

Strategies for Ensuring Business Continuity of SMEs in the APO Developing Economies

Management Practices for Challenging Times



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STRATEGIES FOR ENSURING BUSINESS CONTINUITY OF SMEs IN THE APO DEVELOPING ECONOMIES

Management Practices for Challenging Times

Strategies for Ensuring Business Continuity of SMEs in the APO Developing Economies

Dennis Stephen Cervantes and Kyu Hwang Yeon served as the chief experts and volume editors.

First edition published in Japan
by the Asian Productivity Organization
1-24-1 Hongo, Bunkyo-ku
Tokyo 113-0033, Japan
www.apo-tokyo.org

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CONTENTS

FOREWORD	VII
EXECUTIVE SUMMARY	1
INTRODUCTION	3
Background of the Research	3
Literature Review	3
Agile Organization	3
Automation/mechanization	3
Digitalization/DX	3
Building New Business Models	4
Hybrid and Remote Working	4
Talent Acquisition	4
New Market/customer Development	4
Utilization of Macro-level Government Policies	4
Cost Optimization	4
Summary	5
Research Design and Methodology	5
Definitions of the Nine Key Management Practices	7
Application of the Net Promoter Score in Evaluating Management Initiatives	8
Case Analysis, Initial Findings, and Further Research	9
Case Analyses	9
Initial Findings	11
Further Research	12
References	13
INDIA	16
Executive Summary	16
About the Research Assignment	19
Scope of Work	19
Methodology Adopted for the Research	19
Economic Profile of India	20
Sector-wise Contribution to India's GDP	22
India's Overall Productivity Growth Rate	24
MSMEs in India	25
Role of MSMEs in India's Economy	27
India's Highest Growing SME Sectors in Recent Years	29
Changes in SMEs since COVID-19	30
Case Studies on Emerging Economies	30
Case Study 1: Design2Occupancy LLP, Jaipur	31
Case Study 2: Grannus Water and Environmental Solutions Pvt Ltd	38
Case Study 3: ICON India Pvt Ltd.	45

Conclusion	51
References	51
INDONESIA	53
Economic Profile of Indonesia	53
Macroeconomic Condition	53
MSMEs in Indonesia	59
Case Studies on Emerging Economies	62
Case Study 1: Love Care Company	62
Case Study 2: Pacmann Company	71
Summary	79
References	80
Appendix	82
Love Care Advertisements and Illustrations	82
Pacmann Brochures and Advertisements	87
MALAYSIA	90
Malaysia's Macroeconomic Performance 2020–22	90
Micro, Small, and Medium Enterprises' GDP in 2021	92
Distribution by Types of Economic Activity	96
Contribution by Types of Economic Activity	97
Performance of MSMEs' Exports in 2021	98
Performance of MSMEs' Employment in 2021	98
MSMEs' Employment by Types of Economic Activity in 2021	100
MSMEs' Labor Productivity in 2021	100
Government Intervention	102
Malaysia Government's Assistance to Businesses during the Pandemic	102
Impact of Cashflow on MSMEs	103
Case Study 1: TGSK Kuala Lumpur	104
Signature Menu	104
Founder of the Company	105
Establishment of TGSK Kuala Lumpur	105
Sales and Revenues	106
Business Challenges	108
Continuous Improvement	109
Digitalization in the Food and Beverage Industry	110
Training	110
Social Media Marketing	111
Management Practices and Initiatives Taken to Grow and Sustain During the Pandemic	114
Case Study 2: Talenta Ideas	115
Creative Industry	116
Creative Industry During COVID-19	116
Revenue, Gross Profit, and EBITDA	117
Employment	119
Transformation and Improvements	121
Management Practices and Initiatives Taken to Grow and Sustain During the Pandemic	123
References	124

THE PHILIPPINES	125
Background	125
Research Methods	125
Research Framework	125
Philippine Economy's Growth Perspectives	127
Impact of the COVID-19 Pandemic on Philippine Economy	128
High-growth Sectors and Industry Performance	129
Overall Economic Trends	129
Small- and Medium-sized Enterprises in the Philippines	130
Impact of the COVID-19 Pandemic on SME Productivity	130
Case study 1: Agricultural Enterprise in North Philippines	133
Hybrid Work or Work from Home	134
Agility, Flexibility, and Reallocation	134
New or Contactless Business Model	135
New Skilling and Talent Acquisition	136
Redefining Customers or Markets	136
Utilization of Macro Government Policies	137
Automation or Mechanization	137
Digitalization and Artificial Intelligence	137
Case Study 2: Biotechnology Firm based in Manila, Philippines	138
Hybrid Work or Work from Home	138
Agility, Flexibility, or Reallocation	139
New or Contactless Business Model	139
New Skilling and Talent Acquisition	140
Redefining Customers or Markets	140
Utilization of Macro Government Policies	141
Automation or Mechanization	141
Digitalization and Artificial Intelligence	141
Discussion	142
Conclusion	143
References	144
THAILAND	146
Economic Profile of Thailand	146
SMEs in Thailand	150
New Productivity Trend	153
Government Measures	155
Business Resilience of SMEs	155
Case Studies in Thailand	156
Case Study 1: AWS	156
Case Study 2: The Aromatic Farm	164
Conclusion	172
References	173
TURKIYE	174
Turkiye's Economic Profile During the Pandemic Period	174
Turkiye's Growth Perspective	174
Turkiye's Industry Performance and High-growth Sectors	175

Turkiye's Productivity Trends	177
Case Studies in Turkiye	180
Case Study 1: Abfen Farma	180
Case Study 2: Obilet	186
Conclusion	193
References	195
VIETNAM	196
Country Growth Perspectives in 2020–22	196
High-growth Sectors and Industry's Performance	198
Overall Picture of 2020	198
Overall Picture of 2021	199
Overall Picture of 2022	201
Overall Productivity Trends	202
Case study 1: Rang Dong Light Source & Vacuum Flask Joint Stock Company	203
Company Introduction	203
Business Context in 2020–21	204
Good Practices that were Deployed	205
Business Results	211
Lessons Learnt	212
Case Study 2: Thanh Giong Computer and Communication Joint Stock Company	213
Company Introduction	213
Business Context in 2020–21	214
Good Practices that were Deployed	214
Business Results	218
Lessons Learnt	219
Conclusion	220
References	220
CONCLUSION	222
LIST OF TABLES	223
LIST OF FIGURES	225
LIST OF CONTRIBUTORS	228

FOREWORD

In today's dynamic, interconnected world, the COVID-19 pandemic was a formidable force, impacting every corner of the globe. Developing countries, in particular, faced unparalleled challenges, testing their resilience and adaptability.

The Asian Productivity Organization (APO) presents this report on *Strategies for Ensuring Business Continuity of SMEs in the APO Developing Economies: Management Practices for Challenging Times* showcasing how enterprises in seven developing member economies, India, Indonesia, Malaysia, the Philippines, Thailand, Turkiye, and Vietnam, not only weathered the pandemic but also thrived and flourished amid uncertainty.

Each economy faced different challenges dictated by its socioeconomic development and background. Malaysia was able to overcome a serious contraction of its economy in 2020 by creative expression and talent acquisition, while the Philippines adopted hybrid working models and market expansion. Innovations and digitalization enabled Indian companies to expand, and Turkish enterprises retained employees while expanding markets. By utilizing the government's macroeconomic policies and strengthening supply chains, Vietnamese companies were able to survive, and Indonesian entities used automation and elimination of redundancies to weather the storm. Thai companies, through diversification and the introduction of new products, proved their resilience.

A common theme is the spirit of entrepreneurship and the pursuit of excellence. Each economy's narrative is distinct, but the drive to innovate, adapt, and seize opportunities was shared. The stories offer insights into the potential of MSMEs to contribute to economic recovery and growth, fueling inclusive, sustainable development.

The APO extends sincere gratitude to Chief Experts Dennis Stephen Cervantes, CHEMSOLVE Korea, and Kyu Hwang, Yeon, Apple Adventure, the ROK, and the national experts from India, Indonesia, Malaysia, the Philippines, Thailand, Turkiye, and Vietnam who conducted the research and wrote this publication. My appreciation goes to the enterprises that graciously participated in this study, sharing their growth trajectories, challenges, and successes. Their stories illustrate the resilience of businesses and the human spirit in overcoming adversity.

The APO hopes that this report will guide policymakers, entrepreneurs, and stakeholders in building resilient, innovative, thriving economies capable of weathering any storm. Together, we can forge a brighter future embracing progress, inclusivity, and sustainability.

Dr. Indra Pradana Singawinata
Secretary-General
Asian Productivity Organization
Tokyo

EXECUTIVE SUMMARY

The outbreak of the COVID-19 pandemic in 2020 presented unprecedented challenges to developing APO member economies, leading to declines in their GDPs and severely impacting the small and medium enterprises (SMEs). These SMEs faced sudden drops in demand, difficulties in procuring raw materials, and rapidly changing business landscapes. However, amidst these challenges, SMEs from Thailand, Indonesia, Vietnam, Malaysia, the Philippines, India, and Türkiye exhibited remarkable resilience and resourcefulness.

This comprehensive study delves into the response strategies and growth trajectories of these SMEs. The study revolves around nine key management practices that empowered these enterprises to navigate the adverse economic effects of the pandemic and emerge stronger.

To begin with, we conducted an in-depth analysis of the macroeconomic performance of each of the above mentioned economies, from 2020 to 2022, highlighting the profound impact of the pandemic on them. As the pandemic's ripple effects reached various sectors, SMEs faced economic contractions and unprecedented challenges. However, these enterprises showcased their adaptability and resilience, capitalizing on strategic management practices to navigate uncertainty and pave the path toward recovery and growth.

One of the most surprising findings from the study was the widespread adoption and effectiveness of an agile organizational approach among successful SMEs in all seven developing economies under consideration. Almost all of the SMEs studied exhibited strong inclination toward becoming agile organizations, which proved instrumental in their resilience and growth during the pandemic.

In addition to agility, two other key management practices emerged as common contributors to SMEs' successes. These were: hybrid working/remote working digitalization and new market/customer development strategies. By embracing flexible work arrangements, leveraging technology for digital transformation, and exploring new market opportunities, these SMEs showcased adaptability and innovation.

Contrary to the initial hypothesis, the study revealed that the strategy of relying heavily on massive financial support and relief measures provided by governments had the least adoption among successful SMEs. Instead, these enterprises relied more on internal cost optimization measures and strategic decision-making to ensure their financial viability during the crisis.

Thailand's SMEs demonstrated adaptability and resilience, with enterprises like AWS and Aromatic Farm harnessing technology and e-commerce to expand their market presence. Indonesia's Love Care and Pacmann demonstrated resilience through workforce upskilling and cost optimization. Vietnam's Rang Dong and Thanh Giong thrived with government support and digitization. Malaysia's TGSK and Talenta Ideas embraced new business models and automation to navigate the challenges. The Philippines' 'Anonymous Enterprises' strategically redefined their markets and adopted hybrid working models. India's Grannus Water, ICON India, and Design Occupancy LLP displayed exceptional resilience through innovation and digitization. Türkiye's Abfen Farma and Obilet exhibited resilience by embracing technology and optimizing costs.

The growth and resilience displayed by SMEs from diverse developing APO member economies during the COVID-19 pandemic underscored the power of adaptability, innovation, and strategic management. This study serves as a valuable resource for policymakers, entrepreneurs, and stakeholders seeking insights into effective management practices for navigating crises and fostering sustainable growth. As these inspiring enterprises continue to pave the way for economic recovery and progress, it is sincerely hoped that their stories will inspire others to build resilient and thriving economies for a better future. Collaboration, research, and knowledge sharing are vital in driving positive change and shaping the future of developing economies.

The study has also revealed additional factors contributing to SMEs' resilience and success, beyond the nine management practices, such as top management's engagement, clear strategic direction, and human-centered corporate culture. Firms that emphasized product development, technology adoption, and partnerships with other industries showcased adaptability and innovation. Moreover, businesses that prioritized continuous learning, effective communication with suppliers, and proactive risk management were better prepared to navigate the uncertainty.

Ultimately, this study serves as a wake-up call, reminding us of the importance of anticipating potential risks and proactively addressing them to effectively manage crises. By preparing for and embracing change, SMEs can ameliorate disruption, thrive in challenging times, and continue their journey toward sustainable growth and success. As the world continues to evolve, collaboration and knowledge sharing will be crucial in building a future where resilience, adaptability, and innovation are at the core of every successful enterprise.

INTRODUCTION

Background of the Research

The COVID-19 pandemic struck the global economy with unprecedented force in early 2020, creating immense challenges for economies worldwide. The developing APO member economies were particularly affected, and their small and medium enterprises (SMEs) faced a myriad of obstacles. Sharp declines in demand, supply chain disruptions, and financial strain threatened the very survival of these enterprises. However, in the face of these adversities, SMEs from India, Indonesia, Malaysia, the Philippines, Thailand, Turkiye, and Vietnam showed remarkable resilience and ingenuity.

This study delves deep into the response strategies and growth trajectories of SMEs in the aforementioned APO member countries. Our focus is on the nine key management practices that have empowered these enterprises to navigate the adverse economic effects of the pandemic and emerge stronger.

Literature Review

The COVID-19 pandemic posed unprecedented challenges to developing countries' SMEs, disrupting economies and severely threatening businesses' survival. This literature review examines the management practices adopted by SMEs in developing countries, including Thailand, Indonesia, Vietnam, Malaysia, the Philippines, and India, to address the adverse economic effects of the pandemic. The study encompasses a diverse set of SMEs, ranging from technology startups to manufacturing and healthcare industries.

Agile Organization

The ability of SMEs to respond swiftly and effectively to the dynamic challenges brought on by the pandemic was a key determinant of their resilience. Developing countries' SMEs, such as AWS in Thailand and Talenta Ideas in Malaysia, demonstrated agility by quickly adapting their operations to meet changing customer demands. They restructured processes, reprioritized business strategies, and collaborated cross-functionally to address supply chain disruptions. The literature emphasizes that the agile organizational structure enabled these SMEs to swiftly adjust to evolving market conditions and seize new opportunities as they arose [1, 2].

