INSIGHTS FROM EMERGING MARKETS

MSMEs and Digital Tool Use amidst the COVID-19 Pandemic

BRAZIL COUNTRY BRIEF

DAI

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December 2021

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This Final Report has been prepared solely for the purposes of studying the utilization of digital technologies in the small and medium enterprise sector in developing markets. This includes the business implications of this usage of digital technologies for accelerating and facilitating economic development, inclusion, resilience, and growth post the COVID-19 pandemic, as set out in the Contract.

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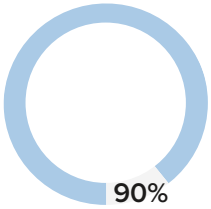
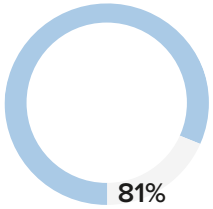
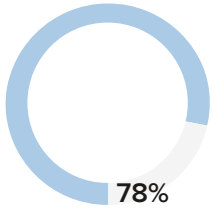


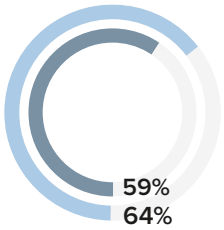
A vast majority (90 percent) of surveyed micro, small, and medium enterprises (MSMEs)[i] reported that they had used digital tools[ii] for business purposes in the past year during COVID-19.



Online respondents looked favorably on digital tool use during the pandemic: a large majority (81 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19.[iii]



Online MSMEs recognized the importance of digital tools during COVID-19: surveyed online MSMEs reported that Facebook apps[iv] (78 percent) helped them adapt to the COVID-19 environment.



Social media played a role across communication-oriented business activities: more than half of surveyed online MSMEs reported that they used Facebook apps for communicating with customers (64 percent) and suppliers (59 percent) in the past 30 days.

A new survey conducted by DAI and Ipsos from July-October 2021 found that a vast majority (90 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 during COVID-19.[v] Additionally, a large majority (81 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19. More specifically, a large majority (78 percent) of surveyed online MSMEs in Brazil reported that Facebook apps helped them adapt to the COVID-19 environment. More than half of surveyed online MSMEs reported using Facebook apps for the business activities about which they were asked, such as marketing to customers (57 percent), communicating with customers (64 percent), and communicating with suppliers (59 percent). Additionally, more than half of surveyed online MSMEs reported recently using WhatsApp for communication-oriented business activities, specifically communicating with customers (61 percent) and suppliers (57 percent).

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i This report 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. Although many countries have different official definitions of MSMEs (including Brazil, where the government officially classifies small and microenterprises by revenue), 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 (2–9 employees), and medium (10–249 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: any of the following social media platforms such as Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp or Instagram; other social media platforms such as Twitter, Tik Tok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, YouTube; other messaging applications such as Viber, Line, WeChat, and QQ, iMessenger, Telegram, Signal; 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, or Etsy, Facebook Marketplace, Magazine Luiza, Mercado Livre, OLX; email, such as Gmail, Hotmail, or Yahoo; mobile banking and digital payments, such as PayPal, Venmo, Mercado Pago, PagSeguro, PicPay; videoconferencing, such as Zoom, Skype, or Google Hangouts.

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 1,018 MSME owners and top-level managers in Brazil 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.

Both surveyed online and offline MSMEs reported facing similar difficulties when using digital tools. High cost was the most frequently reported difficulty that surveyed MSMEs reported facing in using digital tools, at 11 percent for online MSMEs and 20 percent for offline MSMEs. Lack of knowledge was the second-most frequently reported difficulty for surveyed MSMEs, with 10 percent of online MSMEs and 13 percent of offline MSMEs reporting that lack of knowledge was a difficulty their business faced in using digital tools. These findings highlight the need for targeted interventions by stakeholders in the public, private and development sectors that address common roadblocks for both online and offline MSMEs, such as information sharing and capacity building activities to expand awareness and usage of digital tools, while also addressing key barriers such as affordability.

With concentrated efforts by policymakers and other stakeholders to address the key barriers faced by both online and offline MSME segments such as affordability and digital literacy, Brazil'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 Brazil 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 South America, South Asia, and Southeast Asia. This brief provides an overview of findings from face-to-face and telephone surveys that Ipsos conducted with 1,018 micro, small, and medium enterprises (MSMEs) in Brazil via computer-assisted personal interviewing (CAPI) and computer-assisted telephone interviewing (CATI) from July 21 to October 6, 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 statistics from the Annual List of Social Information and the Brazilian Institute of Geography and Statistics, both sourced from Brazil's Ministry of Economy, were used to set targets for the number of completed surveys by categories of business size, as defined by the number of employees: micro (one employee), small (2-9 employees), and medium (10-249 employees). The sampling frame for CATI interviews included all 26 states in Brazil. For CAPI interviews, a random random walk method was implemented to conduct interviews in the Capital (urban), Metropolitan (suburban), and Interior (rural) areas within 281 of Brazil's 5,570 municipal districts, capturing businesses across key segments including owner gender, urbanicity, and business sector. Two weights were applied to the final survey results that are presented in this report: a design weight to adjust the sample to be proportionate to the number of people within each state (for both CAPI and CATI samples), and a non-response weight (CAPI only) based on geography and differential non-response rates by state, urbanicity, and gender. 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 Brazil. A complete explanation of the sample design and research methodology is found in Appendix I.

INTRODUCTION AND BACKGROUND

Bolstered by a considerable micro, small, and medium enterprise (MSME)[vi] sector, Brazil is South America's largest economy by gross domestic product (GDP).[1] During the COVID-19-related economic slowdown in 2020, digital tools (defined here as internet-based technologies)[vii] allowed some MSMEs to quickly pivot online and maintain their core business functions, thus becoming increasingly important to Brazil's MSME community during the pandemic.[2]

A new survey conducted by DAI and Ipsos from July-October 2021 collected evidence directly from 1,018 MSME owners and top-level managers in Brazil 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. Research findings also delve into differences in digital tool use across key business segments within Brazil, such as women-owned MSMEs, rural MSMEs, and microenterprises.[viii]

When entrepreneurs across the MSME sector can equitably access and use digital tools in support of key business functions, Brazil 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 Nations 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 conduct basic business functions, the survey identified challenges that such MSMEs face in regard to 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 use 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. Similarly, reporting on the manufacturing and industry sector provides insights on SDG 9: Industry, Innovation, and Infrastructure, and reporting on the agriculture and food production sector aligns to SDG 2: Zero Hunger and SDG 12: Sustainable Production and Consumption. 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.

vi This report 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. Although many countries have different official definitions of MSMEs (including Brazil, where the government officially classifies small and microenterprises by revenue), 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 (2–9 employees), and medium (10–249 employees).

vii "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: any of the following social media platforms such as Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp or Instagram; other social media platforms such as Twitter, Tik Tok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, YouTube; other messaging applications such as Viber, Line, WeChat, and QQ, iMessenger, Telegram, Signal; 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, or Etsy, Facebook Marketplace, Magazine Luiza, Mercado Livre, OLX; email, such as Gmail, Hotmail, or Yahoo; mobile banking and digital payments, such as PayPal, Venmo, Mercado Pago, PagSeguro, PicPay; videoconferencing, such as Zoom, Skype, or Google Hangouts.

viii 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 BRAZIL

The COVID-19 pandemic has presented significant challenges for Brazil's economy: its real GDP fell by 4.1% in 2020[3] and 860,000 jobs were lost in April 2020 alone.[4] With small and medium enterprises (SMEs)[ix] accounting for 98.5% of all companies in Brazil,[5] 62 percent of employment,[6] and 27 percent of Brazil's GDP,[7] MSMEs were especially hard-hit. For example, one May 2020 survey of over 10,000 MSMEs conducted by SEBRAE—a non-profit in Brazil that promotes small businesses—found that 59 percent of respondents had temporarily closed for two months and that their monthly sales had decreased 64 percent.[8] Similarly, a mid-2020 World Bank/SEBRAE survey of microenterprises and small businesses in Sao Paulo found an average 53 percent drop in revenue among respondents.[9]

In response to the COVID-19 pandemic, MSMEs in Brazil have largely increased their use of digital tools. For example, the joint World Bank/SEBRAE survey in Sao Paulo found that 22 percent of respondents reported starting to use the internet, and 60 percent reported increasing their internet use, during COVID-19.[10] Specifically about social media, 28.5 percent of respondents on the May 2020 SEBRAE survey reported starting to sell online through social media during the pandemic,[11] and 80 percent of small and medium businesses (SMBs) reported they started using or increased their usage of social media platforms when interacting with customers since the outbreak of COVID-19 on the Digital Tools SMB Survey conducted in August 2020.[12] Though the percentages vary, the evidence points to the fact that digital tools have become increasingly prominent and important within Brazil's MSME community during the pandemic.

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

SAMPLE OVERVIEW

This survey had 1,018 MSME respondents comprised of business owners and top-level managers; the below percentages provide details on the sample.

