goods and services prior to COVID-19, which then increased to 40 percent during COVID-19.^{xxxiv} Additionally, survey results showed that social media use to sell goods and services also increased during the pandemic; 25 percent of MSMEs reported that they had ever used social media to sell goods and services prior to COVID-19, which then increased to 39 percent during COVID-19.^{xxxv} Taken together, these survey results show that more surveyed MSMEs were using digital tools and social media to sell goods and services in the past year since COVID-19, than prior to the pandemic.

xxxii The term “offline methods” includes face-to-face interaction; paper-based methods such as letters, fliers or billboards; and through a telephone call, SMS, or text message (does not include WhatsApp).

xxxiii Difference in use of digital tools to sell goods and services in the past year during COVID-19 and use of digital tools to sell goods and services prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

xxxiv Difference in use of digital tools to sell goods and services in the past year during COVID-19 and use of digital tools to sell goods and services prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

xxxv Difference in use of social media to sell goods and services in the past year during COVID-19 and use of social media to sell goods and services prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.



More than half of surveyed offline MSMEs reported using offline methods to conduct each business activity about which they were asked:



A minority of surveyed MSMEs reported ever having difficulty with customer-facing business activities for which they were asked:



CASE STUDY

LA TALLA PERFECTA



[www.facebook.com/
LaTallaPerfecta/](http://www.facebook.com/LaTallaPerfecta/)



[www.instagram.com/
latallaperfecta](http://www.instagram.com/latallaperfecta)



RETAIL &
E-COMMERCE



SMALL
ENTERPRISE



URBAN



SDG 5:
GENDER
EQUALITY

Founded about ten years ago by Ale Montemayor, La Talla Perfecta is Latin America's first inclusive lingerie boutique offering a wide range of bras for people of all shapes and sizes. La Talla Perfecta is personal for Ale: she founded her business because she had difficulty finding a bra that fit her well, even after traveling to specialty stores in the United States. For her, helping women find lingerie that fits well is a mission and a calling: not only does she want to help people find bras that celebrate who they are, she wants to transform Latin America's lingerie industry to become more inclusive so that all women can find well-fitting lingerie. By helping women develop emotional connections to their lingerie and feel good about the bras they wear, her company – La Talla Perfecta – is building its customer base. By empowering and giving choice to female consumers, Ale and La Talla Perfecta embody SDG 5: Gender Equality.

Prior to the COVID-19 pandemic, Ale's business had a very localized approach – La Talla Perfecta had only one brick-and-mortar store, where women came in for custom bra fittings. Complementing her physical shop, Ale had also built a small online presence for La Talla Perfecta. In addition to her shop's Facebook page, where Ale showcased her products and used Facebook Live as an educational tool, she also created a secret Facebook group called the Davis Cup Sisterhood. Eventually growing to 1,000 members, this group gave women a safe space to talk about their bodies while also acting as an organic sales tool for La Talla Perfecta. With Davis Cup Sisterhood Facebook group members uploading

memes, jokes, photographs of their lingerie, and other posts, Ale leveraged this content to drive group members to La Talla Perfecta's Facebook page where customers could see her product offerings and contact her to make sales.

However, during the COVID-19 pandemic, Ale shifted a significant amount of La Talla Perfecta's business away from her physical store to social media. For example, with her physical shop closed for seven months, she quickly pivoted to virtual bra fittings over WhatsApp video calls so that her customers could maintain the level of attention that they had come to expect from La Talla Perfecta. She also grew La Talla Perfecta's brand recognition by focusing on Instagram's storytelling capabilities. By posting many Reels and Stories, she grew her company's follower count from 5,000 to 14,000 on Instagram in just three months. Finally, Ale began to focus on automating her use of Meta products and integrating them into her other business processes. For example, she redesigned La Talla Perfecta's website, which is now integrated with Instagram and Facebook: new products posted to the website will automatically be posted to her Instagram and Facebook Shops. Her business recently started using YouBook, allowing customers to book appointments through WhatsApp, and also adopted a WhatsApp chatbot that automatically responds with information about pricing, sizing, and other general information. As a result of her pivot to the online space, La Talla Perfecta now offers nationwide service across Mexico and regularly gets enquiries from across Latin America.



In the future, Ale plans to expand into the wholesale business so she can sell directly to department stores. She also plans to leverage La Talla Perfecta's online presence to expand to other countries across Latin America. By creating a new market for size-inclusive bras and lingerie appealing to women of all shapes and sizes, Ale's business is enhancing inclusive economic growth in Mexico, aligning with SDG 8: Decent Work and Economic Growth.

"My main tool to survive the pandemic was Facebook, where I educate women, and as a result, they purchase from me."

