

INSIGHTS FROM EMERGING MARKETS

MSMEs and Digital Tool
Use Amidst the COVID-19
Pandemic

INDIA COUNTRY BRIEF



Shaping a more livable world.

February 2022

This final report (the “Final Report”) has been prepared by DAI Global, LLC (“DAI”) for Facebook, Inc. in accordance with the contract between the parties dated 1 May 2021 (“the Contract”) and on the basis of the scope and limitations set out below.

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.

The Final Report is provided exclusively for Facebook, Inc.’s use under the terms of the Contract. No party other than Facebook, Inc. is entitled to rely on the Final Report for any purpose whatsoever and DAI accepts no responsibility or liability or duty of care to any party other than Facebook, Inc. in respect of the Final Report or any of its contents.

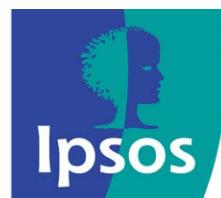
Any decision to invest, conduct business, enter, or exit the markets considered in the Final Report should be made solely on independent advice and no information in the Final Report should be relied upon in any way by any third party. This Final Report and its contents do not constitute financial or other professional advice, and specific advice should be sought from an independent professional about your specific circumstances.

Learn more about the study at www.dai.com/msme-study.



DAI’s Center for Digital Acceleration helps our clients integrate digital tools and approaches across their portfolio, especially in emerging markets. We do this by engaging end users, building digital products, and understanding the broader ecosystems that drive the success of technology-based initiatives. Our clients include bilateral and multilateral donors, private sector companies, foundations, and others seeking to drive positive social change across a cross-section of sectors including health, governance, agriculture, education, and economic growth.

<https://www.dai.com/our-work/solutions/digital-acceleration>



Ipsos is the world’s third-largest Insights and Analytics company, present in 90 markets and employing more than 18,000 people. Our passionately curious research professionals, analysts and scientists have built unique multi-specialist capabilities that provide true understanding and powerful insights into the actions, opinions and motivations of citizens, consumers, patients, customers, and employees. We serve more than 5,000 clients across the world with 75 business solutions.

ISIN code FR0000073298, Reuters ISOS.PA,
Bloomberg IPS:FP
www.ipsos.com.

CONTENTS

EXECUTIVE SUMMARY **4**

INTRODUCTION AND BACKGROUND **6**

MSMEs AND DIGITAL TOOL USE: SNAPSHOT IN TIME **9**

HOW MSMEs MANAGE KEY BUSINESS ACTIVITIES **13**

MSMEs DURING THE COVID-19 PANDEMIC **21**

BARRIERS TO THE ADOPTION AND USE OF DIGITAL TOOLS AMONG MSMEs **24**

CLOSING REMARKS **27**

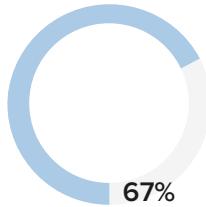
APPENDIX I: METHODOLOGY **28**

APPENDIX II: SUMMARY OF MSME AND RESPONDENT CHARACTERISTICS **33**

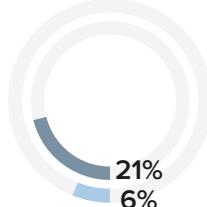
ENDNOTES **35**

EXECUTIVE SUMMARY

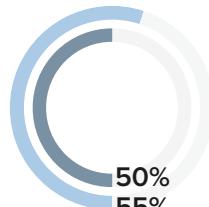
KEY FINDINGS



More than half (67 percent) of surveyed micro, small, and medium enterprises (MSMEs) reported using digital toolsⁱ for business purposes in the past year during COVID-19.



Surveyed online MSMEs recognized the importance of embracing new digital tools during COVID-19. A higher percentage of online MSMEs reported recently using Facebook appsⁱⁱ than other digital tools for common business activities about which they were asked.ⁱⁱⁱ For example, 21 percent of surveyed online MSMEs reported that they used Facebook apps to communicate with suppliers in the past 30 days, while only six percent of online MSMEs reported using other digital tools to do the same in the same timeframe.



Digital tools helped surveyed online MSMEs adapt to COVID-19: 50 percent of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19, and more than half (55 percent) of surveyed online MSMEs reported that digital payment tools helped them adapt to the COVID-19 environment.

India is one of the world's largest economies¹, with a large micro, small, and medium enterprise (MSME)^{iv} sector underpinning its consistent growth until the COVID-19-induced economic slowdown in 2020.² By allowing some MSMEs to quickly pivot online and maintain their core business functions, digital tools (defined here as internet-based technologies) have become increasingly important to India's MSME community during the pandemic.³

A survey conducted by DAI and Ipsos from June-August 2021 found that more than two-thirds (67 percent) of surveyed MSMEs in India were online, meaning that they used digital tools for business purposes in the past year during COVID-19. Similarly, the percentage of surveyed MSMEs who reported using digital tools for business purposes remained roughly similar prior to the COVID-19 pandemic (64 percent), in the past year during COVID-19 (67 percent), and in the past 30 days (65 percent).^v

ⁱ "Digital tools" refers to Internet-based technologies and social media. This is a broad term that includes the use of the internet in any of the following activities: social media platforms, such as Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram; other social media platforms, such as Twitter, TikTok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, or YouTube; other messaging applications, such as Viber, Line, WeChat, QQ, or Telegram; business software or cloud computing, such as Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, or Amazon Web Services); e-commerce websites, such as Amazon, Alibaba, Etsy, or Mercado Libre; email, such as Gmail, Hotmail, or Yahoo; mobile banking and digital payments, such as PayPal, Venmo, Yape, or Plin; videoconferencing, such as Zoom, Skype, or Google Hangouts.

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

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} This report uses the term "micro, small, and medium enterprises" (MSMEs) to refer to the businesses surveyed for this research, in line with the terminology used by multilateral institutions such as the International Finance Corporation and the United Nations. Although many countries have different official definitions of MSMEs (including India, where the government officially classifies MSMEs based on investment and turnover), DAI applied a standardized definition for consistency across all survey countries, based on the number of full-time, part-time, or seasonal employees or workers (including the respondent): micro (one employee), small (two to nine employees), and medium (10 to 249 employees).

^v 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 not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$. Difference in use of digital tools for business purposes in the past year and use of digital tools for business purposes in the past 30 days is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

Many surveyed MSMEs in India were at an early stage of their digital transformation journey. Surveyed MSMEs, both online and offline, reported a strong preference for using offline methods^{vi} to conduct the business activities about which they were asked. Even among online MSMEs, a large majority of respondents cited offline methods as a key way of doing business. For example, 90 percent of surveyed online MSMEs reported that they used offline methods to communicate with customers in the past 30 days. However, surveyed MSMEs also recognized the importance of embracing new digital tools during COVID-19: 50 percent of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19, and more than half (55 percent) of surveyed online MSMEs reported that digital payment tools helped them adapt to the COVID-19 environment. Additionally, a higher percentage of surveyed online MSMEs reported using Facebook apps than other digital tools for each business activity about which they were surveyed. For example, 21 percent of surveyed online MSMEs reported that they used Facebook apps to communicate with suppliers in the past 30 days, while only six percent of surveyed online MSMEs reported using other digital tools to communicate with suppliers in the past 30 days.

Both surveyed online and offline MSMEs reported facing similar difficulties when using digital tools. A lack of knowledge was a key barrier that both surveyed online and offline MSMEs reported when using digital tools. Forty-two percent of surveyed online MSMEs and 51 percent of surveyed offline MSMEs reported that lack

of knowledge was a difficulty their business faced in using digital tools. For online and offline MSMEs alike, this was the most frequently cited difficulty and most challenging difficulty they faced. Similarly, poor or no internet connectivity and high costs were the second and third-most frequently cited difficulties across both groups, respectively. Especially given the overlap between the difficulties that surveyed online and offline MSMEs reported facing, these findings suggest that stakeholders in the public, private, and development sectors could consider investments 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 enabling environment barriers such as connectivity.

With concentrated efforts by policymakers and other stakeholders to address the key barriers faced by both surveyed online and offline MSME segments, India's MSME sector will be well-positioned to increasingly integrate and harness the power of digital tools to improve business outcomes and build resilience to future economic shocks. These efforts have the potential to help entrepreneurs and business owners across the MSME sector to equitably access and use digital tools to support key business functions. This will, in turn, enable India 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 MSME digital tool usage across emerging markets in North America, South America, South Asia, and Southeast Asia. This brief provides an overview of findings from face-to-face surveys that Ipsos conducted with 1,030 micro, small, and medium enterprises (MSMEs) in India via computer-assisted personal interviewing (CAPI) from June 28 to August 13, 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 India's 6th Economic Census (2013) 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 (two to nine employees), and medium (10 to 249 employees) businesses. A random walk method was implemented to conduct interviews in urban and rural areas within four of India's six regions, capturing businesses across key segments including owner gender, urbanicity, and business sector. Due to the limited geographic scope of the survey, findings and results reported here are not nationally representative of India's MSME sector. The final survey results presented in this brief were weighted based on strata and differences in response rates by strata, urban-rural geography, and gender of respondent within each strata. A complete explanation of the sample design and research methodology is found in [Appendix I](#).

vi

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).

INTRODUCTION AND BACKGROUND

India is one of the world's largest economies⁴, with a large micro, small, and medium enterprise (MSME)^{vii} sector underpinning its consistent growth until the COVID-19-induced economic slowdown in 2020.⁵ By allowing some MSMEs to quickly pivot online and maintain their core business functions, digital tools (defined here as internet-based technologies)^{viii} have become increasingly important to India's MSME community during the pandemic.⁶

A new survey conducted by DAI and Ipsos from June to August 2021 collected evidence directly from 1,030 MSME owners and top-level managers in India 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 India, such as women-owned MSMEs and MSMEs working in specific sectors.^{ix}

When entrepreneurs across the MSME sector can equitably access and use digital tools in support of key business functions, India 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 regarding their digital tool usage, or lack thereof. These insights tie to SDG 9: Industry, Innovation, and Infrastructure, which calls for a significant increase in access to information and communications technology and for universal and affordable internet access. The survey also looked at how online MSMEs 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.

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

^{viii} "Digital tools" refers to Internet-based technologies and social media. This is a broad term that includes the use of the internet in any of the following activities: social media platforms, such as Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram; other social media platforms, such as Twitter, TikTok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, or YouTube; other messaging applications, such as Viber, Line, WeChat, QQ, or Telegram; business software or cloud computing, such as Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, or Amazon Web Services; e-commerce websites, such as Amazon, Alibaba, Etsy, or Mercado Libre; email, such as Gmail, Hotmail, or Yahoo; mobile banking and digital payments, such as PayPal, Venmo, Yape, or Plin; videoconferencing, such as Zoom, Skype, or Google Hangouts.