Gender

63% of MSMEs reported that the business had **female owner/s**

53% of MSME respondents were **male**

46% of of MSME respondents were **female**

Urbanicity

50% of MSMEs were located in **urban areas**

31% of MSMEs were located in **suburban areas**

19% of MSMEs were located in **rural areas**

Sector

24% of MSMEs reported that their primary product or service was in the **manufacturing and industry** sector

19% of MSMEs reported that their primary product or service was in the **hospitality** sector

17% of MSMEs reported that their primary product or service was in the **retail and e-commerce** sector

10% of MSMEs reported that their primary product or service was in the **agriculture and food production** sector

5% of MSMEs reported that their primary product or service was in the **professional services** sector

Customer Base

59% of MSMEs reported that their business **primarily served consumers**

34% of MSMEs reported that their business **served both businesses and consumers**

7% of MSMEs reported that their business **primarily served other businesses**

Business owner education

87% of MSMEs had business owners with a **secondary education or higher**

12% of MSMEs had business owners with **less than a secondary education**

Business owner age

57% of MSMEs had business owners **aged 18-44**

42% of MSMEs had business owners **aged 45+**

Bank account access

77% of MSMEs reported that they had access to a **bank account**

MSMEs AND DIGITAL TOOL USE: SNAPSHOTS IN TIME

Surveyed MSMEs in Brazil increasingly used digital tools to run their businesses during COVID-19. Surveyed online MSMEs[x] primarily used their mobile phones to connect to the internet, highlighting their importance in doing business.

Surveyed MSME use of digital tools for business purposes rose during COVID-19[xi]:

75% of MSMEs reported that they had ever used digital tools for business purposes **prior to the COVID-19 pandemic**

90% of MSMEs reported that they used digital tools for business purposes **in the past year** during COVID-19

88% of MSMEs reported that they had used digital tools for business purposes **in the past 30 days**

More than half of surveyed online MSMEs used mobile phones to connect to the internet:

67% of online MSMEs reported that they **primarily used a mobile phone** to connect to the internet

31% of online MSMEs reported that they **primarily used a laptop or PC** to connect to the internet[xii]

x 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.

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

A higher percentage of surveyed women-owned MSMEs reported using Facebook apps in the past year during COVID-19 than surveyed men-owned MSMEs

The percentage of surveyed women-owned MSMEs who reported business-related digital tool use prior to and in the past year during COVID-19 was similar to surveyed men-owned MSMEs.[xii] More specifically, 76 percent of surveyed women-owned MSMEs and 73 percent of surveyed men-owned MSMEs reported that they had ever used digital tools for business purposes prior to the COVID-19 pandemic, which increased to 91 percent for surveyed women-owned MSMEs and 88 percent for surveyed men-owned MSMEs in the past year during COVID-19.[xiii] However, the data showed significant differences in the use of specific digital tools by owner gender in the past year. For example, 85 percent of surveyed women-owned MSMEs reported using Facebook apps in the past year during COVID-19, compared to 79 percent of surveyed men-owned MSMEs–the most frequently reported answer option for each group.[xiv] Similarly, 25 percent of surveyed women-owned MSMEs reported using other social media apps in the past year during COVID-19; surveyed men-owned MSMEs reported a lower usage rate during the same time period, at 20 percent.[xv] These findings show that surveyed women-owned MSMEs used certain digital tools at a higher rate than men-owned MSMEs, which could indicate that surveyed women-owned MSMEs may have been more willing to try digital tools during COVID-19.

In line with the previously reported survey findings, similar percentages of surveyed online women-owned and surveyed online men-owned MSMEs found digital tools to be critical to their COVID-19 response. While not found to be statistically significant, 82 percent of surveyed online women-owned MSMEs and 79 percent of surveyed online men-owned MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19.[xvi] However, there were significant differences in the use of specific digital tools to adapt to COVID-19 when disaggregated by owner gender. For example, 75 percent of surveyed online women-owned MSMEs reported that WhatsApp helped them adapt to the COVID-19 environment, compared to 70 percent of surveyed men-owned MSMEs.[xvii] These findings appear to indicate that a higher percentage of surveyed online women-owned MSMEs perceived these specific digital tools to be a key part of their pandemic response.

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xii Use of digital tools prior to the COVID-19 pandemic and use of digital tools in the past year during COVID-19 by gender of owner is not statistically significant for either time period per Chi squared test of independence, adjusted $p > 0.05$.

xiii Among women-owned MSMEs, the difference in use of digital tools for business purposes in the past year during COVID-19 and use of digital tools for business purposes prior to the COVID-19 pandemic is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

Among men-owned MSMEs, the difference in use of digital tools for business purposes in the past year and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

xiv Use of Facebook apps for business purposes in the past year by gender owner is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xv Use of other social media apps for business purposes in the past year by gender owner is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xvi Reported that digital tools were important or essential to keeping business running during COVID-19 by gender owner among online MSMEs is not statistically significant per Chi squared test of independence, adjusted $p > 0.05$.

xvii Reported that WhatsApp helped the business adapt to the COVID-19 environment by gender owner among online MSMEs is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

KEY INSIGHTS FOR POLICYMAKERS

75% of MSMEs that they had ever used digital tools for business purposes prior to the COVID-19 pandemic

90% of MSMEs reported that they used digital tools for business purposes in the past year during COVID-19

67% of online MSMEs reported that they primarily used a mobile phone to connect to the internet

Survey findings demonstrated high business-related digital tool usage among surveyed MSMEs in Brazil. Three-quarters (75 percent) of surveyed MSMEs reported having ever used digital tools for business purposes prior to the COVID-19 pandemic. Surveyed MSME use of digital tools for business purposes rose significantly during COVID-19, to 90 percent, and remained nearly even at 88 percent in the past 30 days. These survey responses show that digital tools were frequently used among surveyed MSMEs in Brazil, indicating that a critical mass of MSMEs have already begun their digital transformation. The increase in number of surveyed MSMEs using digital tools for business purposes during COVID-19 also suggests that COVID-19 may have accelerated surveyed MSMEs' adoption of digital tools, which is further reinforced by survey findings such as 81 percent of online MSMEs reporting that digital tools were important or essential to keeping their business running during COVID-19. These findings also align with external research that found that 77.9 percent of Brazilian SMEs say that their relationship channels will be primarily digital in the future post-pandemic.[13]

Throughout emerging markets, mobile phones are a key way that individuals access the internet.[14] According to the survey results, surveyed online MSMEs in Brazil were no exception. More than half (67 percent) of surveyed online MSMEs reported that they primarily used mobile phones to connect to the internet. Only 31 percent of surveyed online MSMEs reported primarily using a laptop or PC for this purpose. This aligns with external research: in 2020, an estimated 74 percent of Brazilians had access to the internet, of which 58 percent accessed the internet exclusively through their phones.[15] These survey findings provide additional evidence that mobile phones are a critical business tool for surveyed MSME owners in Brazil. Enhanced MSME use of mobile internet could serve as an accessible 'on ramp' for bringing offline MSMEs online and increasing digital tool usage among online MSMEs.

HOW MSMEs MANAGE KEY BUSINESS ACTIVITIES

Surveyed MSMEs reported using a variety of both online and offline tools to manage business activities, with Facebook apps[xviii] more frequently used than other digital tools for every business activity about which MSMEs were asked. Both surveyed online and offline MSMEs, however, reported using offline methods[xix] to conduct key business activities at a higher rate than digital tools. This finding indicates that there is untapped potential to increase digital tool use among surveyed MSMEs in Brazil. An interview with the owner of Angí Chocolates, an MSME in the agriculture and food production sector, illustrates how one small business in Brazil is using digital tools to connect with suppliers in rural areas, engage with customers across the country, and showcase her home state of Pantanal's natural biodiversity. See page 17 for full case study.

More than half of surveyed online MSMEs reported recently using WhatsApp to market to customers and to communicate with customers and suppliers:

52% of online MSMEs reported that they used WhatsApp to **market to customers** in the past 30 days

61% of online MSMEs reported that they used WhatsApp to **communicate with customers** in the past 30 days

57% of online MSMEs reported that they used WhatsApp to **communicate with suppliers** in the past 30 days

34% of online MSMEs reported that they used WhatsApp to **conduct customer research** in the past 30 days

16% of online MSMEs reported that they used WhatsApp to **hire or find new employees** in the past 30 days

xviii The term "Facebook apps" refers to Facebook, WhatsApp, and Instagram.

xix 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).

Surveyed microenterprises reported lower digital tool usage rates for business purposes prior to COVID-19, in the past year during COVID-19, and in the past 30 days than surveyed small or medium-sized enterprises

Similar percentages of surveyed small and medium-sized MSMEs reported using digital tools for their businesses prior to COVID-19, in the past year, and in the past 30 days, which were significantly higher than the percentages reported by surveyed microenterprises.[xx] For example, 61 percent of surveyed microenterprises reported that they had ever used digital tools for business purposes prior to the COVID-19 pandemic, compared to 78 percent of surveyed small enterprises and 77 percent of surveyed medium-sized enterprises. These percentages all rose in the past year during COVID-19, to 74 percent for surveyed microenterprises and 94 percent (each) for surveyed small and medium-sized enterprises, though there was a 20 percentage point difference between microenterprises and both other business sizes.[xxi] Similarly, 71 percent of surveyed microenterprises reported that they had used digital tools for business purposes in the past 30 days, compared to 92 percent of surveyed small enterprises and 94 percent of surveyed medium-sized enterprises, though this was not found to be significant.[xxii] These findings indicate that surveyed microenterprises were less likely to use digital tools than surveyed small or medium-sized enterprises.

