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

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

The COVID-19 pandemic caused an unprecedented economic slowdown that had an outsized, adverse impact on micro, small, and medium enterprises (MSMEs) across the globe.1 Small and medium enterprises (SMEs) are a critical building block of the global economy, accounting for 90 percent of businesses around the world.2 In developing countries, the median gross domestic product (GDP) contribution of SMEs is 35 percent,3 according to the World Trade Organization’s (WTO) World Trade Report 2016.4 SMEs also account for more than 50 percent of employment around the world, including 70 percent of formal jobs in emerging markets, according to the World Bank.4 During the COVID-19 pandemic, digital tool use among MSMEs in emerging markets rapidly accelerated. According to the Organisation for Economic Co-operation and Development (OECD), up to 70 percent of small and medium enterprises have increased their use of digital technologies during the COVID-19 crisis, though usage rates vary by country and by company.5

Given the vital role that MSMEs play in determining the growth trajectories of emerging markets, as well as the growing body of evidence that digital tools have become increasingly important for MSMEs during the pandemic,6 DAI chose to survey MSME owners and top-level managers to inform this research. To gain a fuller picture of digital tool use among MSMEs in Latin America, South Asia, and Southeast Asia, DAI’s Center for Digital Acceleration and survey firm Ipsos designed and administered a survey of MSME owners and top-level managers across 13 countries: Argentina, Bangladesh, Brazil, Cambodia, Colombia, India, Indonesia, Mexico, Peru, Philippines, Sri Lanka, Thailand, and Vietnam. Conducted between June and December 2021 – at a time when data collection was particularly challenging due to COVID-197 – the survey used computer-assisted personal interviewing (CAPI) and/or computer-assisted telephone interviewing (CATI), and was designed around a framework aligned with the United Nations Sustainable Development Goals (SDGs).8

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1 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, 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 engaged in the enterprise (including the respondent): micro (one employee), small (two to nine employees), and medium (10 to 249 employees).
2 If citing other literature that uses another term to refer to MSMEs, such as small and medium enterprise (SME) or small and medium-sized business (SMB), this report uses the term cited in the source document. This is why the term “SME” appears here.
3 If citing other literature that uses another term to refer to MSMEs, such as small and medium enterprise (SME) or small and medium-sized business (SMB), we use the term cited in the source document. This is why the term “SME” appears here.
4 Digital tools are defined in this report as internet-based technologies. For country-specific definitions, please refer to Appendix 1: Digital Tools Definitions by Country.
5 An overview of the survey approach can be found in the Methodology section on page 9.
6 In 2015, UN Member States adopted 17 SDGs as a cornerstone of their 2030 Agenda for Sustainable Development, articulating a shared vision of global priorities for the planet and its people.
This global report contextualizes the findings of individual country briefs within the framework of the SDGs, highlighting findings related to specific SDGs while also reinforcing the ecosystem of partnerships necessary to further each goal. Each country brief provides an overview of the country’s digital ecosystem and MSME sector, followed by a summary of survey findings regarding the impact of digital tool usage on surveyed MSMEs, highlighting differences in the responses among key segments of the surveyed business population within each country. Direct comparisons of data points across countries are not possible due to different survey methodologies for each country. Additionally, data from surveyed MSMEs within each country should not be interpreted as representative of that country as a whole. For further discussion of the limitations of the data, please see the Methodology section page 9.

Topic areas in the country briefs include:

- Digital tool use among surveyed MSMEs prior to the COVID-19 pandemic, in the past year during COVID-19, and in the past 30 days
- How surveyed MSMEs managed key business activities
- Impact of the COVID-19 pandemic on surveyed MSMEs
- Barriers to the adoption and use of digital tools among surveyed MSMEs

As emerging markets recover and rebound from the immense challenges presented by the COVID-19 pandemic, this research contributes important insights for actors seeking to enhance inclusive economic growth and business resilience in these countries. The global report highlights the ways in which this research aligns with and contributes to the goals and targets of the SDGs, while the nuanced findings in the country briefs – based on computer-assisted personal interviewing (CAPI) and/or computer-assisted telephone interviewing (CATI) at scale – shed light on opportunities for policymakers to further investigate how to equip MSMEs, including offline MSMEs, with digital pathways to growth in the context of the COVID-19 crisis. Together, this body of research articulates clear, actionable approaches to promote inclusivity and business resilience among both online and offline MSMEs, offering a new bank of insights on the increasingly important role of digital tools in economic growth.
INTRODUCTION AND BACKGROUND

The COVID-19 pandemic revealed the vital role that digital technologies play in enabling businesses, communities, and individuals to connect, function, and thrive. By allowing some micro, small, and medium enterprises (MSMEs)\textsuperscript{vii} to quickly pivot online and maintain their core business functions, digital tools (defined here as internet-based technologies)\textsuperscript{viii} have become increasingly important to the global MSME community during the pandemic.\textsuperscript{vii} Ensuring that MSMEs can access digital tools is particularly crucial in emerging markets because MSMEs fuel economic growth and spur job creation.\textsuperscript{vii}

To gain a fuller picture of digital tool use among surveyed MSMEs in Latin America, South Asia, and Southeast Asia, DAI’s Center for Digital Acceleration and survey firm Ipsos designed a survey of MSME owners and top-level managers. Between June and December 2021, at a time when data collection was particularly difficult due to COVID-19, the survey was administered via CAPI and/or CATI in 13 countries: Argentina, Bangladesh, Brazil, Cambodia, Colombia, India, Indonesia, Mexico, Peru, Philippines, Sri Lanka, Thailand, and Vietnam. This approach allowed the research team to capture insights from both offline MSMEs (defined here as MSMEs that did not report using any digital tools for business purposes in the past year) and online MSMEs (defined here as MSMEs using at least one digital tool for business purposes in the past year). This project represents an enormous undertaking that attempts to give voice to a hard-to-reach population – MSMEs, especially offline MSMEs – and captures the resiliency of those we were able to cover by the survey in the face of an unprecedented crisis. Direct comparison of data points across countries is not possible due to distinct survey methodologies for each country. Additionally, data from surveyed MSMEs within each country should not be interpreted as representative of that country as a whole. This is an inherent problem with enterprise surveys where there is no comprehensive list available to achieve a representative sample. For further discussion of the limitations of the data, please see the Methodology section on page 9.
MSMEs are critical engines of growth in emerging markets. Small and medium enterprises (SMEs) account for 90 percent of businesses globally. In developing countries specifically, the median gross domestic product (GDP) contribution of SMEs is 35 percent, according to the WTO’s *World Trade Report 2016*. SMEs account for more than 50 percent of employment around the world, including 70 percent of formal jobs in emerging markets, according to the World Bank. In short, MSMEs play a vital role in determining the growth trajectories of emerging markets, which is why DAI chose to survey MSME owners and managers to inform this research.

MSMEs in emerging markets are increasingly digitizing their operations to reduce costs, increase efficiency, and reach more customers, with important economic repercussions at the national and regional levels. For example, in Asia-Pacific, Cisco and IDC reported in 2020 that small and medium businesses (SMBs) that successfully digitize generate 50 percent more sales and worker productivity. Similarly, 45 percent of SMEs surveyed in a 2016 FedEx survey in Latin America and the Caribbean said that investing in new technology is viewed as the number one solution to business challenges. However, evidence shows that structural challenges are inhibiting SME digitization in emerging markets. For example, the World Bank estimated in 2009 that a ten-percentage point increase in internet penetration in low- and middle-income economies would lead to a 1.12 increase in their economic growth. This indicates that increased connectivity could further improve economic growth outcomes in emerging markets. Other structural challenges include digital literacy gaps – people not knowing how to use digital tools effectively in business settings – and inadequate access to finance for the requisite digital tools. The potential impact of addressing such inhibiting factors is immense: for example, Cisco and IDC’s research estimates that Asia-Pacific’s GDP could grow by an additional USD2.6 trillion by 2024 if SMBs continue their digital transformation.

The COVID-19 pandemic has had an outsized adverse impact on MSMEs. Because MSMEs typically have lower productivity, less cash-on-hand, and fewer assets than bigger firms, they are especially vulnerable to economic shocks like COVID-19. For example, according to the International Trade Center’s 2020 COVID-19 Business Impact Survey of nearly 4,500 companies in more than 130 countries, 64 percent of micro-sized firms, 60 percent of small firms, and 51 percent of medium-sized firms reported that their business operations were strongly affected by the pandemic. Twenty-one percent of surveyed SMEs stated that they risked shutting down permanently within three months. Similarly, in a longitudinal, six-wave Center for Financial Inclusion study of MSME owners in Colombia, India, Indonesia, and Nigeria during COVID-19, 74 percent of survey participants reported having steady or increasing profit levels before the pandemic, dropping to 16 percent by the first wave of the study in 2020. The 2021 *Global State of Small Business* report found that 18 percent of surveyed SMBs reported being closed, down from 30 percent in May 2020. Similarly, 73 percent of surveyed SMBs reported lower sales in May 2020 than in the same 30-day period a year earlier, though this percentage steadily decreased to 52 percent in the most recent survey. Collectively, these survey results indicate that MSMEs around the world were hard hit by the pandemic.