^{ix} 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 INDIA

The COVID-19 pandemic has presented significant challenges for India's economy. After two decades of at least 6.5 percent annual economic growth,⁷ India's GDP contracted by eight percent.⁸ Employing 120 million people and responsible for a third of India's manufacturing output and nearly half of exports, India's estimated 63.4 million MSMEs have been greatly affected by the pandemic.⁹ For example, an All India Manufacturers' Organisation survey found that 35 percent of surveyed MSMEs reported closing their businesses due to COVID-19-related lockdowns.¹⁰ Similarly, an online Endurance International Group (EIG) survey of its MSME customers in India conducted in June 2020 found that a third of respondents reported temporarily shutting down their business during COVID-19.¹¹

In response to the COVID-19 pandemic, survey research indicates that MSMEs in India have increased their use of digital tools. On the e-commerce side, in a Fedex survey of 120 small and medium enterprises (SMEs) across 18 cities in India, conducted in late 2020, 30 percent of surveyed small, and 40 percent medium businesses reported that their e-commerce sales improved since the pandemic started.¹² Similarly, the EIG survey found that 30 percent of surveyed MSMEs enabled e-commerce functionality or started a business website since the lockdown started.¹³ These survey findings align with a joint Unicommerce/Kearney report, which stated that India's e-commerce sales grew 36 percent by volume and 30 percent by value year-on-year in the last quarter of 2020.¹⁴ To that end, 35 percent of small businesses and 54 percent of medium businesses surveyed as part of the Fedex report stated that they were optimistic about e-commerce increasing their profitability following the COVID-19 pandemic.¹⁵

Social media use and digital payments also saw an uptick in usage among India's MSME population during COVID-19. For example, 44 percent of small businesses on the Fedex survey stated that they had been using social media platforms to engage with their customers.¹⁶ Similarly, more than 50 percent of MSMEs on the EIG survey reported that they used WhatsApp to keep their business running during COVID-19.¹⁷ In terms of digital payments, 76 percent of surveyed small and 60 percent of medium businesses on the Fedex report reported that they saw an increase in digital payments made to them since the pandemic started.¹⁸ Similarly, 28 percent of small businesses and seven percent of medium businesses reported adopting digital wallets during the pandemic; 84 percent of surveyed SMEs reported that they had adopted internet banking during the pandemic.¹⁹ These findings indicate that surveyed MSMEs did increase their digital tool usage to keep their businesses running during the COVID-19 pandemic.

SAMPLE OVERVIEW

This survey had 1,030 MSME respondents comprised of business owners and top-level managers; the below percentages provide detail on the sample.



Gender

20% of MSMEs reported that the business had **female owner/s**

92% of MSME respondents were **male**

8% of MSME respondents were **female**



Urbanicity

64% of MSMEs were located in **urban areas**

24% of MSMEs were located in **suburban areas**

12% of MSMEs were located in **rural areas**



Sector

27% of MSMEs reported that their primary product or service was in the **hospitality** sector

26% of MSMEs reported that their primary product or service was in the **retail and e-commerce** sector

14% of MSMEs reported that their primary product or service was in the **manufacturing and industry** sector

11% of MSMEs reported that their primary product or service was in the **professional services** sector

6% of MSMEs reported that their primary product or service was in the **agriculture and food production** sector



Customer base

58% of MSMEs reported that their business primarily served **other businesses**

32% of MSMEs reported that their business primarily served **consumers**

11% of MSMEs reported that their business served **both businesses and consumers**



Business owner education

84% of MSMEs had business owners with a **secondary education or higher**

15% of MSMEs had business owners with **less than a secondary education**



Age of business owner

61% of MSMEs had business owners **aged 18-44**

38% of MSMEs had business owners **aged 45+**



Bank account access

71% of MSMEs reported that they had **access to a bank account**

MSMEs AND DIGITAL TOOL USE: SNAPSHOTS IN TIME

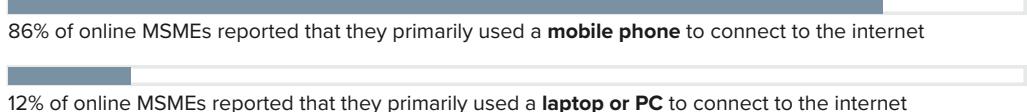
More than half of surveyed MSMEs in India reported using digital tools for business purposes prior to the COVID-19 pandemic, in the past year during COVID-19, and in the past 30 days. Surveyed online MSMEs reported that they primarily used their mobile phones to connect to the internet, highlighting the importance of mobile phones in doing business among India's online MSMEs.^x An interview with Balamurugan Sundararajan, one of the co-founders of professional services MSME Kaigal, shows how one medium-sized enterprise in India is running an employment service using only digital tools – primarily Facebook apps.^{xi} See [page 11](#) for full case study.



More than half of surveyed MSMEs used digital tools for business purposes prior to the COVID-19 pandemic, in the past year during COVID-19, and in the past 30 days^{xii}:



A large majority of surveyed online MSMEs used mobile phones to connect to the internet^{xiii}:



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

^{xii} 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 not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$. Difference in use of digital tools for business purposes in the past year and use of digital tools for business purposes in the past 30 days is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

^{xiii} Other answer options included tablets, don’t know, or refused.



Similar percentages of surveyed women-owned and men-owned MSMEs reported using digital tools for business purposes prior to COVID-19, in the past year during COVID-19, and in the past 30 days

Similar percentages of surveyed men-owned and women-owned MSMEs reported using digital tools for business purposes across all three time periods: prior to the COVID-19 pandemic, in the past year during COVID-19, and in the past 30 days. More specifically, 64 percent of surveyed men-owned and 63 percent of surveyed women-owned MSMEs reported that they had ever used digital tools for business purposes prior to the COVID-19 pandemic. The percentage of surveyed men-owned MSMEs who reported using digital tools for business purposes in the past year during COVID-19 increased to 68 percent and remained flat at 63 percent for women-owned MSMEs.^{xiv} In the past 30 days, it remained roughly constant (60 percent for women-owned MSMEs and 66 percent for men-owned MSMEs^{xv}). These findings do not align with the 2019 After Access survey, which showed a 57 percent gender gap in internet use in India.²⁰ This discrepancy could suggest that the gender gap may not extend to surveyed MSMEs.

However, a higher percentage of online women-owned MSMEs reported using certain digital tools than men-owned MSMEs in each time period. While some of these percentages were relatively similar across online women-owned and online men-owned MSMEs. For example, there was only a one or two percentage point difference in the use of digital payment tools for business purposes across all three time periods (71 percent for online women-owned MSMEs and 70 percent for online men-owned prior to COVID-19, 82 percent for online women-owned and 80 percent for online men-owned in the past year during COVID-19, and 78 percent for online women-owned and 76 percent for online men-owned in the past 30 days). Some digital tools had wider usage gaps. For instance, there was at least an eight-percentage point difference between online women-owned and online men-owned MSMEs when it came to videoconferencing. 24 percent of online women-owned MSMEs reported that they had ever used videoconferencing (e.g. Zoom, Skype) for business purposes prior to the COVID-19 pandemic, compared to 13 percent of men-owned MSMEs.^{xvi} These percentages increased slightly to 25 percent and 16 percent in the past year during COVID-19, then decreased to 21 percent and 13 percent in the past 30 days.^{xvii} Even though surveyed online women-owned MSMEs reported using digital tools for business purposes at a lower rate overall than online men-owned MSMEs, the survey results also show that each group used specific digital tools at different rates. These findings suggest that efforts to increase MSME digital tool usage will be more likely to succeed if tailored programming targets specific MSME segments – such as online women-owned and online men-owned MSMEs – with distinct business needs, as opposed to India’s MSME community as a whole.

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

^{xv} Among women-owned and men-owned MSMEs, the difference in use of digital tools in the past 30 days and in the past year during COVID-19 is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

^{xvi} Use of videoconferencing for business purposes prior to COVID-19 by gender owner is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.

^{xvii} Among women-owned and men-owned MSMEs, the difference in use of videoconferencing in the past 30 days and in the past year during COVID-19 is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

Among women-owned and men-owned MSMEs, the difference in use of videoconferencing in the past year and prior to COVID-19 is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

CASE STUDY

KAIGAL



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



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



PROFESSIONAL
SERVICES



MEDIUM-SIZED
ENTERPRISE



URBAN



SDG 8: DECENT
WORK & ECONOMIC
GROWTH

Balamurugan Sundararajan (Mr. Bala) saw a business opportunity when he realized that unskilled and skilled blue-collar and entry-level job seekers in Tamil Nadu often lacked networks and professional connections to identify job openings. To address this imbalance, he and his co-founders created an online recruitment start-up in his hometown to connect job seekers and MSMEs looking for employees.

Because mobile penetration is relatively high in India, Mr. Bala and his business partners decided to leverage digital tools to reach their core demographic – job seekers. They use WhatsApp and Facebook Messenger to tap into the pool of people seeking entry-level positions. To start the process, Mr. Bala's team posts available jobs on Kaigal's Facebook page. Interested applicants respond back about specific job openings through Facebook Messenger, which also registers them in Kaigal's systems. Once job seekers provide their contact information to the company, Kaigal uses the WhatsApp Business API to send automated messages with job openings in their local language. These innovative features have increased Kaigal's response rate and improved engagement metrics with job seekers. As a result, Mr. Bala now spends close to 70 percent of his marketing budget on Facebook and WhatsApp and says that more than 65 to 70 percent of their jobseekers come in through Facebook.



During the COVID-19 pandemic, Kaigal dramatically increased in popularity. Because so many people traveled back to their hometowns prior to lockdowns, the number of people seeking employment in Tamil Nadu went up significantly. With more people using their mobile phones to look for jobs during this period, Mr. Bala expanded Kaigal's use of Facebook to engage with this new customer segment. As a result, Kaigal saw a 20 to 30 percent increase in users during the pandemic.

Mr. Bala's MSME Kaigal embodies SDG 8: Decent Work and Economic Growth, by using digital tools to expand access to job opportunities and employment for India's labor force. At the same time, Kaigal supports MSMEs to grow and scale their businesses with the labor that they require. This dual approach – supporting

job seekers and supporting MSMEs simultaneously – promotes resilient economic growth in Tamil Nadu. In the future, Mr. Bala is interested in learning more about using advertisements to grow his business and explore WhatsApp's full functionality to improve his customer engagement experience.

"Facebook still has great potential for us to reach out to people. [We] started out in one small town, wanted to see how this idea evolves. It has all happened and is happening because of Facebook."