KEY INSIGHTS FOR POLICYMAKERS



46% of surveyed online MSMEs reported that they used Facebook apps to communicate with customers in the past 30 days

25% of surveyed online MSMEs reported that Facebook apps were very important for communicating with customers

87% of surveyed online MSMEs reported that they used offline methods to communicate with customers in the past 30 days

Facebook apps were the digital tools that surveyed online MSMEs most frequently reported using to conduct business activities about which they were asked. For instance, 46 percent of surveyed online MSMEs reported that they used Facebook apps to communicate with customers in the past 30 days, compared to three percent who used other digital tools during the same time period.^{xxxvi} Facebook apps were also used to market to customers; 40 percent of surveyed online MSMEs reported that they used Facebook apps to market to customers in the past 30 days, compared to five percent who used other digital tools during the same time period.^{xxxvii} Accordingly, surveyed online MSMEs reported that Facebook apps were very important for business activities about which they were asked. For example, 25 percent of surveyed online MSMEs reported that Facebook apps were very important for communicating with customers, compared to two percent of surveyed online MSMEs who said this about other digital tools.^{xxxviii} Additionally, 21 percent of surveyed online MSMEs reported that Facebook apps were very important for marketing to customers, compared to two percent of surveyed online MSMEs who reported this about other digital tools.^{xxxix}

Nevertheless, survey findings indicated that surveyed online MSMEs in Mexico were supplementing rather than wholly replacing their use of offline methods^{xli} with digital tools. More specifically, surveyed online MSMEs reported that they used offline methods to communicate with customers (87 percent), communicate with suppliers (77 percent), conduct customer research (75 percent), and market to customers (74 percent) in the past 30 days. As such, while surveyed MSMEs did use digital tools for business activities about which they were asked, offline methods remained the dominant form of interaction. Additionally, amongst offline methods, face-to-face methods were the most common. More specifically, surveyed online MSMEs reported that they used face-to-face methods to communicate with customers (83 percent), conduct customer research (70 percent), market to customers (67 percent), and communicate with suppliers (63 percent) in the past 30 days.^{xlii} In this context, public, private, and development sector stakeholders have an opportunity to develop digital tools that can continue to support – rather than replace – the ways that MSMEs currently operate.

^{xxxvi} Difference in use of Facebook apps to communicate with customers in the past 30 days and use of other digital tools to communicate with customers in the past 30 days is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xxxvii} Difference in use of Facebook apps to market to customers in the past 30 days and use of other digital tools to market to customers in the past 30 days is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xxxviii} Difference in reporting Facebook apps as very important to communicating with customers and reporting other digital tools as very important to communicating with customers is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xxxix} Difference in reporting Facebook apps as very important for marketing to customers and reporting other digital tools as very important for marketing to customers is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xli} The term “offline methods” includes face-to-face interaction; paper-based methods such as letters, fliers or billboards; and through a telephone call, SMS, or text message (does not include WhatsApp).

^{xlii} Difference between use of face-to-face and use of Facebook apps is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$, for the following activities: communicating with customers, marketing to customers, communicating with suppliers, and doing customer research in the past 30 days.

MSMEs DURING THE COVID-19 PANDEMIC

The COVID-19 pandemic was a challenge for surveyed MSMEs in Mexico. More than half of surveyed MSMEs reported that their sales decreased compared to a typical year. To adapt to this new environment, more than half of surveyed online MSMEs used digital tools and reported that digital tools were important or essential in keeping their business running during COVID-19. An interview with Germán Santillán, the founder of Oaxacanita, showed how he used digital tools to adapt to the pandemic. By running ads on Facebook, he increased his user engagement, sales, and revenue. See full case study on [page 21](#).



Surveyed MSMEs sales decreased during the COVID-19 pandemic:

56% of MSMEs reported that their **sales decreased** during COVID-19 compared to a typical year

24% of MSMEs reported that their **sales decreased by more than half** of a typical year

45% of MSMEs reported that their **business closed at some point** during COVID-19



Well-known digital tools – such as Facebook apps, email, and mobile banking^{xlii} – helped surveyed online MSMEs adapt to the COVID-19 economic environment.^{xliii}

69% of online MSMEs reported that **digital tools** were important or essential to keeping their business running during COVID-19

72% of online MSMEs reported that **Facebook apps** helped them adapt to the COVID-19 environment

22% of online MSMEs reported that **email** helped them adapt to the COVID-19 environment

15% of online MSMEs reported that **digital payment tools** helped them adapt to the COVID-19 environment



Surveyed MSMEs' digital tool use for business purposes in different business sectors was similar and remains higher than prior to the pandemic

According to survey results, digital tool use for business purposes in different business sectors was relatively similar across two surveyed time periods, with an increase from prior to the pandemic to in the past year since COVID-19. More specifically, 58 percent of surveyed MSMEs in the professional services sector and 56 percent of surveyed MSMEs in the retail and e-commerce sector reported that they had used digital tools for business purposes in the past year since COVID-19, an increase from the 47 percent of surveyed MSMEs in professional services and 41 percent of surveyed MSMEs in retail and e-commerce who reported digital tool use prior to COVID-19.^{xliv} As such, survey results indicate that surveyed MSMEs in these two business sectors have higher digital tool use in the past year than before the pandemic occurred.

^{xlii} Mobile banking as used in this brief refers to both mobile banking and digital payments.