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

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

xi If citing other literature that uses another term to refer to MSMEs, such as small and medium enterprise (SME) or small and medium-sized business (SMB), this report uses the term cited in the source document. This is why the term “SMB” appears here.
Over the same pandemic period, digital tool use among MSMEs in emerging markets rapidly accelerated, a phenomenon that has caught the attention of stakeholders in the development sector and beyond. According to the OECD, up to 70 percent of SMEs increased their use of digital technologies during the crisis, though usage rates vary by country and by company. For example, 88 percent of surveyed SMBs in the September 2021 Global State of Small Business Report reported that they were using digital tools, up from 81 percent at the beginning of the year. Similarly, 72 percent of small businesses surveyed in eight countries as part of a joint Cisco and the International Data Corporation (IDC) research project reported that they had accelerated their digitization rates to address COVID-19 challenges. In the same survey, 93 percent of respondents said COVID-19 had made them more reliant on technology. Taken together, this evidence indicates that digital tools are becoming increasingly important for MSMEs during this period of upheaval, potentially creating an opportunity for development sector actors to engage and connect MSME digitization to sustainable development outcomes.

STUDY ALIGNMENT WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

In 2015, the UN Member States adopted 17 SDGs as the cornerstone of their 2030 Agenda for Sustainable Development, articulating a shared vision of global priorities for the planet and its people. Recognizing the importance of their call to action, this survey framework and the associated report are structured to align with several SDGs, so that the findings can better inform policy and programs related to global development.

After assessing how surveyed online and offline MSMEs conducted basic business functions, the survey identified challenges that they face with 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 surveyed online MSMEs reported using digital tools for business purposes; specifically, it explored how their digital tool usage changed during the COVID-19 pandemic. By examining how surveyed MSMEs enhanced their economic resilience through the use of digital tools, this line of inquiry links to SDG 1: No Poverty and to SDG 8: Decent Work and Economic Growth. Reporting on survey results from women-owned MSMEs also sheds light on SDG 5: Gender Equality, since women-led enterprises can use digital tools to enter the global marketplace. Similarly, reporting on rural, suburban, and urban MSME segments yields key insights into SDG 11: Sustainable Cities and Communities. The case studies highlight the manufacturing and industry sector, which also provides insights on SDG 9: Industry, Innovation, and Infrastructure, while case studies focused on the agriculture and food production sector align to SDG 2: Zero Hunger and to SDG 12: Sustainable Production and Consumption. Lastly, suggested interventions for public, private, and development sector actors seeking to address the challenges that surveyed MSMEs reported facing when using digital tools are offered in the spirit of SDG 17: Partnerships for the Goals.
METHODOLOGY

This research was conducted as part of a broader study of MSME digital tool usage across emerging markets in North America, South America, South Asia, and Southeast Asia. Ipsos completed approximately 1,000 interviews per country among MSMEs in 13 countries from May 27 to December 2, 2021. Although the study sample is not representative of the full population of MSMEs in each of the targeted countries, the sampling allocation was based on quotas to assure a minimum number of MSMEs from both formal and informal businesses covering micro (one employee), small (two to nine employees), and medium (10 to 249 employees) businesses. Eligible respondents within each business contacted during the fielding period were owners or top-level managers. Eligible MSMEs for the CAPI sample were those operating from a storefront, booth, and/or with signage. Eligible MSMEs for the CATI sample, where relevant, were those listed in the sample directories.

In 10 of the countries, one data collection mode was used: in-person computer-assisted personal interviewing (CAPI). In Argentina, Brazil, and Colombia, two modes were used: CAPI and computer-assisted telephone interviewing (CATI). Below is a snapshot of these key coverage differences amongst the 13 countries.

See graphic on the following page for a visual overview of the MSME study.

RESTRICTIONS ON CROSS-COUNTRY COMPARISONS

Numerous methodological differences across markets prohibit any cross-country comparisons in reporting on, drawing conclusions from, or developing policy recommendations based on survey results. First, it is not possible to compare countries because each had its own custom sampling and weighting plans. Second, it was not possible to create cross-national weights to enable comparison as there were no reliable national statistics on necessary firmographic and demographic data including total number of MSMEs, breakdown of MSMEs by business size, business-owner gender, and urbanicity.

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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, 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 engaged in the enterprise (including the respondent): micro (one employee), small (two to nine employees), and medium (10 to 249 employees).

Vietnam is considered to be a single-mode country since all businesses were first approached in-person. However, approximately 10 percent of respondents chose to complete the survey by telephone after being given the option to do so.
OVERVIEW OF MSME STUDY IN 13 COUNTRIES

In 10 of the countries, one data collection mode was used: in-person computer-assisted personal interviewing (CAPI). In Argentina, Brazil, and Colombia, two modes were used: CAPI and computer-assisted telephone interviewing (CATI). To the right is a snapshot of these key coverage differences amongst the 13 countries.
STUDY DESIGN

Ipsos developed a custom study design and limited weighting schema for each country to account for differences in geography, composition of the MSME sector, and other variations. Pandemic-related challenges to data collection and survey administration factored into many aspects of the study design, as discussed below.

For detailed methodological information, please refer to Appendix I in each country report, available here https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study

Fieldwork timing

- **Description:** Data collection began on different dates and lasted for different lengths of time, depending on the country, the severity of its COVID-19 outbreak, and the nature of its pandemic-response protocols, especially lockdowns and capacity restrictions in places of business that required Ipsos to adapt fieldwork dates.

- **Limitations:** Respondents were, therefore, answering the same time-based survey questions (for example, “in the past 30 days” or “in the past year”) but applying the terms of those questions to different calendar dates. Furthermore, fieldwork in each country was conducted at a different stage of the pandemic (for example, in Argentina, lockdowns were lifted more than a month before fieldwork began; in Vietnam, lockdowns were lifted 10 days prior to fieldwork launch). In sum, time-related questions about business behaviors (such as digital tool use) and business outcomes (such as loss of revenue) materially affected both survey responses and cross-country comparability.

Survey modes of administration

- **Description:** A single mode (CAPI) was employed in 10 out of the 13 countries using a multi-stage cluster design (described below). Dual-mode interviewing (CAPI and CATI) was conducted in Argentina, Brazil, and Colombia. The decision to add the CATI data-collection mode was based mainly on two factors: limited or prohibited in-person interviewing due to pandemic-related government lockdowns, and the specific need to allow coverage of MSMEs in rural or remote geographies that were otherwise difficult to access.

- **Limitations:** The single-mode CAPI and dual-mode CAPI-CATI presented their own set of limitations. In 10 of the 13 countries, businesses were approached using CAPI only. This resulted in coverage bias against businesses without signage or storefronts, as well as informal and household-based businesses being excluded. In-person interviewing via CAPI was also susceptible to unobservable COVID-19-related factors such as unwillingness to have non-paying enumerators in shops and reluctance to participate in a survey during the pandemic. These could lead to over- or under-coverage of certain business types and sizes. Regarding the three dual-mode countries, geography and mode effects were mostly confounded by business size, urbanicity, and formal versus informal businesses, meaning it was not possible to separate out possible mode effects from these factors. The only geographic area where the two modes overlapped and a mode weight was applied was in Bogotá, Colombia.
Geographic coverage

- **Description:** Custom survey designs in 13 countries involved a multistage process to attempt the broadest possible geographic coverage of that country’s MSME population. For the CAPI mode, the sample design was a multi-stage 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. Certain geographic locations were not available for inclusion in the sampling frame in several countries. These varied from remoteness (e.g. rainforests in Vietnam) and security concerns (e.g., in Colombia, Mexico) to COVID-19-related restrictions and protocols across all countries. In contrast, the CATI mode employed business lists. In this case, individual businesses were sampled randomly from the list at hand.

- **Limitations:** Due to a lack of a comprehensive frame of all MSMEs within each country and their geographic distribution, the final results of the survey cannot be interpreted as nationally representative of the MSME population in any of the 13 countries included in this study.

Weighting

- **Description:** Two weights – design and non-response – were applied in all countries. A third weight was applied in Bangladesh (to adjust for an oversample of women-owned MSMEs) and in Colombia (to adjust for an increased probability of selection for medium-size businesses in Bogotá, where both CAPI and CATI were employed). For benchmarking purposes, design weights were based on population counts because they were considered more closely aligned with estimates of business counts than available business statistics, except in Sri Lanka and Mexico where reliable business statistics were available for weighting purposes. Variation in non-response was adjusted using class adjusted non-response weights by urbanicity and gender within geography. Weights were combined to create one overall final weight applied to each relevant data point.

- **Limitations:** A lack of reliable data on business-population characteristics across countries resulted in an inability to apply weights to the total population of MSMEs, particularly for national-level calculations and estimates. However, even where such country-level data existed, they were usually known to be out-of-date, and were expected to suffer from severe coverage problems due to the changes triggered by pandemic-related shifts in the composition of MSME populations, such as businesses that were forced to close and new informal businesses opening.