KEY INSIGHTS FOR POLICYMAKERS



Survey findings demonstrated that 64 percent of surveyed MSMEs in India reported using digital tools for business purposes prior to the COVID-19 pandemic, remaining relatively even at 67 percent in the past year during COVID-19 and 65 percent in the past 30 days. These survey results indicate that a critical mass of surveyed MSMEs in India have already begun their digital transformation process. This presents a promising opportunity for public, private, and development sector stakeholders to directly engage with those MSMEs that are not yet using digital tools, or that are not yet maximizing their digital tool use, to help them keep pace with market changes and stay competitive as their MSME peers digitize their business operations.

Throughout emerging markets, mobile phones are a key way that individuals access the internet.²¹ According to the survey results, surveyed online MSMEs in India were no exception. A large majority of surveyed online

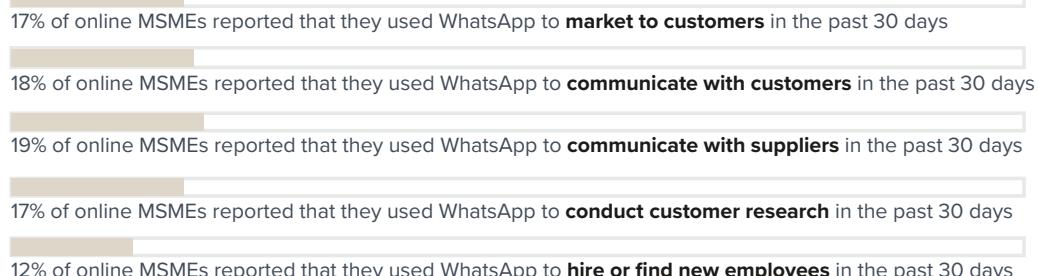
MSMEs (86 percent) reported that they primarily used mobile phones to connect to the internet, while only 12 percent of surveyed online MSMEs reported primarily using a laptop or PC for this purpose. According to GSMA's *The State of Mobile Internet Connectivity 2021* report, smartphone adoption among adults in India increased from 22 percent in 2017 to 51 percent in 2020 – the largest increase in smartphone adoption in recent years among South Asian countries. In addition to smartphone uptake, the country's users are among the largest consumers of data worldwide, due in part to widespread 4G coverage and data affordability.²² Given the already widespread (and growing) use of mobile phones to access the internet among surveyed MSMEs in India, public, private, and development sector stakeholders could look for opportunities to enhance MSME use of mobile internet even further, as an accessible “on ramp” for expanding digital tool use amongst offline MSMEs.

HOW MSMEs MANAGE KEY BUSINESS ACTIVITIES

Surveyed MSMEs reported recently using a variety of both online and offline tools to manage business activities, with Facebook apps more frequently used than other digital tools for every business activity about which MSMEs were asked. However, both surveyed online and offline MSMEs predominantly reported using offline methods^{xviii} in the past 30 days to conduct the key business activities about which they were asked. This finding indicates that there is untapped potential to increase MSME digital tool use across India. An interview with Meenal Velani, the owner of retail and e-commerce MSME Hiccup, shows how one small business in India is using social media to create meaningful content about women's health and build a sense of community with her followers. See [page 19](#) for full case study.



Similar percentages of surveyed online MSMEs reported they used WhatsApp for each business activity about which they were asked^{xix}:



^{xviii} 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).

^{xix} Difference between use of WhatsApp to communicate with customers in the past 30 days and use of WhatsApp for hiring or finding new employees in the past 30 days is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

Difference between use of WhatsApp to communicate with customers in the past 30 days and use of WhatsApp for marketing to customers in the past 30 days is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

Difference between use of WhatsApp to communicate with customers in the past 30 days and use of WhatsApp for doing customer research in the past 30 days is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.



Digital payment tools, Facebook apps, and email were the most frequently used digital tools among surveyed microenterprises, small businesses, and medium-sized businesses

A higher percentage of surveyed medium-sized businesses reported business-related digital tool usage than either small businesses or microenterprises across all three time periods: prior to COVID-19, during COVID-19, and in the past 30 days. More specifically, 75 percent of surveyed medium-sized businesses, 67 percent of surveyed small businesses, and 54 percent of surveyed microenterprises reported that they had ever used digital tools for business purposes prior to the COVID-19 pandemic.^{xx} These percentages increased to 77 percent for medium-sized businesses, 71 percent for small businesses, and 58 percent for microenterprises in the past year since COVID-19, then dipped slightly to 73 percent (medium-sized businesses), 69 percent (small businesses), and 56 percent (microenterprises).^{xxi} It is important to note that a higher percentage of surveyed microenterprises and surveyed small businesses reported using digital tools in the past 30 days than prior to COVID-19, which suggests that surveyed microenterprises and small businesses have likely continued using digital tools that they started using during COVID-19.^{xxii} It is not clear why surveyed medium-sized businesses reported lower digital tool usage rates for business purposes in the past 30 days than prior to COVID-19, though overall usage rates remained relatively high.^{xxiii} Despite lower digital tool usage rates among surveyed microenterprises, about the same percentage of surveyed online microenterprises (51 percent) reported that digital tools were important or essential to keeping their business running during COVID-19 as surveyed small businesses (50 percent) and surveyed medium-sized businesses (46 percent). This finding could indicate that digital tools played an outsize role in surveyed microenterprises' responses to the pandemic, despite lower overall usage rates.

Surveyed MSMEs of each business size reported often using digital payment tools, Facebook apps, and email for their businesses prior to COVID-19, during COVID-19, and in the past 30 days. Echoing other findings presented in this report, digital payment tools were the most frequently reported digital tools across surveyed MSMEs of all three sizes in each time period.^{xxiv} However, surveyed small businesses – not surveyed medium-sized businesses – reported the highest rates of digital payment tool usage for business purposes across each time period: 54 percent prior to the COVID-19 pandemic (compared to 46 percent for surveyed medium-sized businesses and 41 percent for surveyed microenterprises), 60 percent in the past year during COVID-19 (compared to 51 percent for surveyed medium-sized businesses and 46 percent for surveyed microenterprises), and 57 percent in the past 30 days (compared to 46 percent for surveyed medium-sized enterprises and 44 percent for surveyed microenterprises).^{xxv} These survey results echo the findings of a Fedex survey of 120 SMEs across 18 cities in India conducted in late 2020, which (as stated previously) found that 76 percent of surveyed small and 60 percent of medium businesses reported that they saw an increase in digital payments made to them since the pandemic started.²³ Further, Facebook apps were the second-most frequently used digital tool among surveyed microenterprises and surveyed small businesses and third-most for surveyed medium-sized enterprises across all three time periods.^{xxvi} However, email was the second-most frequently reported digital tool for surveyed medium-sized businesses across all time periods, but third-most for surveyed microenterprises and surveyed small businesses. This finding could indicate that Facebook apps were perceived as more accessible to – or were generally better-known – among microenterprises and small businesses, though more research would be required.

^{xx} Use of digital tools in the past year by business size is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.
Use of digital tools in the past 30 days by business size is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.

^{xxi} For both digital tool use in past 30 days and digital tool use in the past year, differences by business size is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.

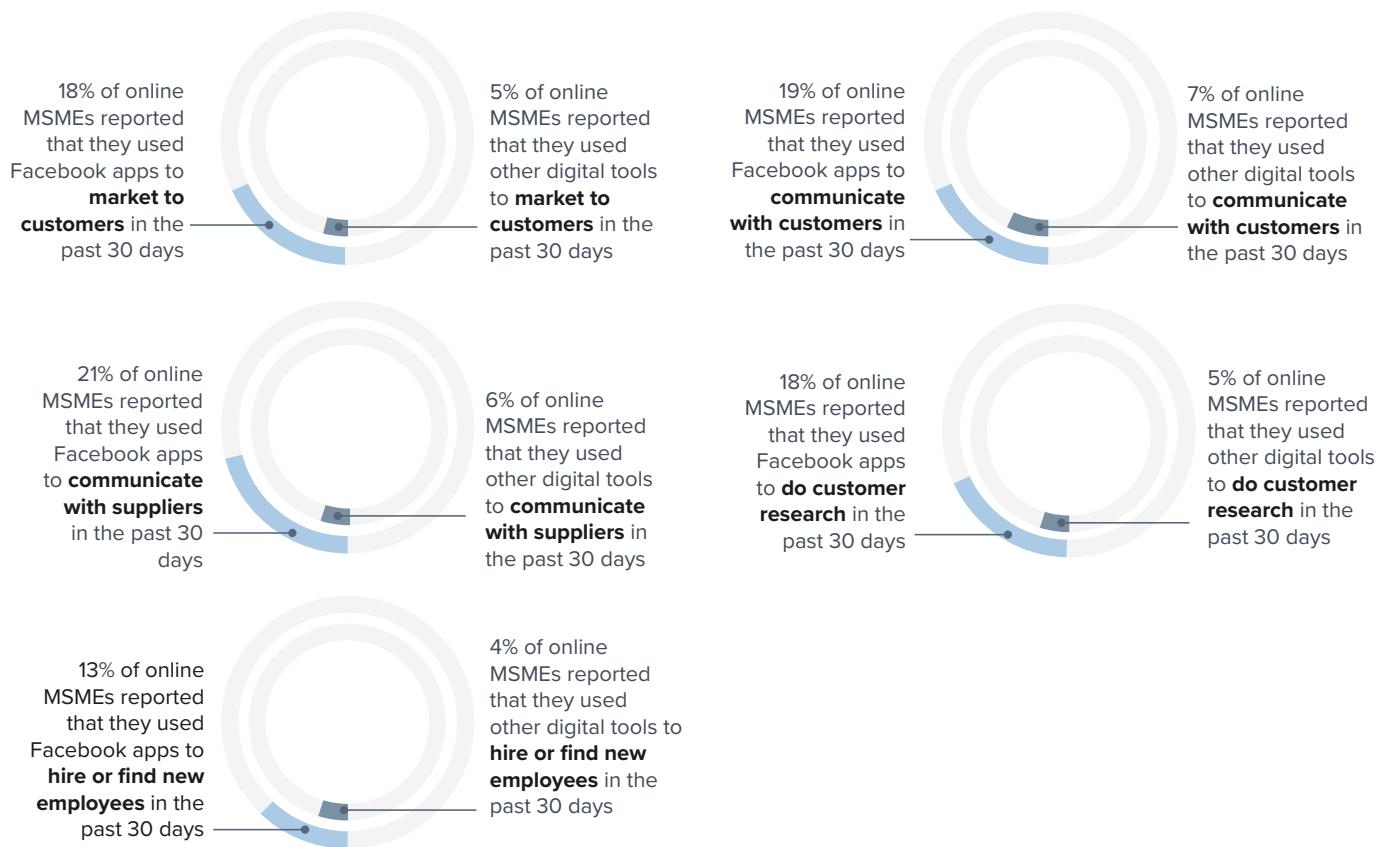
^{xxii} Among microenterprises, difference in use of digital tools for business purposes in the past 30 days and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.
Among small businesses, difference in use of digital tools for business purposes in the past 30 days and use of digital tools for business purposes prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

^{xxiii} Among medium-sized businesses, difference in use of digital tools for business purposes in the past 30 days and use of digital tools for business purposes prior to COVID-19 is not statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

^{xxiv} Digital payments were tied with Facebook apps and email (46 percent each) among medium-sized businesses prior to the COVID-19 pandemic as the most frequently used digital tool for business purposes.