Similarly, a lower percentage of surveyed microenterprises tended to use specific digital tools during COVID-19. For example, while 60 percent of surveyed microenterprises reported that they had used Facebook apps for business purposes in the past year since COVID-19, so did 89 percent of surveyed small enterprises and 90 percent of surveyed medium-sized enterprises–the most frequently reported digital tool for each MSME segment surveyed.[xxiii] A similar pattern played out when asked which digital tools helped them adapt to the COVID-19 environment–the most frequently reported answer option across surveyed MSMEs of all three business sizes was Facebook apps (63 percent for surveyed microenterprises and 81 percent (each) for surveyed small enterprises and medium-sized enterprises).[xxiv] Further, email was another frequently used digital tool across surveyed MSMEs of all three business sizes. More specifically, 48 percent of surveyed microenterprises, 69 percent of surveyed small enterprises, and 83 percent of surveyed medium-sized enterprises reported that they had used email for business purposes in the past year since COVID-19.[xxv] This pattern largely repeated itself when looking at how surveyed MSMEs of each business size perceived email as helping them adjust to the pandemic: 30 percent of surveyed online microenterprises, 27 percent of surveyed online small enterprises, and 42 percent of surveyed online medium-sized enterprises reported that email helped them adapt to the COVID-19 environment.[xxvi] However, it is notable that these percentages are considerably lower than reported usage rates for email in the past year during COVID-19 — and that a higher percentage of surveyed microenterprises (over surveyed small enterprises) reported that email helped them adapt to this new economic environment.

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xx Difference between micro and medium sized enterprises' use of digital tools for business purposes for all three time periods is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

Difference between micro and small sized enterprises' use of digital tools for business purposes for all three time periods is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

Difference between small and medium sized enterprises' use of digital tools for business purposes for all three time periods is not statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxi Among each business size segment, the difference between use of digital tools prior to COVID-19 and in the past year is statistically significant for Chi squared goodness of fit test, adjusted $p < 0.05$.

xxii Among each business size segment, the difference between use of digital tools in the past 30 days and in the past year is not statistically significant for per Chi squared goodness of fit test, adjusted $p > 0.05$.

xxiii Use of Facebook apps for business purposes in the past year by business size is statistically significant Chi squared test of independence, adjusted $p < 0.05$.

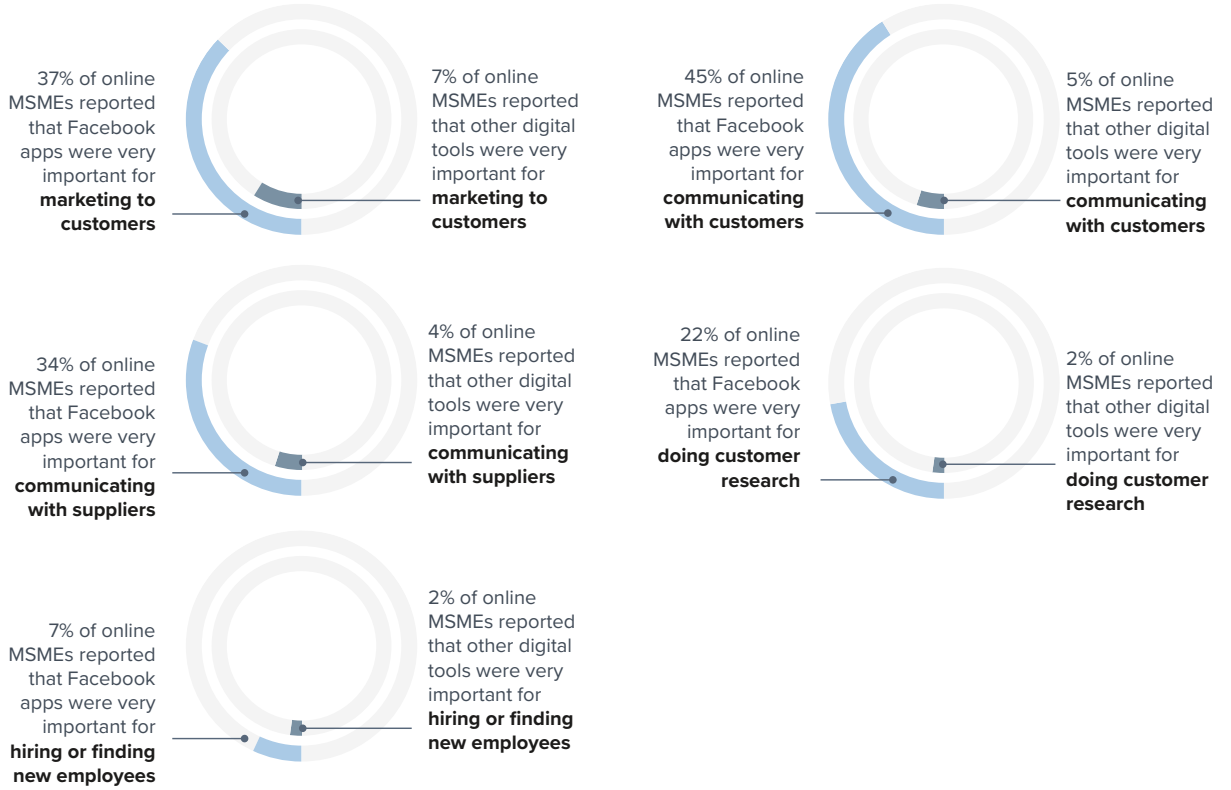
xxiv Reported that Facebook apps helped them adapt to the COVID-19 environment by business size is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxv Use of email for business purposes in the past year during COVID-19 by business size is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxvi Reported that email was helped them adapt to the COVID-19 environment by business size is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

A higher percentage of surveyed online MSMEs reported using Facebook apps than other digital tools to conduct each business activity[xxvii]...

...And a higher percentage of surveyed online MSMEs stated that Facebook apps were very important for each business activity than other digital tools[xxviii]...



xxvii Difference between use of Facebook apps and use of other digital tools for each business activity in question is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

xxviii Difference between use of Facebook apps and use of other digital tools for each business activity in question is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

...but more than half of surveyed online MSMEs reported using offline methods[xxix] to market to customers and communicate with customers and with suppliers in the past 30 days:

61% of online MSMEs reported that they used offline methods to **market to customers** in the past 30 days

76% of online MSMEs reported that they used offline methods to **communicate with customers** in the past 30 days

68% of online MSMEs reported that they used offline methods to **communicate with suppliers** in the past 30 days

46% of online MSMEs reported that they used offline methods to **do customer research** in the past 30 days

46% of online MSMEs reported that they used offline methods to **hire or find new employees** in the past 30 days

Surveyed MSME digital tool use to sell goods and services increased during COVID-19

Selling goods and services is a key business activity for all MSMEs. According to the survey, 75 percent of surveyed MSMEs reported that they had ever used digital tools to sell goods and services. More specifically, 53 percent of surveyed MSMEs reported that they had ever used digital tools to sell goods and services prior to COVID-19, which increased to 70 percent during COVID-19. While not statistically significant, this decreased slightly to 68 percent in the past 30 days.[xxx] This finding shows that surveyed MSMEs considerably increased their digital tool usage for sales purposes around the time of the pandemic. These findings also align with external research–a mid-2020 World Bank/SEBRAE survey of microenterprises and small businesses in Sao Paulo found that 56 percent of surveyed companies reported using digital tools specifically for sales.[16] A similar pattern emerged specifically for sales-related social media usage. 50 percent of surveyed MSMEs reported that they had ever used social media to sell goods and services prior to COVID-19, which increased to 67 percent during COVID-19.[xxxi] Mirroring the previous finding, this indicates that surveyed MSMEs increased their use of social media for sales purposes during the COVID-19 pandemic.

xxix 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).

xxx Difference between use of digital tools to sell goods and services in the past year and prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

Difference between use of digital tools to sell goods and services in the past 30 days and in the past year is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

xxxi Difference between use of social media to sell goods and services in the past year and prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

More than half of surveyed offline MSMEs reported using offline methods to communicate with customers and with suppliers:

45% of offline MSMEs reported that they used offline methods to **market to customers** in the past 30 days

72% of offline MSMEs reported that they used offline methods to **communicate with customers** in the past 30 days

57% of offline MSMEs reported that they used offline methods to **communicate with suppliers** in the past 30 days

45% of offline MSMEs reported that they used offline methods to **do customer research** in the past 30 days

25% of offline MSMEs reported that they used offline methods to **hire or find new employees** in the past 30 days

Surveyed offline MSMEs reported using face-to-face interactions to conduct key business activities at a higher rate than telephone calls/SMS or paper-based methods[xxxii]:

68% of offline MSMEs reported that they used **face-to-face to communicate with customers** in the past 30 days

5% of offline MSMEs reported that they used **paper-based methods (e.g., letters, fliers) to communicate with customers** in the past 30 days