CONCLUSION

This ambitious study of MSMEs collected data in-person in 13 countries across North America, South America, South Asia, and Southeast Asia during an unprecedented global pandemic. A custom quota-based sampling design was constructed for each of the 13 countries. Ipsos carefully considered each aspect of these individual country-level sampling designs and quota allocations alongside the limitations detailed in this methodology. While roughly 1,000 interviews were completed in each country during their respective fieldwork periods, the findings and results reported should not be considered nationally representative of an individual country’s MSME sector.
KEY FINDINGS

SDG 9: INDUSTRY, INNOVATION, INFRASTRUCTURE

SDG 9 focuses on building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation. Specifically, target 9.c is to “significantly increase access to information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2020.” External research has found that internet access is a key driver of economic growth in emerging markets. This is largely based on the seminal 2009 World Bank study on the economic impacts of information and communications technology (ICT), which found that a 10 percentage point increase in internet penetration leads to a 1.12 percent increase in GDP per capita in low- and middle-income economies. A recent International Telecommunications Union (ITU) study focused on the economic impact of broadband and digitalization through the COVID-19 pandemic builds upon this research, finding that the economic dividend of mobile broadband in countries with lower economic development yields a 2.04 percent increase in GDP per capita as a result of a 10 percent increase in mobile broadband penetration.

This study also found that economic losses related to the COVID-19 pandemic in 2020 were not equal for every country: countries with better broadband infrastructure were able to mitigate part of COVID-19’s negative economic impact, allowing households, enterprises, and governments to continue functioning. Specifically, in countries with penetration levels between 50 percent and 75 percent of unique mobile subscribers, 15 percent of the economic damage faced by less-connected economies was mitigated. For countries with mobile penetration over 75 percent, the mitigation effect increased to 19 percent. As such, the DAI/Ipsos survey investigated internet access and use amongst surveyed MSMEs to establish the percentage of interviewees that could be considered “online” or “offline” in each country of study.

External research has found that mobile phones are a key way that individuals access the internet throughout emerging markets. Given the positive economic impact of increased mobile broadband, as noted above, the predominance of “mobile-first” internet access in the survey findings reinforces the importance of target 9.c within SDG 9. One example of this is Cambodia. Like its peers in Southeast Asia, Cambodia is a mobile-first nation: Cambodia has a 90 percent mobile internet subscription rate, while only 1.5 percent of the population has a fixed-line internet subscription.

Highlighted findings on surveyed MSMEs’ internet access and use in select countries are detailed below. Full findings can be found in each country’s detailed brief here: https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study

An interview with the owner of woman-owned small business Queen Bird’s Nest Shop in Cambodia shows the evolution of her digital tool use within this mobile-first context, from first using her personal Facebook page to post photos of her products to eventually using Facebook Business to increase her new customers by 50 percent. See the full case study on page 15.
Indonesia

A vast majority (92 percent) of surveyed online MSMEs reported that they primarily used a mobile phone to connect to the internet, while a small minority (six percent) reported using a laptop or PC to connect to the internet.\(^1\)

Argentina

A large majority (89 percent) of surveyed MSMEs reported that they had used digital tools\(^\text{ii}\) for business purposes in the past year during COVID-19.

Bangladesh

Despite Bangladesh’s 28 percent mobile internet penetration rate, 73 slightly more than half (54 percent) of surveyed MSMEs reported that they used digital tools for business purposes prior to the COVID-19 pandemic.

India

More than half (65 percent) of surveyed MSMEs reported that they had used digital tools for business purposes in the past 30 days.

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\(^1\) Difference between use of mobile phone as primary mode to connect to internet and use of a laptop or PC as primary mode to connect to internet among online MSMEs is statistically significant per Chi-squared goodness of fit test, p < .05.

\(^\text{ii}\) Digital tools are defined in this report as internet-based technologies. For country-specific definitions, please refer to Appendix 1: Digital Tools Definitions by Country.
After nearly 10 years as an accountant for the Cambodian government, Sar LeakKanha decided to take over her family business selling edible birds’ nests, birds’ nest drinks, and malva nut juice drinks. Considered delicacies in Cambodia, bird’s nest products and malva nuts are known for their health benefits and immune boosting properties. She soon realized the market potential for birds’ nest products and expanded her sales from her storefront in Koh Kong to a network of wholesalers working in Siem Reap, Sihanoukville, and Phnom Penh. As a female entrepreneur, Sar LeakKanha advances progress on SDG 5: Gender Equality by using technology to build her own enterprise and contribute to Koh Kong province’s entrepreneurial ecosystem.

She credits digital tools with helping her sustainably grow her family business into an MSME that closes sales in multiple cities across Cambodia. Customer demand initially prompted her to create an online presence for Queen Bird’s Nest Shop, after her customers began inquiring about shareable photos of her products. First using her personal Facebook profile for business purposes, then creating a formal business page in 2019, Sar LeakKanha now primarily uses Facebook Business and Messenger to promote her company. Like her customers requested, Facebook Business enables her to post and share high-quality photos showcasing the variety and benefits of her birds’ nest treats. Since she started using Facebook Business, Sar LeakKanha reports that her business promotions have led to a 50 percent increase in new customers and facilitated her business’s expansion into wholesale markets in Siem Reap. Although her competitors also use social media platforms to promote their products, she credits Facebook for allowing her to accurately represent her business to the public and build trust with her customer base.

During the COVID-19 pandemic, she continues to rely on digital tools to keep her business afloat. Though the pandemic has slowed her sales and forced Sar LeakKanha to reduce her staff down to three people, she continues to sell her goods online to Cambodian and Chinese wholesales using Facebook as a means to redirect to e-commerce websites. She recently took a course on how to use Facebook Business more effectively, crediting it with giving her a better understanding of the available tools and features to improve customer engagement. In the future, she wishes to expand the video content on her page and learn more about how she can reach new customer segments and expand to other cities in the region. Sar LeakKanha’s journey as the owner of a small family business operating only in Koh Kong to an international entrepreneur embodies the idea that digital tools enable entrepreneurship and, in turn, resilient economic growth.

“Facebook is important for the business as it can promote my products to new customers. The more people know about my products, the more markets [in which] I can expand.”
Lucy Vilte manages the Ecohotel Posta de Purmamarca in Argentina’s northern province of Jujuy. After inheriting the hotel from her family in the early 2000s, she decided to embrace the relatively new concept of sustainable tourism and transform her business. She started with a social responsibility strategy to promote community development and reduce the environmental impact of her business with a solar heating system, water recycling systems, and other innovations. By conserving Jujuy’s natural resources, she is in alignment with SDG 12: Responsible Consumption and Production. Fifteen years later, Ecohotel Posta de Purmamarca is now an award-winning sustainable tourism destination.

Digital tools have been critical in the evolution of Lucy’s property into an ecotourism hotspot. She first opened a Facebook business page for Ecohotel Posta de Purmamarca over ten years ago, posting a few times a week about the property, her environmental sustainability strategy, the local community in Jujuy, and nearby tourist attractions. She later started to use Instagram for its visual impact, sharing the beauty of her region and the hotel’s conservation projects with local communities with her growing number of followers.

Lucy’s use of digital tools intensified during COVID-19. After observing how other tourist destinations were marketing their properties during the pandemic, her efforts focused on catching the attention of prospective guests who were already making plans after the lifting of travel restrictions. In addition, she connected with various regional microentrepreneurs to exchange experiences and communication strategies that would allow their businesses to survive during this extremely difficult and tumultuous period.

This experience inspired her to change how she communicated about the hotel and the Jujuy region with prospective customers. To boost the resilience of Argentina’s MSME community, Lucy became known as a promoter and “influencer of the land.” She organized and participated in IG Live streams with other MSME owners and well-known people (archaeologists, artisans, farmers, chefs, etc.) to promote sustainable tourism from the north of Argentina – where Jujuy is located – to the southern tip of the country. The local Ministry of Tourism also offered to share her posts and promote her on their social media networks, which significantly expanded the Ecohotel Posta de Purmamarca’s reach – her followers grew at a rate of 3,000 per month during this period. When lockdown restrictions were lifted, Lucy quickly realized she had a competitive advantage over her competitors, many of whom had slowed or stopped actively posting on social media during the lockdowns.

Lucy dedicated herself to supporting other MSMEs in using digital technologies and social media to grow and recover during the COVID-19 pandemic. She shared her knowledge of digital tools with other Argentine MSMEs, while also connecting them to local and indigenous suppliers to foster more business partnerships within her local community. Digital tools transformed Lucy into a sought-after leader in Argentina’s environmental conservation and ecotourism market, and contributed to the economic resiliency of other MSMEs in the country.

“COVID was a changing point – technology showed me how much more I could do and how much I was losing before by not using it.”
Dumplings of Fury founders Saqueeb, Shaer, Mehran, and Anika started their dumpling business in Dhaka in 2019. Instead of opening a traditional brick-and-mortar restaurant, they decided to launch and manage their dumpling delivery service on Facebook due to its widespread popularity among their target customer base and its low price point. As a young team with a niche product looking to generate brand awareness, using digital tools was the logical choice for their new business.