Automation/mechanization

In a time when social distancing and workforce disruptions were rampant, automation and mechanization proved essential for ensuring business continuity. SMEs like Rang Dong (in Vietnam) and ICON India invested in automated manufacturing processes, thus reducing their dependence on manual labor and minimizing the impact of labor shortages during lockdowns. The literature underscores that the adoption of automation not only bolstered operational efficiency but also mitigated potential disruptions to the production process [3, 4].

Digitalization/DX

Digitalization played a pivotal role in the SMEs' response to the pandemic in developing countries. Firms like Love Care in Indonesia and Design Occupancy LLP in India leveraged digital platforms

to strengthen their online presence and engage with customers remotely. By adopting e-commerce platforms and enhancing digital marketing strategies, these SMEs expanded their reach and customer base, thereby mitigating the reduced footfalls experienced in physical stores during lockdowns. The literature highlights that digital transformation enabled SMEs to tap into new market segments and maintain meaningful customer interactions despite the limitations posed by the pandemic [5, 6].

Building New Business Models

The pandemic necessitated a reevaluation of traditional business models, prompting SMEs to innovate and adapt their strategies to the new normal. Aromatic Farm in Thailand and PacMann in Indonesia successfully diversified their product offerings and ventured into new markets. By embracing innovative business models, these SMEs navigated the pandemic's challenges and positioned themselves for sustained growth. The literature stresses that the ability to pivot and explore new revenue streams was fundamental to their resilience [7, 8].

Hybrid and Remote Working

The pandemic compelled SMEs to swiftly implement remote work arrangements to ensure employee safety while maintaining business continuity. Developing country SMEs like Thanh Giong in Vietnam and anonymous in the Philippines promptly equipped their workforce with the necessary infrastructure and training to work remotely. The literature highlights that embracing hybrid/remote work arrangements enabled these SMEs to sustain productivity, retain talent, and enhance employees' wellbeing [9, 10].

Talent Acquisition

In countries like India, SMEs such as Grannus Water actively focused on talent acquisition, attracting skilled professionals to strengthen their workforce. By investing in employee training and development, these SMEs enhanced their capabilities to respond to changing market demands. The literature underscores that nurturing a skilled and adaptable workforce was crucial to SMEs' ability to respond effectively to the pandemic's challenges [11].

New Market/customer Development

Developing country SMEs like Vietnam's Rang Dong and Malaysia's TGSK explored new market segments and demographics to reduce their reliance on existing markets adversely affected by the pandemic. The literature emphasizes that these SMEs' proactive efforts in identifying and tapping into emerging opportunities enabled them to mitigate the impact of the crisis and foster sustained growth [12, 13].

Utilization of Macro-level Government Policies

SMEs in countries with supportive government policies, such as Abfen Farma in Turkiye and anonymous in the Philippines, accessed financial support to maintain operations and invest in growth opportunities. The literature underscores that the utilization of macro-level government policies provided crucial lifelines to SMEs during economic downturns, helping them to weather the storm and continue with their operations [14, 15].

Cost Optimization

Optimizing costs was a strategic imperative for SMEs in developing countries to ensure financial stability during the crisis. Malaysia's TGSK and Indonesia's Love Care implemented cost optimization strategies, while identifying inefficiencies and streamlining processes to safeguard

their businesses during challenging economic conditions. The literature highlights that effective cost optimization measures allowed these SMEs to conserve resources and remain resilient in the face of uncertainties [13, 16].

Summary

The literature review provides a comprehensive understanding of how SMEs in developing countries addressed the adverse economic effects of the COVID-19 pandemic. By adopting agile organizational structures, investing in automation and digitalization, and innovating new business models, these SMEs demonstrated resilience and adaptability. Leveraging remote work, talent acquisition, and market diversification strategies further fortified their responses. Accessing government support and optimizing costs were crucial in navigating economic uncertainties. The insights from this literature review offer valuable guidance to developing country SMEs, policymakers, and business support organizations in formulating effective strategies for building resilience and sustained growth amidst challenges. The success stories and lessons learned from these SMEs can inspire and inform other businesses facing similar challenges worldwide, ultimately contributing to the collective effort of fostering economic recovery and long-term sustainability.

Research Design and Methodology

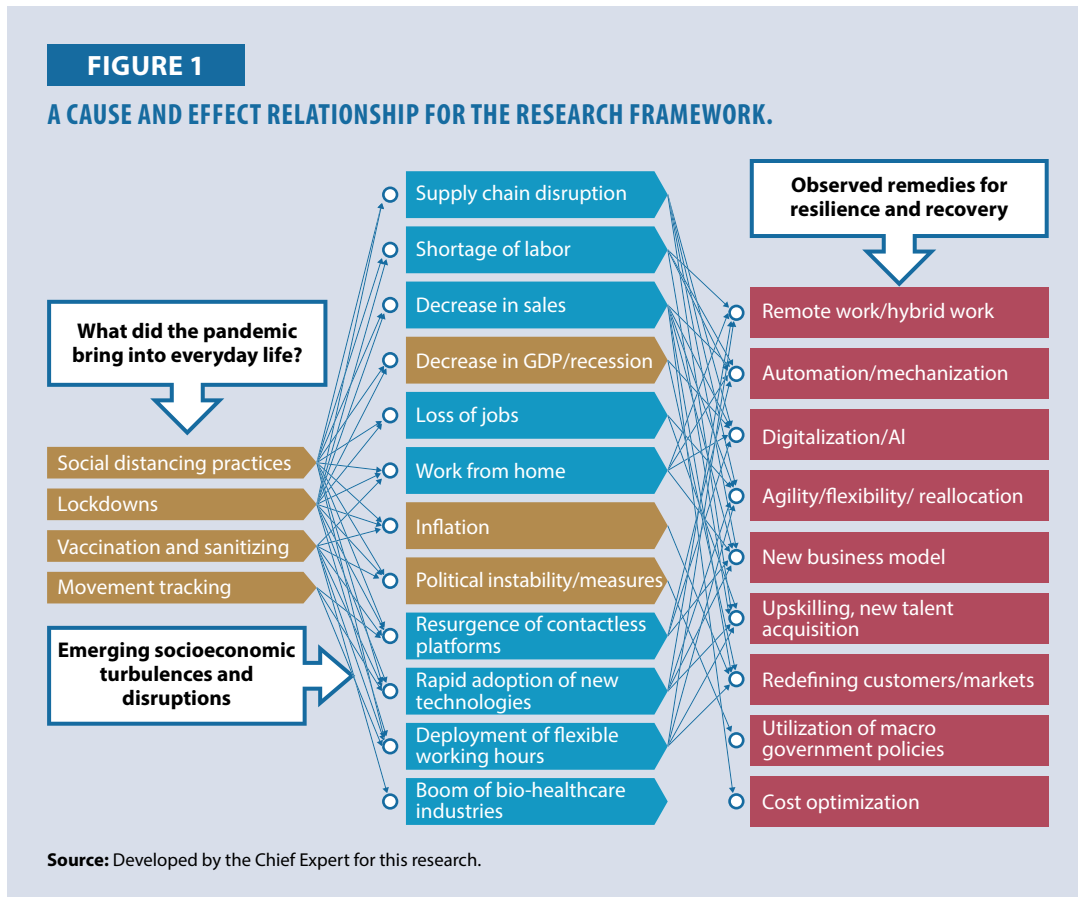
The initiation of the study was based on a predetermined research schema to investigate the foundations of sustainable recovery and exceptional performance of the case companies in the face of economic adversity. Due to resource constraints, the empirical investigation was limited to two to three interviews per company, which necessitated a recalibration of the methodology. Therefore, we operationalized the study through the following strategies:

- A case firm's selection was coordinated by selecting two exemplary firms from each of the four developing APO member economies that demonstrated post-pandemic innovation during 2020–22.
- A preliminary screening recommended the selection of five potential case candidates per economy, with final selection based on demonstrable growth in revenue, operating profit, and workforce expansion.
- Priority consideration was given to award-winning companies that have been recognized for productivity excellence or other outstanding corporate performance in the country context.

The research framework was informed by a comprehensive review of literature and media sources to formulate causal hypotheses about the impact of the COVID-19 pandemic. The advent of the pandemic in early 2020 led to widespread containment measures, including social distancing, movement restrictions, and preventive health policies, with some countries leveraging technology to strictly enforce these measures [18].

Lockdowns and restrictions have severely disrupted the economic activity and the business environment [19, 20, 21, 22]. The sudden shift to remote work and subsequent supply chain disruptions had a cascading effect on the economies, resulting in unemployment, inflation, and an overall slowdown evidenced by lower GDPs and lower productivity [25, 26, 27, 28, 29, 30]. This study identified the ripple effects of the pandemic on national economies and examined

the responses adopted by SMEs to overcome these challenges, as detailed in the literature and media reports [19, 20, 21, 23, 24]. Figure 1 illustrates the causal chain that informed the study design and describes the various strategies to overcome these challenges in the face of unprecedented disruption.



The study examined many of the strategies and responses adopted by firms through interviews with selected best-practice firms to see how they aligned with the principles of business resilience and innovation. The study assumed that by identifying patterns in the strategic responses of these firms, insights could be gained for other firms in developing APO member countries. While the limited sample of two firms per country is not a comprehensive representation of the spectrum of SMEs, valuable lessons can be learned by extracting commonalities from the success stories of the participating countries.

In Figure 1, SMEs are considered as patients seeking a cure for the pain of COVID-19, with ‘cures’ symbolizing management initiatives or best practices. Management initiatives are conceptualized here as deliberate efforts by an organization’s leadership to drive change, improvement, or innovation, covering a wide range of activities such as strategic alignment, process improvement, workforce motivation, technology integration, and more. These initiatives are distinguished by their goal-driven nature and the commitment of resources to achieve the prescribed objectives. At the same time, a “management best practice” refers to a methodology or procedure that has consistently produced optimal results and serves as a benchmark for other organizations aiming for similar outcomes. In this context, the term encompasses a range of specific management actions around resilience and innovation and reflects real-world business operations.

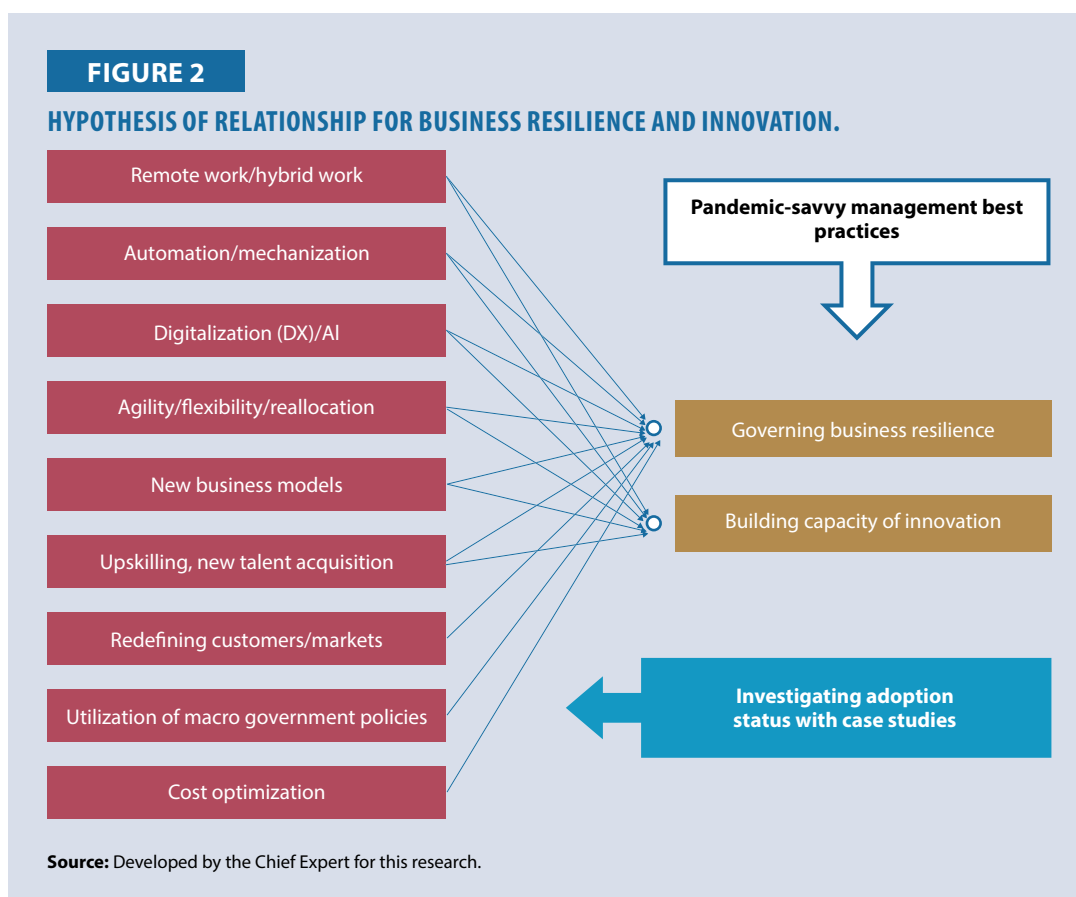


Figure 2 also explores how effective documented strategies categorized as resilience and innovation through digital and automated means were in facilitating recovery in the aftermath of the pandemic. The study focused on SMEs in seven APO developing countries to understand how these strategies helped them avoid the adverse effects of the pandemic. The hypothetical correlations between these management practices and their role in overcoming the adversity of COVID-19 are described in Figure 2.

Definitions of the Nine Key Management Practices

Hybrid working/WFH: As the pandemic necessitated social distancing and remote work, SMEs swiftly adapted by embracing hybrid working models and work-from-home (WFH) setups. This allowed them to ensure business continuity while prioritizing the safety and well-being of their workforce.