^{xliii} Difference in reporting Facebook apps and email as important or essential to keeping their business running during COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

Difference in reporting email and digital payment tools as important or essential to keeping their business running during COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xliv} Among businesses in the professional services sector, the difference between use of digital tools prior to COVID-19 and use of digital tools in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

Among businesses in the retail and e-commerce sector, the difference between use of digital tools prior to COVID-19 and use of digital tools in the past year since COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

CASE STUDY

OAXACANITA



[es-la.facebook.com/
Oaxacanita](https://es-la.facebook.com/Oaxacanita)



[www.instagram.com/
oaxacanita.chocolate](https://www.instagram.com/oaxacanita.chocolate)



AGRICULTURE
& FOOD
PRODUCTION



MEDIUM-
SIZED
ENTERPRISE



RURAL



SDG 8: DECENT WORK
& ECONOMIC GROWTH
SDG 12: RESPONSIBLE
PRODUCTION &
CONSUMPTION

Building on the Oaxaca region's long tradition of chocolate-making, Germán Santillán founded chocolate company Oaxacanita in 2015. He sources Oaxacanita chocolate directly from indigenous farmers and other marginalized communities, bringing together local artisans and cacao farms in Oaxaca to create a sustainable supply chain from farm to table. Specializing in traditional chocolate-making methods, his company shares Oaxaca's cultural heritage with its customer base: individual consumers, as well as other businesses throughout Mexico and beyond. Oaxacanita also collaborates with more than 30 partners dedicated to youth development and leadership in Mexico. By promoting local, small-scale production, Oaxacanita embodies SDG 12: Responsible Production and Consumption.

Digital tools – especially social media – give Germán's business the opportunity to compete with bigger companies, spread the word about Oaxacanita's work throughout local communities, and efficiently speak with different audiences. While he started with a very simple social media presence for Oaxacanita, uploading individual pictures from his phone to Oaxacanita's Facebook page, Facebook has quickly become a critical platform for Germán's business. Not only does his team regularly publish official announcements, photos, and videos to enhance their customer engagement, they also sell chocolate products directly to consumers. Germán emphasizes storytelling on Oaxacanita's Instagram page, where his team posts photos and videos about Oaxacanita's business and history to connect

with customers. The Instagram Stories feature is especially valuable to Germán's business because he can add links to other websites, like news outlets who have published stories about Oaxacanita; as is Polls because it increases Oaxacanita's engagement with followers. He has also connected WhatsApp Business to Oaxacanita's Instagram and Facebook pages, so that customers can reach Oaxacanita directly to ask questions, place orders, or get customer service. According to Germán, 80 percent of Oaxacanita's online consumers come through Meta platforms.

During COVID-19, Germán and his team worked to improve the quality of Oaxacanita's social media content and expanded their use of features they had not previously used on Facebook and Instagram. For example, they ran considerably more ads on Facebook than ever before; Oaxacanita's sales have since doubled compared to the previous year. Similarly, his team increased their use of specific Instagram features, like IG Live, Polls, and Stories, which enhanced Oaxacanita's reach from 50 people per Story to over 7,000 per Story. As a result, Germán's business now reaches over 100,000 people every month with its posts.

As an internationally recognized leader in Mexico's chocolate industry, especially for its social impact, Germán's business Oaxacanita will continue catalyzing development in Oaxaca and empowering local communities into the future. By growing an inclusive value chain for chocolate rooted in traditional methods,



Oaxacanita is helping facilitate sustainable economic development at a local level in Mexico, in alignment with SDG 8: Decent Work and Economic Growth.

"We are able to present our company in a professional way on social media. It gave us a chance and a platform to compete with bigger organizations and spread the word about what we are doing in the region and in the community."

KEY INSIGHTS FOR POLICYMAKERS



56% of surveyed online MSMEs reported that their sales decreased during COVID-19 compared to a typical year

69% of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19

72% of surveyed online MSMEs reported that Facebook apps helped them adapt to the COVID-19 environment

Survey results showed the economic slowdown stemming from the COVID-19 pandemic negatively affected more than half of surveyed MSME's sales throughout Mexico. Fifty-six percent of surveyed MSMEs reported that their sales decreased during COVID-19 compared to a typical year. This finding aligns with external research, such as a 2020 finding from the mobile banking firm Konfio, which reported that 34 percent of Mexican companies with less than 10 employees and 26 percent of those who employ between 10 and 20 people, had an impact classified as "serious" from the pandemic.¹⁷ Despite the pandemic's disruptions to sales, less than half (45 percent) of surveyed MSMEs reported that their business closed at some point during the pandemic and a minority (24 percent) of surveyed MSMEs reported that their sales decreased by more than half of a typical year. An external questionnaire conducted in 2021 by the academic journal *Revista de Comunicación de la SEECl*, reported similar results, with 66 percent of surveyed microenterprises suffering a decrease of more than 31 percent in their sales.¹⁸

During the pandemic, surveyed online MSMEs reported that digital tools, especially Facebook apps, helped them adapt to the COVID-19 environment. For instance, more than half (69 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19. In addition, more than half (72 percent) of surveyed online MSMEs reported that Facebook apps helped

them adapt to the COVID-19 environment. Furthermore, surveyed online MSME's second-most cited digital tool for helping to adapt to the pandemic was email, with a minority (22 percent) of surveyed online MSMEs reporting email was helpful in adapting to the pandemic.^{xlv} Lastly, digital payment tools were the third-most cited digital tool, with a small minority (15 percent) of surveyed online MSMEs reporting digital payment tools were helpful in adapting to the pandemic.^{xlvii} These findings suggest that while surveyed online MSMEs found digital tools important or essential to keeping their business running during the pandemic, Facebook apps were the clear preference for adapting to this new environment. These results align with findings from the *Revista de Comunicación de la SEECl* questionnaire, which reported that Facebook apps were the first digital tool that surveyed microenterprises turned to during the pandemic and that three out of 10 surveyed businesses increased their use of social networks (including Facebook) after the pandemic began.¹⁹ The survey's finding about Facebook apps usefulness during the pandemic also follows the well-documented phenomenon of technological leapfrogging, by which entrepreneurs in emerging markets bypass the use of established technologies in favor of newer ones.²⁰ With the growing importance of Facebook apps in Mexico, there may be an opening for public, private, and development sector stakeholders to increase digital tool use among Mexico's MSMEs community by using this established tool as an "on-ramp" for increased adoption of other digital tools.