Saqueeb, Shaer, Mehran, and Anika use Facebook for everything from placing dumpling orders and arranging delivery to customer promotions and marketing, though they have since expanded into Instagram for customer engagement. When Facebook Business launched in 2020, Dumplings of Fury’s founders leveraged its insights and analytics features to boost advertisements for specific customer segments. This led to increased sales revenue for the business. Eventually, Saqueeb, Shaer, Mehran, and Anika began posting Dumplings of Fury content on Instagram to share important business information with new potential customers. More specifically, they use Instagram Stories to share their prices and provide instructions on how to order dumplings. Though they cross-post all their Instagram content to Facebook - in part because they report it shows up on more of their target audience’s feeds this way than through boosted ads alone and because customers order through Facebook – they now say that Instagram has become integral to their customer engagement function.

Because Dumplings of Fury was already an online-only business, its owners were able to minimize the impact of the pandemic and thrive in this new environment. With the increase in online activity during the pandemic, they found ways to use Facebook apps to streamline their operations and adapt their workflow. For example, because they were spending more time on customer engagement than ever before, they started using simple, automated messages for initial greetings and customer intake on Facebook Messenger.

As they look to the future, Saqueeb, Shaer, Mehran, and Anika want to expand their use of the digital tools – such as improved predictive analytics - to continue adapting to Bangladesh’s rapidly growing and evolving marketplace. By founding a company with an online-only business model, Dumplings of Fury’s founders Saqueeb, Shaer, Mehran, and Anika foster business innovation in Bangladesh, which embodies SDG 9: Industry, Innovation, and Infrastructure, and enhance the country’s economic growth, which embodies SDG 8: Decent Work and Economic Growth. They demonstrated their business resilience during the earliest waves of the pandemic in Bangladesh, benefitting from digital tools to support their business continuity.

“Instagram has helped us grow a bit more... So when our customers share that they’re eating from Dumplings of Fury through their stories, we can reshare them and [that] helps us reach more people and gain a greater reputation – sort of distributes ownership of creating our food content.”
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.”
SDG 8: DECENT WORK AND ECONOMIC GROWTH

SDG 8 focuses on “promot[ing] sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”.\(^{36}\) Targets 8.2 and 8.3 specifically articulate a vision for achievements around digital transformation and MSMEs. As noted previously, external research has found that MSMEs have been particularly vulnerable to the economic impacts of the COVID-19 pandemic.\(^{37}\) Due to COVID-19, many MSMEs faced new hardships, like struggling to make ends meet and dealing with rapidly changing business environments. While the benefits of digital interventions vary between sectors and firms, the adoption of digital solutions can help MSMEs in areas such as: 1) managing transactions at a distance; 2) delivering goods efficiently; 3) facilitating access to financial services; and 4) engaging with new and existing customers.\(^{38}\)

External research has shown, for example, that SMBs\(^{xiv}\) in Asia-Pacific who successfully digitalize are able to generate 50 percent more sales and worker productivity.\(^{39}\) In a 2019 study by the McKinsey Global Institute, researchers estimated that Latin America could raise its GDP growth by 50 percent – versus a baseline scenario of 3.5 percent annually in 2030 – if MSMEs continued their digital transformation at scale, alongside other inclusive growth steps.\(^{40}\) Aligned with targets 8.2 and 8.3, this body of research documents the importance of MSME digital transformation in meaningfully contributing to the sustained economic growth and employment goals articulated in SDG Goal 8.

Recent research has also highlighted the importance of digital transformation for MSMEs during the COVID-19 pandemic. A recent study by the International Finance Corporation found that the adoption of digital strategies by firms in emerging markets during COVID-19 will determine their economic success.\(^{41}\) As such, the DAI/Ipsos study sought to surface insights on how surveyed MSMEs reported using both offline and online tools to conduct their business activities before and during the COVID-19 pandemic. These findings provide a portrait of where surveyed MSMEs are in their digital transformation journey, and how they leverage – or underuse – digital tools across common business activities.\(^{xv}\) Consistent across countries, offline methods\(^{xvi}\) had a strong foothold in surveyed MSMEs’ operations, suggesting that digital tools augmented and amplified – rather than replaced – more traditional offline methods.\(^{xvii}\) Findings about surveyed MSMEs’ use of digital tools to manage key business activities in select countries are detailed below.\(^{xviii}\) Full findings can be found in each country’s detailed brief here: [https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study](https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study).

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

\(^{xv}\) Survey respondents were asked about their usage of digital tools and offline methods for the following business activities in the past 30 days: (1) communicating with customers; (2) communicating with suppliers; (3) marketing to customers; (4) doing customer research; (5) hiring or finding new employees.

\(^{xvi}\) 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).

\(^{xvii}\) Direct comparisons of data points across countries is not possible due to different survey methodologies for each country.

\(^{xviii}\) Direct comparisons of data points across countries is not possible due to different survey methodologies for each country.
Colombia

According to survey results, Facebook apps were the most frequently reported digital tools that surveyed online MSMEs reported using to conduct each business activity about which they were asked. For example, 15 percent of surveyed online MSMEs reported that they used Facebook apps to hire or find new employees in the past 30 days, compared to seven percent of surveyed online MSMEs who reported that they used other digital tools to hire or find new employees over the same timeframe.

Mexico

Forty percent of surveyed online MSMEs reported that they used Facebook apps to market to customers in the past 30 days, compared to five percent of surveyed online MSMEs who reported that they used other digital tools to market to customers over the same timeframe.

Cambodia

Twenty-nine percent of surveyed online MSMEs reported that they used Facebook apps to do customer research in the past 30 days, compared to eight percent of surveyed online MSMEs who reported that they used other digital tools to do customer research over the same timeframe.

Thailand

Thirty-three percent of surveyed online MSMEs reported that they used Facebook apps to communicate with customers in the past 30 days, compared to 18 percent of surveyed online MSMEs who reported that they used other digital tools to communicate with customers over the same timeframe.

Peru

A larger percentage of surveyed online MSMEs reported that Facebook apps were very important for conducting each business activity about which they were asked, compared to other digital tools. For instance, 50 percent of surveyed online MSMEs reported that Facebook apps were very important for communicating with suppliers, compared to only nine percent of surveyed online MSMEs who reported the same about other digital tools.

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xix Online MSMEs were asked about their usage of digital tools for the following business activities in the past 30 days: (1) communicating with suppliers; (2) marketing to customers; (3) doing customer research; (4) communicating with customers; (5) hiring or finding new employees.
xx Difference between use of Facebook apps and use of other digital tools is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05, for hiring or finding new employees in the past 30 days.
xxi Difference between use of Facebook apps and use of other digital tools is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05, for marketing to customers in the past 30 days.
xxii Difference between use of Facebook apps and use of other digital tools is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05, for doing customer research in the past 30 days.
xxiii Difference between use of Facebook apps and use of other digital tools is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05, for communicating with customers in the past 30 days.
xxiv Difference between percent reporting Facebook apps as very important and percent reporting other digital tools as very important for communicating with suppliers is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.
LA TALLA PERFECTA

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

Prior to the COVID-19 pandemic, Ale's business had a very localized approach - La Talla Perfecta had only one brick-and-mortar store, where women came in for custom bra fittings. Complementing her physical shop, Ale had also built a small online presence for La Talla Perfecta. In addition to her shop's Facebook page, where Ale showcased her products and used Facebook Live as an educational tool, she also created a secret Facebook group called the Davis Cup Sisterhood. Eventually growing to 1000 members, this group gave women a safe space to talk about their bodies while also acting as an organic sales tool for La Talla Perfecta. With Davis Cup Sisterhood Facebook group members uploading memes, jokes, photographs of their lingerie, and other posts, Ale leveraged this content to drive group members to La Talla Perfecta’s Facebook page where customers could see her product offerings and contact her to make sales.

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

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

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

CASE STUDY

La Talla Perfecta

www.facebook.com/LaTallaPerfecta/

www.instagram.com/latallaperfecta

RETAIL & E-COMMERCE

SMALL ENTERPRISE

URBAN

SDG 5: GENDER EQUALITY
After retiring from her career as a lawyer in 2015, Martha realized that savvy young consumers in Peru were becoming increasingly aware of the environmental impact of cosmetic and cleaning products in the market. To capitalize on this trend and build a community of environmentally-conscious consumers, Martha started Actúa Verde in Lima to sell natural cleaning, self-care, and clean makeup products. Actúa Verde promotes a sustainable lifestyle to inspire and educate consumers across Peru about its benefits. This aligns to SDG 12 to ensure sustainable consumption and production, as Martha sources locally-produced raw materials to create consumer products in an environmentally- and socially-responsible way.

Martha has tried multiple different ways to spread the news about her eco-friendly products. A solo entrepreneur, Martha first started sharing her products on Facebook groups to generate traffic to her physical store. However, with COVID-19 restrictions limiting in-person interactions at her physical store, she soon realized the potential value of the tools to sell her products and reach new clients, pivoting to 100% online business during the past year. She integrated creative ways to engage with customers such as providing personalized analyses for facials and product recommendations on WhatsApp. Martha also learned new skills, taking classes on photo- and video-editing tools during quarantine to boost her graphics and ads on Instagram and Facebook. Her profiles not only include products for sales, but also information on the benefits of natural products. Despite having to close her face-to-face store, Martha has continued to maintain business operations during COVID-19. Through the use of digital tools, she continues to grow her digital business and share awareness of the importance of sustainable production of consumer goods.