Agility/flexibility/reallocation of resources: The ability to adapt swiftly and reallocate resources became strategically paramount for SMEs facing unprecedented market fluctuations. This agility enabled them to optimize their operations and respond effectively to rapidly changing circumstances.

Exploring new business models: Embracing digital transformation and venturing into innovative business models allowed SMEs to cater to shifting customer preferences and seize emerging market opportunities. This ability to explore and experiment drove their competitiveness and growth.

New skilling and talent acquisition: Recognizing the importance of a skilled workforce, SMEs prioritized upskilling and talent acquisition. By ensuring that their employees possessed the necessary skills to thrive in the new business landscape, these enterprises remained competitive in the market.

Redefining customer markets: Strategically redefining their target markets, SMEs identified new opportunities and niches. This customer-centric approach allowed them to expand their customer base and diversify their revenue streams.

Utilizing macro-government policies: Capitalizing on supportive government policies and economic stimulus packages, SMEs successfully overcame financial challenges and stimulated growth. Collaborative efforts between the government and the private sector proved crucial in achieving these goals.

Optimizing working/operating costs: Through prudent cost optimization measures, SMEs ensured their financial viability during the pandemic. By carefully managing their expenses and maximizing efficiencies, these enterprises sustained their operations and growth.

Adopting automation and mechanization: Embracing automation and mechanization, SMEs enhanced efficiency and productivity. The adoption of technology enabled them to streamline operations, reduce human intervention, and achieve scalability.

Switching to digitization/AI tools: Leveraging digital technologies and AI tools, SMEs streamlined operations, improved customer experiences, and accelerated their growth trajectories. Digitization proved to be a gamechanger in the new normal.

Application of the Net Promoter Score in Evaluating Management Initiatives

The Net Promoter Score (NPS) metric was used to evaluate management initiatives in the seven developing APO member economies. The tool was utilized to critically assess whether these initiatives aligned with established best practices in the areas of business resilience and innovation.

The NPS is a widely recognized metric in marketing, conceptualized by Bain & Company Consulting. It has gained significant traction as a measure of customer repurchase and recommendation propensity across a wide range of business tiers, from early-stage startups to established companies. The strength of NPS lies in its simple approach and clear methodology, which quantifies a customer's propensity to repurchase or recommend a product or a service on a 10-point scale (1–10). Survey participants are categorized as “promoters” (9–10 points); “passives” (7–8 points); and “non-promoters” (6 points or less). The calculation of the NPS involves subtracting the percentage of detractors from the percentage of promoters [31, 32].

This metric is based on the premise that there is a significant discrepancy between verbal recommendations and actual consumer behavior with respect to product adoption or recommendation, with the assumption that true purchase or recommendation intentions are primarily expressed through high scores (9–10). Where a rapid analysis process by subject matter experts is required, as in this study, the NPS methodology entails identifying management initiatives based on individual assessments and expert judgments in each country's context. The rationale for applying the NPS is to extract and identify the most influential initiatives from the nine management initiatives documented in the case studies and correlate them with similar cases.

Accordingly, country experts were tasked with cataloging the salient management initiatives observed in the case studies. After compiling this list, they were instructed to consolidate in a single tabular format those initiatives that were deemed to have had the most pronounced

impact on the companies' performance and strategic efforts, as assessed by the experts. For each case study company, only those management initiatives that received a score of 9 or 10 were assigned for cross-comparative analysis. This methodological approach helped to quickly turn qualitative assessments into quantitative data that could be subjected to comparative scrutiny. Despite potential arguments and criticisms about the applicability of this method, it is a powerful means of identifying distinct patterns that emerge from the comparative analysis of the case studies.

Case Analysis, Initial Findings, and Further Research

The study provides surprising insights into management practices adopted by successful SMEs in all seven developing countries. The most prevalent and effective management initiative embraced by these enterprises was the adoption of an agile organizational approach. Almost all of the SMEs studied exhibited a strong inclination toward becoming agile organizations, which proved instrumental in their resilience and growth during the pandemic.

Contrary to expectations, the strategy of relying heavily on the massive COVID-19 financial support and relief policies provided by the governments showed the least adoption among successful SMEs. Instead, these enterprises emphasized internal adaptive strategies, such as cost-optimization measures and strategic decision-making, to navigate the financial challenges posed by the pandemic. This finding challenged the initial hypothesis and highlighted the importance of internal resilience and strategic management practices.

Case Analyses

In fact, the most intriguing inquiry to delve into the case studies revolves around the management initiatives embraced by high-performing SMEs across developing APO countries amidst the pandemic. Contemplating the myriad international political and economic ramifications during the initial phases of the pandemic, the focal inquiry pertains to the management strategies deployed by these high-performing enterprises to effectively surmount the substantial challenges, along with discerning whether analogous patterns are discernible in other nations.

In this case analysis for developing APO economies, a total of 15 SMEs, including those from India (3); Indonesia (2); Malaysia (2); the Philippines (2); Thailand (2); Turkey (2); and Vietnam (2), were comprehensively examined. The study was conducted by dedicated experts hailing from each respective country. Within the overarching research framework, these experts scrutinized nine the management initiatives categorized under two primary pillars: innovation and business resilience. Additionally, they assessed the relative impact of each initiative from an expert's standpoint.

The initial findings revealed that both “New Market/customer Development” and “Hybrid/remote Work” initiatives garnered the highest adoption rate (60%) and received significant emphasis during the pandemic. (This result is different from the results for developed APO countries, where agile organization work practices had the highest adoption rate.) Specifically, nine companies (60%) across the studied nations implemented this initiative. Following closely behind, agile organization work practices were embraced by eight companies (53.3%), while digitalization efforts emerged as the third most prevalent management initiatives, adopted by seven companies (46.7%).

Meanwhile, the cost optimization work practice scored the lowest response (22.2%). Similarly, automation/mechanization initiatives and those seeking government support initiative were underrepresented (33.3%). Taken together with the other findings, it may be assumed that SMEs in developing APO nations either had fewer manufacturing cases in our study, which may have led to this behavior, or they were only able to make small investments due to limited capital. These hypotheses could be tested in further research.

TABLE 1

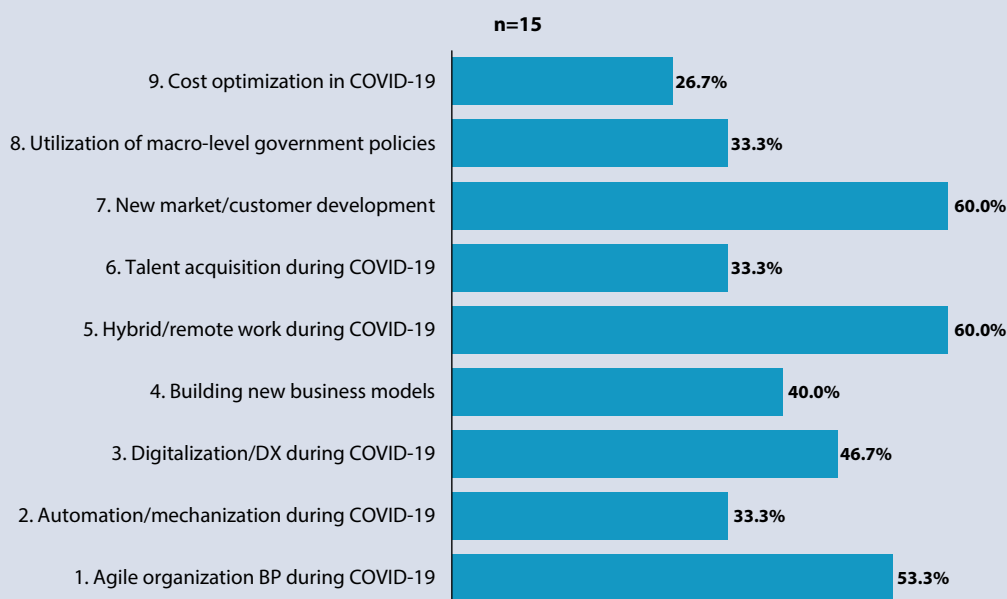
BEST PRACTICES WITH NPS SCORES OF 9–10 ADOPTED BY CASE STUDY COMPANIES.

Management's response to COVID-19 pandemic	Thailand		Indonesia		Vietnam		Malaysia		Philippines		India			Turkiye		Total no. of markings	Percentage of total cases
	AWS	AF	LC	PM	RD	TG	TGSK	TI	C1	C2	D2O	GW	ICON	ABF	OB		
1. Agile organization BP during COVID-19	X		X		X	X	X	X	X		X					8	53.3%
2. Automation/mechanization during COVID-19	X		X	X	X				X							5	33.3%
3. Digitalization/DX during COVID-19	X			X	X	X		X	X						X	7	46.7%
4. Building new business models	X	X			X		X				X		X			6	40.0%
5. Hybrid/remote working during COVID-19	X		X	X	X	X					X	X		X	X	9	60.0%
6. Talent acquisition during COVID-19	X		X	X					X	X						5	33.3%
7. New market/customer development	X	X	X	X	X				X	X				X	X	9	60.0%
8. Utilization of macro-level government policies		X				X			X	X		X				5	33.3%
9. Cost optimization during COVID-19	X		X									X	X			4	26.7%
10. Others						X											

Note: AF = Aromatic Farm; LC = Love Care; PM = PacMann; RD = Rang Dong; TG = Thanh Giong; TGSK = TGSK Kuala Lumpur; TI = Talenta Ideas; C1 = Case Study1; C2 = Case Study2; D2O = Design2Occupancy; GW = Grannus Water; Icon = ICON INDIA; ABF = ABFen Farma; OB = Obilet.

FIGURE 3

HIGH NPS SCORES OF 9–10 ASSIGNED BY COUNTRY EXPERTS FOR BEST PRACTICES.



Source: Developed by the Chief Expert for this research.

Initial Findings

In Thailand, SMEs like AWS (an IT service provider) and Aromatic Farm (a coconut farming business) demonstrated remarkable adaptability and resilience by harnessing technology and e-commerce to expand their market presence. Leveraging digital platforms allowed them to maintain business continuity amidst physical limitations. In other words, by adopting remote working, reassigning the remaining employees to other departments, practicing price flexibility, conducting retraining of employees, offering new products, making diversifications, eliminating redundancies, utilizing AI, and obtaining low-interest loans, these two entities were able to weather the pandemic and emerge much stronger than before.

In Indonesia, Love Care (a services company) and PacMann (a research company) exhibited resilience through workforce upskilling and cost optimization. By proactively investing in their employees and optimizing resources, these SMEs effectively navigated the challenging economic landscape. More specifically, the following strategies were instrumental in the companies' successes: creating new standard operating procedures; doing market expansion and diversification of the business model; undertaking digitalization, automation, retraining, and elimination of redundancies; implementing hybrid work; and prudently utilizing government programs.

Vietnam's RALACO (a lighting company) and Thanh Giong (a computer company) thrived with government support and digitization. By capitalizing on favorable government policies and embracing technological advancements, these enterprises successfully weathered the storm. More specifically, these two entities devised new ways to redeploy and retrain employees, enhance remote working, strengthen supply chains, focus on innovation, invest in new technologies, and do brand-building. These goals were achieved while supporting the humanitarian efforts in the country.

In Malaysia, whose economy severely contracted due to the pandemic, a number of innovations contributed to SMEs' recovery and success. TGSK (food industry) and Talenta Ideas (service industry), by embracing new business models and automation, presented the best examples of their creativity. Their ability to pivot and adapt to changing market demands allowed them to thrive in a dynamic environment. More specifically, by adopting new technologies and digital transformation, more avenues for growth, creative expression, and audience management were realized. Among other innovations, one could include hybrid/remote work, talent acquisition, and utilization of macro-level government policies.

By adopting a number of management practices, the SMEs studied in the Philippines, here referred to as anonymous enterprises (in areas of agriculture and biotech), were able to strategically redefine their markets and adopt hybrid working models, reflecting their resilience and ability to seize emerging opportunities. Their focus on flexibility and adaptability positioned them for success. The important point in their case is that although the adoption of these practices proved positive, it remains to be seen if they can achieve the same level of success in general. The true measure of their effectiveness depends on a number of factors such as organizational culture, type of industry, and other external factors. It is strongly suggested that the larger context of each case be taken into consideration for maximum effectiveness.

India's M/s Grannus Water (a water and waste management company); M/s ICON India (a manufacturing and trading company); and M/s Design Occupancy LLP (a provider of energy efficiency platforms) displayed exceptional resilience through innovation and digitization. By continuously innovating their products and services and adopting digital technologies, they sustained growth during uncertain times. Among the successful strategies adopted by these companies, the notable ones were enhanced remote working, digitalization, retraining of employees, business expansion, cost-cutting measures, and participation in government macroeconomic policies.

Turkiye's Abfen Farma (a pharmaceutical company) and Obilet (service industry) exhibited resilience through technology adoption and cost optimization, supported by favorable government policies. The fusion of cost-effective measures and technological leverage enabled them to surmount challenges. The secret to the success of these two companies can be attributed to the acceptance of the following policies: adoption of a hybrid remote/office work; employee retraining; improving internal communication; expansion into hitherto unexplored business areas; emphasis on e-commerce; automation; elimination redundancies; and utilization of government policies.

Further Research

This case study was conducted within the limitations of time and resources, which constrained us from adopting a more complex research methodology. Identifying companies within the participating countries that not only survived the pandemic but also excelled in their performance was a significant challenge. One of the main objectives of the study was to uncover the correlation between exceptional corporate performance, business resilience, and innovation. However, since the primary goal of companies during the pandemic was to survive, it was difficult to formulate hypotheses linking increased productivity to greater business resilience and viability.

Therefore, we used an inductive methodology to identify companies with notable growth and productivity during this period to uncover the management initiatives they implemented. We also faced challenges in obtaining detailed internal information beyond public announcements and company-provided data, which limited our ability to objectively assess quantitative performance.