^{xlv} Difference in reporting Facebook apps and email as important or essential to keeping their business running during COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xlvii} Difference in reporting email and digital payment tools as important or essential to keeping their business running during COVID-19 is statistically significant per Chi-squared goodness of fit test, $p < .05$.

BARRIERS TO THE ADOPTION AND USE OF DIGITAL TOOLS AMONG MSMEs

Both surveyed online and offline MSMEs reported that lack of knowledge and poor or no internet connectivity were difficulties their business faced in using digital tools for business purposes. Additionally, surveyed online and offline MSMEs alike reported an interest in learning more about using digital tools to market their business.



Surveyed online and offline MSMEs cited a lack of knowledge as difficulties their business faced in using digital tools:

12% of online MSMEs reported that **lack of knowledge** was a difficulty their business faced in using digital tools

23% of offline MSMEs reported that **lack of knowledge** was a difficulty their business faced in using digital tools



Surveyed online and offline MSMEs also cited poor or no internet connectivity and high cost as difficulties they faced in using digital tools:

9% of online MSMEs reported that **poor or no internet connectivity** was a difficulty their business faced in using digital tools

21% of offline MSMEs reported that **poor or no internet connectivity** was a difficulty their business faced in using digital tools

8% of online MSMEs reported that **high cost** was a difficulty their business faced in using digital tools

12% of offline MSMEs reported that **lack of customer interest** was a difficulty their business faced in using digital tools



Surveyed online and offline MSMEs cited that needing more knowledge was the most challenging difficulty^{xlvii} their business faced in using digital tools:

5% of online MSMEs reported that **needing more knowledge** was the most challenging difficulty their business faced in using digital tools

8% of offline MSMEs reported that **needing more knowledge** was the most challenging difficulty their business faced in using digital tools

Surveyed online and offline MSMEs reported an interest in learning more about using digital tools to market their business, to find new customers, and to communicate with existing customers:



^{xlvii} When asked what was their most challenging difficulty using digital, responses were coded to fit 18 options. Options: need more knowledge or know-how; poor or no internet connectivity; it is too expensive or the costs are too high; difficult to access a mobile phone, tablet, or computer; do not have consistent access to electricity; customers do not use them; suppliers do not use them; they are not relevant to this business or do not see a need for them; do not trust digital transactions; fear of information being stolen; hard to comply with legal requirements such as digital security and consumer protection standards; not enough relevant posts, articles, pictures or videos in my local language; fear of accessing inappropriate or offensive posts, articles, pictures or videos; digital tools were not effective or did not work; nothing prevents this business from using the internet, social media, or digital tools; other; don't know; refused.



A minority of surveyed offline MSMEs reported that more education and training would make them more likely to use digital tools, with training on how to use digital tools for marketing their business as the most often cited:

45% of offline MSMEs reported that **training on how to use digital tools for marketing** would benefit their business

23% of offline MSMEs reported that **more education and training** would make them more likely to use digital tools



Although the highest-confidence activity, less than half of surveyed online MSMEs reported feeling confident in using digital tools to find information or help online, while a small minority of surveyed offline MSMEs reported the same:

49% of online MSMEs reported that they **felt confident** using the internet to find information or help

13% of offline MSMEs reported that they **felt confident** using the internet to find information or help



Surveyed online and offline MSMEs reported they were either self-taught on how to use digital tools or they learned from their friends or family

The most frequently selected response by surveyed online MSMEs about how they learned to use digital tools was that they were self-taught, with friends or family being the second-most cited source for learning. More specifically, 39 percent of surveyed online MSMEs reported that they were self-taught on how to use digital tools, and 34 percent of surveyed online MSMEs reported that they learned how to use digital tools from their friends or family.^{xlviii} In comparison, the most frequently selected response by surveyed offline MSMEs about how they learned how to use digital tools was from their friends or family, with being self-taught as the second-most cited source. More precisely, 26 percent of surveyed offline MSMEs reported that they learned how to use digital tools from their friends or family, and 11 percent of surveyed offline MSMEs reported that they were self-taught on how to use digital tools.^{xlix}

^{xlviii} Difference between reporting learning digital tools as self-taught and reporting learning digital tools from friends or family among online businesses is statistically significant per Chi-squared goodness of fit test, $p < .05$.

^{xlix} Difference between reporting learning digital tools as self-taught and reporting learning digital tools from friends or family among offline businesses is statistically significant per Chi-squared goodness of fit test, $p < .05$.