53% of offline MSMEs reported that they used **face-to-face to communicate with suppliers** in the past 30 days

19% of offline MSMEs reported that they used **telephone calls, SMS or text messages to communicate with suppliers** in the past 30 days

A similar percentage of surveyed MSMEs reported ever having difficulty for each business activity about which they were asked:

23% of MSMEs reported ever having **difficulty marketing to customers**

25% of MSMEs reported ever having **difficulty communicating with customers**

28% of MSMEs reported ever having **difficulty communicating with suppliers**

19% of MSMEs reported ever having **difficulty doing customer research**

23% of MSMEs reported ever having **difficulty hiring or finding new employees**

xxxii Difference between use of face-to-face interaction and use of telephone calls, SMS, or text message for each business activity in question among offline MSMEs is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

Difference between use of face-to-face interactions and use of paper-based methods to communicate with customers among offline MSMEs is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

Woman-owned MSME

CASE STUDY

ANGÍ CHOCOLATES

www.facebook.com/angichocolates/

www.instagram.com/angichocolates

AGRICULTURE & FOOD PRODUCTION | SMALL ENTERPRISE | RURAL | SDG 12: RESPONSIBLE CONSUMPTION & PRODUCTION

Beatriz began selling chocolate as part of a school project for an entrepreneurship class. After attracting 300 potential buyers by posting her products on her personal Facebook page during the class, she founded her own company, Angi Chocolates, out of her kitchen in 2017. Angí Chocolates specializes in vegan chocolate products, sourced with ingredients directly from indigenous communities in Pantanal state and sold directly to consumers.

From the earliest days of her business, Beatriz has used digital tools to promote Angí Chocolates and expand its brand awareness. Among other digital tools like email, video conferencing services, QR codes, and Angí Chocolates' own website, Beatriz uses Facebook Messenger and Ads to promote her products, WhatsApp to connect with suppliers, and Instagram to engage with her customers. Integrating Facebook Messenger with her website has allowed customers to message Beatriz directly with inquiries and sales requests. Similarly, WhatsApp gives her a direct line to farmers and other suppliers in Pantanal, as well as a way to communicate with customers about deliveries. Beatriz also uses Instagram to build her brand among consumers. Through Instagram Stories, Reels, and IG Live, she demonstrates to her followers how her chocolate is made, introduces them to the farmers that she works with in Pantanal, and shows the local fruit used in Angí Chocolates' products. In addition to promoting her products on Instagram, she also uses her platform and influencer status to build awareness of Pantanal's biodiversity and showcase its indigenous communities. "Followers like the concept of the brand, not just selling products but selling a way of life – a lifestyle and a social business – a business that helps a community and to maintain the forestry. We're not destroying, but helping to enhance the place." Not only have digital tools allowed Beatriz's business to flourish, but they have also enabled her to rapidly grow Angí Chocolates and showcase the biodiversity of her home state to the Brazilian public.

During the COVID-19 pandemic, Beatriz's business pivot to online-only sales, with new products and new MSME customers, prompted her to change the way that Angi Chocolates uses digital tools. Not only did she integrate her Instagram and WhatsApp accounts with an e-commerce website that shares her catalog, processes transactions, and makes deliveries, she also built an online community that expands Angí Chocolates' reach to like-minded communities, such as Brazil's organic and slow food devotees, yogis, and other chef-influencers. For example, Beatriz started hosting IGLive events and participating in virtual discussions with other chocolate brands and cooking events. She also built partnerships with other MSMEs, chefs, and cooking schools who wanted to learn more about vegan products. As a result of these changes, her sales grew 85 percent in 2020, with 68 percent of her sales coming from Instagram.

Angí Chocolates' commitment to working with local products and small-scale suppliers aligns with SDG 12: Responsible Consumption and Sustainable Production, as does Beatriz's commitment to uplifting local communities in Pantanal. In the past year, Beatriz has connected her own suppliers with other MSMEs in Brazil seeking organic ingredients. She also founded an NGO to support farmers in Pantanal affected by wildfires and COVID-19 with food and healthcare services. Her commitment to the economic empowerment of her home community in tandem with her use of digital tools to grow her business demonstrates how MSMEs' innovation and adaptability contribute to economic development and resiliency.

> "Technology means everything – I couldn't have a business without them, the internet made my business real. I had a way to advertise and share everything; the platform helps me to have my business. It's global, I can talk to everyone."

KEY INSIGHTS FOR POLICYMAKERS

64% of online MSMEs reported that they used Facebook apps to communicate with customers in the past 30 days

76% of online MSMEs reported that they used offline methods to communicate with customers in the past 30 days

70% of surveyed MSMEs reported that they used digital tools to sell goods and services during COVID-19

A higher percentage of surveyed online MSMEs reported using Facebook apps than other digital tools for each business activity. For example, 57 percent of surveyed online MSMEs reported that they used Facebook apps to market to customers in the past 30 days, compared to 10 percent of surveyed online MSMEs who reported using other digital tools for the same purpose over the same timeframe. (These findings also largely align with mid-2020 research from the World Bank and SEBRAE, which stated that 70 percent of surveyed microenterprises and small businesses in Sao Paolo reported using digital tools for marketing.[17]) Further, in the DAI/Ipsos survey, a larger percentage of surveyed online MSMEs also reported that Facebook apps were very important across each key business activity compared with other digital tools. For instance, 37 percent of surveyed online MSMEs reported that Facebook apps were very important for marketing to customers, compared to seven percent of surveyed online MSMEs who reported that other digital tools were very important for marketing to customers. These findings indicate that a high percentage of surveyed online MSMEs had recently used digital tools–especially Facebook apps–for each business activity about which they were asked.

However, offline methods maintained a strong foothold among surveyed online MSMEs. For example, in the past 30 days, a large majority (76 percent) of surveyed online MSMEs reported using offline methods to communicate with customers, and 68 percent of surveyed online MSMEs reported the same about communicating with suppliers. Similarly, among surveyed offline MSMEs, face-to-face was the most frequently reported way of conducting each business activity. For example, over half (68 percent) of surveyed offline MSMEs reported that they used face-to-face to communicate with customers in the past 30 days. Despite the relatively high digital tool usage rates among surveyed MSMEs, these findings indicate that offline methods are still an important way for surveyed online and offline MSMEs alike to run their businesses. Despite surveyed MSMEs' frequent reported use of offline methods to conduct key business activities, survey findings highlighted opportunities where simple and intuitive digital tools could be introduced to help address difficulties that surveyed MSMEs cited. For instance, a quarter of surveyed MSMEs reported ever having difficulty communicating with customers, despite the largest percentage of surveyed MSMEs reporting that they used offline methods to conduct this business activity. This indicates that there could be an opportunity for stakeholders in the public, private, and development sectors to encourage offline and online MSMEs alike to use–or increase their use of–digital tools for business activities, such as external communication.

MSMEs DURING THE COVID-19 PANDEMIC

The COVID-19 pandemic posed a challenge for surveyed MSMEs in Brazil. Over half (54 percent) of surveyed MSMEs reported that their sales decreased during COVID-19 compared to a typical year, and nearly half of respondents (45 percent) reported that their business closed at some point during the pandemic. Struggling with difficult economic conditions, surveyed MSMEs embraced digital tools, and Facebook apps in particular, when adapting to the new economic environment. An interview with the owner of Bigodiva, an MSME in the retail and e-commerce industry, illustrates how one medium-sized enterprise in Brazil used digital tools during the COVID-19 pandemic to pivot to direct-to-consumer sales. See page 21 for full case study.

More than half of surveyed MSMEs' sales decreased during the COVID-19 pandemic:

54% 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

16% of MSMEs reported that their **sales decreased by about half** of a typical year

13% of MSMEs reported that their **sales decreased by less than half** of a typical year

36% of MSMEs reported that their **sales increased or stayed approximately the same** during COVID-19 compared to a typical year

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

Digital tools helped a large majority of surveyed MSMEs adapt to the new economic environment:

81% of online MSMEs reported that **digital tools were important or essential to keeping their business running** during COVID-19

78% of online MSMEs reported that **Facebook apps** helped them adapt to the COVID-19 environment

37% of online MSMEs reported that **digital payment tools** helped them adapt to the COVID-19 environment

30% of online MSMEs reported that **email** helped them adapt to the COVID-19 environment

A higher percentage of surveyed rural MSMEs than surveyed urban or suburban MSMEs reported using digital tools for business purposes in the past year during COVID-19

A lower percentage of surveyed urban MSMEs reported using digital tools for their businesses in the past year and in the past 30 days than surveyed suburban or rural MSMEs. When looking at business-related digital tool usage over time, 72 percent of surveyed urban MSMEs, 81 percent of surveyed suburban MSMEs, and 72 percent of surveyed rural MSMEs reported that they had ever used digital tools for business purposes prior to the COVID-19 pandemic.[xxxiii] These percentages increased in the past year during COVID-19, to 86 percent for surveyed urban MSMEs, 94 percent of surveyed suburban MSMEs, and 96 percent of surveyed rural MSMEs.[xxxiv] Then, they decreased slightly in the past 30 days–to 83 percent for surveyed urban MSMEs, 92 percent for surveyed suburban MSMEs, and 94 percent for surveyed rural MSMEs–though they remained relatively similar to their COVID-19 levels.[xxxv] These findings do not appear to align with external research on the urban-rural divide in Brazil: an estimated 75 percent of adults in urban areas use the internet, compared to only 49 percent in rural areas.[18] It is unclear why surveyed urban MSMEs had lower recent digital tool usage rates than surveyed suburban or rural MSMEs, though each MSME segment saw relatively high rates of digital tool usage for business purposes.