In formulating the research methodology, we focused on exploring the twin pillars of business resilience and innovation, rather than relying heavily on the broader academic literature. The research focused on understanding the management initiatives that companies took as the pandemic unfolded, which included resilience and innovation. In addition, a range of guiding inquiries were devised to assess effective implementation.

Ultimately, the analysis of prominent management initiatives, guided by each country's experts, lacks supplementary interpretation regarding the rationale or methodology behind their conclusions.

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INDIA

Executive Summary

This is a country report on emerging needs of Indian economy, prepared on the basis of secondary research, followed by analysis of information obtained from surveys and interviews with representatives of three small-scale enterprises that have shown tremendous growth in recent years despite the COVID-19 pandemic.

The research objective was to identify the factors for robust growth of small and medium enterprises, especially during the pandemic.

COVID-19 led to major setbacks for all scales of industries and enterprises (large, medium, small, or micro). While many enterprises could not sustain or struggled to sustain their existence, there were many enterprises that could sail through the hardships and come out stronger. This country report presents the factors behind the success stories of three enterprises that grew and thrived against all odds. Two of these enterprises were from the services sector, while one was from the manufacturing sector. The growths of these organizations have been measured not only in terms of their turnovers but also in terms of their number of employees, clients, and beneficiaries; national and international outreach; and profit margins.

To begin with, a hypothesis was made at the inception of this research that any enterprise that had possibly sustained or grown during the pandemic would have adopted certain specific management practices or taken some strategic initiatives that helped them take their businesses to new heights. The hypothesis stated the reasons for growths of the enterprises during the pandemic that could broadly be classified under the following nine management practices:

- (1) hybrid working/work from home (WFH);
- (2) agility/flexibility/reallocation of resources;
- (3) explore new business model;
- (4) new skilling and talent acquisition;
- (5) redefine customer market;
- (6) utilize macro government policies;
- (7) optimize working/operating cost;
- (8) adopt automation and mechanization; and
- (9) switch to digitization/AI tools.

Based on the above hypothesis, the research was undertaken starting with secondary data research on the economic profile of India and how it has been growing or has been affected by the pandemic during the two-year period of the pandemic. Further, the scenario of micro, small, and medium enterprises (MSMEs) in the country was studied to understand how the MSMEs survived or grew in the past few years, what setbacks and challenges they faced, and where they stand as of date.

The secondary research also led to identifying the top 5 MSME sectors that have contributed to India's GDP in the recent years and the top MSME sectors that boomed in India during the pandemic.

After the secondary research, 10 MSMEs that grew during the pandemic were identified. Out of these 10 MSMEs, three enterprises were shortlisted based on their growth and on the willingness to share quantitative and qualitative data pertaining to their growth.

The quantitative and qualitative data and information on the growths and achievements of these three selected enterprises were collected in detail through a structured questionnaire. This questionnaire primarily comprised questions pertaining to the nine management practices noted above, in line with the hypothesis made at the beginning of the study.

The responses obtained from the three enterprises were then analyzed. Subsequently, face-to-face interviews were also conducted with representatives from each of the three enterprises to further understand the nitty-gritties and specific nuances that each of the enterprises had adopted to sustain themselves.

A summary of the three selected enterprises for the case study is captured in Table 1.

TABLE 1

SUMMARY OF THREE SELECTED SMEs.

S. No.	Name of the enterprise	Growth trend in last 3–4 years	Keys reasons for growth
1	M/s Design2Occupancy, Jaipur (services sector; small scale)	USD0.40–1.1 million (2.75 times)	<ul style="list-style-type: none"> • Strengthening online presence by effective digitization; expanding service offerings; diversifying supply chains as new business model • Adopting remote working using WFH and hybrid models; emphasizing health and safety • Conducting workshops and awareness programs, both national and international • Adopting new technologies (introduced new software for modeling, BIM, etc.) • Building a strong presence (opening new offices in India as well as in Canada); agility and reallocation • Focusing on customer experience

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S. No.	Name of the enterprise	Growth trend in last 3–4 years	Keys reasons for growth
2	M/s Grannus water and environmental solutions, Delhi (services sector; small scale)	USD0.42–1.21 million (2.82 times)	<ul style="list-style-type: none"> • Focusing on retention of clients; providing a system with 3–5 years warranty; focusing on quality and technology. As a result of the new business model, the company became a preferred vendor in its domain. • 24x7 service and plant operation with high degree of automation, near zero breakdown time • Focusing on Blue Ocean concept in addition to clientele • Throughput concept adopted in optimizing operation, e.g., smart procurement control; reducing time of execution by 30%; reducing breakdown time by 90–95% • Emphasizing employee welfare even during COVID-19, e.g., timely salaries, work from home, benefits, and job retention schemes. • Keeping service orientation • Adopting automation and technology for nonstop services • Focusing on organic growth concept and developing indigenous products for patents; timely payments to suppliers/vendors and other operational suppliers even in the pandemic situation
3	M/s ICON India, Patna (manufacturing sector; small scale)	USD0.10–0.89 million (8.9 times)	<ul style="list-style-type: none"> • Working through retailers, distributors and wholesalers; adding new products and loans as new business models. • Hiring new talent: focusing on skills of marketing, coordination, customer relations, stock maintenance, and logistics planning during talent acquisition. • Focusing on sensor-based product automation and digitization in payments. • Optimizing operational costs by purchasing own vehicles for improving logistics as well as self-branded product packaging.

Based on the research study undertaken, it could be concluded that the hypothesis made during the inception is true and all the initiatives, practices, and strategies that had been adopted by these enterprises fitted into the nine management practices discussed above.

About the Research Assignment

The APO undertook a research study to come out with the emerging needs of APO member economies. Each participating country had a designated country expert for presenting the country's perspective on the emerging needs of that country. The country expert was expected to carry out country-based research and come out with specific emerging needs through sufficient secondary research and supporting case studies.

Scope of Work

The scope of the research assignment included

- reviewing the economic growth of the country in recent years and assessing the impact of the pandemic;
- identifying the top SME sectors in the country that contributed to the country's GDP in recent years;
- identifying 2–3 service/manufacturing-sector SMEs that showed high growth during recent years (for showcasing their case studies); and
- detailed study of the identified SMEs to assess their growth and understand the key strategic initiatives and management practices followed to sustain the growth.

Methodology Adopted for the Research

To accomplish the study, a four-pronged approach was adopted comprising (1) secondary data research on the economic growth of the country; (2) a standard questionnaire-based survey to obtain responses from some selected enterprises; (3) interviews with some officials of the selected enterprises; and (4) analysis of the data and information obtained.

At the beginning of the research study, a hypothesis was made that any enterprise that has possibly sustained or grown during the pandemic would have adopted certain specific management practices or taken some strategic initiatives that would have helped them take their businesses to new heights. The hypothesis stated the reasons for the growth of any enterprise during the pandemic, which can broadly be classified under the nine management practices listed earlier.

Based on the hypothesis, the secondary research was undertaken, followed by the identification of SMEs that grew during the pandemic period. This was followed by deep diving into the reasons that led to their growths in recent years and how they overcame the various obstacles during the pandemic.

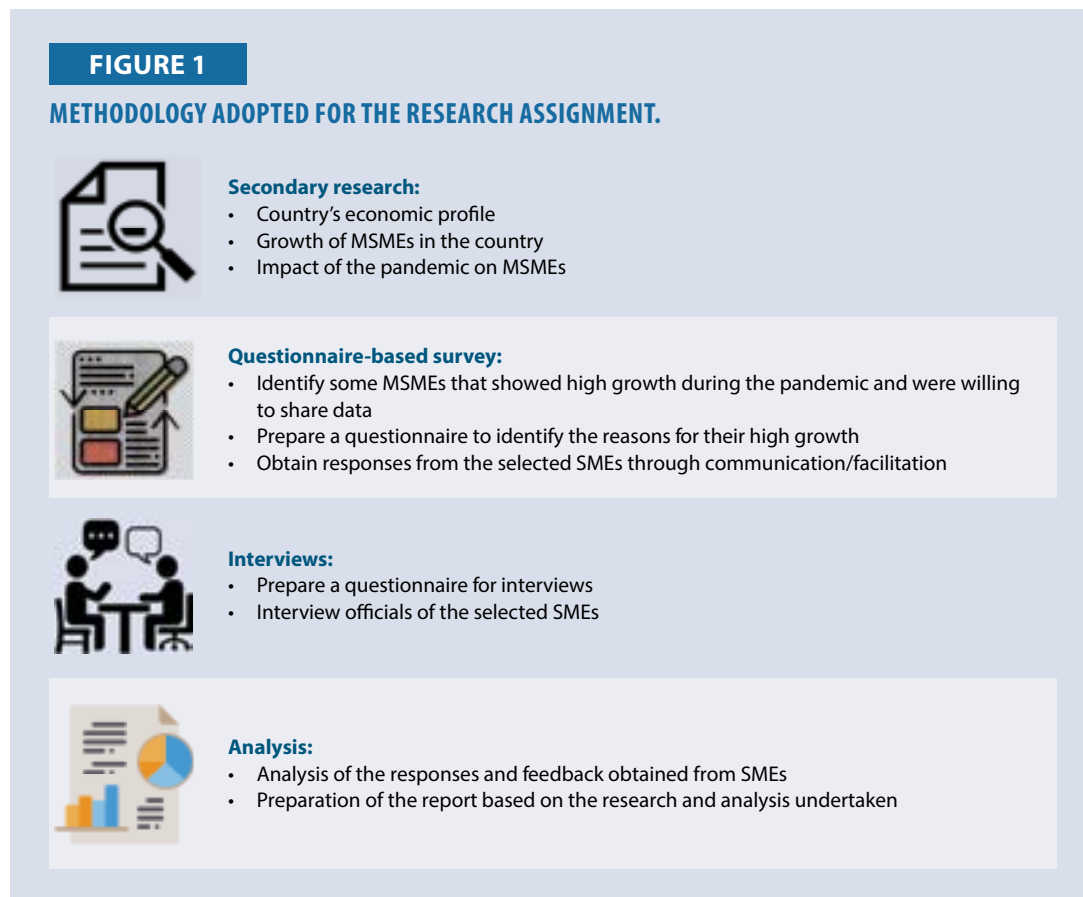
To come up with factors that led to the growth and survival of SMEs, 10 Indian SMEs were identified to showcase their success stories. Out of these 10 SMEs, three were finally shortlisted based on the consistent growth they had achieved and their willingness to share qualitative and quantitative data pertaining to their growth.

The growth of these three SMEs was reviewed not only based on their annual turnover but also on aspects of increases in team size, clientele, beneficiaries, national outreach, international outreach, and improvement in profit margin.

Subsequent to the review of the quantitative and qualitative data provided by the three SMEs, a questionnaire was prepared in line with the hypothesis made at the inception of the study and all the three SMEs were requested to respond to the structured questionnaire.

The responses obtained were reviewed and analyzed and subsequently face-to-face interviews were also conducted with the representatives of these SMEs to get direct insights into their growths as well as the initiatives they took to overcome the obstacles during the pandemic.

The methodology adopted for the research is summarized in Figure 1.



The questionnaire prepared for obtaining responses from the selected SMEs was specifically around the nine management practices in line with the hypothesis made.

Economic Profile of India

India is expected to witness a GDP growth of 6.0–6.8% in 2023–24, depending on the trajectory of economic and political developments globally (see Figure 2).

The economic survey of 2022–23 [1] projected a baseline GDP growth of 6.5% in real terms in FY2023–24. The Indian economy was expected to grow at 7% for the financial year ending March 2023, compared with 8.7% growth in the previous financial year. The credit growth to the MSME sector has been remarkably high, at over 30.5% on an average during the period January–November 2022. Capital expenditure of the central government, which increased by

63.4% in the first eight months of FY2023, was another growth driver of the Indian economy in the current year.

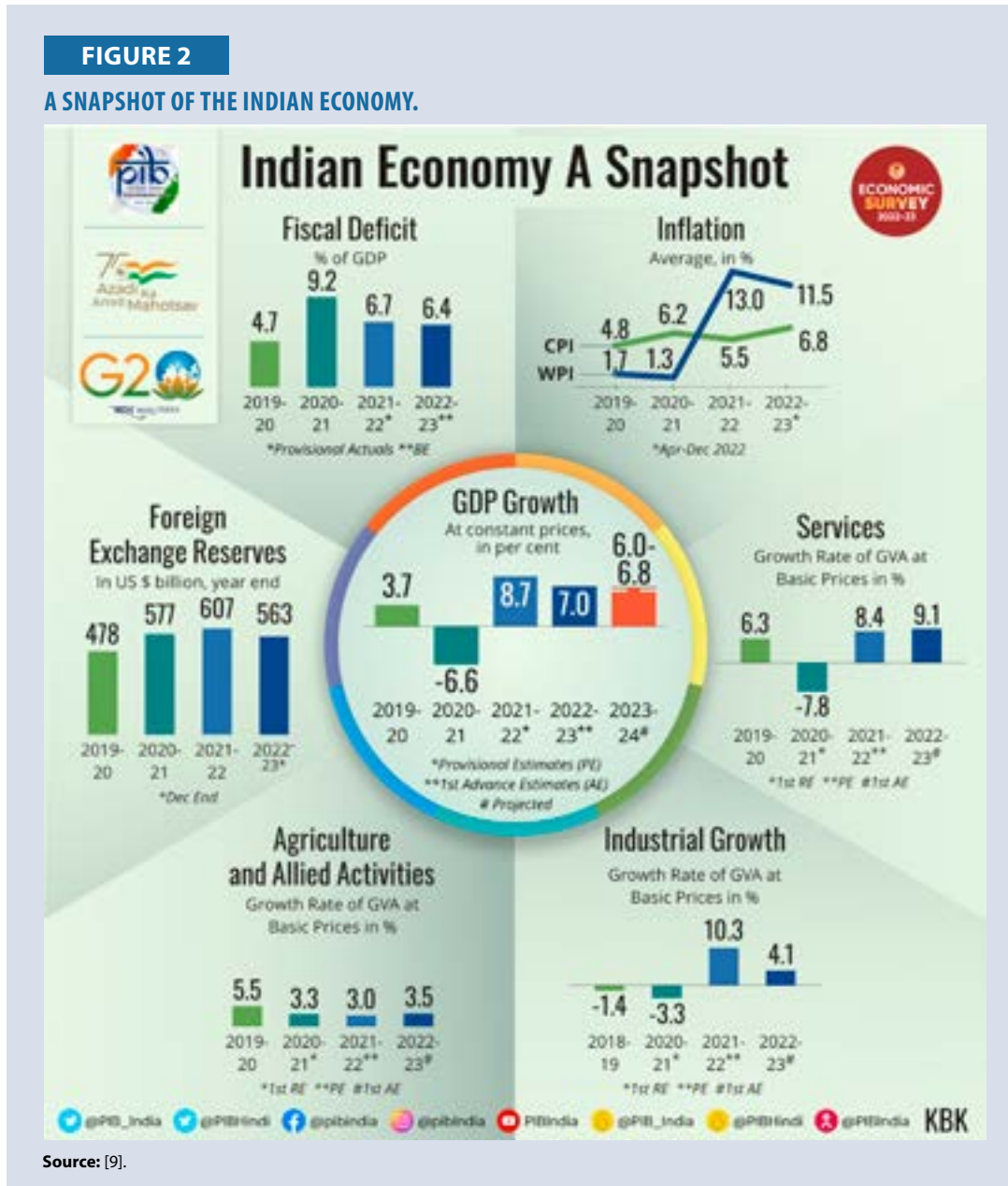
India's GDP at current prices in the first quarter of 2022–23 was estimated to be INR36.85 lakh crore (USD447.44 billion), as against INR32.46 lakh crore (USD394.13 billion) in 2021–22, showing a growth rate of 13.5%.