KEY INSIGHTS FOR POLICYMAKERS

12% of surveyed online MSMEs reported that lack of knowledge was a difficulty their business faced in using digital tools

23% of surveyed offline MSMEs reported that lack of knowledge was a difficulty their business faced in using digital tools

53% of surveyed online MSMEs reported that they were interested in learning more about using digital tools to market their business

43% of surveyed offline MSMEs reported that they were interested in learning more about using digital tools to market their business



Surveyed offline and online MSMEs reported facing a similar set of difficulties in using digital tools for business purposes. A lack of knowledge about digital tools was the most cited difficulty that surveyed online (12 percent) and surveyed offline (23 percent) MSMEs reported facing, with five percent of surveyed online MSMEs and eight percent of surveyed offline MSMEs reporting it as the most challenging difficulty their business faced. Surveyed online and offline MSMEs both cited poor or no internet connectivity as the second most frequent challenge (nine percent and 21 percent, respectively).ⁱ These survey findings suggest that surveyed MSMEs in Mexico, both online and offline, were facing knowledge and infrastructural constraints that limited digital tools usage for business purposes. Additionally, digital tools' high cost was surveyed online MSMEs third-most cited difficulty (eight percent) and a lack of customer interest was surveyed offline MSMEs third-most cited difficulty (12 percent).ⁱⁱ As such, public, private, and development sector stakeholders could approach improving MSMEs digitalization through a multi-pronged approach that addresses digital literacy, internet connectivity and affordability.

Survey results also showed that surveyed online and offline MSMEs were interested in learning more about digital tools, particularly for marketing to customers. More specifically, roughly half (53 percent) of surveyed online MSMEs and 43 percent of surveyed offline MSMEs reported that they were interested in learning more about using digital tools to market their business. Furthermore, 45 percent of surveyed offline MSMEs reported that training on how to use digital tools for marketing would benefit their business and 23 percent of surveyed offline MSMEs reported that more education and training would make them more likely to use digital tools. These findings reinforce the importance of working directly with MSMEs to build their digital skills on specific topics of interest, such as using digital tools to market their business.

- I Difference between reporting needing more knowledge as a difficulty and reporting poor or no internet connectivity as a difficulty among online businesses is statistically significant per Chi-squared goodness of fit test, $p < .05$.
- Difference between reporting needing more knowledge as a difficulty and reporting poor or no internet connectivity as a difficulty among offline businesses is not statistically significant per Chi-squared goodness of fit test, $p > .05$.
- ii Difference between reporting poor or no internet connectivity as a difficulty and reporting high cost as a difficulty among online businesses is not statistically significant per Chi-squared goodness of fit test, $p > .05$.
- Difference between reporting poor or no internet connectivity as a difficulty and reporting lack of customer interest as a difficulty among offline businesses is statistically significant per Chi-squared goodness of fit test, $p < .05$.

CLOSING REMARKS

With continued improvements in digital literacy and internet connectivity, Mexico's MSME sector will be well-positioned to harness the power of digital tools to improve business outcomes and become more resilient to future economic shocks. Based on survey results, more than half (60 percent) of surveyed MSMEs were online, and 69 percent of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19. Nonetheless, surveyed online and offline MSMEs reported facing specific difficulties that were limiting their ability to integrate digital tools into their business. Survey findings reported that a lack of knowledge about digital tools and poor or no internet connectivity were the most frequently cited difficulties for both surveyed online and offline MSMEs. These findings present an opportunity for public, private, and development sector stakeholders to encourage the uptake of digital tools among offline MSMEs and to identify complementary solutions that address digital literacy and poor internet access.

Survey results showed that surveyed online and offline MSMEs were interested in additional training on how to use digital tools, with 23 percent of surveyed offline MSMEs reporting that more education and training would make them more likely to use digital tools. Furthermore, surveyed MSMEs expressed a desire for training to focus on how to use digital tools for marketing their business. More specifically, 53 percent of surveyed online MSMEs and 43 percent of surveyed offline MSMEs reported that they were interested in learning more about using digital tools to market their business, with 45 percent of surveyed offline MSMEs reporting that training on how to use digital tools for marketing would benefit their business. Looking ahead, it will be important for stakeholders to provide targeted, appropriate interventions to address difficulties that MSMEs reported facing. Promoting equitable digital tool usage within Mexico's MSME sector will help to build an economy that is resilient to the COVID-19 pandemic's economic disruptions as well as future economic shocks. MSMEs that are poised to innovate by using digital tools will help to foster economic growth and support Mexico in achieving its SDG commitments.

APPENDIX I: METHODOLOGY

OVERVIEW OF THE SURVEY DESIGN

Between November 15 to December 2, 2021, Ipsos conducted 1,000 in-person interviews of enterprises via computer-assisted personal interviewing (CAPI) to better understand their use of digital tools as well as their challenges and barriers to digitization.ⁱⁱⁱ

The sample for the study was defined to include and be limited to Mexico's micro (1 employee), small (2 to 9 employees) and medium (10 to 249 employees) business populationsⁱⁱⁱⁱ (summarized as "business size" in the text) using official business statistics from the INEGI National Statistical Directory of Economic Units 2021 (DENU, for its abbreviation in Spanish).²¹

The targets for business size were set to approximate the distribution of the MSME population by business size across all of Mexico, however these estimates are imperfect as the official statistics on which they are based do not include informal businesses and are not sufficiently recent to account for the impact of COVID-19 on business operations. Due to the lack of reliable official statistics, the data is not considered to be representative of the entire MSME formal and informal business population in Mexico.