However, though the overall digital tool usage rate remained higher in suburban and rural areas, surveyed MSMEs of different urbanicities reported using specific digital tools at different rates across time periods. For example, surveyed urban and suburban MSMEs were more likely to use digital payment tools before COVID-19 than rural MSMEs: 51 percent of surveyed urban MSMEs and 49 percent of surveyed suburban MSMEs reported that they had ever used digital payment tools for business purposes prior to the COVID-19, compared to 33 percent of surveyed rural MSMEs.[xxxvi] This pattern held during COVID-19 as well: 63 percent of surveyed urban MSMEs and 64 percent of surveyed suburban MSMEs reported that they used digital payment tools for business purposes in the past year during COVID-19, compared to 52 percent of surveyed rural MSMEs.[xxxvii] However, the opposite was true for Facebook apps -surveyed urban MSMEs were the least likely to report business-related Facebook apps' usage in both time periods. 64 percent of surveyed urban MSMES reported that they had ever used Facebook apps for business purposes prior to the COVID-19 pandemic, compared to 73 percent of surveyed suburban MSMEs and 68 percent for surveyed rural MSMEs.[xxxviii] Similarly, 76 percent of surveyed urban MSMEs reported that they had used Facebook apps for business purposes in the past year since COVID-19, compared to 88 percent of surveyed suburban MSMEs and 93 percent of surveyed rural MSMEs.[xxxix] As previously stated, these findings are not in line with previous research showing an urban/rural divide in Brazil, though they pose interesting questions for future research about suburban MSMEs in Brazil.

In line with the previous survey findings, a higher percentage of surveyed online suburban MSMEs found that digital tools were critical to their pandemic response than surveyed online urban or online rural MSMEs. While 86 percent of surveyed online suburban MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19, so did 84 percent of surveyed rural MSMEs and 77 percent of surveyed urban MSMEs.[xl] To this end, survey results showed significant differences by surveyed MSME urbanicity in perceptions of WhatsApp's importance in adapting to COVID-19. Seventy-nine percent of surveyed online suburban MSMEs reported that WhatsApp helped them adapt to the COVID-19 environment, compared to 73 percent of surveyed online rural MSMEs and 69 percent of surveyed online urban MSMEs.[xli] These findings indicate that surveyed MSMEs perceived digital tools to be an important aspect of their response to COVID-19 and provide evidence that WhatsApp was especially critical.

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xxxiii Use of digital tools for business purposes prior to COVID-19 by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxxiv Use of digital tools for business purposes in the past year by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxxv Use of digital tools for business purposes in the past 30 days by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.0$.

xxxvi Use of digital tools to sell goods and services prior to COVID-19 by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxxvii Use of digital tools to sell goods and services in the past year by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxxviii Use of Facebook apps for business purposes prior to COVID-19 by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xxxix Use of Facebook apps for business purposes in the past year by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xl Reported that digital tools are important or essential to keeping their business running during COVID-19 by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

xli Reported that WhatsApp helped their business adapt to the COVID-19 environment by urbanicity is statistically significant per Chi squared test of independence, adjusted $p < 0.05$

Woman-owned MSME

CASE STUDY

BIGODIVA

www.facebook.com/bigodiva/

www.instagram.com/bigodiva

RETAIL & E-COMMERCE | MEDIUM-SIZED ENTERPRISE | URBAN | SDG 9: INDUSTRY, INFRASTRUCTURE, AND INNOVATION

As a long-time volunteer at an animal shelter in Sao Paulo, Andrea started creating toys and other products for the rescue cats that she cared for. In 2016, she founded her own business selling patented cat beds, toys, and other cat-related goods and quickly expanded her sales footprint across the country.

Prior to the COVID-19 pandemic, Andrea's business model focused on business sales directly to pet stores and other resellers. She had incorporated some digital tools into her business model, such as using business software and social media to manage communications with retailers, but they were not core to her business. However, when the COVID-19 pandemic closed stores across Brazil, Andrea had to completely shift Bigodiva's business model to 100 percent direct-to-consumer online sales.

Digital tools have become central to Bigodiva's customer engagement and sales strategy during the COVID-19 pandemic. In pivoting to direct-to-consumer sales, Andrea quickly invested in Bigodiva's social media presence to reach new audiences and continue selling her products. In particular, she uses Instagram to build brand awareness and enhance Bigodiva's engagement metrics. In addition to using Instagram features like Stories, Reels, and Polls to grow her number of followers, she also interacts directly with shelters, pet owners, pet stores, and other content creators to discuss cat care. Building this online community has resulted in more customer engagement than ever before. "More people following now are genuinely interested in cat solutions and engaging with the business," she commented.

During the pandemic, WhatsApp Business has become Andrea's primary communications tool with both customers and suppliers. Instead of email, Bigodiva relied on WhatsApp's automated responses with direct links to her sales catalog to process purchase orders. According to Andrea, she has seen a higher sales conversion rate on WhatsApp than Bigodiva's website during the pandemic. To that end, Andrea reports that 2020 was Bigodiva's best sales year yet, with a 153 percent increase in global revenue over the previous year. "For us, using these tech tools during COVID opened a new world. We wouldn't have survived without technology."

Andrea's biggest challenge in pivoting to an online business model was her lack of knowledge and familiarity with digital tools. To address this issue, Andrea took classes and read books to maximize her use of them. By hiring a marketing firm to manage Bigodiva's online advertising, she also sought out new resources and expertise to enhance Bigodiva's digital marketing. In line with SDG 9: Industry, Infrastructure, and Innovation, Bigodiva shows how MSMEs can use digital tools to successfully adapt their business models in a highly dynamic business environment, enhancing customer engagement to increase sales and grow their businesses. Andrea's flexibility and willingness to experiment with a new way of doing business shows how digital tools can enhance MSME business resilience, leading to more sustainable economic growth outcomes.

> "COVID was a changing point – technology showed me how much more I could do and how much I was losing before by not using it."

KEY INSIGHTS FOR POLICYMAKERS

81% of online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19

78% of online MSMEs reported that Facebook apps helped them adapt to the COVID-19 environment

54% of MSMEs reported that their sales decreased during COVID-19 compared to a typical year

Survey results show that the COVID-19 economic environment negatively affected surveyed MSMEs' sales throughout Brazil. More specifically, over half of respondents (54 percent) reported that their sales decreased during COVID-19 compared to a typical year. Further, nearly a quarter (24 percent) of MSMEs reported that their sales decreased by more than half of a typical year, while 16 percent reported that their sales decreased by about half. By contrast, however, 36 percent of surveyed MSMEs saw their sales increase or stay approximately the same during COVID-19 compared to a typical year. This aligns with previously cited external research: for example, a mid-2020 World Bank/SEBRAE survey of microenterprises and small businesses in Sao Paulo found an average 53 percent drop in revenue among respondents.[19] Underscoring this economic disruption, 45 percent of surveyed MSMEs on the DAI/Ipsos survey reported that their business closed at some point during COVID-19, similar to the 59 percent of MSME respondents on a mid-2020 survey conducted by SEBRAE who reported that their businesses had temporarily closed for two months.[20]

Many online MSMEs used digital tools as part of their pandemic response. Despite the reported decreases in sales among respondents, a large majority (81 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19. Facebook apps were the most frequently cited digital tool among online respondents, with 78 percent of surveyed online MSMEs reporting that Facebook apps helped them adapt to the COVID-19 environment, followed by digital payment tools at 37 percent and email at 30 percent.[xlii] These survey findings indicate that simple, intuitive, and cost-effective digital tools were especially important in how surveyed MSMEs' responded to the pandemic.

xlii This ordering excludes specific Facebook apps, such as WhatsApp.

BARRIERS TO THE ADOPTION AND USE OF DIGITAL TOOLS AMONG MSMEs

For both online and offline[xliii] MSMEs surveyed, high cost and lack of knowledge were the most frequently cited difficulties in using digital tools. Surveyed online and offline MSMEs alike were interested in learning more about using digital tools to interface with customers.

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

11% of online MSMEs reported that **high cost** was a difficulty their business faced in using digital tools

10% of online MSMEs reported that **lack of knowledge** was a difficulty their business faced in using digital tools

Similarly, the most frequently reported difficulties that surveyed offline MSMEs reported that their business faced in using digital tools were high costs and a lack of knowledge:

20% of offline MSMEs reported that **high cost** was a difficulty their business faced in using digital tools

13% of offline MSMEs reported that **lack of knowledge** was a difficulty their business faced in using digital tools

When asked about the most challenging difficulty[xliv] their business faced in using digital tools, surveyed online MSMEs most frequently cited high cost:

4% of online MSMEs reported that **high cost** was the most challenging difficulty their business faced in using digital tools

Surveyed offline MSMEs most frequently reported that the need for 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 they faced in using digital tools

xliii n=105 for surveyed offline MSMEs in Brazil.

xliv When asked what was their most challenging difficulty using digital, responses were coded to fit 18 options. The options displayed in this figure correspond to those displayed in the prior graph where most common difficulties are displayed. 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.