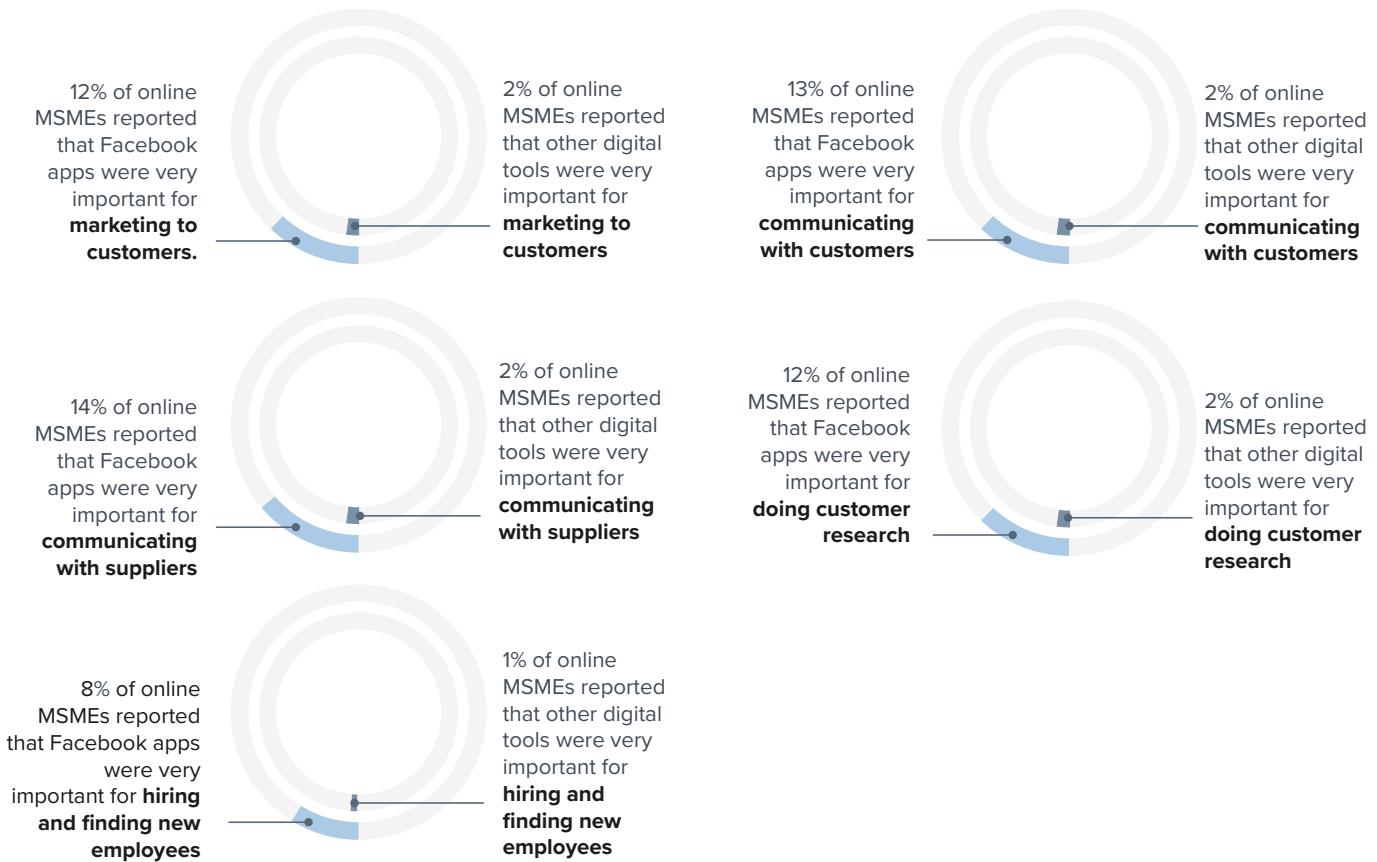
^{xxv} Use of digital payment tools for business purposes in each time frame by business size is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.
Digital payments were tied with Facebook apps and email (46 percent each) among medium-sized businesses prior to the COVID-19 pandemic as the most frequently used digital tool for business purposes.

A higher percentage of surveyed online MSMEs reported using Facebook apps than other digital tools to conduct each business activity about which they were asked^{xxvii}...



^{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.

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

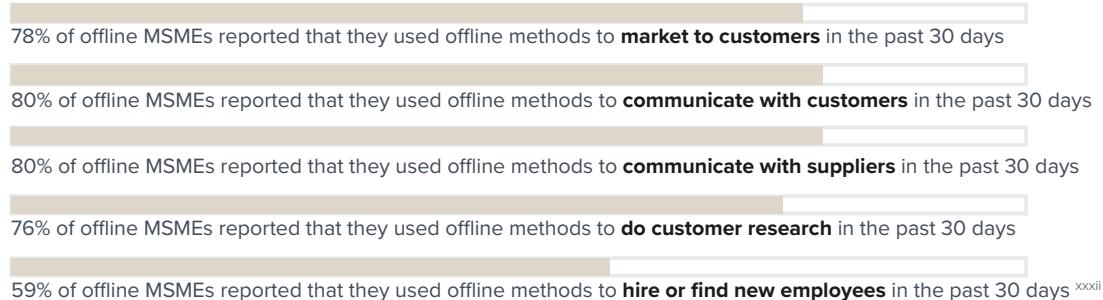


...but a large majority of surveyed online MSMEs reported using offline methods to conduct each business activity about which they were asked:

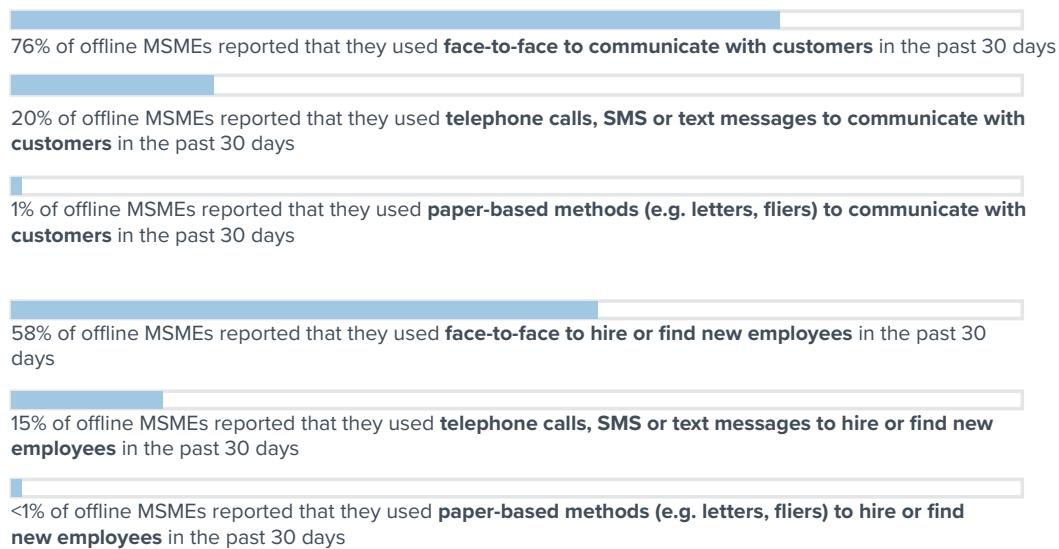


^{xxviii} Difference between percent reporting Facebook apps as very important and percent reporting other digital tools as very important for each business activity in question is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

The lowest percentage of surveyed offline MSMEs reported using offline methods^{xxix} to hire or find new employees, compared to other business activities about which they were asked:



Surveyed offline MSMEs reported using face-to-face interactions to conduct the key business activities about which they were asked at a higher rate than paper-based methods or telephone calls, SMS, or text messages^{xxxiii}:



^{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 offline MSMEs who reported they used offline methods or hire or find new employees and all other listed business activities is statistically significant per Chi-squared goodness of fit test, adjusted $p > 0.05$.

^{xxxiii} 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 interaction and use of paper-based-methods for each business activity in question among offline MSMEs is statistically significant per Chi-squared goodness of fit test, adjusted $p < 0.05$.

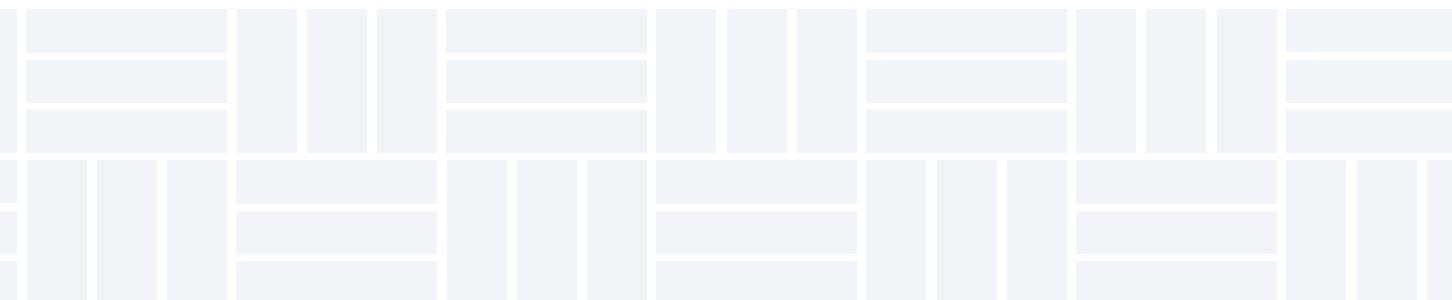
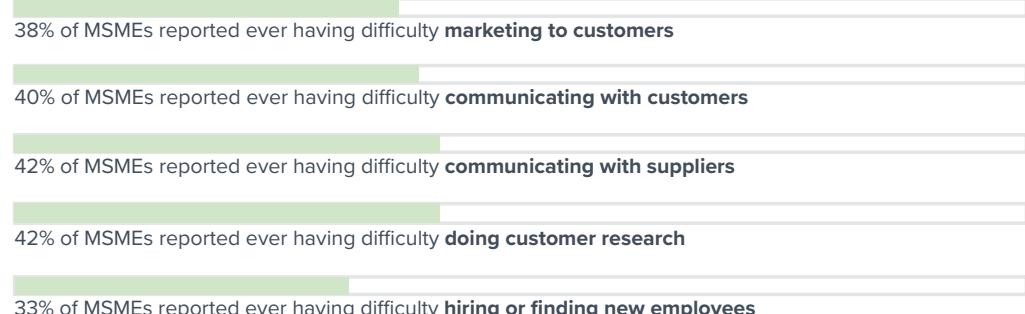


Surveyed MSMEs' digital tool use to sell goods and services remained the same during COVID-19

Selling goods and services is a key business activity for all MSMEs. In the survey, 21 percent of surveyed MSMEs in India reported that they have ever used digital tools to sell goods and services. In terms of COVID-19-related digital tool usage for sales, 17 percent of surveyed MSMEs reported using digital tools to sell goods and services across all three time periods about which they were surveyed: prior to COVID-19, in the past year since COVID-19, and in the past 30 days.^{xxxii} This survey finding indicates that surveyed MSMEs did not increase their digital tool usage for sales purposes during the pandemic.