“I am thankful to Facebook because I have learned a lot about marketing and it is so helpful to communicate with and learn from other small business owners. Not just to sell products, but also to build a community of people who care about their carbon footprints.”
SPOTLIGHT ON DIGITAL TOOLS TO SELL GOODS AND SERVICES DURING COVID-19

Not only is selling goods and services a key business activity for all MSMEs, but it is also crucial to the economic growth vision that SDG 8 articulates. As such, the survey also sheds light on if, and how, surveyed MSMEs reported using digital tools to sell goods and services during the COVID-19 pandemic. A deep-dive on survey results from Sri Lanka related to sales is detailed below. Full findings can be found in each country’s detailed brief here: https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study

In Sri Lanka, surveyed MSME digital tool use to sell goods and services increased during COVID-19 when in-person methods fell dramatically.

In the survey, 38 percent of surveyed MSMEs reported that they had ever used digital tools to sell goods and services. However, survey results showed a substantial increase in the use of digital tools to sell goods and services during the COVID-19 pandemic and a massive decrease in the use of in-person methods to sell goods and services. More specifically, 25 percent of surveyed MSMEs reported that they used digital tools to sell goods and services prior to COVID-19, which then increased to 31 percent during COVID-19.xxv In comparison, 93 percent of MSMEs reported that they had ever used in-person methods to sell goods and services prior to COVID-19, which then decreased 43 percentage points to 50 percent during COVID-19.xxvi The survey results also found an increase in the use of social media to sell goods and services. For example, 24 percent of MSMEs reported that they used social media to sell goods and services prior to COVID-19, which then increased six percentage points to 30 percent during COVID-19.xxvii This finding illustrates that digital tools, such as social media, played a distinct role in selling goods and services during COVID-19 when in-person transactions fell sharply.

An interview with Sri Lankan MSME ELU showed how Facebook apps played a valuable role in helping the business navigate reductions in in-person shopping during the pandemic. By using Facebook apps, ELU was able to directly connect with customers and make deliveries. Citing the benefits digital tools had on the business, ELU’s owner would like to learn more about online marketing to grow its brand. See the full case study on page 24.

xxv Difference between use of digital tools to sell goods and services during COVID-19 and prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.
xxvi Difference between the use of in-person methods to sell goods and services during COVID-19 and prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.
xxvii Difference between use of social media to sell goods and services during COVID-19 and prior to COVID-19 is statistically significant per Chi-squared goodness of fit test, adjusted p < 0.05.
In 2016, ELU was established, a premium goat milk brand that specializes in fresh goat milk and handmade goat milk soap. ELU maintains their own goats and partners with farmers that share the same commitment to animal welfare and environmental stewardship. Prior to the COVID-19 pandemic, the owner and his partners relied on supermarket sales, which included agents picking up ELU products from supermarkets and delivering them to customers.

Early in the COVID-19 pandemic, ELU's sales fell because its customers could no longer visit retail outlets. In their shift to a new business model, ELU and its owners quickly turned to social media platforms – such as Facebook, Whatsapp, and Instagram – to directly connect to customers and make deliveries. To support customers in placing orders, they turned to Whatsapp for Business. Key features included Auto Replies, which allowed ELU staff to respond immediately to inquiries with template messages, and Catalog, to showcase all their available products. ELU and its owners also use the Labelling feature to keep track of customers who have or have not purchased from them. To date, 50 percent of ELU's business revenue is derived from Facebook; it also has an 80 percent sales conversion rate on inquiries through WhatsApp.

In the midst of the pandemic, ELU successfully expanded into the online commerce space, selling their products via Facebook and Instagram. Moving forward, ELU's owners plan to expand their online business operations by focusing more on digital marketing. In the offline space, they continue to make sales in supermarkets and plan to open a physical store within the next two years to allow customers to purchase ELU goods directly from the business. By working directly with goat farmers, thereby increasing their resilience and improving their livelihoods, ELU embodies SDG 2: Zero Hunger. Supporting smallholder businesses in commercializing agriculture advances Sri Lanka’s inclusive economic growth agenda.

“For any type of business, depending on direct customers is the best. Facebook and Instagram are great platforms for businesses to do that.”
SDG 1: NO POVERTY

SDG 1 has a clear and vital definition: “End poverty in all its forms everywhere.” The COVID-19 pandemic has escalated the urgency of this goal: COVID-19 led to the first rise in extreme poverty in a generation, with an additional 119 to 124 million people falling back into extreme poverty in 2020. However, it is not only the extremely poor who have been affected. According to projections by the United Nations Development Programme (UNDP), developing economies will lose at least USD220 billion in income. The daily per capita income of households in the bottom forty percent of the global income distribution has dropped due to the pandemic. Pre-COVID-19 projections estimated that the average daily median household income in the middle of the global income distribution would grow from USD7.15 in 2019 to USD7.44 in 2021 (in 2011 constant USD). However, it is now projected to be USD7.05 in 2021, a five percent reduction from pre-pandemic estimates.

The global poverty rate is expected to be seven percent in 2030, missing the target of eradicating poverty (see Targets 1.1 and 1.2 of SDG 1).

As noted previously in this report, MSMEs are critical engines of growth in emerging market economies. Research has also found that the economic effects of the COVID-19 pandemic had an outsized negative impact on MSMEs across the globe. The World Bank notes that “the severe impacts [of the COVID-19 epidemic] seen for small and micro enterprises can lead to the erosion of entrepreneurial capital and jobs that can be hard to reverse.” As such, the DAI/Ipsos survey sought to assess the impact of COVID-19 on surveyed MSMEs in terms of business shutdowns and revenue loss, but also in terms of how digital tools helped surveyed online MSMEs adapt to the COVID-19 environment.

Highlighted findings on how surveyed MSMEs in select countries reported using digital tools during the COVID-19 pandemic can be found below. Full findings can be found in each country’s detailed brief here: https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study

An interview with the owner of MSME Aguilar Healthy Mushroom illustrates how one small business in the Philippines is using digital tools to conduct key business functions, like marketing and communicating with customers, during the pandemic. Jerwin, the owner of the business, noted that Facebook apps have helped him understand market trends and customer preferences, which allows his company to reach more customers. See the full case study on page 27.
Brazil

A large majority (81 percent) of surveyed online MSMEs reported that digital tools were important or essential to keeping their business running during COVID-19.

Vietnam

A large majority (75 percent) of surveyed online MSMEs reported that Facebook apps helped them adapt to the COVID-19 environment.

Philippines

More than half (51 percent) of surveyed online MSMEs reported that mobile banking helped them adapt to the COVID-19 environment.

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xxx Mobile banking as used in this report refers to both mobile banking and digital payments.
In late 2019, Jerwin transformed his family’s oyster mushroom farm into a community-wide livelihood endeavor in rural Luzon. “...even if it’s just a small livelihood, [it provides] something for people to do and benefits the company, but also the people around them.” Employing local farmers and community members, Aguilar Healthy Mushroom contributes to SDG 8: Decent Work and Economic Growth by supporting job creation in rural areas and SDG 9: Responsible Production and Consumption by utilizing farm waste to encourage sustainable food production with minimal environmental impact.

Jerwin credits digital tools for successfully managing his business’s shift to a direct-to-consumer model and growing his sales across the country. Launching his business at the same time that the COVID-19 pandemic arrived in the Philippines, he shifted his planned sales strategy from local resellers to 100 percent online sales across the country. Jerwin uses Facebook apps to market Aguilar’s goods to the growing Philippine consumer segment interested in a healthy lifestyle. With Facebook Business and his use of Facebook groups, Jerwin better understands market trends and customer preferences. Through Instagram Stories and ads, Jerwin regularly posts curated content using hashtags like #healthy or #vegan to connect with customers eager to explore eco-friendly health food products. Leveraging WhatsApp, Facebook Messenger, and Instagram’s messaging and chat features, Jerwin connects to customers directly, responds to inquiries, and closes sales on his products.

To increase Aguilar’s competitiveness and grow his business in the long run, Jerwin seeks to expand into international markets and to integrate more analytics and artificial intelligence tools into his business practices. By providing income-producing opportunities to local community members, Jerwin’s business enhances the economic resilience of his own community in rural Luzon.

“Social media really helps my business a lot, especially to reach customers. I’m in a rural area, but I can reach anywhere in the Philippines. I’m grateful to have those features.”
As a young student, Nguyen Trung Kien was inspired to design school uniforms because he saw them as a symbol of community solidarity. He later started a manufacturing and printing business called King Uniforms that has grown to over 30 employees with a Can Tho storefront and a robust online presence.

Even prior to the COVID-19 pandemic, Kien cited digital tools as critical to the success of his business. Over two years ago, he began using Facebook Business to post pictures of his products and market them to parents interested in purchasing school uniforms for their children. Using Facebook advertisements increased his company income by 40 percent compared to his previous sales levels, when he relied on in-person sales through his storefront. Facebook Messenger was also a critical engine of growth for Kien’s business, with a 50 percent close rate through Messenger chats with prospective customers. In addition to his use of Facebook, Kien also sold King Uniforms’ products and markets to customers through regional e-commerce platform Shopee.