Surveyed online MSMEs were interested in learning more about digital tools to enhance their customer-facing work:

47% of online MSMEs reported that they were interested in learning more about **using digital tools to find new customers**

45% of online MSMEs reported that they were interested in learning more about **using digital tools to market their business**

38% of online MSMEs reported that they were interested in learning more about **using digital tools to communicate with existing customers**

When asked about their specific interests in learning more about using digital tools, the most frequently reported response among surveyed offline MSMEs was finding new customers:

29% of offline MSMEs reported that they were interested in learning more about **using digital tools to find new customers**

20% of offline MSMEs reported that they were interested in learning more about **using digital tools to market their business**

20% of offline MSMEs reported that they were interested in learning more about **using digital tools to communicate with existing customers**

Some offline MSMEs reported that more education and training would make them more likely to use digital tools:

21% of offline MSMEs reported that **more education and training would make them more likely to use digital tools**

32% of offline MSMEs reported that **training on how to use digital tools to find new customers** would benefit their business

Over half of surveyed online MSMEs reported that they felt confident using the internet to find information or help:

64% of online MSMEs reported that they felt confident **using the internet to find information or help**

61% of online MSMEs reported that they felt confident **using a phone app or computer program to make a voice call or send a voice note**

55% of of online MSMEs reported that they felt confident **attaching photos or files to emails or messages**

A small minority of surveyed offline MSMEs reported that they felt confident using the internet to find information or help:

15% of offline MSMEs reported that they felt confident **using the internet to find information or help**

14% of offline MSMEs reported that they felt confident **understanding terms or words relating to social media**

14% of offline MSMEs reported that they felt confident **installing apps or programs on a phone, computer, or tablet**

A higher percentage of surveyed online MSMEs compared to offline MSMEs reported that they were self-taught in using digital tools[xlv]

The highest percentage of surveyed online MSMEs reported that they were self-taught on how to use digital tools, but the highest percentage of offline MSMEs reported that they learned to use digital tools from their friends and family. More specifically, 41 percent of surveyed online MSMEs reported that they were self-taught on how to use digital tools, compared to 12 percent of surveyed offline MSMEs–the most frequently reported answer option for online MSMEs. However, 39 percent of surveyed online MSMEs and 34 percent of surveyed offline MSMEs reported that they learned how to use digital tools from their friends and family (offline MSMEs' most frequently reported response). This finding indicates that surveyed online MSMEs were more likely to be self-taught than surveyed offline MSMEs. They could also be due to selection effect, i.e., surveyed MSMEs who were self-taught were more likely to be online, as well as being online makes it easier to be self-taught.

xlv Reported being self-taught in learning to use digital tools by connectivity status (online or offline) is statistically significant per Chi squared test of independence, adjusted $p < 0.05$.

KEY INSIGHTS FOR POLICYMAKERS

11% of online MSMEs reported that high cost was a difficulty their business faced in using digital tools

20% of offline MSMEs reported that high cost was a difficulty their business faced in using digital tools

21% of offline MSMEs reported that more education and training would make them more likely to use digital tools

High cost and a lack of knowledge were key difficulties that surveyed online and offline MSMEs reported facing in using digital tools. More specifically, high cost was the most frequently cited difficulty among surveyed online MSMEs (11 percent) followed closely by lack of knowledge (10 percent) for surveyed online MSMEs. Similarly, 20 percent of surveyed offline MSMEs reported that high cost was a difficulty their business faced in using digital tools, and 13 percent reported the same about a lack of knowledge–the most frequently reported responses among offline MSMEs. However, these findings about high cost do not necessarily align with external research. For example, Brazil ranked 12th out of 72 countries on the Alliance for Affordable Internet's Affordability Drivers' Index in 2020.[21] International Telecommunications Union (ITU) data from 2020 also showed that data-only mobile broadband prices as a percentage of adjusted per capita income were an average of 1.43 percent in Brazil,[22] with 2.51 percent average for fixed broadband,[23] lower than for neighboring countries like Colombia and Peru. However, the cost of devices or of genuine software could have factored into surveyed MSMEs' responses to this survey question. Regardless, the findings about needing more knowledge do reflect other literature–according to ITU data, 20 percent of individuals in Brazil possess basic ICT skills, 11 percent possess standard skills, and just three percent possess advanced skills.[24] Similar responses between surveyed online and offline MSMEs suggest that investments by public, private, and development sector stakeholders in tackling areas of common difficulty for both online and offline MSMEs can have compounding positive effects. For example, investments in reducing costs associated with digital tool usage have the potential to both bring more offline MSMEs online, while also expanding digital tool usage by online MSMEs.

Survey results showed that surveyed online and offline MSMEs were interested in learning more about digital tools, specifically for their customer-facing work. When asked about specific topics of interest in learning more about using digital tools, the most frequently reported response among surveyed online MSMEs was finding new customers (47 percent). Similarly, 29 percent of surveyed offline MSMEs reported that they were interested in learning more about using digital tools to find new customers–the most frequently cited answer option among surveyed offline MSMEs. These survey results indicated that surveyed MSMEs in Brazil were open to learning about the benefits of digital tools and already understand the value-add to their businesses, especially among surveyed online MSMEs. It is therefore important to work directly with MSMEs to build their digital literacy and specific skills in their areas of interest—such as finding new customers— to quickly demonstrate how digital tools can help them efficiently run their businesses and manage their operations.

CLOSING REMARKS

With continued improvements in affordability, and targeted interventions to improve digital literacy among both online and offline MSMEs, Brazil'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. A vast majority (90 percent) of surveyed MSMEs in Brazil reported using digital tools for business purposes in the past year during COVID-19. However, difficulties such as high cost and lack of knowledge proved a challenge to surveyed MSMEs seeking to fully leverage digital tools in their business practices: our findings reported that some surveyed MSMEs, both online and offline, were constrained by both high cost and a lack of knowledge. Nevertheless, surveyed MSMEs still reported a strong desire to learn more about digital tools for business purposes, such as using them to market their business. This evidence shows that targeted solutions are required to maintain forward momentum and continue growing MSME digital tool usage equitably across all MSME segments.

Both surveyed online and offline MSMEs reported a need for training: online MSMEs surveyed reported a desire for additional training in specific aspects of using digital tools for business, while offline MSMEs surveyed reported a desire to learn how to use digital tools for such activities as finding new customers and marketing their business, recognizing that such training would benefit their business. Looking ahead, it will be important to provide appropriate interventions to address affordability and digital literacy barriers while continuing to enhance the skills of online MSMEs to further amplify their use of digital tools. Promoting equitable digital tool usage within Brazil's MSME sector will help build a Brazilian economy that is resilient to the COVID-19 pandemic and future shocks. MSMEs that are poised to grow and scale as the pandemic recedes will accelerate economic growth outcomes and support Brazil in achieving its SDG commitments.

APPENDIX I: METHODOLOGY

OVERVIEW OF THE SURVEY DESIGN

Between July 21 to October 6, 2021, Ipsos conducted 1,018 in-person interviews of enterprises via computer-assisted personal interviewing (CAPI) and computer-assisted telephone interviewing (CATI) to better understand their use of digital tools as well as their challenges and barriers to digitization.[xlvi] Fieldwork was not continuous: it was conducted in two stages (July 21 to September 15 and October 4 to October 6) to achieve the final sample size.

The sample for the study was defined to include and be limited to Brazil's micro (one employee), small (2 to 9 employees) and medium (10 to 249 employees) business populations[xlvii] (summarized as "business size" in the text). Official statistics from the Annual List of Social Information[25] and the Brazilian Institute of Geography and Statistics[26] both within the Ministry of Economy were used as a basis to estimate the proportion[xlviii] of businesses for each business size and to set a target number of interviews by state within Brazil.

The targets for business size were set to approximate the distribution of the business population by business size across all of Brazil, 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 Brazil.

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 Brazil, this minimum was achieved naturally and no oversample was required.

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

BUSINESS SIZE			URBANICITY[l]			BUSINESS-OWNER GENDER		
	TARGET	ACTUAL		TARGET	ACTUAL		MINIMUM NEEDED	ACTUAL
Micro	150	205	Urban	800	822	Women	150	645
Small	700	683	Rural	200	196			
Medium	150	130						

Target and Actual Interview Counts by Business Size, Urbanicity and Business-Owner Gender in Brazil[l]

xlvi This is one in a series of 13 country reports about micro, small and medium-sized enterprises' (MSMEs) use of digital tools in South America, South Asia, and Southeast Asia. The forthcoming global report will contain a complete description of the research and survey methodology.

xlvii 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 (including seasonal employees or workers).

xlviii These were considered estimates, as the official statistics do not include informal businesses and are not sufficiently recent to account for the impact of COVID-19 on business operations.

xlix Urban, suburban and rural categories are not standard terms in Brazil and will be used and defined as per the following: Capital (instead of urban areas): Core city (main urban core) of the state. Metropolitan Areas (instead of suburban areas): Metropolitan Areas and Urban Agglomerations are constituted by groups of bordering municipalities and are instituted by a complementary state law, aiming at integrating the organization, planning and execution of public functions of common interest. Interior (in place of rural areas): the rest of the municipalities that do not fall under the Metropolitan Region or Capital classification.

l Numbers presented in this appendix are based on unweighted interview counts and totals. Some numbers in this appendix may differ from those discussed in the full body of the report which relies on weighted data.