Surveyed MSMEs reported ever having difficulty communicating with customers at a higher rate than hiring or finding new employees^{xxxiii}:



^{xxxii} Difference between use of digital tools to sell goods and services in the past year and prior to COVID-19 is not 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 year and in the past 30 days is not statistically significant per Chi-squared goodness of fit test, adjusted p > 0.05.

^{xxxiii} Difference between difficulty in communicating with customers and difficulty in marketing to customers is not statistically significant per Chi-squared goodness of fit test, adjusted p > 0.05.

Difference between difficulty in communicating with customers and difficulty in hiring or finding new employees is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.

CASE STUDY

HICCUP



[www.facebook.com/
my.hiccup/](https://www.facebook.com/my.hiccup/)



[www.instagram.com/
my.hiccup](https://www.instagram.com/my.hiccup)



RETAIL &
E-COMMERCE



SMALL
ENTERPRISE



URBAN



SDG 5:
GENDER EQUALITY

Driven by their desire to make sustainable and affordable menstrual products more accessible across India, Meenal Velani and her business partner started a business selling menstrual cups (reusable feminine hygiene products) in 2019. With her background in marketing, she realized that she could import her products from trusted companies and sell them online to consumers and small stores across India. “At any time, there are 600 million people menstruating in India. We wanted to create something that’s widely accessible to rural and urban areas for people across all socioeconomic backgrounds.” She soon plans to start her own factory, to have control over all materials and support India’s domestic manufacturing sector.

Soon after Hiccup’s founding, Meenal and her business partner began using digital tools to sell their products and educate their online audience about the social and environmental benefits of menstrual cups. After launching Hiccup’s website in 2019, she quickly realized that she needed more analytics and insights about Hiccup’s reach and its typical user journey. To get more nuanced information on customer acquisition and how her online content was performing, Meenal pivoted to social media.

Meenal uses Instagram and Facebook to create a sense of community with her followers. She posts educational content about menstruation and sexual health on Instagram, engaging with Hiccup’s followers – the online community she has carefully cultivated – on topics

like period poverty and body positivity. “This is a safe space on Instagram to have these conversations. To have meaningful education and engage with women talking about their experiences to build a sense of community.” She also connects to and collaborates with non-governmental organizations, experts, and content creators from niche communities, like people living with endometriosis in India, to produce more content. Similarly, she participates in Facebook groups and communities to connect and interact with her audience. To close sales, she uses Facebook Marketplace and Facebook ads to direct potential customers to Hiccup’s website for product purchase.

During the COVID-19 pandemic, Hiccup started using even more features to share information about their products in new ways. For example, during the lockdown, Meenal noticed people were watching more long-format content than before, so she started using IGLive and Instagram Reels to reach more potential customers and increase Hiccup’s discoverability. According to her, Hiccup is now creating more meaningful content and seeking more innovative collaborations than ever before due to COVID-19-related marketplace changes. With these changes in how Hiccup used social media during the pandemic, Meenal quickly began to see increased online activity and engagement for Hiccup, which translates to increased sales.

By using technology to promote women’s empowerment and by enhancing women’s access to sexual and reproductive health



information, Hiccup embodies the values and goals of SDG 5: Gender Equality. By expanding the marketplace for women’s health and wellness products and giving women the information that they need to take control of their bodies, Hiccup is advancing India’s inclusive economic growth agenda.

“When we run Facebook and Instagram ads, we see a massive increase in the number of people who visit our website and engage with us and start following us.”

KEY INSIGHTS FOR POLICYMAKERS

A higher percentage of surveyed online MSMEs reported recently using Facebook apps than other digital tools for each business activity about which they were asked. For example, 21 percent of online MSMEs reported that they used Facebook apps to communicate with suppliers in the past 30 days, compared to just six percent of online MSMEs that reported using other digital tools for this purpose in this timeframe. Similarly, a larger percentage of surveyed online MSMEs also reported that Facebook apps were very important across each business activity about which they were asked, compared with other digital tools. For instance, 13 percent of surveyed online MSMEs reported that Facebook apps were very important for communicating with customers, compared to two percent of surveyed online MSMEs about other digital tools. Especially in the context of India's 41 percent internet penetration rate,²⁴ these survey findings suggest that Facebook apps were a particularly important digital tool among surveyed online MSMEs. They also largely align with other external research. For example, MicroSave Consulting (MSC) research published in January 2021 stated that nearly one-third of MSMEs they surveyed in India reported starting to use social media, such as WhatsApp and Facebook, to communicate and accept business orders during the pandemic.²⁵

However, offline methods maintained a strong foothold among surveyed online MSMEs across all business activities about which they were asked. For example, 91 percent of online MSMEs reported using offline methods to communicate with suppliers in the past 30 days, and 90 percent reported the same about communicating with customers over the same time period. These survey findings indicate that there is untapped potential to increase digital tool use among surveyed MSMEs in India, an important consideration for stakeholders in the public, private, and development sectors. Given surveyed MSMEs' frequent reported use of offline methods to conduct key business activities about which they were asked, survey findings also highlighted opportunities where simple and intuitive digital tools could be introduced to help address difficulties that surveyed MSMEs cited. For instance, a third (33 percent) of surveyed MSMEs reported ever having difficulty hiring or finding new employees. At the same time, the smallest percentage of offline MSMEs (59 percent) and online MSMEs (77 percent) reported using offline methods to hire or find new employees in the past 30 days. This suggests that there could be an opportunity to encourage offline and online MSMEs alike to use – or increase their use of – digital tools for functions such as personnel recruitment.



MSMEs DURING THE COVID-19 PANDEMIC

The COVID-19 pandemic posed a challenge for surveyed MSMEs in India. A large majority (84 percent) of surveyed MSMEs reported that their sales decreased during COVID-19 compared to a typical year, and nearly the same percentage (89 percent) reported that their business closed at some point during COVID-19. Half (50 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19.



Surveyed MSMEs' sales decreased substantially during the COVID-19 pandemic:

84% of MSMEs reported that their **sales decreased** during COVID-19 compared to a typical year

54% of MSMEs reported that their **sales decreased by more than half** of a typical year

9% of MSMEs reported that their **sales increased or stayed approximately the same** during COVID-19 compared to a typical year

89% of MSMEs reported that their **business closed at some point** during COVID-19



Digital tools helped some surveyed online MSMEs adapt to the new economic environment:

50% of online MSMEs reported that **digital tools were important or essential to keeping their business running** during COVID-19

55% of online MSMEs reported that **digital payment tools** helped them adapt to the COVID-19 environment

43% of online MSMEs reported that **Facebook apps** helped them adapt to the COVID-19 environment

17% of online MSMEs reported that **email** helped them adapt to the COVID-19 environment



A higher percentage of surveyed MSMEs in the hospitality sector reported business-related digital tool use prior to COVID-19 and in the past year since COVID-19 than MSMEs in other sectors

A higher percentage of surveyed MSMEs in the hospitality sector reported business-related digital tool use prior to COVID-19 and in the past year since COVID-19 than MSMEs in the retail and e-commerce sector, manufacturing and industry sector, and professional services sector. More specifically, 75 percent of surveyed MSMEs in the hospitality sector reported that they had ever used digital tools for business purposes prior to the COVID-19 pandemic, compared to 71 percent in manufacturing and industry, 68 percent in professional services, and 55 percent in retail and e-commerce.^{xxxiv xxxv} With the exception of retail and e-commerce, which remained the same at 55 percent, these percentages all increased in the past year during COVID-19: 84 percent of surveyed MSMEs in the hospitality sector reported that they used digital tools for business purposes in the past year since COVID-19, compared to 75 percent of MSMEs in professional services and 73 percent in manufacturing and industry.^{xxxvi} Not only did the hospitality sector maintain the highest percentage of surveyed MSMEs reporting that they used digital tools for business purposes during COVID-19, but it also experienced the largest percentage point jump (10) between time periods.^{xxxvii} This finding indicates that surveyed MSMEs in the hospitality sector were frequent digital tool users, even before the pandemic.

During COVID-19, digital payment tools were the most frequently reported digital tool used for business purposes across all four sectors, followed by Facebook apps. Echoing the above findings, surveyed MSMEs in the hospitality sector reported the highest usage percentages of each digital tool. For example, 75 percent of surveyed MSMEs in hospitality, 63 percent in professional services, 55 percent in manufacturing and industry, and 43 percent in retail and e-commerce reported that they used digital payment tools for business purposes in the past year during the COVID-19 pandemic.^{xxxviii} Facebook apps were the second-most frequently reported digital tool, with 58 percent of surveyed MSMEs in hospitality, 42 percent in manufacturing and industry, 41 percent in professional services, and 37 percent in retail and e-commerce reporting their use for business purposes in the past year since COVID-19.^{xxxix} These findings indicated that MSMEs across sectors reported often using simple and intuitive digital tools to meet their business needs.

^{xxxiv} Though this survey finding is lower than expected, it may be due to retail and e-commerce MSMEs being combined into a single sector category, rather than two separate categories.

^{xxxv} Use of digital tools prior to COVID-19 by sector is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.

^{xxxvi} Use of digital tools for business purposes in the past year by sector is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.

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

^{xxxviii} Use of digital payment tools for business purposes in the past year by sector 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 sector is statistically significant per Chi-squared test of independence, adjusted $p < 0.05$.