Furthermore, a minimum target of 150 women-owned businesses was set for the sample. This means that if 150 interviews were not reached when the final sample size was achieved, then additional interviews would be conducted to ensure the sample included 150 interviews with women-owned businesses. In Mexico, this minimum was achieved naturally, and no oversample was required.

Finally, a maximum of 400 interviews was set for retail-sector MSMEs in order to achieve sufficient sample sizes across other sectors (e.g. agriculture, manufacturing) for analysis purposes. Enumerators were provided with soft quotas for monitoring but during the course of fieldwork a limit did not need to be imposed.

Based on these estimates, the sample targets were allocated as shown below, which also shows the actual counts achieved from fieldwork:

Target and Actual Interview Counts by Business Size, Urbanicity and Business-Owner Gender in Mexico

	BUSINESS SIZE		URBANICITY		BUSINESS-OWNER GENDER			
	TARGET	ACTUAL		TARGET	ACTUAL		MINIMUM REQUIRED	ACTUAL
Micro	150	152	Urban	896	911	Women	150	729
Small	750	743	Rural	104	89			
Medium	100	105						

ⁱⁱⁱ This is one in a series of 13 country reports about micro, small and medium-sized enterprises' (MSMEs) use of digital tools in North America, South America, South Asia, and Southeast Asia. These are accompanied by a global report, containing a complete description of the research and survey methodology.

ⁱⁱⁱⁱ Across all business size groupings, employees include the respondent (an owner or top-level manager of the MSME), any full-time employees or workers, and any part-time employees or workers.

SAMPLE DESIGN

The sample design was a multistage stratified cluster sample. This means that the population was divided into geographic blocs and then through stages, each time selecting a more limited geographic unit until the final sampling unit for interviewing was selected. The geographic and sampling units defined at each stage were the following:

- **PSUs:** Primary sampling units (PSUs) were defined as states. Of the 32 states in Mexico, six were excluded for security reasons at the time of interviewing.^{liv} The 26 states selected as PSUs with certainty (100 percent probability) were then grouped into six regional strata: Central/East, Central/North-Northeast, Central/Occidental, East/Yucatán Peninsula, North/Northwest, and South.
- **SSUs:** Secondary sampling units (SSUs) were defined as Basic Geostatistical Areas (AGEBs, for its abbreviation in Spanish). The total number of AGEBs in Mexico is 66,605; however, with the exclusion of six states, only 53,452 AGEBs were eligible for selection as SSUs.^{lv} These were then stratified by urbanicity (urban/rural)^{lvi} and after stratification, 125 were selected as SSUs with random probability proportional to the number of businesses within their PSU-Urbanicity stratum.²²
- **Individual businesses:** Within each SSU, enumerators identified businesses to contact by using the random walk method. That is, after beginning at a random spot within a demarcated geographic area in the SSU, enumerators counted off and approached every “Xth” business, where “X” was a randomly selected number provided on their interview sheets. First, they walked on the right-hand side of the street and turned right until they had walked around the entire perimeter, then they repeated the same process on the left side of the street. For the purposes of this survey, Ipsos enumerators only made contact with businesses with a storefront, booth or signage.

Once a business was identified, enumerators proceeded to gain consent for the interview. If the respondent agreed, the enumerator administered the screening questions and, if qualified, conducted the survey. If a business was not available, or the respondent requested that the interview be rescheduled, enumerators made three attempts to reach the business. If the enumerator was unable to reach the business after these three attempts, then that business was marked as a refusal.

Survey participation was completely optional, dependent on explicit respondent consent, and non-compensated. Enumerators administered the screening and survey using pre-programmed tablets for data entry, ensuring consistency in the questionnaire administration.

Sampling Statistics

The sampling statistics are as follows:

Interview Response and Refusal Rates in Mexico^{lvii}

CAPI
Contacts
Completes
Refusals
Response rate ^{lviii}
Refusal rate ^{lix}

liv The six excluded states were Baja California, Baja California Sur, Chihuahua, Sinaloa, Sonora, and Tamaulipas.

lv Of the total 66,605 AGEBs in Mexico, 13,153 were located in the six states excluded from the sample frame.

lvi In Mexico, urban and rural designations are at the “Localidad” level. Localities are considered urban if (1) it has 2,500 or more inhabitants, or (2) the locality is the head of its municipality regardless of the number of inhabitants. There is no classification for suburban in Mexico.

lvii Showing only the response and refusal rates presents a limited set of the outcomes possible. The full set of dispositions includes outcomes such as ineligible respondent (e.g. not owner or top-manager), ineligible company or suspended interview. The response rate and refusal rate calculations are not inclusive of the complete set of outcomes and therefore do not add to 100 percent.

lviii Calculated using [AAPOR Response Rate 3 methodology](#).

lix Calculated by dividing the number of refusals by the number of contacts.