Quarterly gross value added (GVA) estimates at basic prices in the first quarter of 2022–23 at constant 2011–12 prices are as follows:

- Agriculture, forestry, and fishing: INR493,325 crore (USD59.9 billion).
- Mining and quarrying: INR85,423 crore (USD10.37 billion).
- Manufacturing: INR605,104 crore (USD73.47 billion).
- Electricity, gas, water supply, and other utility services: INR88,640 crore (USD10.76 billion).
- Construction: INR262,918 crore (USD31.92 billion).
- Trade, hotels, transport, communications, and services related to broadcasting: INR559,723 crore (USD67.96 billion).
- Financial, real estate, and professional services: INR880,313 crore (USD106.89 billion).
- Public administration, defense, and other services: INR466,380 crore (USD56.62 billion).
- Forex reserves: USD528.36 billion, as of October 14, 2022.
- Value of export: India's overall export in FY2023 (April-September 2022) was estimated at USD382.31 billion (a year-on-year increase of 21.03%).
- Export partners: USA, Germany, UAE, PR China, Japan, Thailand, Indonesia, and the EU. India is also tapping newer markets in Africa and Latin America.
- Currency (code): Indian rupee (INR).
- Exchange rates: Indian rupee per USD: USD1 = INR82.36 as of 27 October 2022.
- Fiscal year: 1 April to 31 March.
- Cumulative FDI equity inflow: USD604.99 billion (from April 2000 to June 2022).
- Key sectors attracting the highest FDI equity inflow (from April 2000 to June 2022): Services sector (16%); computer software and hardware (15%); telecommunications (6%); trading (6%); automobile (6%); construction activities (5%); construction development (4%); chemicals (3%); drugs and pharmaceuticals (3%); and metallurgical industries (3%).

Sector-wise Contribution to India's GDP

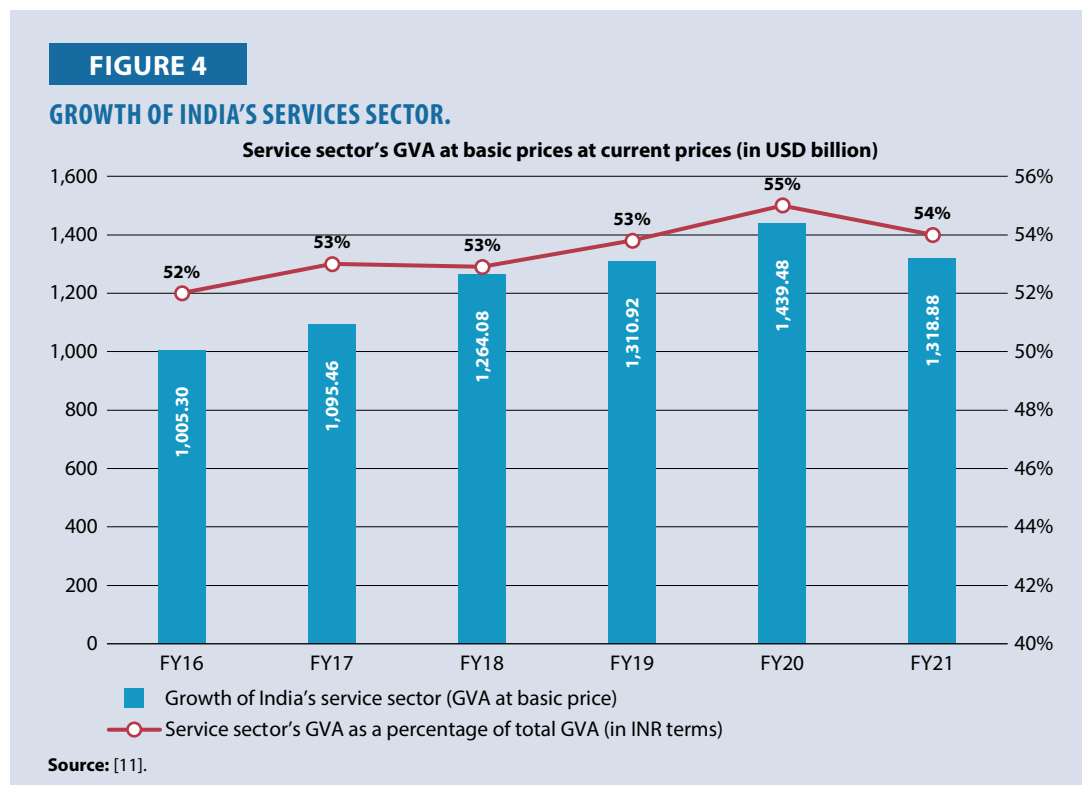
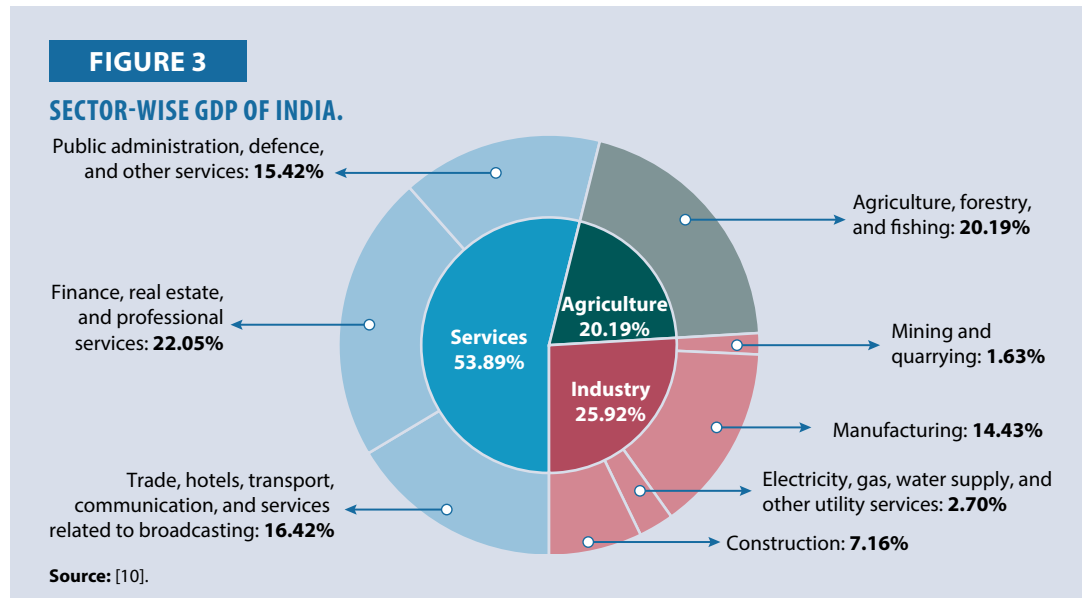
FIGURE 2
A SNAPSHOT OF THE INDIAN ECONOMY.



The services sector is not only the dominant sector in India’s GDP, but has also attracted significant foreign investment, contributed significantly to exports, and provided large-scale employment. The sector covers a wide variety of activities such as trade, hotel and restaurants, transport, storage and communication, finance, insurance, real estate, business services, community, social and personal services, and services associated with construction.

India’s services sector is its biggest sector with a GVA of INR96.54 lakh crore (USD1.18 trillion) at current prices in 2020–21. Today, the services sector accounts for almost 54% of India’s GVA [3] of INR179.15 lakh crore or USD2.19 trillion (see Figures 3 and 4). The industry sector follows with 25.92% contribution, while the agriculture sector occupies the third place with 20.19% contribution (see Figure 3).

The services sector remains the engine of growth for India's economy. The sector's GVA increased at a CAGR of 11.43% to INR101.47 trillion (USD1,439.48 billion) in FY2020, from INR68.81 trillion (USD1,005.30 billion) in FY2016. Between FY2016 and FY2020, financial, real estate and professional services augmented at a CAGR of 11.68% (in INR terms), while trade, hotels, transport, communication, and services related to broadcasting rose at a CAGR of 10.98% (in INR terms). India's IT and business services market is projected to reach USD19.93 billion by 2025. In September 2022, the Manufacturing Purchasing Managers' Index (PMI) in India stood at 55.1. With the fastest growing services sector globally (at 9.2%), the sector accounts for 66% share in India's GDP and generates about 28% of the total employment in India.



Numerous government initiatives like Smart Cities, Clean India, and Digital India are fostering an environment that is strengthening the services sector. The sector has the potential to open up a multi-trillion-dollar opportunity that might stimulate symbiotic growth for all nations.

India’s Overall Productivity Growth Rate

The Indian economy appears to have moved on since its encounter with the pandemic, staging a full recovery in FY2022, ahead of many nations, and positioning itself to ascend to the pre-pandemic growth path in FY2023 (see Figures 5 and 6).

The COVID-19 pandemic caused a global economic downturn, the most severe since the Global Financial Crisis. India adopted a four-pillar strategy of containment, fiscal, financial, and long-term structural reforms.

There was calibrated fiscal and monetary support for cushioning the vulnerable during the lockdown and boosting consumption and investment while unlocking.

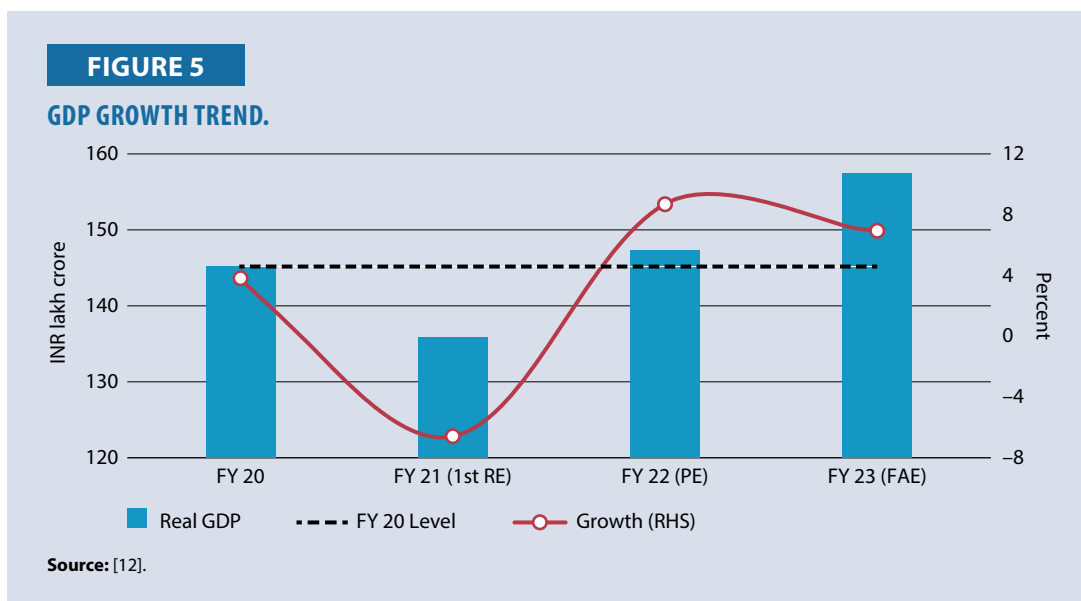
A favorable monetary policy ensured abundant liquidity and immediate relief to debtors while unclogging monetary policy transmission.