However, during the pandemic, Kien has begun using digital tools to appeal to a new customer base—large companies who require uniforms for their workforce. The shift in his business model away from school uniforms in favor of work uniforms required Kien to rely on more targeted advertising methods and marketing tools. Using these tools, he shares information about his new product line to a different pool of prospective customers and grows his reputation within the marketplace. While his sales volume has yet to recover to pre-pandemic levels, he can generate sufficient income to help his business survive and retain some of his own employees. By enhancing MSME growth in the digital economy through his use of social media, Kien advances progress on SDG 9: Industry, Innovation, and Infrastructure.

Despite Kien’s success with online marketing and sales, he also expressed that he had difficulty in using unfamiliar digital tools for the first time. However, he has gradually overcome this challenge as he has grown more comfortable in using these tools. To address this issue, he recommends that digital platforms focus on creating products that are easy to use and organize trainings for business owners on using their platforms. By using digital tools to grow his business and successfully shift his customer base during the COVID-19 pandemic, Kien’s MSME is positively contributing to Vietnam’s economic growth journey.

“I still find myself lucky to still be surviving in this difficult time. With Facebook, we still can outreach to our customers without physically going out to meet them.”
SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

SDG 11 focuses on “mak[ing] cities and human settlements inclusive, safe, resilient and sustainable.” External research has consistently shown an urban/rural divide in internet usage within emerging markets. For example, according to GSMA's *The State of Mobile Internet Connectivity 2020* report, “people living in rural areas across low and middle-income countries are 37 percent less likely to use mobile internet than those living in urban areas.” This aligns with region-specific data published by the International Telecommunication Union (ITU) in 2021: 75 percent of individuals in urban areas of Asia-Pacific used the internet, compared to 39 percent of individuals in rural areas. In the Americas, these figures were 83 percent and 60 percent. This may be due to a variety of factors, ranging from a lack of digital infrastructure and connectivity to affordability and digital skills. Aligned with targets 11.3 and 11.5, this body of research documents the importance of bridging the rural digital divide in meaningfully contributing to the sustainable cities and communities vision articulated in SDG Goal 11.

The urban/rural divide also extends to the business realm: the World Bank's seminal *World Development Report 2016: Digital Dividends* stated that firms in urban areas typically use more digital technologies, though it is not clear why. Possible explanations include business-specific factors like management capacity, sector-specific attributes, and income differences between urban and rural firms; technology-specific reasons like prohibitive import costs and internet affordability; and market characteristics like vested interests and regulatory hurdles. Urban and rural MSMEs face similar pressures and challenges: according to the International Labour Organization (ILO), locally-oriented small enterprises and knowledge-based small enterprises typically require more sophisticated technology that may need consistent access to electricity, as well as stable and affordable internet access, than similar firms in rural or peri-urban areas. Because these types of small enterprises – as well as digital start-ups – are typically clustered in urban areas, they often attract digitally skilled workers.

To better understand these trends illuminated in the literature, the survey sought to assess digital tool use among surveyed MSMEs in urban, suburban, and rural areas. The research delved into differences in digital tool usage rates among all three groups, as well as specific digital tools that respondents reported frequently using for business purposes, and challenges that MSMEs in urban, suburban, and rural locations reported facing in using digital tools. Specific country findings focused can be found in the country briefs here: [https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study](https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study).

An interview with Piyanart, the female owner of a rural durian farm in Thailand called Thongthai Farm, showed how her rural MSME pivoted to online sales during the pandemic. During this period, she reported expanding her use of digital tools – such as Facebook and Line – to conduct her business online and promote her products. These tools also enabled her customers to interact with the business directly and contact customer service to coordinate purchase and delivery of products. See the full case study on page 31.
SDG 5: GENDER EQUALITY

SDG 5 focuses on “achieving gender equality and empowering all women and girls.” Target 5.5 specifically narrows in on “enhancing the use of enabling technology, such as information and communication technology (ICT), to promote women’s empowerment.”

Over the last several years, progress has been made in achieving this target by narrowing the gender gap in digital tool use. For example, in 2020, GSMA reported that women were 20 percent less likely to use mobile internet than men, a seven percentage point decrease from 2017, when women were 27 percent less likely to use mobile internet than men. However, challenges still remain: for example, women are eight percent less likely than men to own a mobile phone.

Disparities in digital tool use also extend to women-owned and men-owned MSMEs. For example, GSMA has found that women-owned MSMEs are often less likely to have access to digital technologies, which are an important input for business innovation. This aligns with other constraints and barriers limiting the ability of women-owned MSMEs to grow and compete against men-owned MSMEs. For example, various social and cultural norms contribute to gender biases that can limit women-owned MSMEs’ ability to access formal financial products, such as loans or credit. Despite these challenges, women-owned MSMEs are important contributors to economic and social development in emerging markets. Economic research compiled by the Goldman Sachs Global Markets Institute indicates that increasing the share of women-owned MSMEs can lead to improved development outcomes, such as higher wages, stronger GDP growth, and better health indicators.

Despite the gradual progress in empowering women entrepreneurs and improving their access to digital tools, the COVID-19 pandemic presents a new hurdle. According to a 2020 report from Mastercard, 87 percent of women business owners reported that they had been adversely affected during the pandemic. Furthermore, the Global State of Small Business report, published in September 2021, found that about 20 percent of women-led SMBs reported being closed, compared to 16 percent of men-led SMBs. Women-owned MSMEs have been disproportionately affected by the pandemic for several reasons: overrepresentation in hard-hit business sectors, longstanding gender biases, and the digital gender gap in a business environment that is more reliant on digital tools than ever before. Specific country findings focused can be found in the country briefs here: https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study

An interview with the owner of Bajuboo illustrates how one women-owned MSME in Indonesia is using digital tools and social media to promote her brand and grow the business. In particular, business owner Intan’s story highlights how Facebook apps have helped the business remain connected to customers during the pandemic and underscores how women entrepreneurs are using digital tools. See the full case study on page 32.

An interview with Claudia and her husband, the owners of LifePack, showed how this women-owned MSME in Colombia adapted to the pandemic by increasing its use of digital tools, such as Facebook apps. Claudia indicated that digital tools such as Facebook and WhatsApp helped her develop new marketing and communication strategies that fueled an increase in sales. See the full case study on page 33.
Piyanart Chuaybangyeero is the sole manager of her family's 64,000 sq meter durian farm in Surat Thani, Thailand. A third-generation durian farmer, Piyanart returned home after receiving her marketing degree to help her family’s business grow its customer base across Thailand. Her education helped launch her family’s expansion into online sales. As she commented, “I studied marketing, so I created the content and took care of the marketing component myself. It’s not an easy job and you have to have some technical knowledge to do it.” Using digital tools, Piyanart expanded her family’s business and sold fresh durian fruit to customers within Thailand and abroad. Her business stands as an example of SDG 5: Gender Equality to promote the empowerment of women through technology, as digital tools such as Facebook Business and Instagram helped Piyanart first to expand her market internationally, and then to quickly pivot her business strategy during the Covid-19 pandemic.

Due to the pandemic, demand for international sales waned. As a result, instead of selling to international customers in Malaysia, Singapore, and Vietnam, Piyanart pivoted to focus on the local rural market in Surat Thani. Simultaneously, more customers at home exploring new health trends during COVID-19 began to reach out to her via Facebook to purchase fresh fruit and boosted the interest in her online profile.

Although sales to the international market still haven’t returned to pre-pandemic levels, Piyanart has been able to quickly pivot her business strategy by integrating other digital tools such as Line, a popular online messaging platform to connect directly to customers and complete purchases online. She also learned how to use targeted advertising from Facebook to expand her customer base in the local market. While she benefited from Facebook customer support to learn how to use the application’s marketing tools effectively, she noted the challenges in keeping up with the changing technology. “You notice that it changes season by season, I have to sit down and relearn things again. It took me a while to continue progressing.”

Still, Piyanart has shown that the persistence to stay on top of ever-changing technologies pays off. Leveraging new online features on Facebook apps and Line enabled her business to remain resilient during the pandemic, by helping her to connect to her customers, localize and promote her products, and be responsive to changing trends and preferences. Thongthai Farm shows how women-owned MSMEs are empowered by technology which has helped Piyanart and others like her to reach new customers and contribute to the local economy.

“But despite COVID, our business keeps growing because there has been a ‘Durian Fever,’ a popular health phenomena in Thailand, and I kept [implementing] advertisements. So, my business keeps growing.”
Inspired by her own experience trying to find stylish yet practical clothes during her pregnancy, Intan Aisyah started a fashion company in 2019 selling breastfeeding and maternity clothes and instant hijabs to women in her home city of Tangerang. Empowered by hearing stories of other women entrepreneurs across Indonesia, Intan began using Facebook apps to promote her brand and gradually expanded her customer reach across the country.

As smartphones become ubiquitous across Indonesia, more Indonesian companies are selling online through an expanding e-commerce marketplace using digital applications to reach customers. Intan noted that digital tools gave her a competitive edge over other similar businesses selling to their existing followers. In addition, she has been able to attract new customers, and attributes growth in her sales to her Facebook ads. Intan leveraged Facebook and Instagram to promote her products, using features such as Stories, Polls, and Questionnaire to interact with customers, share product reviews, and offer instructions on how to order online. She usually posts 1 to 3 times a day on Instagram using the carousel feature to share her products in a catalog format.