Locations for Research in Mexico

The target interview count and actual interview count by region are detailed below:

Target and Actual Interview Counts by Region

REGIONS	TARGET	ACTUAL
Central – East	336	335
Central - North/Northeast	112	113
Central - Occidental	184	184
East/Yucatán Peninsula	120	120
North/Northwest	128	128
South	120	120
Total	1,000	1,000

Sample Weighting

Based on the fieldwork dispositions, Ipsos applied two weights to the raw survey data to account for regional distribution and the variation in non-response by urban and rural designations and by gender.

- **Design weight:** A weight by region was employed in Mexico to adjust the sample to be proportionate to the regional MSME business population using the DENUE statistics mentioned above.²³
- **Non-response weight:** Weights were applied by urbanicity (urban/rural) and gender of respondent by strata based on response rates. For example, if an enumerator approached a business in location X with a female respondent, and they were ultimately marked as a refusal, the enumerator would still keep track of the fact that a female respondent was approached. During weighting, location X would be weighted to reflect the number of female and male respondents who were approached. Without these weights, the survey results would be biased by propensity to respond based on respondent gender and urbanicity.

These two weights were combined to create one overall final weight applied to all data points. The design effect for Mexico is 1.01.^{ix}

Ipsos carefully considered a broad spectrum of weights to be applied. Two in particular – business-size and cross-national – were not applied. A business-size weight was not applied as there are no reliable statistics that define the proportion of businesses throughout Mexico by business size. A cross-national weight, to enable comparison across countries in this series of reports, was not applied because there were no reliable data sources that could account for sampling differences across all countries in fieldwork timing and survey modes.

Due to the limitations of the weighting strategy discussed here, the sample should not be considered to be wholly representative of formal and informal businesses in Mexico.

COVID-19 Protocols

Extensive COVID-19 protocols were observed during CAPI interviews: only 2 to 3 people were allowed at each interview location, two meters apart. Enumerators wore masks and gloves during all interviews – which they removed, cleaned, and stored or disposed of after every six hours of wear – and sanitized their hands before and after each interview.

^{ix}

The design effect is the ratio of an actual variance of an estimator that is based on a sample from some sampling design, to the variance of an alternative estimator that would be calculated (hypothetically) using a sample from a simple random sample (SRS) of the same number of elements. A design effect less than one indicates that the sample design has a smaller variance (is more efficient) than the hypothetical SRS design, whereas a design effect greater than one indicates that the sample design has a greater variance (is less efficient). Kish, Leslie (1965). "Survey Sampling". New York: John Wiley & Sons, Inc. ISBN 0-471-10949-5.

Limitations to the Survey Design

While every effort was made to ensure representativeness of the data, there were several limitations to the survey design. In terms of geography, six of Mexico's 32 states were not included in the sampling plan due to security concerns over increased violence.

Another limitation was using random walk sampling methods in urban and non-urban areas which could mean that MSMEs associated with certain characteristics might have a higher likelihood of agreeing to participate in the survey. For example, a grocery store owner would be more apt to agree to participate in a survey during slow business hours than an MSME owner engaged in physical labor. This may lead to overcoverage or undercoverage of certain business sector types. Another key coverage limitation relates to the exclusion of any household-based businesses without signage or storefronts and the geographic coverage; in-person interviews were conducted with businesses with a storefront, stand or stall and/or signage. The random walk methodology could also limit the inclusion of multiple businesses at the same location. For example, for multi-storey buildings enumerators were instructed to treat the building as part of the random walk and choose one MSME (or multiple depending on the interval and building size) from the location for screening and consent. However, if multiple businesses were operating from one space or location in the building, only one would be eligible. This limitation would also

apply to multiple businesses sharing a stand or booth as only one of the business owners or top-level managers would be screened for qualification and consent.

There were also limitations resulting from COVID-19 specific challenges. These included the impact of social distancing-related restrictions on response and completion rates and the impact of COVID-19 on respondent business outcomes and behavior. Although this study accounts for unit non-response weighting on certain characteristics, there is no way to weight on unobservables such as individual propensity to participate in a survey during a pandemic.

An additional key limitation related to weighting was the lack of post-stratification weights, particularly for national-level calculations and estimates. Without complete data on formal and informal MSMEs for benchmarking, it was not possible to implement post-survey adjustments to reflect the true composition of Mexico's MSME structure. Although the sampling process captured variations in Mexico's MSME structure regarding size, industry, and individual characteristics of business owners, any national-level figures were not adjusted or corrected to reflect other business population characteristics, such as industry or owner gender.

Finally, the use of multistage cluster sampling represents a limitation on the precision of estimates. This may have led to larger standard errors for estimation at a detriment to the overall precision of results.

NOTES ON ANALYSIS

The primary methods of analysis used in this report are ratio estimations and Rao & Scott's Chi-squared test of Independence to determine statistical significance. All questions required a response to be entered, enabling the interviewer to continue to the next question. All questions included a "don't know" option code and a "refused" option code. These were considered valid responses and were included in the base for a question. The percentage of respondents that refused to answer a question for which they were eligible ranged from zero to four percent, depending on the question.

Reported survey results were calculated with a base of all respondents (the total sample), or on all surveyed online MSMEs or surveyed offline MSMEs. The base is specified for each data point. The sample sizes of online and offline MSMEs are both smaller than the base of all

surveyed MSMEs. Certain data points may also reflect the results for a subgroup of respondents, such as women-owned businesses or those within a region.