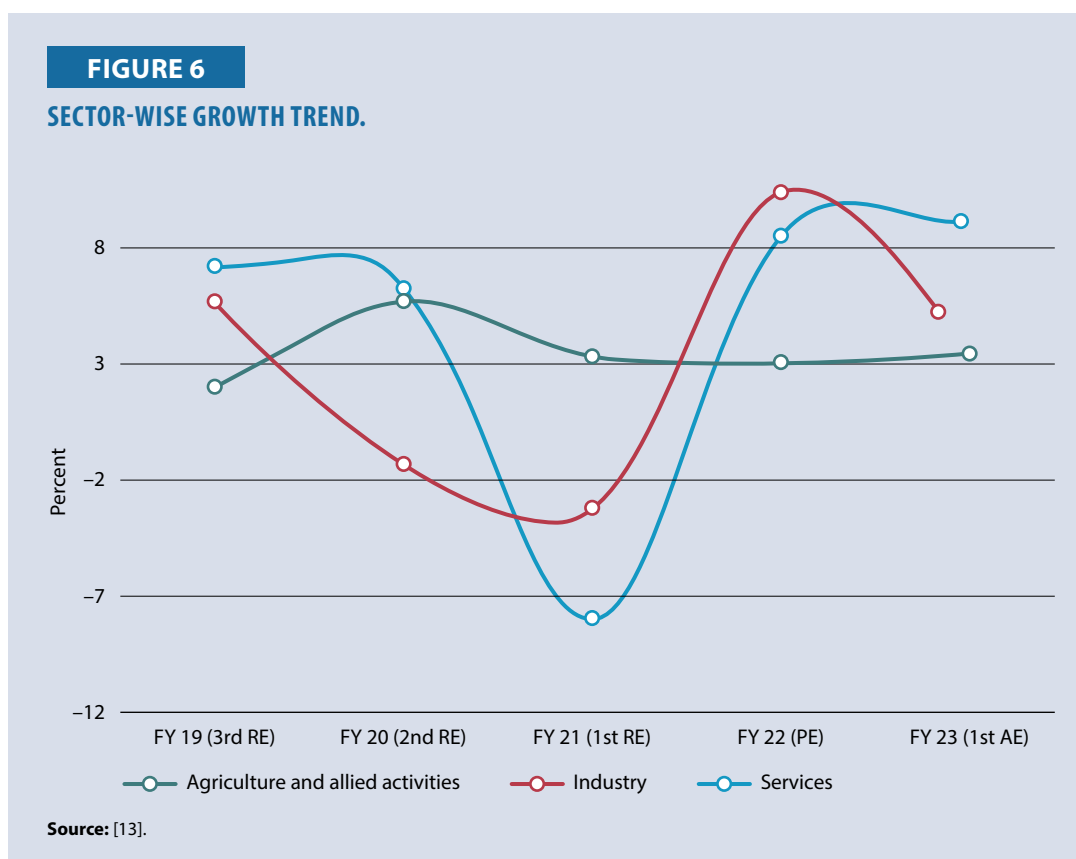
Improvement in the financial health of public sector banks enabled increase in credit supply, leading to a rapid credit growth for the MSME sector.

According to the Economic Survey 2022–23 [2], India’s economic growth in FY2023 was principally led by private consumption and capital formation, which helped generate employment.

The world’s second-largest vaccination drive involving more than 2 billion doses also served to lift consumer sentiment. Global growth was projected to decline in 2023, but India’s growth is expected to be swift in FY2024 with a vigorous credit disbursement and capital investment cycle.

India’s economic recovery from the pandemic is complete and the economy is expected to grow in the range of 6% to 6.8% in the financial year 2023–24.





MSMEs in India

The MSME sector is a major contributor to the socioeconomic development of the country [5]. In India, the sector has gained significant importance due to its contribution to the GDP of the country as well as to exports. The sector has also contributed immensely with respect to entrepreneurship development, especially in semi-urban and rural areas of the country.

According to the provisions of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, the MSMEs are classified into two categories, namely, manufacturing enterprises and service enterprises (see Table 2).

The enterprises are also categorized based on their investments in equipment and annual turnover.

TABLE 2
CATEGORIZATION OF MSMEs IN INDIA.

Criteria	Manufacturing		Service	
	Turnover	Investment	Turnover	Investment
Micro	INR5 crore (USD0.6 million)	Less than INR25 lakh (USD0.03 million)	INR5 crore (USD0.6 million)	Less than INR10 lakh (USD0.01 million)
Small	INR50 crore (USD6.8 million)	More than INR25 lakh (USD0.03 million) but less than INR5 crore (USD0.6 million)	INR50 crore (USD6.8 million)	More than INR10 lakh (USD0.01 million) but less than INR2 crore (USD0.3 million)

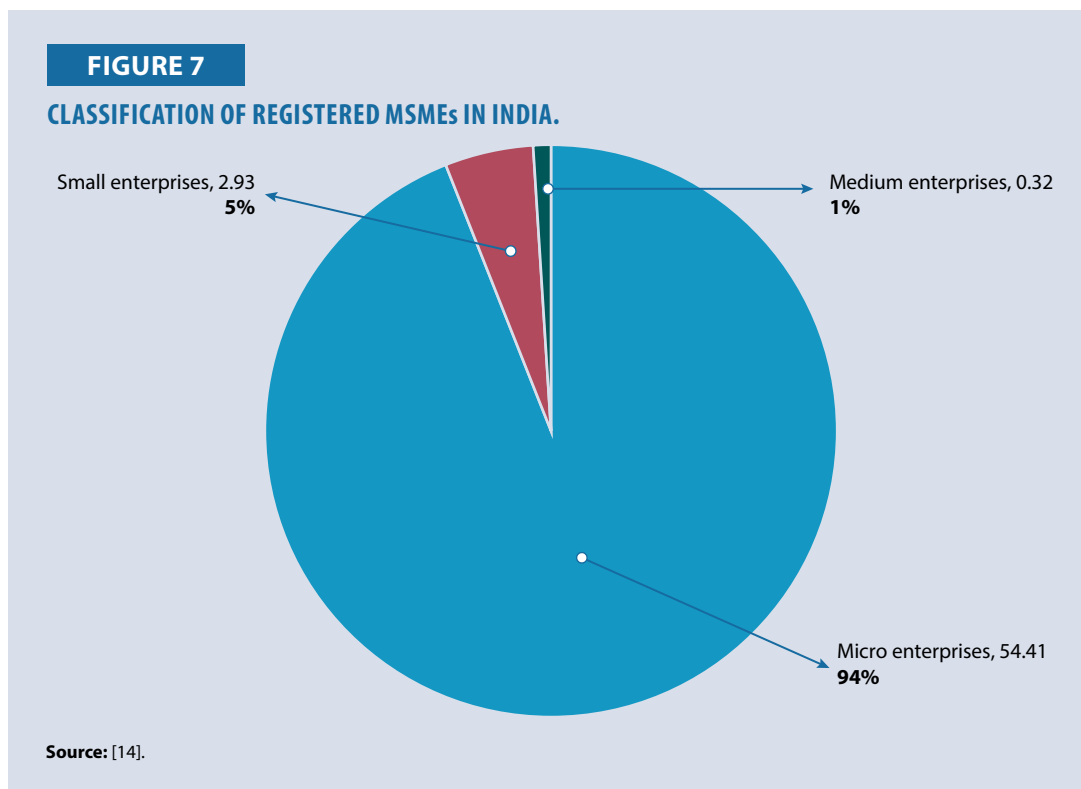
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Criteria	Manufacturing		Service	
	Turnover	Investment	Turnover	Investment
Medium	INR250 crore (USD34 million)	More than INR5 crore (USD0.6 million), but less than INR10 crore (USD1.4 million)	INR250 crore (USD34 million)	More than INR2 crore (USD0.3 million) but does not exceed INR5 crore (USD0.6 million)

As per data from the Ministry of Micro, Small and Medium Enterprises, as of 22 February 2023, the Udyam Registration portal had registered 14,392,652 MSMEs, replacing the former process of filing for a Udyog Aadhaar Memorandum (UAM). The number of registered microenterprises stood at 13,834,411 (96.12%), followed by small enterprises at 446,980 (3.11%) and mid-sized enterprises at 40,400 (0.28%), as shown in Figure 7. Domestic businesses require strong financial stimulus with concessional working capital loans from government and financial institutions to ensure that adequate liquidity is maintained in business operations.

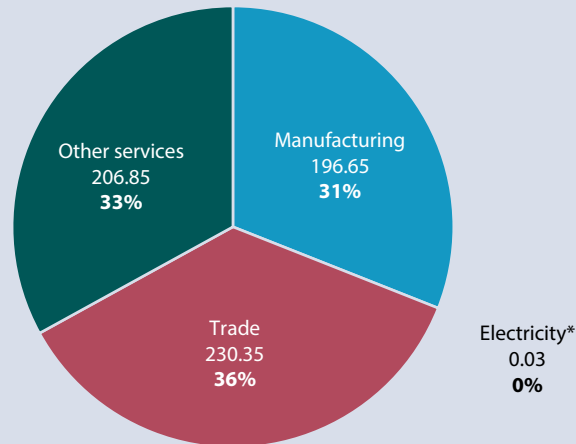
Indian MSMEs are rapidly adopting digital payments over cash, with 72% payments done through the digital mode, compared with 28% cash transactions. The rise in digital adoption presents prospects for further growth in the sector.



MSMEs in India are playing a crucial role by providing large-scale employment opportunities at comparatively lower capital costs than large industries as well as through industrialization of rural and backward areas, thereby reducing regional imbalances by assuring more equitable distribution of national income and wealth.

FIGURE 8

DISTRIBUTION OF SMEs BY NATURE OF ACTIVITY.



*Non-captive electricity generation and transmission
 Source: [15].

Role of MSMEs in India's Economy

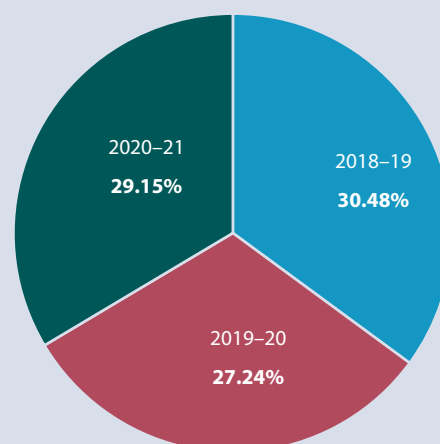
MSMEs are a critical component of India's economic growth [4], contributing to over 30% of the country's GDP and employing over 110 million people. The sector's contribution to the country's exports has also been significant, with MSMEs accounting for over 40% of India's total exports.

MSMEs have played a significant role in driving India's economic growth by creating jobs, increasing exports, and contributing to innovation. Small and medium-sized enterprises have been instrumental in promoting entrepreneurship, innovation, and creativity, which makes them a key driver of India's economic growth.

The contribution of MSMEs to India's GDP is summarized in Figures 9 to 11.

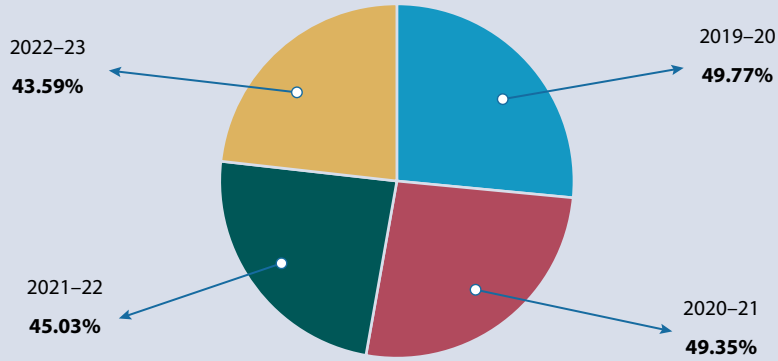
FIGURE 9

SHARE OF MSMEs IN INDIA'S GDP.



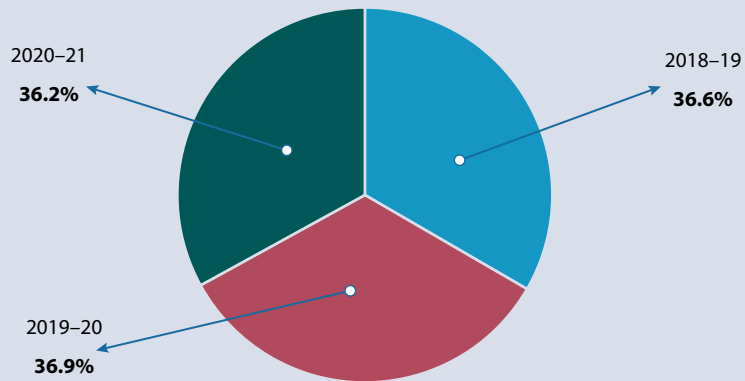
Source: [16].

FIGURE 10
SHARE OF MSMEs IN INDIA'S EXPORTS.



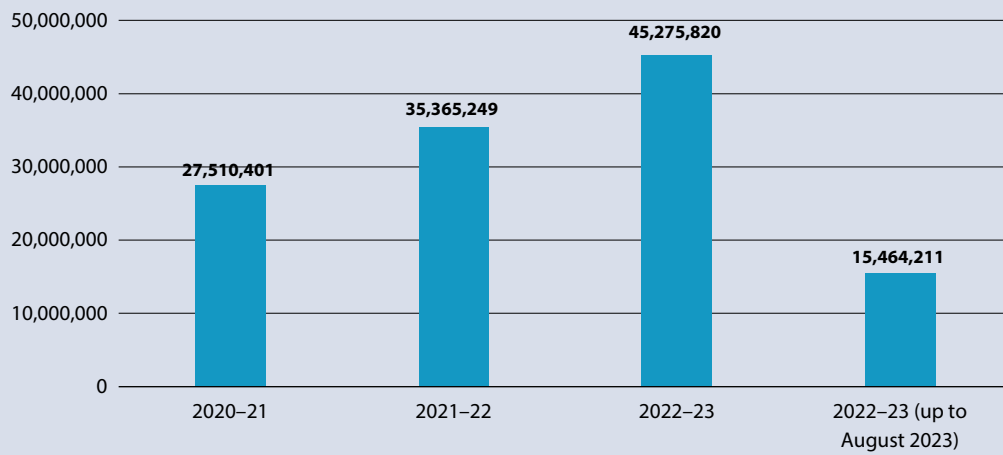
Source: [17].

FIGURE 11
SHARE OF MSMEs IN INDIA'S MANUFACTURING.



Source: [18].

FIGURE 12
CONTRIBUTION OF MSMEs TO EMPLOYMENT IN INDIA.