SAMPLE DESIGN

A hybrid sampling design was employed in Brazil using two different interviewing methodologies and two different sampling frames; specifically the fieldwork was administered using CAPI and CATI. The decision to use dual modes was based on the situation in Brazil at the time of interviewing which limited travel and access to rural and remote areas. CATI was therefore used to collect data from primarily small and medium businesses in rural and remote areas. CATI interviews represented 45% of the total achieved sample; CAPI represented 55%.

All 26 states in Brazil were included in the CATI sample frame covering businesses across all three geographic designations: rural ("Interior" in Brazil), urban ("Capital" in Brazil), and suburban ("Metropolitan" in Brazil). Of the 26 states, 14 were designated as rural; 12 were urban or suburban. Interviews with businesses in rural areas were conducted by CATI only because face-to-face interviewing was not feasible. For the 12 urban and suburban areas, however, interviews were conducted using both the CATI and CAPI sample frames meaning there was some geographic overlap between the two modes in these 12 areas.

CAPI Sample Frame

The CAPI sample design was a multistage stratified cluster sample. This means that in the first stage, the population was divided into geographic blocks (a "cluster"). Then at each of the subsequent stages (outlined below) a more limited geographic unit was identified until the final sampling unit for interviewing individual businesses was selected. Specifically, the sampling unit of individual businesses defined at each stage were the following:

- **PSUs:** Primary sampling units (PSUs) were defined as states. Of the 26 total states in Brazil, CAPI was employed in 12 states that were primarily urban or suburban. (Note that all 26 states were covered by CATI.)
- **SSUs:** Secondary sampling units (SSUs) were defined as municipal districts within a state. Out of the 5,570 municipal districts in Brazil, 281 were selected as SSUs all within the 12 states covered by CAPI. The municipal districts were selected randomly with a probability proportional to the population of the municipal district using the 2020 estimates from the Brazilian Institute of Geography and Statistics.[27]
- **TSUs:** Tertiary sampling units (TSUs) were defined as commercial areas or business districts within each SSU. TSUs were selected within each SSU based on factors such as urbanicity, number of commercial areas and the density of those areas. For example, in urban areas with densely populated business districts, a TSU would be randomly selected within that one commercial area. Conversely, in rural SSUs where only one commercial area existed, that one area served as the default TSU and no selection process was needed.

Individual businesses: Within each of the TSUs, enumerators identified businesses to contact by using the random walk method. That is, after beginning at a random spot within a demarcated geographic area, selected by the project management team based on their knowledge of local business districts, 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.

A total of 564 out of the 1,018 interviews were conducted via CAPI.

CATI Sample Frame

The CATI sample frame was designed to reach formal small and medium businesses in rural and remote areas. CATI was also employed along with CAPI (described above) in the areas where there was some geographic overlap with urban and suburban areas. Regardless of geographic definition, only formal small and medium businesses were covered by CATI.

- **PSUs:** PSUs were defined as all five regions in Brazil. All five regions were included in the CATI sampling frame drawn from the Special Department of Federal Revenue of Brazil's Business Database.[li]
- **SSUs:** No SSUs were assigned for the CATI sample as the business database cited above was national.
- **Individual Businesses:** Individual businesses were selected using a simple random sample from the sample list. Using the list of businesses in the national register of businesses, enumerators were randomly assigned businesses from the sample list (i.e., enumerators were not required to select businesses). Once a business was identified, enumerators proceeded to administer the screening and 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 by phone, or the respondent requested that the interview be rescheduled, enumerators made three attempts to recontact 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 a pre-programmed telephone interviewing script, ensuring consistency in the questionnaire administration.

A total of 454 interviews were conducted via CATI.

Sampling Statistics (CAPI and CATI)

The sampling statistics for the two methods are:

	CAPI	CATI
Contacts	636	24,748
Completes	564	454
Refusals	8	2,013
Response rate[liv]	94%	2%
Refusal rate (refusals / contacts) [iv]	1%	8%

Interview Response and Refusal Rates by Mode in Brazil[liv]

li This business database was purchased so a public link is not available. Sourced through: https://receita.economia.gov.br/orientacao/tributaria/cadastros/cadastro-nacional-de-pessoas-juridicas-cnpj/dados-publicos-cnpj

lii Calculated using AAPOR Response Rate 3 methodology.

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

liv 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%.

Locations for Research in Brazil

The target allocation and actual completes by regions are detailed below:

REGIONS	TARGET	ACTUAL CAPI	ACTUAL CATI	ACTUAL TOTAL
North	80	16	25	41
Northeast	150	67	92	159
Southeast	460	343	161	504
South	210	109	108	217
Midwest	100	29	68	97
Total	**1,000**	**564**	**454**	**1,018**

Target and Actual Interview Counts by Region and Mode

Sample Weighting

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

- **Design weight:** A weight by each of the 26 states was applied to adjust the sample to be proportionate to the number of people within each state, as determined by the 2020 Brazilian Institute of Geography and Statistics.[28] The people population was deemed preferable to the official statistics used to set targets (the Annual List of Social Information[29] and the Brazilian Institute of Geography and Statistics[30]) due to the exclusion of informal businesses in these counts.
- **Non-response weight (CAPI only):** Weights were applied by urbanicity (urban / rural) and gender of respondent within strata based on response rates. For example, if an enumerator approached a business in region 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, region X would be weighed 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. Statistics on non-response by region and gender are not available for CATI as the information is not recorded in the sample and cannot be recorded by the enumerator in absence of a response to call.

The design weight and non-response weights were combined to create one overall final weight applied to all data points. The design effect for Brazil is 1.10.[lv]

Ipsos carefully considered a broad spectrum of additional weights to be applied. First: a mode weight could not be applied due to the confounding mode effects by both geography and business size. A lack of reliable data sources precluded other weighting, for instance, by company size as there are no reliable population statistics that define the proportion of businesses throughout Brazil by company size. Also, cross-national weights were not applied since the purpose of a cross-national weight would be to make the data in this report comparable to data for other country reports in this series. Finally, no data source exists that could account for country sampling differences in both fieldwork timing and survey mode.

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 Brazil.

lv 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."

COVID-19 Protocols

Extensive COVID-19 protocols were observed during CAPI interviews: only 2-3 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.

Limitations to the Survey Design

While every effort was made to ensure representativeness of the data, there were several limitations to the survey design. The sampling plan covered all five regions in Brazil, and all 26 states within those regions. However, only selected municipalities were included in the CAPI sample. Micro businesses and informal businesses were excluded from the CATI sample.

Within each state, municipalities were limited to those that had interviewing teams because COVID-19 travel restrictions limited travel between and even within municipalities. This means the face-to-face approach covering formal and informal businesses of all sizes was limited to urban and suburban areas, whereas rural areas were covered via the CATI approach using a listed sample of registered businesses of only small and medium formal companies.

In terms of coverage limitations for CAPI, the use of random walk sampling methods in urban and non-urban areas could mean that MSMEs associated with certain characteristics could 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-story 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.

In terms of geographic coverage limitations, firms selected for interviews for the CAPI sample were from the targeted SSUs listed above; all firms outside of these areas were not included in the sampling frame.

An additional limitation in Brazil is a gap in the fieldwork period. The different fielding dates may have affected the way that respondents answered questions–particularly temporal questions referencing "the past 30 days." The main fieldwork was July 21 to September 15, 2021 when a total of 1,010 interviews were completed. In order to reach a sample size of 100 offline MSMEs, as requested by Facebook, fieldwork recommenced from October 4 to 6, 2021, to garner the eight additional interviews to reach the 100 minimum sample size of enterprises that were defined as offline.

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.

In terms of weighting limitations, it was not possible to implement a mode weight due to the confounding mode effects of both geography and business size. For example, the CAPI approach covered formal and informal businesses of all sizes in urban and suburban areas but not in rural ones. Using a listed sample of registered businesses, the CATI approach covered rural areas that included only formal businesses and only two of the three business sizes–small and medium.

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 Brazil's MSME structure. Although the sampling process captured variations in Brazil's MSME structure regarding size, industry, and individual characteristics of business owners, any national-level figures were not adjusted or corrected to reflect business population characteristics.