KEY INSIGHTS FOR POLICYMAKERS

Survey results demonstrated that the COVID-19-related economic downturn negatively affected many surveyed MSMEs' sales. More specifically, a large majority (84 percent) of surveyed MSMEs reported that their sales decreased during COVID-19 compared to a typical year, and over half (54 percent) reported that their sales decreased by more than half of a typical year. To that end, 89 percent of surveyed MSMEs reported that their business closed at some point during the pandemic. These findings align with other external research from India: in the first wave of the Center for Financial Inclusion's six-wave longitudinal study on COVID-19's impact on MSMEs in four countries, 89 percent of surveyed MSME owners in India reported a decrease in profits.²⁶ Between waves three and four, the percentage of MSMEs who reported being able to cover expenses with revenue dropped over sixty percentage points.²⁷ Both these findings and external research demonstrate that the COVID-19 pandemic had far-reaching economic impacts on many MSMEs in India.

Further, in the DAI/Ipsos survey, half (50 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19. Though not universal, this finding indicates the important role that digital tools played in

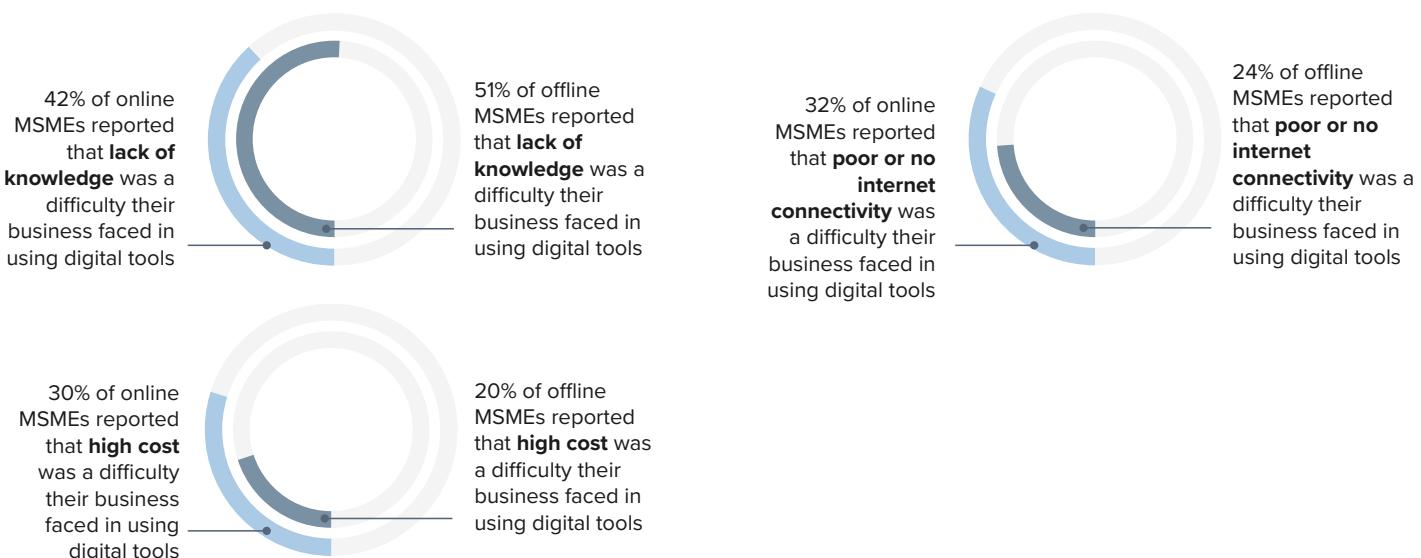


facilitating business resilience for online MSMEs at a key moment during the pandemic. It also suggests that there is untapped potential for surveyed MSMEs to digitize their business operations. In terms of specific digital tools that surveyed online MSMEs reported helping them adapt to the COVID-19 environment, the two most frequently cited responses were digital payment tools (55 percent) and Facebook apps (43 percent). These findings align with external research – for example, a June 2020 MSC research report stated that 57 percent of MSME respondents reported increasing their usage of digital payments during the pandemic and that WhatsApp was surveyed MSMEs' preferred social media platform to run their business in the post-COVID-19 situation.²⁸ These findings indicate that surveyed online MSMEs in India appeared to favor simple and intuitive digital tools, like Facebook apps and digital payments, while adjusting to new economic conditions. Stakeholders in the public, private, and development sectors have an opportunity to support offline MSMEs with the training and skills needed to adopt these types of digital tools and keep pace with their online peers. This kind of support has the potential to increase the likelihood that offline MSMEs can benefit from increased digitization during India's journey towards economic recovery.

BARRIERS TO THE ADOPTION AND USE OF DIGITAL TOOLS AMONG MSMEs

For surveyed online and offline MSMEs, a lack of knowledge was the most frequently cited difficulty and most challenging difficulty their businesses faced in using digital tools. Both online and offline MSMEs demonstrated low confidence in using digital tools, and respondents from each group reported interest in learning about digital tools to interface with customers.

Both surveyed online and offline MSMEs most frequently cited a lack of knowledge as a difficulty their business faced in using digital tools. Poor or no internet connectivity and high costs were, respectively, the second- and third-most frequently cited difficulties among both groups:



Both surveyed online and offline MSMEs most frequently cited a need for more knowledge as the most challenging difficulty their business faced in using digital tools.^{xl}

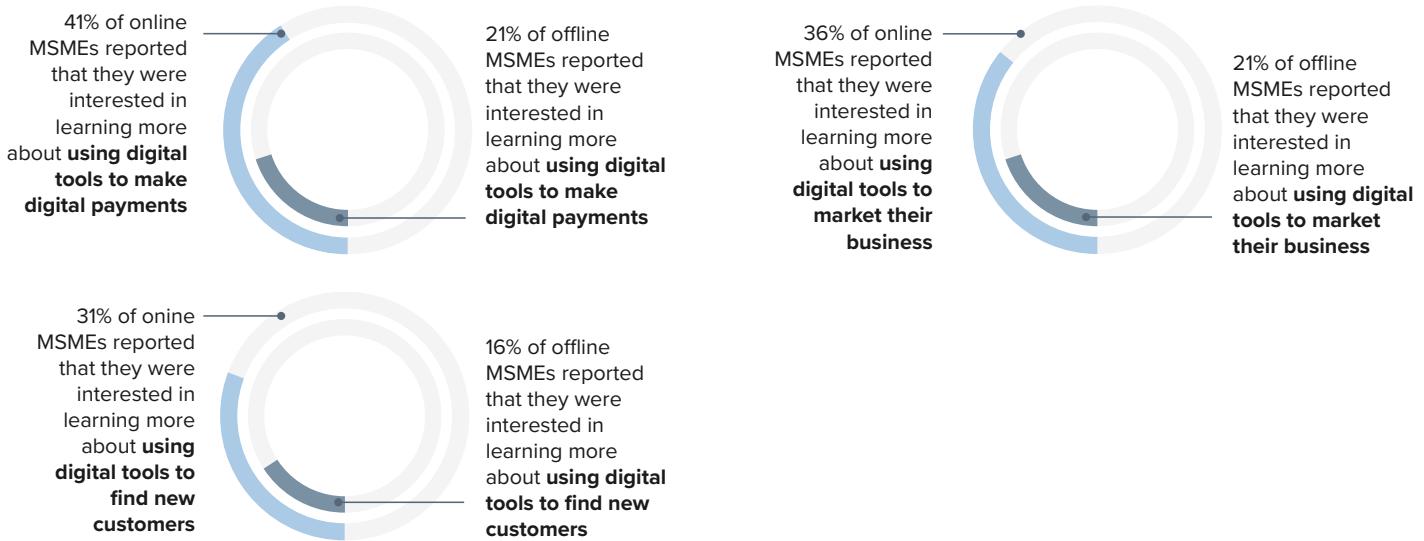


19% of offline MSMEs reported that **needing more knowledge** was the most challenging difficulty their business faced in using digital tools^{xli}

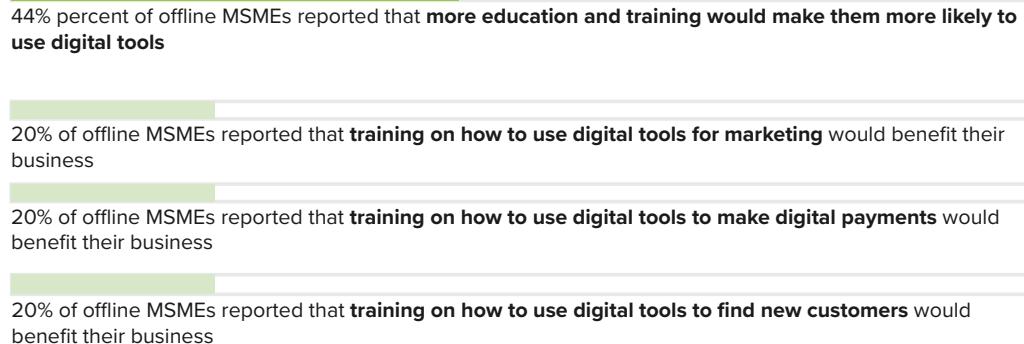
14% of online MSMEs reported that **needing more knowledge** was the most challenging difficulty their business faced in using digital tools

^{xl} When asked what was their most challenging difficulty using digital tools, 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.

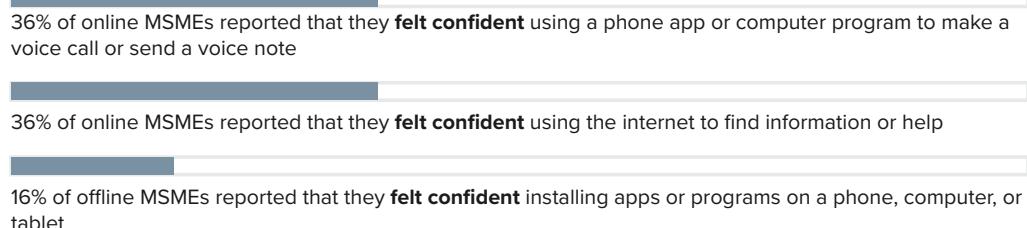
Surveyed online and offline MSMEs were interested in learning more about digital payments and how to use digital tools to enhance their customer-facing work:



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



 **A minority of surveyed online MSMEs reported feeling confident in using digital tools for routine business activities, such as voice calls and internet searches:**





A much higher percentage of surveyed online MSMEs compared to surveyed offline MSMEs reported that they were self-taught on using digital tools^{xli}

A significantly higher percentage of online MSMEs reported that they learned how to use digital tools from their family or friends and that they were self-taught on digital tools than offline MSMEs. More specifically, 67 percent of online MSMEs reported that they learned how to use digital tools from their family or friends, compared to 30 percent of offline MSMEs – the most frequently reported response across both groups for how they learned to use digital tools. The second most frequently reported response for online and offline MSMEs alike was being self-taught: 51 percent of online MSMEs reported that they were self-taught on how to use digital tools and just 14 percent of offline MSMEs reported the same. Even though online and offline MSMEs had the same top answer options when asked how they learned to use digital tools, the percentage differences between online and offline MSMEs for each suggests that surveyed offline MSMEs had lower levels of digital tool knowledge and familiarity than online MSMEs. These findings could also be due to selection effect, i.e. the self-taught are more likely to be online, as well as being online makes it easier to be self-taught.