After experiencing a decline in sales during the early months of the COVID-19 pandemic, Intan collaborated with a digital marketing agency to learn strategies to improve her promotions on Facebook Business. Learning the tools herself, Intan created the content and analyzed the results from ads to help her business grow. She also explored new digital tools like IGLive to provide more intimate, personalized connections with her followers, often resulting in a boost in sales. WhatsApp Business – especially Quick Reply and Labelling – was also key to managing Bajuboo's customer service and engagement.

Intan's business exemplifies a recent fashion industry trend that has seen women entrepreneurs start their own fashion companies to address market gaps in available clothing options. Not only does her thriving business Bajuboo contribute to the advancement of SDG 5: Gender Equality by providing Indonesian women with clothing that addresses their needs, it also promotes inclusive and sustainable economic growth in Indonesia.
To tackle climate change and deforestation in Colombia, Claudia and her husband Andrés started a business that manufactures plantable packaging – biodegradable containers, boxes, and other small consumer products from recycled food waste. After their use, Lifepack’s fully compostable products can be put in the ground and germinate plants within several days, further reducing their environmental impact. Since the founding of her business in 2009, Claudia has expanded Lifepack to sell its award-winning products across Colombia, Latin America, the United States, and Europe. Through its use of waste products to manufacture eco-friendly packaging, Claudia’s business Lifepack embodies SDG 9: Industry, Innovation, and Infrastructure and SDG 13: Climate Action. By training and employing vulnerable groups of women like single mothers to produce its products, her business also advances progress on SDG 5: Gender Equality.

During the COVID-19 pandemic, Claudia adjusted her digital marketing and promotions strategy to enhance online customer engagement, which ultimately increased Lifepack’s sales. Rather than focusing only on Lifepack’s products, she started posting more about environmental protection and the importance of eco-friendly packaging on Lifepack’s Facebook and Instagram Stories. This led her to start engaging with consumers interested in recyclable products and other like-minded content creators, which boosted her brand recognition, especially among international audiences in Europe. With a more active and engaged audience across multiple social media platforms, Claudia cites a 60 percent increase in sales from social media in the last 18 months.

“We have always used Facebook but during the pandemic, we saw our customers began to be a little more active in networks and this has greatly increased our brand recognition and interaction with our friends, our customers, and our users. Facebook has always made it easier for us to publicize the benefits that we have.”
SDG 17: PARTNERSHIPS FOR THE GOALS

By recognizing that the achievement of every SDG requires global cooperation across businesses, civil society, national governments, and development sector actors like the United Nations and other donors, SDG 17: Partnerships for the Goals sets the stage for the other sixteen SDGs. In 2014, the United Nations Conference on Trade and Development (UNCTAD) estimated that achieving the SDGs would cost an estimated USD5 trillion to USD7 trillion per year, of which an estimated USD3.3 trillion to USD4.5 trillion would be required for developing countries alone. A 2019 Brookings paper estimated that public sector spending gaps for the SDGs at the national level equaled about USD1 trillion per year across low-income and middle-income countries. These findings underscore the importance of identifying and implementing high-impact partnerships to close funding gaps for the SDGs, especially with the economic impacts of COVID-19 constraining national level and development sector spending.

According to The SDG Partnership Guidebook, the SDGs represent a deliberate shift toward a “system-transformational development” approach. This approach requires holistic collaboration among previously disparate stakeholders, like businesses, civil society, and national governments – alongside traditional development sector stakeholders – to achieve impact. Especially in the context of financial constraints impacting SDG achievement, partnerships allow each stakeholder to maximize their individual impact and collectively create more value than any one stakeholder could alone contribute. This value-add to the partnership, in combination with the partnership’s value-add to individual stakeholders, will accelerate the achievement of the SDGs and deepen their impact for stakeholders and individual citizens.

It will take robust partnerships to tackle the barriers preventing MSMEs across emerging markets from fully leveraging digital tools. As such, the survey sought to identify the most frequent barriers that both surveyed online and offline MSMEs faced in adopting and using digital tools. In addition, it ascertained the surveyed MSMEs’ interest in learning more about digital tools, which illuminated potential intervention areas for public, private and development stakeholders. Consistent across countries was a reported gap between the use of digital tools for personal and business reasons, meaning that a higher percentage of surveyed respondents reported using digital tools for personal or business purposes than for business purposes exclusively. This finding suggests that increasing the awareness of surveyed MSME owners who already use digital tools in their personal lives about the potential applications of these same tools for business purposes could be a powerful way to catalyze MSME digital transformation.
Key barriers reported by both offline and online surveyed MSMEs in the study include:\footnote{xxii}:

- Lack of knowledge (in using digital tools)
- Poor or no internet connectivity
- High cost
- (Perceived) lack of relevance to their business

By enabling more MSMEs to come online with fewer disruptions and difficulties, partnerships 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. Additionally, some surveyed MSMEs, especially online MSMEs, reported an interest in learning more about digital tools to augment their customer-facing work, like marketing their business, finding new customers, and using digital payment tools. This finding reinforces the importance of working directly with MSMEs and focusing on topics of specific interest that build on their existing digital skills. Partnerships between public, private, and development sector stakeholders that tackle areas of common difficulty for both online and offline MSMEs could additionally have compounding positive effects. For example, investments in developing MSMEs’ digital literacy skills could potentially address information security and knowledge concerns that could bring more offline MSMEs online, while also expanding digital tool usage by online MSMEs.

Specific country findings and a discussion of potential pathways for partnerships to address these barriers can be found in the country briefs here: https://www.dai.com/our-work/solutions/digital-acceleration-solutions/msme-study

An interview with the owner of Kak LakHeng Rice Mill in Cambodia illustrates the challenges that offline MSMEs face when beginning to come online for the first time. It also shows how one offline MSME in Cambodia is gaining the knowledge it needs to use digital tools. See the full case study on page 36.

\footnote{xxii} 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.
Sum Chanzo’s family rice mill business sells rice directly to customers in Phnom Penh and internationally to wholesale businesses in Vietnam. In operation for over 30 years, Chanzo’s farm employs 30 to 40 people part-time to harvest crops and four full-time employees to manage the machines. Recently procuring a milling machine to separate refined rice grains, her new equipment produces more high-quality rice products using only compost fertilizer. Kang Lakheng Rice Mill’s use of organic methods for harvesting and milling rice directly supports SDG 12: Responsible Consumption and Production. With a limited water supply in the region, Chanzo refrains from using additive fertilizers or chemicals and instead utilizes sustainable agricultural methods, such as composting, to grow organic rice.

As a family business, Chanzo’s rice mill depends on the trusted connections and customer networks that her father built over the last 30 years. Instead of using digital tools, she relies on more traditional methods of sales, communications, and hiring, like telephone calls and SMS. However, the COVID-19 pandemic created more demand for Chanzo’s rice crops. She plans to increase production capacity, so she would like a better way to identify and reach out to potential new customers. In order to grow her business and meet the growing demand, Chanzo recently participated in a USAID-funded Digital Literacy Training with SHE Investments. At the training, she learned how to create a personal Facebook page, share information, and post photos. By strengthening her digital literacy skills, Chanzo can better understand how to use digital tools to receive more orders, manage internal resources, and reach suppliers more efficiently.

Though she reported little knowledge or awareness of other Facebook tools and features that would allow her to effectively use the platform to promote her business, Chanzo is interested in using digital tools to promote her business by showcasing her products and attracting visitors to her farm. She also wants to use digital tools to share her organic and environmentally sustainable farming practices with Cambodia’s farming community. Overcoming barriers such as limited knowledge about digital marketing resources can empower MSME owners, like Chanzo, to effectively use technology to improve business outcomes and to withstand shocks or shifts in economic activity.

“I do not know much about technology, so I don’t know what to expect. But I want to expand my business in the future, so I need a better way to reach out to new customers and Facebook might be the answer to this.”
CLOSING REMARKS

Micro, small, and medium-sized enterprises are a critical engine of growth and employment for the global economy. By highlighting the ways in which this research aligns with and contributes to the goals and targets of the SDGs, this report – and each individual country brief – proposes a clear framework for policymakers and other actors to further investigate and explore the use of this evidence to inform development programming guided by the SDGs’ call to action. Although we cannot generalize these findings across countries nor within countries, we believe that the findings highlighted by this report could guide the development of actionable approaches aiming to promote inclusivity and resilience amongst both online and offline MSMEs, offering a new bank of insights on the increasingly important role of digital tools in economic growth. While this study found that many surveyed MSMEs have embraced digital tools as a key part of their business activities, external research also shows that further digitalization is required to enhance MSME economics and ensure their survival. Difficulties such as poor or no internet connectivity and a lack of knowledge about digital tools kept surveyed online and offline MSMEs from fully leveraging digital tools in their business practices.

As policymakers plan for “the new normal,” robust support for MSMEs – adapted to policy-making priorities in the current economic and operating environment – is crucial to unlocking digital opportunities at the MSME level. Looking ahead, it will be important to provide targeted, appropriate interventions to address digitalization barriers, while continuing to enhance the skills of online MSMEs in using digital tools. Promoting equitable digital tool usage is expected to improve MSME resilience to the COVID-19 pandemic and future shocks, as well as enhance their ability to serve as employers, customers, and positive engines of growth for the global economy as a whole. MSMEs that are poised to grow and scale could be a driving force to accelerate economic growth outcomes across emerging markets. Ensuring that all MSMEs can equitably participate in and benefit from digital transformation in the long run is crucial to fostering inclusive and resilient economic growth and to supporting these countries in achieving the Sustainable Development Goals.
Agriculture and food production sector: For the purposes of this study, this sector is defined to include businesses operating in farming, food processing, and manufacturing of food products.