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 0-7%, 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% 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 Brazil'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	105	10.3	9.9	0.96	0.98
	Online	911	89.7	90.1	0.96	0.98
Gender Ownership	Men-owned	355	34.9	36.3	1.5	1.63
	Women-owned	658	64.8	63.4	1.5	1.64
	Don't Know	3	0.3	0.2	0.17	0.16
Urbanicity	Rural	197	19.4	19.2	1.24	1.34
	Suburban	300	29.5	30.6	1.43	1.52
	Urban	516	50.8	49.8	1.57	1.65
	Don't Know	2	0.2	0.2	0.14	0.12
	Refused	1	0.1	0.2	0.1	0.18
Business Size	Micro	209	20.6	20.2	1.27	1.25
	Medium	133	13.1	12.8	1.06	1.1
	Small	674	66.3	67.1	1.48	1.53
Business Vertical	Agriculture and food production	108	10.6	10.5	0.97	1.03
	Hospitality	189	18.6	19	1.22	1.38
	Manufacturing and industry	245	24.1	23.8	1.34	1.46
	Professional services	56	5.5	5.4	0.72	0.76
	Retail & eCommerce	174	17.1	16.7	1.18	1.2
	Other	244	24	24.6	1.34	1.47
Region	Acre	3	0.3	0.2	0.17	0
	Alagoas	12	1.2	0.7	0.34	0
	Amapa	2	0.2	0.1	0.14	0
	Amazonas	17	1.7	0.6	0.4	0.01
	Bahia	52	5.1	4.9	0.69	0.25
	Ceara	30	3	2.5	0.53	0.03
	Distrito Federal	30	3	1.7	0.53	0.04
	Espirito Santo	17	1.7	2	0.4	0.01
	Goias	42	4.1	4.1	0.62	0.08
	Maranhao	6	0.6	1	0.24	0
	Mato Grosso	12	1.2	2.1	0.34	0.01
	Mato Grosso do Sul	18	1.8	1.7	0.41	0.01
	Minas Gerias	115	11.3	13.3	0.99	0.16
	Para	55	5.4	1.7	0.71	0.04
	Paraiba	3	0.3	1	0.17	0

CATEGORICAL VARIABLES		UNWEIGHTED N	UNWEIGHTED %	WEIGHTED %	UNWEIGHTED STDERROR	WEIGHTED STDERROR
	Parana	105	10.3	8	0.96	0.09
	Pernambuco	38	3.7	2.8	0.6	0.03
	Piaui	2	0.2	0.8	0.14	0
	Rio G. do Norte	5	0.5	1.1	0.22	0
	Rio G. do Sul	81	8	8	0.85	0.07
	Rio de Janeiro	62	6.1	7.3	0.75	0.2
	Rondonia	4	0.4	0.8	0.2	0
	Santa Catarina	21	2.1	5.3	0.45	0.02
	Sao Paulo	276	27.2	27	1.4	0.16
	Sergipe	3	0.3	0.6	0.17	0
	Tocantins	5	0.5	0.6	0.22	0
Owner Education	No formal education or less than Primary education	11	1.1	1.3	0.33	0.45
	Primary education	113	11.1	11.1	0.99	1.1
	Secondary education	504	49.7	50	1.57	1.72
	University education or higher (degree)	330	32.5	31.9	1.47	1.59
	Vocational or technical education or training	28	2.8	2.8	0.51	0.58
	Don't Know	24	2.4	2.5	0.48	0.51
	Refused	4	0.4	0.5	0.2	0.29
Owner Age	18-24	63	6.2	6.1	0.76	0.81
	25-34	196	19.3	19.3	1.24	1.33
	35-44	318	31.4	31.6	1.46	1.63
	45-54	249	24.6	24.6	1.35	1.44
	55-64	131	12.9	12.8	1.05	1.17
	65 or older	41	4	4.3	0.62	0.69
	Don't Know	13	1.3	1.2	0.35	0.34
	Refused	3	0.3	0.2	0.17	0.12
Respondent Education	No formal education or less than Primary education	11	1.1	1.3	0.32	0.45
	Primary education	110	10.8	10.7	0.98	1.08
	Secondary education	553	54.4	55	1.56	1.7
	University education or higher (degree)	315	31	30.3	1.45	1.56
	Vocational or technical education or training	26	2.6	2.5	0.5	0.56

CATEGORICAL VARIABLES		UNWEIGHTED N	UNWEIGHTED %	WEIGHTED %	UNWEIGHTED STDERROR	WEIGHTED STDERROR
Banking Status	Banked	785	77.3	76.7	1.32	1.48
	Unbanked	191	18.8	19.3	1.23	1.36
	Don't Know	19	1.9	1.9	0.43	0.43
	Refused	21	2.1	2.1	0.45	0.54
Respondent Role	Owner	840	82.7	82.8	1.19	1.21
	Top-level manager, not an owner	176	17.3	17.2	1.19	1.21
Client Type	Both businesses and individuals	348	34.3	33.6	1.49	1.58
	Primarily Individuals such as consumers or customers	595	58.6	59.2	1.55	1.63
	Primarily businesses	73	7.2	7.2	0.81	0.92

NUMERICAL VARIABLES	UNWEIGHTED N	UNWEIGHTED MEAN	WEIGHTED MEAN	UNWEIGHTED STANDARD DEVIATION	WEIGHTED STANDARD DEVIATION
Respondent Age[1]	1016	41.2	41.3	12.4	12.5
Business Age[2]	996	11.9	10.8	64.1	45.2
Number of Owners[3]	1016	1.4	1.4	0.9	0.9

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

2 Businesses in operation less than one year (79) coded as 0. Other possible response options: Don't Know (13), Refused (7)

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

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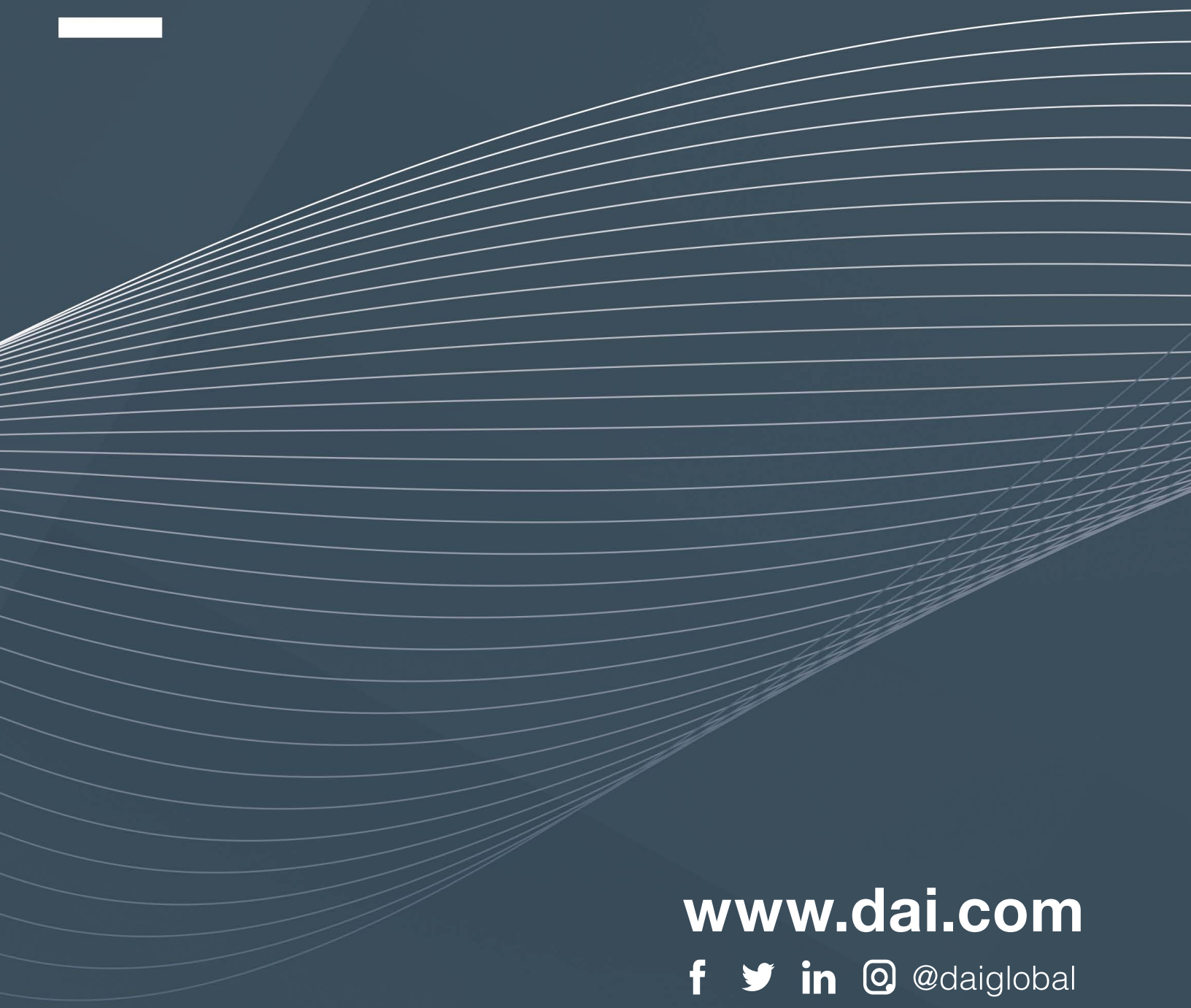

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