KEY INSIGHTS FOR POLICYMAKERS

For surveyed online and offline MSMEs alike, a lack of knowledge was the most frequently cited difficulty and most challenging difficulty their business faced in using digital tools. Similarly, poor or no internet connectivity and high costs were the second- and third-most frequently cited difficulties across both groups, respectively. Especially given the overlap between the difficulties that surveyed online and offline MSMEs reported eported that their business faced in using digital tools, these findings suggest that stakeholders in the public, private and development sectors could consider investments that address common roadblocks for both online and offline MSMEs. This includes information sharing and capacity-building activities to expand awareness and usage of digital tools. By enabling more MSMEs to come online with fewer disruptions and difficulties, investments that address connectivity issues and the high costs of data and devices could also encourage more MSMEs to come online and/or increase their use of digital tools.



Some surveyed MSMEs, especially online MSMEs, reported an interest in learning more about digital tools to make digital payments and augment their customer-facing work, like marketing their business and finding new customers. A higher percentage of surveyed online MSMEs reported an interest in learning more about digital tools than their offline counterparts across all answer options, suggesting that online MSMEs may already possess a deeper understanding of how digital tools can enhance their business outcomes. However, survey responses also demonstrated low confidence among both surveyed online and offline MSMEs in using digital tools for routine business activities. For example, just 36 percent of online MSMEs reported that they felt confident using the internet to find information or help; only 16 percent of offline MSMEs reported that they felt confident installing apps or programs on a phone, computer, or tablet. This survey finding indicates that, while surveyed online MSMEs may be interested in learning about digital tools, they lack confidence in using them to support their business activities.

CLOSING REMARKS

With continued improvements in internet connectivity and digital literacy and targeted interventions to improve enabling environment barriers such as cost and accessibility, India'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. Two-thirds (67 percent) of MSMEs surveyed in this study were online, and more than half (55 percent) reported that digital tools such as digital payment tools helped them adapt to the COVID-19 environment. These findings present a rich opportunity for policymakers and other stakeholders to make a case for greater uptake of digital tools among MSMEs and identify targeted solutions addressing poor connectivity, low digital skills, and low user confidence. With Facebook apps outpacing other digital tool usage amongst online respondents, stakeholders could take advantage of the network effect to draw offline businesses into the online world.

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

APPENDIX I: METHODOLOGY

OVERVIEW OF THE SURVEY DESIGN

From June 28 to August 13, 2021, Ipsos conducted 1,030 in-person interviews of enterprises via computer-assisted personal interviewing (CAPI) to better understand their use of digital tools as well as their challenges and barriers to digitization.^{xlii}

The sample for the study was defined to include and be limited to India's micro (one employee), small (two to nine employees) and medium (10 to 249 employees) business populations^{xliii} (summarized as "business size" in the text). In India, there were no official statistics on businesses either by business size or by geography so it was not possible to establish target interview counts of the MSME business population. 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 India.

Furthermore, due to the lack of business-population statistics, Ipsos was unable to estimate the number of businesses by size, urbanicity, and business-owner gender. In lieu of this, Ipsos set a minimum interview count of 150 for each business size and urbanicity type (urban/rural).^{xliv} In addition, a 150 minimum-interview count for women-owned businesses was set. This means that if 150 interviews were not reached when the final sample size was achieved, then additional interviews would be conducted to oversample women-owned businesses to achieve 150 interviews. In India, this minimum was achieved naturally and no oversample was required.

The minimum interview counts were allocated as shown below, which also shows the actual interview counts achieved from fieldwork:

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

BUSINESS SIZE			URBANICITY			BUSINESS-OWNER GENDER		
	MINIMUM REQUIRED	ACTUAL		MINIMUM REQUIRED	ACTUAL		MINIMUM REQUIRED	ACTUAL
Micro	150	401	Urban	150	893	Women	150	207
Small	150	483	Rural	150	137			
Medium	150	146						

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

^{xliii} 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.

^{xliv} For stratification purposes, strata classified as peri-urban/suburban were combined with those designated as rural.

Sample Design

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

- **PSUs:** Primary sampling units (PSUs) were defined as states. India's 36 states (including its eight Union territories) were stratified by four regions: North, South, East, and West. A total of eight states were selected with random probability proportional to the number of persons of each state using the census data from the 6th Economic Census, Central Statistical Office (2013).²⁹ The eight PSUs across the four regions were: New Delhi, Uttar Pradesh, and Punjab (North); Tamil Nadu and Telangana (South); West Bengal (East); and Maharashtra and Gujarat (West).
- **SSU1s:** Secondary sampling units (SSU1s) were defined as districts. The 269 districts in the eight PSUs (out of 748 districts nationally) were then stratified by state. Within each state, one district was randomly chosen from the list using systematic selection for a total of eight districts (SSU1s).
- **SSU2s:** SSU2s were defined as cities. Due to the size and diversity of the country, India required an additional stage of selection whereby districts were stratified into urban areas that included the urban cities, and rural areas that included each district's fringe peri-urban areas, rural cities, and towns.^{xlv} One city was selected with equal probability out of the compiled list of urban areas within a district. One rural area was selected with equal probability out of the compiled list of peri-urban or rural areas corresponding to a district. Sixteen SSU2s were chosen – one urban and one rural from each SSU1.
- **SSU3s:** SSU3s were defined as commercial business areas within each SSU2. There were no available statistics for the total universe of SSU3s so they were selected using the combined knowledge of the research team and Ipsos' on-the-ground experience. This analysis took into account meeting target interview counts by urbanicity and business size. Where an SSU2 contained only one commercial business area, that served as the default

SSU3. In densely populated business districts, a discretionary SSU3 would be selected to begin the random walk selection of individual businesses.

- **Individual businesses:** Within each SSU3, enumerators identified businesses to contact by using the random walk method. That is, after beginning at a random spot within a demarcated geographic area – which were 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.

Interview Response and Refusal Rates in India^{xlvii}

	CAPI
Contacts	2,191
Completes	1,030
Refusals	901
Response rate ^{xlviii}	47%
Refusal rate ^{xlviii}	41%

^{xlv} There are no official counts of the total number of commercial areas in India, hence the need to compile lists of identifiable urban and peri-urban or rural commercial areas from which to select SSU2s.

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

^{xlvii} Calculated using AAPOR Response Rate 3 methodology.

^{xlviii} Calculated by dividing the number of refusals by the number of contacts.

Locations for Research in India

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

Target and Actual Interview Counts by Region

REGION (AND # OF STATES SELECTED)	TARGET	ACTUAL
East (1 state)	125	134
North (3 states)	375	462
South (2 states)	250	252
West (2 states)	250	182
TOTAL	1,000	1,030

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.

- **Design weight:** A weight was applied by India's four regions to adjust the sample to be proportionate to the number of persons within each region as determined by the 2013 Census data mentioned above.³⁰ As no reliable census of businesses existed, general population counts were more likely to mirror the total (formal and informal) business population.
- **Non-response weight:** 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 state 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, state X would be weighted to reflect the number of female and male respondents who were approached. Without these weights, the survey results would be biased by propensity to respond based on respondent gender and urbanicity.

These two weights were combined to create one overall

final weight applied to all data points. The design effect for India is 1.26.^{xlix}

Ipsos carefully considered a broad spectrum of weights to be applied. Two in particular – business-size and cross-national – were not applied. A business-size weight was not applied because no reliable data exists in India against which to weight. A cross-national weight, to enable comparison across countries in this series of reports, was not applied because there were no reliable data sources that could account for sampling differences across all countries in fieldwork timing and survey modes.

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

COVID-19 Protocols

Extensive COVID-19 protocols were observed during CAPI interviews: only two to three 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 every interview.

Limitations to the Survey Design

While every effort was made to ensure representativeness of the data, there are several limitations to the survey design. In terms of coverage limitations, 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. The random walk methodology may also limit the inclusion of multiple businesses at the same location. For multi-storey buildings, enumerators were instructed

^{xlix} 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.

to treat the building as part of the random walk and choose one MSME from the location for screening and consent (or multiple MSMEs, depending on the interval and building size). However, if multiple businesses were operating from one space or location in the building, only one would be eligible. This limitation also applied 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 were from targeted areas listed above; all firms outside of these areas were not included in the sampling frame.

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 weigh

on unobservables such as individual propensity to participate in a survey during a pandemic.

An additional key limitation related to weighting was the lack of post-stratification weights, particularly for national-level calculations and estimates. Without complete data on formal and informal MSMEs for benchmarking, it was not possible to implement post-survey adjustments to reflect the true composition of India's SME structure. Although the sampling process captured variation in India'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 they were eligible for ranged from zero to 14 percent, depending on the question.

Reported survey results were calculated with a base of all respondents (the total sample), or on all surveyed online MSMEs or surveyed offline MSMEs. The base is specified for each data point; sample sizes for both online and offline MSMEs are smaller than the base of all surveyed MSMEs. Certain data points may also reflect 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. The main criterion for determining statistical significance is the 95 percent confidence level. For each disaggregate percentage estimation highlighted in the report, the p-value in relation to alpha (less than or equal to .05 or greater than .05) is reported as a footnote.

Additionally, findings and results reported here should not be considered representative of India's MSME sector due to the limited geographic scope of the survey and the limitations to the survey design mentioned above.