Footnotes are included throughout the report to make note of the analyses conducted, including the corresponding statistical tests and associated outputs. For all tests of statistical significance, the results should be interpreted as levels of association and not causality. Our main criterion for determining statistical significance is the 95 percent confidence level. For each disaggregate percentage estimation highlighted in the report, the associated p-value is reported as a footnote.

Additionally, findings and results reported here should not be considered representative of Mexico's MSME sector due to the limited geographic scope of the survey, among other considerations.

APPENDIX II: SUMMARY OF MSME AND RESPONDENT CHARACTERISTICS

CATEGORICAL VARIABLES		UNWEIGHTED N	UNWEIGHTED %	WEIGHTED %	UNWEIGHTED STDError	WEIGHTED STDError
Online Status	Offline	401	40.1	39.6	1.55	1.58
	Online	599	59.9	60.4	1.55	1.58
Gender Ownership	Men-owned	267	26.7	28.2	1.4	1.48
	Women-owned	729	72.9	71.4	1.41	1.49
	Don't know	4	0.4	0.4	0.2	0.22
Urbanicity	Rural	89	8.9	1.4	0.9	0.16
	Urban	911	91.1	98.6	0.9	0.16
Business Size	Micro	152	15.2	15.5	1.14	1.19
	Medium	105	10.5	10.7	0.97	1.02
	Small	743	74.3	73.8	1.38	1.44
Business Vertical	Agriculture and food production	41	4.1	4	0.63	0.64
	Hospitality	123	12.3	12.2	1.04	1.07
	Manufacturing and industry	50	5	5.3	0.69	0.74
	Professional services	36	3.6	3.6	0.59	0.61
	Retail and e-commerce	386	38.6	38	1.54	1.51
	Other	364	36.4	36.8	1.52	1.5
Region	Centro-Este	335	33.5	35.1	1.49	0.37
	Centro-Norte & NorEste	113	11.3	10.3	1	0.36
	Centro-Occidente	184	18.4	18.4	1.23	0.39
	Este & Península de Yucatán	120	12	11.8	1.03	0.21
	Norte & NorOeste	128	12.8	12.9	1.06	0.21
	Sur	120	12	11.5	1.03	0.33
Owner Education	No formal education or less than Primary education	17	1.8	1.9	0.42	0.45
	Preparatoria	315	32.6	32.5	1.51	1.56
	Primary education	69	7.1	6.6	0.83	0.82
	Secondary education	237	24.5	23.3	1.38	1.39
	University education or higher (degree)	208	21.5	22.6	1.32	1.39
	Vocational or technical education or training	35	3.6	3.7	0.6	0.64
	Don't know	84	8.7	9.2	0.91	0.96
	Refused	2	0.2	0.2	0.15	0.17

CATEGORICAL VARIABLES		UNWEIGHTED N	UNWEIGHTED %	WEIGHTED %	UNWEIGHTED STDERROR	WEIGHTED STDERROR
Owner Age	18-24	67	6.9	6.7	0.82	0.83
	25-34	223	23.1	23.1	1.36	1.41
	35-44	306	31.6	32.1	1.5	1.56
	45-54	215	22.2	21.8	1.34	1.37
	55-64	87	9	9	0.92	0.95
	65 or older	33	3.4	3.4	0.58	0.61
	Don't know	32	3.3	3.5	0.58	0.61
	Refused	4	0.4	0.5	0.21	0.23
Respondent Education	No formal education or less than Primary education	15	1.5	1.6	0.38	0.42
	Preparatoria	429	42.9	43.6	1.57	1.62
	Primary education	65	6.5	6	0.78	0.78
	Secondary education	268	26.8	25.8	1.4	1.42
	University education or higher (degree)	195	19.5	20	1.25	1.3
	Vocational or technical education or training	25	2.5	2.7	0.49	0.53
	Refused	3	0.3	0.3	0.17	0.19
	Banked	269	26.9	27.8	1.4	1.46
Banking Status	Unbanked	678	67.8	66.6	1.48	1.54
	Don't know	40	4	4.3	0.62	0.67
	Refused	13	1.3	1.3	0.36	0.38
Respondent Role	Owner	614	61.4	60	1.54	1.52
	Top-level manager, not an owner	386	38.6	40	1.54	1.52
Client Type	Both businesses and individuals	156	15.6	15.7	1.15	1.18
	Primarily Individuals such as consumers or customers	824	82.4	82.3	1.2	1.24
	Primarily businesses	20	2	2	0.44	0.45

NUMERICAL VARIABLES	UNWEIGHTED N	UNWEIGHTED MEAN	WEIGHTED MEAN	UNWEIGHTED STANDARD DEVIATION	WEIGHTED STANDARD DEVIATION
Respondent Age ¹	1,000	36.8	36.7	11.9	11.9
Business Age ²	946	7.8	7.2	9.8	9.2
Number of Owners ³	1,000	1.3	1.3	0.7	0.7

¹ Other possible response options: Don't know (0), Refused (0)..

² Businesses in operation less than one year (88) coded as 0. Other possible response options: Don't know (53), Refused (1)

³ Other possible response options: Don't know (0), Refused (0).

ENDNOTES

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