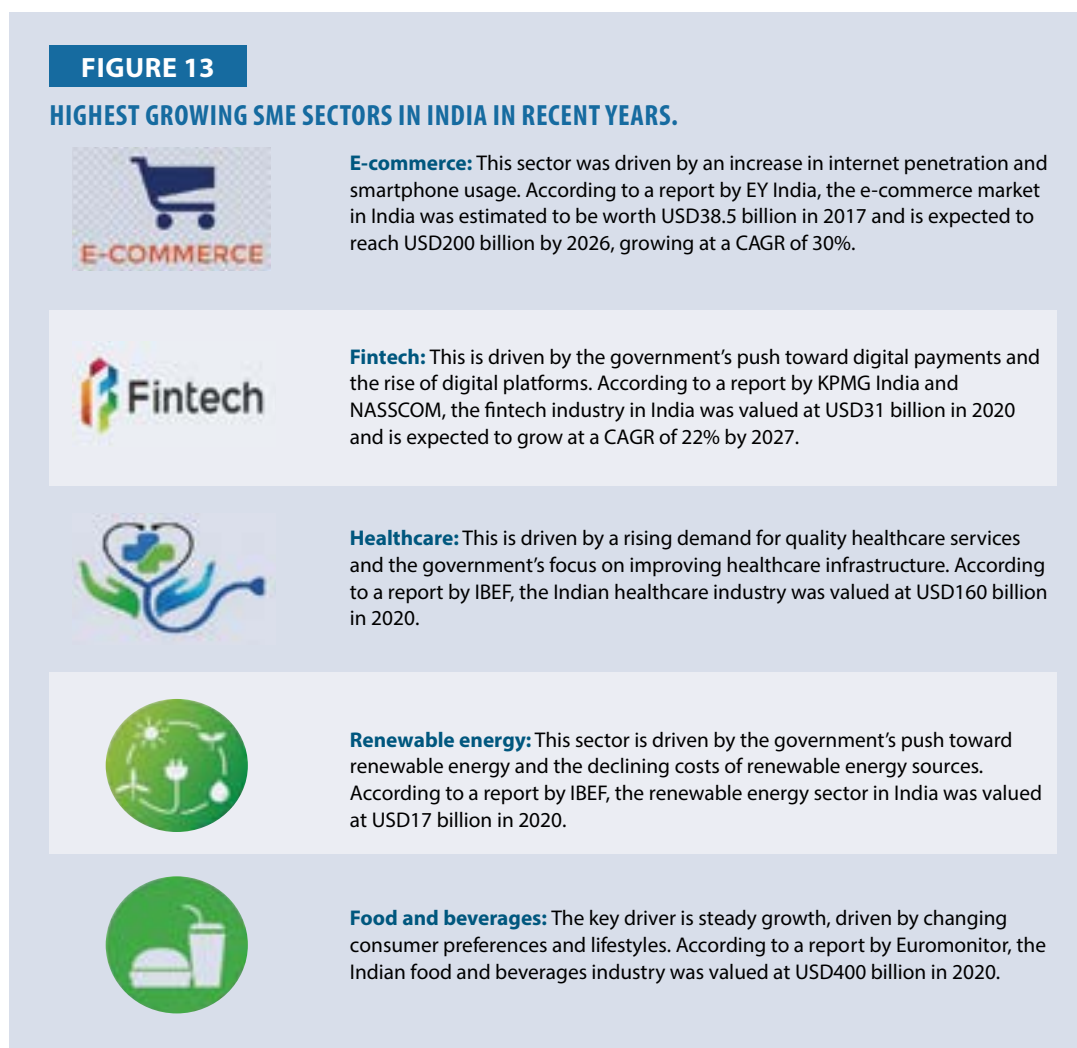
Source: [19].

India's Highest Growing SME Sectors in Recent Years

For the past few decades, the SME sector, comprising services, manufacturing, packaging, infrastructure, food processing, IT, and chemicals industries, has developed as the most dynamic source of growth for the Indian economy. In recent years, the MSME sector has shown a higher growth rate than the industrial sector. This sector not only offers huge employment but also contributes to regional balance by generating industrialization in remote, rural, and backward areas.

However, the MSMEs became vulnerable during the pandemic because of their size, scale of business, and availability of financial resources. Studies and surveys showed that approximately 95% of the businesses were impacted negatively due to a national lockdown imposed in April 2020 and 70% remained disrupted till August 2020. Even after progressive unlocking, reports suggest that almost 40% of the businesses remained interrupted till the end of February 2021. The three critical barriers faced by MSMEs are market access, overall productivity, and getting access to more finances. An average 11% decline in the business volume of Indian MSMEs was recorded because of the lockdown in 2021 in comparison with a 46% decline during the nationwide lockdown in 2020.

The highest growing service-sector SMEs in India in recent years are illustrated in Figure 13.



Other than the highest growing sectors, there were also a few sectors that boomed during the pandemic owing to the opportunities that the pandemic had created.

Mostly any sector that could adapt to online transformation could grow substantially. The other booming sectors were related to technology and healthcare.

The sectors that boomed during the pandemic in India are illustrated in Figure 14.



Changes in SMEs since COVID-19

COVID-19 left its impact on all sectors of the economy including the MSMEs. The total lockdown raised an existential issue primarily due to nonavailability of cash and subsequent job losses. MSMEs faced financial challenges due to the pandemic, including difficulty in accessing credit, delayed payments, and decrease in working capital.

There was a decrease in demand due to lockdowns and the economic slowdown caused by the pandemic, leading to a decrease in sales and revenue for many MSMEs (see Figure 15).

With the pandemic leading to restrictions on physical movement and in-person transactions, many SMEs shifted toward digital channels for marketing, sales, and delivery of their products and services.

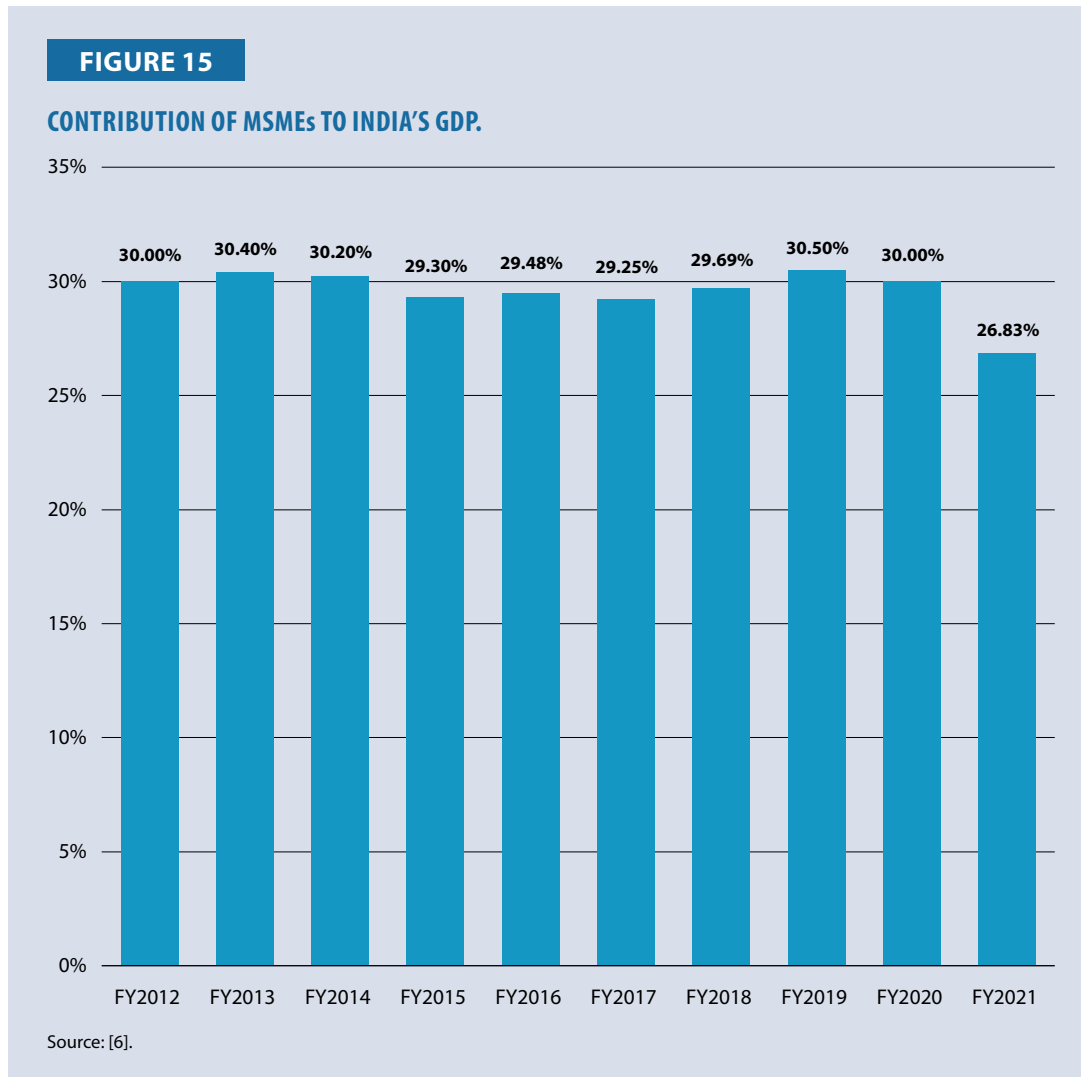
Many MSMEs diversified their products and services to cater to the changing customer needs during the pandemic. For example, some MSMEs started manufacturing PPE kits, sanitizers, and other essential products to meet the growing demand.

The pandemic also led to a shift in consumer preferences toward local products and services. This benefitted the MSMEs that operate in local markets, as they were able to capture a larger market share.

In spite of all the odds, records show that the contribution of MSMEs to India's GDP remained consistent, which confirms that SMEs could not only survive but also thrive during the pandemic.

Case Studies on Emerging Economies

Three SMEs were shortlisted (see Table 1) to showcase their success stories on the basis of their growth and also on their willingness to share and disclose qualitative and quantitative data and information pertaining to growth.



Detailed case studies of the three SMEs are presented ahead.

Case Study 1: Design2Occupancy LLP, Jaipur

About Design2Occupancy LLP

Established in the year 2013, M/s Design2Occupancy Services LLP [7] is a leading organization providing a platform and comprehensive solutions in energy efficiency analysis and energy code compliances, climate change policies, sustainability solutions, carbon footprint analysis, green building certification facilitation, ESG, LCA, energy and daylight simulation, CFD analysis, energy, water and fire audits, MEP design/BIM, and related domains. It bears some of the most valued credentials in the industry such as LEED AP, GEM CP, IGBC AP, GRIHA Trainer & Evaluator, PQP, EDGE Expert, EDGE Auditor, ICP, ECBC Master Trainers and Certified Energy Auditors & Managers, and Water Auditors.

D2O is equipped to handle projects of all sizes. Its dedicated and experienced teams work across the globe and deliver on the missions. It serves its clients in various areas like energy efficiency, renewable energy, sustainability reporting, IAQ, and energy audits and commissioning. The company has experience in projects as diverse as residential spaces, office buildings, malls, hotels, schools, colleges, and government buildings.

Over 400 green building facilitation projects have been done by D2O for USGBC, GEM, IGBC, GRIHA, and other green rating authorities. Projects include energy simulation for NYSERDA, Pay4Performance (existing and new construction), LEED, state local code compliance like Title 24 (CA), LL87 (NYC), 179d tax deduction, etc. The company offers holistic, feasible, timely, and cost-effective solutions so that clients can benefit from lowered ongoing consumption of water and conventional energy resources, refreshing and healthy environments for occupants, and compliance with national and international standards.



Service domains of Design2Occupancy include

- green building certification facilitation for LEED, IGBC, GEM, and GRIHA;
- energy and daylight simulation; sustainability audit (energy–water waste);
- local code compliance (ECBC); and mechanical, electrical, plumbing, and fire protection/ BIM works;
- energy efficiency policy making; audit; and commissioning (energy, water, and fire audits);

- carbon footprint analysis (e.g., GHG inventory, carbon footprint, carbon offset, carbon neutrality); and
- environmental, social, and governance assessment; life cycle assessment; computational fluid dynamics analysis/microclimatic analysis; solar PV; and project management consultancy (PMC).



Growth of Design2Occupancy in Recent Years

Details of Design2Occupancy's growth were obtained from them in terms of turnover, employees, clients, beneficiaries, and national and international outreach. The quantitative details provided by the firm are given in Table 3.

TABLE 3
OVERALL GROWTH TREND OF DESIGN2OCCUPANCY.

S. No.	Growth during past years	FY2018	FY2019	FY2020	FY2021	FY2021-22
1	Turnover (in lakh INR)	237.81	338.40	530.33	756.07	930.55
2	No. of employees / team members	55	70	85	100	130
3	No. of clients	111	116	133	129	156
4	No. of beneficiaries	150	290	350	500	1050
5	No. of states/countries reached	11/5	16/9	17/7	19/8	20/14

The growth of Design2Occupancy is illustrated in Figures 18 to 23.