APPENDIX II: SUMMARY OF MSME AND RESPONDENT CHARACTERISTICS

CATEGORICAL VARIABLES		UNWEIGHTED N	UNWEIGHTED %	WEIGHTED %	UNWEIGHTED STDERROR	WEIGHTED STDERROR
Online Status	Offline	322	31.3	33.1	1.45	1.65
	Online	708	68.7	66.9	1.45	1.65
Gender Ownership	Men-owned	819	79.5	79.9	1.26	1.38
	Women-owned	207	20.1	19.8	1.25	1.37
	Don't know	4	0.4	0.4	0.19	0.18
Urbanicity	Rural	137	13.3	12.4	1.06	1.17
	Suburban	241	23.4	23.8	1.32	1.47
	Urban	652	63.3	63.9	1.5	1.67
Business Size	Micro	401	38.9	37.9	1.52	1.67
	Medium	146	14.2	16.3	1.09	1.35
	Small	483	46.9	45.8	1.56	1.72
Business Vertical	Agriculture and food production	67	6.5	5.6	0.77	0.69
	Hospitality	321	31.2	27.3	1.44	1.38
	Manufacturing and industry	139	13.5	14.2	1.07	1.25
	Professional services	127	12.3	11	1.02	0.99
	Retail and e-commerce	237	23	25.5	1.31	1.54
	Other	139	13.5	16.4	1.07	1.36
Region	East	134	13	29	1.05	0.1
	North	462	44.9	33.6	1.55	0.14
	South	252	24.5	22.2	1.34	0.08
	West	182	17.7	15.2	1.19	0.18
Owner Education	No formal education or less than Primary education	23	2.2	1.7	0.46	0.36
	Primary education	149	14.6	13.5	1.1	1.13
	Secondary education	420	41.1	40.7	1.54	1.7
	University education or higher (degree)	340	33.2	34.9	1.47	1.68
	Vocational or technical education or training	85	8.3	8	0.86	0.92
	Don't know	5	0.5	1.1	0.22	0.47
	Refused	1	0.1	0.1	0.1	0.08

CATEGORICAL VARIABLES		UNWEIGHTED N	UNWEIGHTED %	WEIGHTED %	UNWEIGHTED STDERROR	WEIGHTED STDERROR
Owner Age	18-24	111	10.9	9.5	0.97	0.93
	25-34	273	26.7	24.2	1.38	1.37
	35-44	299	29.2	28.1	1.42	1.53
	45-54	219	21.4	23.9	1.28	1.53
	55-64	105	10.3	12.3	0.95	1.23
	65 or older	14	1.4	1.7	0.36	0.5
	Don't know	2	0.2	0.4	0.14	0.31
Respondent Education	No formal education or less than Primary education	25	2.4	2	0.48	0.42
	Primary education	157	15.2	14.4	1.12	1.18
	Secondary education	431	41.8	42.6	1.54	1.72
	University education or higher (degree)	338	32.8	33.7	1.46	1.65
	Vocational or technical education or training	79	7.7	7.2	0.83	0.86
Banking Status	Banked	674	65.4	70.6	1.48	1.36
	Unbanked	274	26.6	22.2	1.38	1.22
	Don't know	24	2.3	1.9	0.47	0.38
	Refused	58	5.6	5.3	0.72	0.74
Respondent Role	Owner	921	89.4	86.6	0.96	1.28
	Top-level manager, not an owner	109	10.6	13.4	0.96	1.28
Client Type	Both businesses and individuals	105	10.2	10.8	0.94	1.1
	Primarily individuals such as consumers or customers	354	34.4	31.6	1.48	1.53
	Primarily businesses	571	55.4	57.6	1.55	1.66

NUMERICAL VARIABLES	UNWEIGHTED N	UNWEIGHTED MEAN	WEIGHTED MEAN	UNWEIGHTED STANDARD DEVIATION	WEIGHTED STANDARD DEVIATION
Respondent Age ¹	1,030	38	11.4	38.9	11.6
Business Age ²	1,020	17.2	87.4	19.7	100.9
Number of Owners ³	1,030	2.1	8.1	3.1	12.3

¹ Other possible response options: Don't know (0), Refused (0).² Businesses in operation less than one year (51) coded as 0. Other possible response options: Don't know (4), Refused (6).³ Other possible response options: Don't know (0), Refused (0).

ENDNOTES

- 1 By GDP. The World Bank, "GDP (current US\$)," The World Bank–Data, 2021, accessed November 2021, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_value_desc=true.
- 2 *Ibid.*
- 3 "How COVID-19 Has Pushed Companies over the Technology Tipping Point-and Transformed Business Forever," 2020. McKinsey&Company. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>.
- 4 By GDP. The World Bank, "GDP (current US\$)," The World Bank–Data, 2021, accessed November 2021, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_value_desc=true.
- 5 *Ibid.*
- 6 "How COVID-19 Has Pushed Companies over the Technology Tipping Point-and Transformed Business Forever," 2020. McKinsey&Company. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>.
- 7 Kaka, Noshir, Anu Madgavkar, Alok Kshirsagar, Rajat Gupta, James Manyika, Kushe Bahl, and Shishir Gupta. *Digital India: Technology to Transform a Connected Nation*. Report. McKinsey Global Institute. 2019. Accessed November 2, 2021. <https://www.mckinsey.com/~/media/mckinsey/business/functions/mckinsey/digital/our insights/digital india technology to transform a connected nation/mgi-digital-india-report-april-2019.pdf>.
- 8 "GDP Growth (annual %) – India," *World Bank Open Data*. Accessed November 2, 2021. <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=IN>.
- 9 Mahajan, Anilesh S. "Covid's Second Wave Hits India's 63.4 Million MSMEs," *India Today*, May 1, 2021. Accessed November 2, 2021. <https://www.indiatoday.in/magazine/cover-story/story/20210510-covid-s-second-wave-hits-india-s-63-4-million-msmes-1796991-2021-05-01>.
- 10 *Ibid.*
- 11 Ramaswamy, Krishnarajapet V. Impact of COVID-19: Micro, Small and Medium Enterprises in India, Pandemic Shock of COVID-19 and Policy Response: A Bird's Eye View. Publication no. Part 02. Ndira Gandhi Institute of Development Research (IGIDR). 2016. Accessed November 2, 2021. https://www.kiep.go.kr/galleryExtraDownload.es?bid=0026&list_no=9312&seq=2. p. 165.
- 12 India Small and Medium Enterprises (SMEs) Study. Study. December 2020. Accessed November 2, 2021. https://www.fedex.com/content/dam/fedex/meisa-middle-east/downloads/FedEx-SMEs-COVID-19_en-in.pdf. p. 3.
- 13 Ramaswamy, Krishnarajapet V. Impact of COVID-19: Micro, Small and Medium Enterprises in India, Pandemic Shock of COVID-19 and Policy Response: A Bird's Eye View. Publication no. Part 02. Ndira Gandhi Institute of Development Research (IGIDR). 2016. Accessed November 2, 2021. https://www.kiep.go.kr/galleryExtraDownload.es?bid=0026&list_no=9312&seq=2. p. 166.
- 14 Unicommerce, and Kearney. Q4 2020 E-Commerce Trends Report. Report. 2021. Accessed November 2, 2021. https://res.cloudinary.com/ddehn0smb/image/upload/v1612937931/Q4_E-commerce_Trends_Report_2020.pdf. p. 3.
- 15 India Small and Medium Enterprises (SMEs) Study. Study. December 2020. Accessed November 2, 2021. https://www.fedex.com/content/dam/fedex/meisa-middle-east/downloads/FedEx-SMEs-COVID-19_en-in.pdf. p. 3.
- 16 *Ibid.* p. 5.
- 17 Ramaswamy, Krishnarajapet V. Impact of COVID-19: Micro, Small and Medium Enterprises in India, Pandemic Shock of COVID-19 and Policy Response: A Bird's Eye View. Publication no. Part 02. Ndira Gandhi Institute of Development Research (IGIDR). 2016. Accessed November 2, 2021. https://www.kiep.go.kr/galleryExtraDownload.es?bid=0026&list_no=9312&seq=2. p. 166.
- 18 India Small and Medium Enterprises (SMEs) Study. Study. December 2020. Accessed November 2, 2021. https://www.fedex.com/content/dam/fedex/meisa-middle-east/downloads/FedEx-SMEs-COVID-19_en-in.pdf. p. 5.
- 19 *Ibid.*
- 20 LIRNEAsia. "AfterAccess: ICT access and use in Asia and the Global South (Version 3.0)," Colombo, Sri Lanka: LIRNEAsia. March 2019. Accessed November 2021. Pp 38.
- 21 Silver, Laura, Aaron Smith, Courtney Johnson, Kyle Taylor, Jingjing Jiang, Monica Anderson, and Lee Rainie. 2019. "Mobile Connectivity in Emerging Economies," Pew Research Center.
- 22 Bahia, Kelvin and Anne Delaporte. "The State of Mobile Internet Connectivity 2021," 2021. GSM Association. <https://www.gsma.com/r/wp-content/uploads/2021/09/The-State-of-Mobile-Internet-Connectivity-Report-2021.pdf>. p. 14.
- 23 India Small and Medium Enterprises (SMEs) Study. Study. December 2020. Accessed November 2, 2021. https://www.fedex.com/content/dam/fedex/meisa-middle-east/downloads/FedEx-SMEs-COVID-19_en-in.pdf. p 5.
- 24 International Telecommunication Union. Digital Development Dashboard: India. Publication. ITU. Accessed November 9, 2021. https://www.itu.int/en/ITU-D/Statistics/Documents/DDD/ddd_IND.pdf.
- 25 Singh, Anup, Diana Siddiqui, and Graham A. N. Wright. Impact of the COVID-19 Pandemic on Low- and Moderate-income (LMIs) Populations and Micro, Small, and Medium Enterprises (MSMEs): Comparative Report. Report. January 2021. Accessed November 9, 2021. <https://www.microsave.net/wp-content/uploads/2021/01/210127-Impact-of-COVID-19-on-LMIs-and-MSMEs-comparative-study-report-final.pdf>. p. 22.
- 26 Modi, Shradha, Katia Huayta Zapata, Lauren Braniff, and Aeriel Emig. The Precarious State of MSMEs: Understanding the Impact of COVID-19 and Opportunities to Support Their Recovery. Brief. September 22, 2021. Accessed November 9, 2021. <https://www.centerforfinancialinclusion.org/the-precarious-state-of-msmes-understanding-the-impact-of-covid-19-and-opportunities-to-support-their-recovery>.
- 27 *Ibid.*
- 28 Mehrotra, Aakash, Abhishek Anand, Gayatri Pandey, Manoj Nayak, Mohak Srivastava, Nitish Narain, Shobhit Mishra, and Surbhi Sood. Impact of COVID-19 Pandemic on Micro, Small, and Medium Enterprises (MSMEs): India Report. Report. June 2020. Accessed November 9, 2021. <https://www.microsave.net/wp-content/uploads/2020/06/Impact-of-COVID-19-pandemic-on-micro-small-and-medium-enterprises-MSMEs-India-report-1.pdf>. p. 18.
- 29 <http://www.icssrdataservice.in/datasrepository/index.php/catalog/146/study-description>
- 30 Op. cit. <http://www.icssrdataservice.in/datasrepository/index.php/catalog/146/study-description>

SHAPING A MORE LIVABLE WORLD.



www.dai.com

f  in  @daiglobal