Completion rate: The number of businesses who finished the survey as a proportion of the number of businesses that were contacted.

Computer-assisted personal interviewing (CAPI): Computer-assisted personal (in-person) interviewing, typically used to indicate face-to-face surveys that are enumerator-administered.

Digital tools: Internet-based technologies. As definitions vary per country, please see Appendix I for a country-specific definition of digital tools for each country included in the study.

Enumerators: A trained interviewer who administers the survey to respondents.

Group of Meta applications: Group of Facebook applications, including WhatsApp, Instagram, and the Facebook mobile app.

Hospitality sector: For the purposes of this study, this sector is defined to include food service, arts and entertainment, hospitality and tourism, and transportation sectors.

Manufacturing and industry sector: For the purposes of this study, this sector is defined as consisting of enterprises of materials and construction, manufacturing, and general repair services.

Men-owned micro, small, and medium enterprises (MSMEs): For the purposes of this survey, men-owned MSMEs are defined as MSME that does not have at least one woman among all the owners of the firm.

Micro, small, and medium enterprises (MSMEs): This report uses the term “micro, small, and medium enterprises” (MSMEs) to refer to the businesses surveyed for this research, in line with terminology used by multilateral institutions such as the International Finance Corporation and the United Nations. 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).

Mobile banking: Mobile banking as used in this report refers to both mobile banking and digital payments.

Offline: Micro, small and medium enterprises (MSMEs) who reported not using any digital tools for business purposes in the past year (also referred to as “offline MSMEs”).

Online: Micro, small and medium enterprises (MSMEs) who reported using at least one digital tool for business purposes in the past year (also referred to as “online MSMEs”).

Primary Sampling Unit (PSU): Primary sampling unit; sampling units that are selected in the first stage of a multistage sample approach, typically a large geographic unit such as a province, state or region.

Random walk: Procedures that are used to ensure randomness of selection when employing a CAPI face-to-face methodology. A random starting point is chosen, and enumerators are provided with a numeric skip interval so that businesses are randomly selected. In order to ensure that enumerators are not covering the same area, random walk procedures include the use of the “right hand rule” which means the enumerators must only interview businesses on their right side. and if they come to an end of a block or sampling area they move to their right. If enumerators reach the end of their assigned area without reaching the target number of completions, they continue the process using the left side rule or opposite direction.
Response rate: The number of businesses who answered the survey as a proportion of the number of businesses that were contacted.

Retail and e-commerce sector: For the purposes of this study, this sector is defined to include retail outlets with a storefront, booth, or obvious signage and/or businesses who participate in online sales (e-commerce).

Rural: As part of the survey, respondents were provided this definition: “Rural such as a village or another location that is far from cities and towns.” For the purposes of the analysis, statistics are reported based on self-reported geographic categorization.

Segment: For the purposes of this study, a segment refers to a market or business sub-population.

Secondary Sampling Unit (SSU): Secondary sampling unit, sampling units that are selected in the second stage of a multistage sample approach, typically a smaller geographic unit that is within the PSU.

Suburban: As part of the survey, respondents were provided this definition: “Suburban such as a town or another location that is neither urban or rural.” For the purposes of the analysis, statistics are reported based on self-reported geographic categorization.

Urban: As part of the survey, respondents were provided this definition: “Urban, such as a city or metropolitan center.” For the purposes of the analysis, statistics are reported based on self-reported geographic categorization.

Women-owned micro, small, and/or medium enterprises (MSMEs): For the purposes of this survey, women-owned MSMEs are defined as MSME that have at least one woman among all the owners of the firm.
APPENDIX I: DIGITAL TOOLS DEFINITIONS BY COUNTRY

The below denotes the country-specific definition of digital tools used for each country included in the study.

Argentina:
- Any of the following social media platforms: 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, Amazon Web Services, etc
- E-commerce websites, such as Amazon, Alibaba, or Etsy
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, Venmo, or MercadoPago
- Videoconferencing, such as Zoom, Skype, or Google Hangouts

Brazil:
- Any of the following social media platforms: 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, iMessenger, Telegram, or Signal
- Business software or cloud computing, such as Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, Amazon Web Services, etc
- E-commerce websites, such as Amazon, Alibaba, Etsy, Facebook Marketplace, Magazine Luiza, Mercado Livre, or OLX
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, Venmo, Mercado Pago, PagSeguro, or PicPay
- Videoconferencing, such as Zoom, Skype, or Google Hangouts

Bangladesh:
- Any of the following social media platforms: 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, or QQ
- Business software or cloud computing, such as Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, Amazon Web Services, etc
- E-commerce websites, such as Amazon, Alibaba, Etsy, Facebook Marketplace, Magazine Luiza, Mercado Livre, or OLX
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, Venmo, Mercado Pago, PagSeguro, or PicPay
- Videoconferencing, such as Zoom, Skype, or Google Hangouts
Cambodia:

- Any of the following social media platforms: 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, or QQ
- Business software or cloud computing, such as Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, Amazon Web Services, etc
- E-commerce websites, such as Amazon, Alibaba, Etsy, Venmo, or PayPal
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, or Venmo
- Videoconferencing, such as Zoom, Skype, or Google Hangouts

India:

- Any of the following social media platforms: 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, or QQ
- 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, or Etsy
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, or Venmo
- Videoconferencing, such as Zoom, Skype, or Google Hangouts

Colombia:

- Any of the following social media platforms: 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, or QQ
- 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, or Etsy
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, Venmo, Nequi, or Davipay
- Videoconferencing, such as Zoom, Skype, or Google Hangouts

Indonesia:

- Any of the following social media platforms: Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram
- Other social media platforms, such as Twitter, TikTok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, YouTube, or Snack Video
- Other messaging applications such as WeChat, Telegram
- Business software or cloud computing, such as Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, or Amazon Web Services, etc
- E-commerce websites, such as Amazon, Alibaba,etsy, Tokopedia, Shopee, Lazada, or Bukalapak
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, Venmo, DANA, OVO, LINK AJA, GO-PAY, Paytren, Sakuku, True Money, or Shopee pay
- Video conferencing, such as Zoom, Skype, or Google Hangouts Your Own Business website
Mexico:
- Any of the following social media platforms: 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, Mercado Libre, or Kichink
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, Venmo, MercadoPago, or CoDi
- Videoconferencing, such as Zoom, Skype, Google Hangouts, or Microsoft Teams

Peru:
- Any of the following social media platforms: 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, Mercado Libre, or Kichink
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, Venmo, MercadoPago, or CoDi
- Videoconferencing, such as Zoom, Skype, Google Hangouts, or Microsoft Teams

Philippines:
- Any of the following social media platforms: Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram
- Other social media platforms, such as Twitter, LinkedIn, SnapChat, Reddit, Pinterest, YouTube, or Tumblr
- Other messaging applications, such as KakaoTalk, Viber, Line, QQ, WeChat, 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 shopee.ph, Alibaba and Amazon
- Email, such as Gmail, Yahoo!Mail and Outlook
- Mobile banking and digital payments, such as Gcash, PayMaya, PayPal, or Venmo
- Video conferencing, such as Google Meet, Zoom, and Skype

Sri Lanka:
- Any of the following social media platforms: Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram
- Other social media platforms, such as Twitter, TikTok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, Digg, or YouTube
- Other messaging applications, such as QQ, Viber, Telegram, or MyDialog
- 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, Daraz, or eBay
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as NEOS, WePay, Upay, or Flash
- Videoconferencing, such as IMO, Zoom, Skype, or Google Hangouts
Thailand:

- Any of the following social media platforms: Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram
- Other social media platforms, such as Twitter, TikTok, LinkedIn, Snapchat, Pinterest, Tumblr, or YouTube
- Other messaging applications, such as Viber, Line, WeChat, or QQ
- Business software or cloud computing, such as Microsoft Office, Word or Excel, Google Drive, Docs or Sheets, or Amazon Web Service
- E-commerce & digital payment platforms websites, such as Amazon or Shopee Pay
- Email, such as Gmail, Hotmail, or Yahoo
- Mobile banking and digital payments, such as PayPal, PromptPay, or True Money Wallet
- Video conferencing, such as Zoom, Skype, or Google Hangouts

Vietnam:

- Any of the following social media platforms: Facebook, Facebook Messenger, Facebook Marketplace, WhatsApp, or Instagram
- Other social media platforms, such as Twitter, TikTok, LinkedIn, SnapChat, Pinterest, Tumblr, Reddit, YouTube, or Zalo
- Other messaging applications, such as Viber, Line, WeChat, QQ, or Zalo
- 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, Etsy, or Ebay
- Email
- Mobile banking and digital payments, such as PayPal, Viettelpay, or Momo
- Video conferencing, such Zoom, Skype, or Google Hangouts
- Your own business website


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