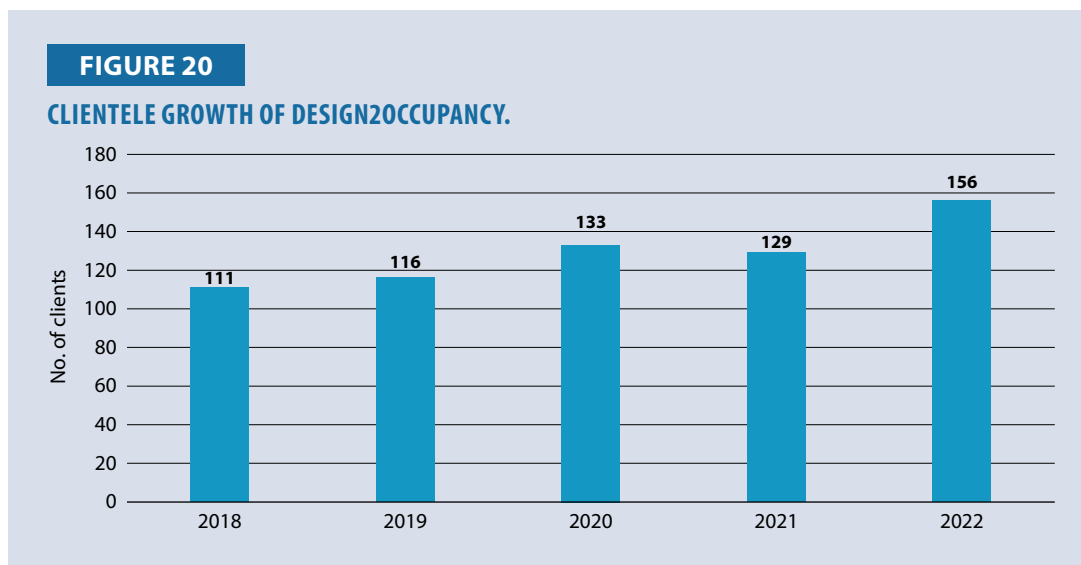
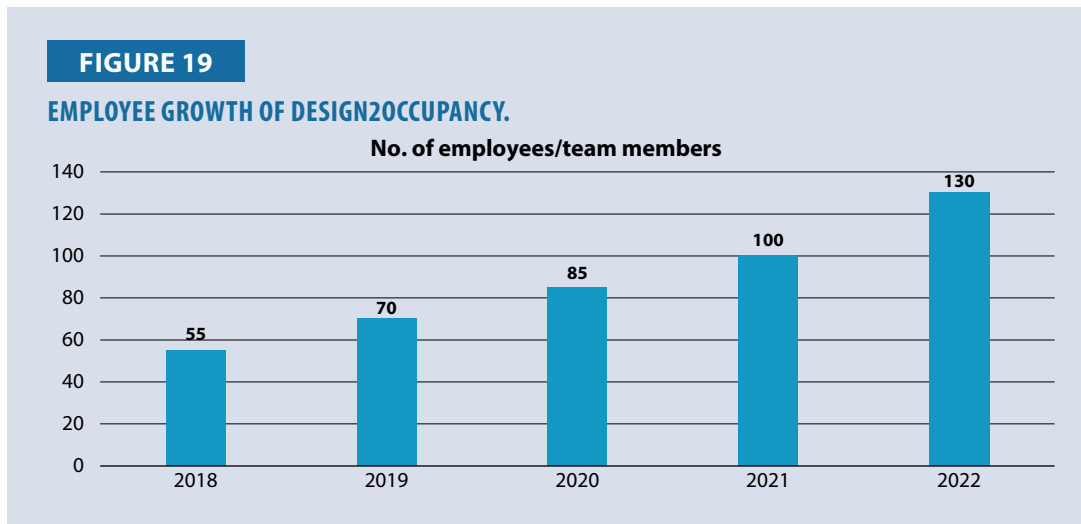
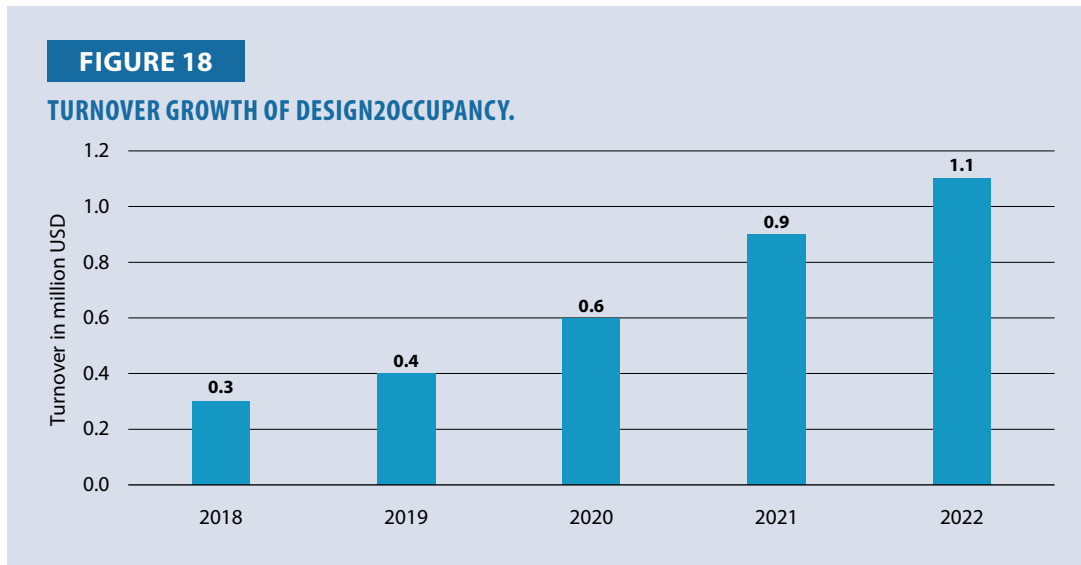
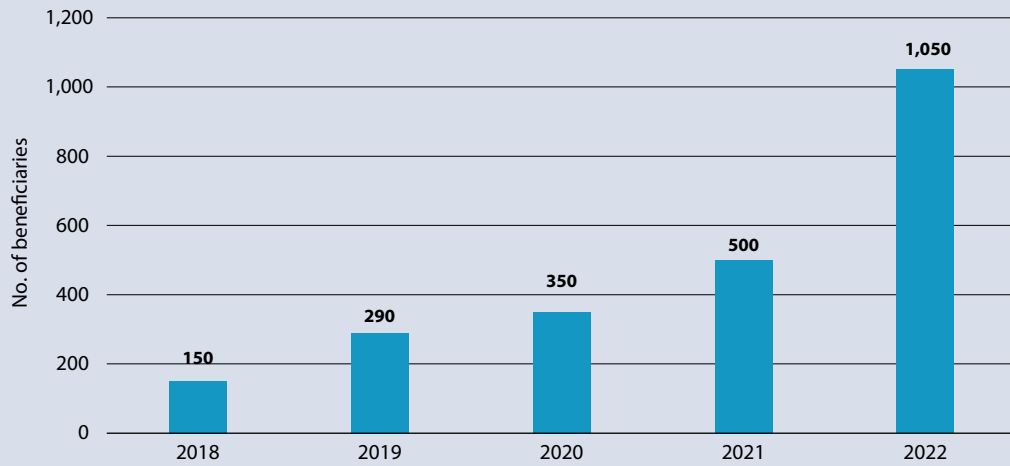
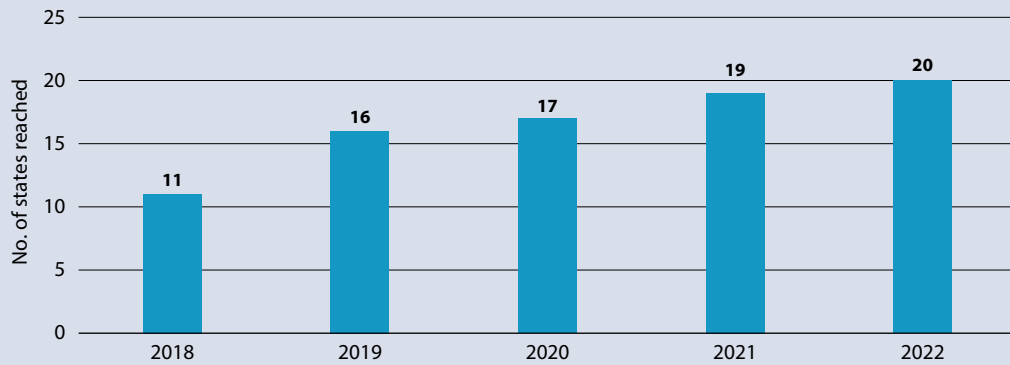
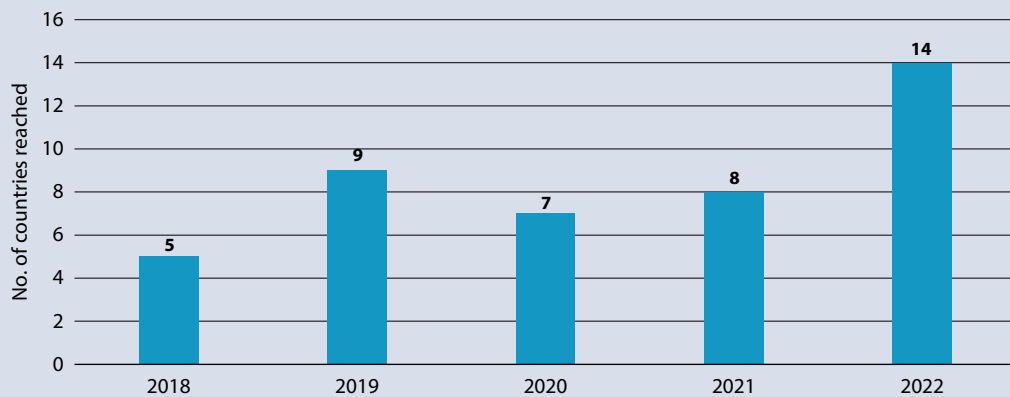


FIGURE 21**GROWTH IN DESIGN2OCCUPANCY'S BENEFICIARIES.****FIGURE 22****NATIONAL OUTREACH OF DESIGN2OCCUPANCY.****FIGURE 23****INTERNATIONAL OUTREACH OF DESIGN2OCCUPANCY.**

Reasons for Sustained Growth

Seven out of the nine management practices and initiatives were taken by the company to grow and sustain during the pandemic (see Table 4).

TABLE 4

MANAGEMENT PRACTICES ADOPTED BY DESIGN2OCCUPANCY.

Management practices	Adopted (yes/no)
1. Hybrid working/WFH	Yes
2. Agility/flexibility/reallocation of resources	Yes
3. Exploring new business models	Yes
4. New skilling and talent acquisition	Yes
5. Redefining customer markets	No
6. Utilizing macro government policies	No
7. Optimizing working/operating cost	Yes
8. Adopting automation and mechanization	Yes
9. Switching to digitization/AI tools	Yes
Total score	7 out of 9

Details of Management Practices Adopted by Design2Occupancy

The details of various management practices adopted by Design2Occupancy have been collated after analyzing the responses obtained from the questionnaire as well as interactions with some key officials:

- (1) **Hybrid working/WFH:** Hybrid working was implemented by means of developing a flexible work policy, providing the right tools and technologies to the employees, ensuring security and data privacy, and measuring and evaluating the performances regularly.

Hybrid working led to increased employee productivity, reduced operational costs, and improved work-life balance by virtue of greater flexibility in working hours. This facilitated access to a wider talent pool.

Tools like videoconferencing, cloud storage, file-sharing, virtual private network (VPN), remote desktop software, time tracking, and productivity measurement were leveraged for enabling employees to work from home.

Hybrid working/WFH led to increased availability of employees, enabled more personalized services, and reduced face-to-face interactions during the pandemic.

- (2) **Agility/reallocation of resources:** Reallocation of resources was introduced through cross-functional teams comprising individuals with diverse skills and backgrounds and encouraging knowledge sharing and collective ownership.

This enabled the company to deliver projects more quickly, improve collaboration and communication, and increase employee engagement by empowering team members to take ownership of their works and participate in decision making.

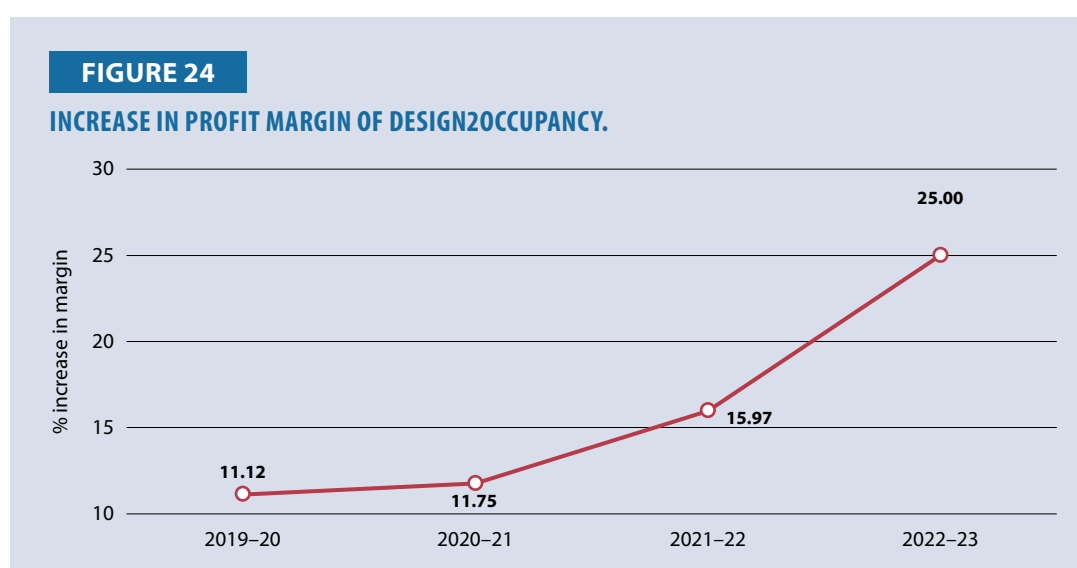
This also led to greater visibility on project progress and individual contributions, improved transparency and accountability, prevented delays, avoided duplication of efforts, and ensured that everyone worked toward the same goals.

- (3) **Exploring new business model:** In view of rising demand for online education and virtual training, Design2Occupancy established its subsidiary, D2O Learning, which helped them capture the online market that was at its peak during pandemic.
- (4) **Cost optimization:** Optimization of costs was achieved through a monthly review of expenses, optimizing the inventory, and outsourcing non-core functions.

This led toward improved financial stability, better cash flow management, and enhanced competitiveness.

- (5) **Skilling and talent acquisition:** Talent acquisition was done through increased use of virtual interviews and remote hiring, along with flexibility in work arrangements. Skilling and hiring were focused on digital skills, adaptability and resilience, remote collaboration, self-motivation, emotional intelligence, and empathy.
- (6) **Automation:** Automation was implemented through remote-working solutions. Although this required high upfront costs and technical expertise, automation helped the business adapt to changing circumstances by improving safety measures, increasing efficiency, reducing costs, and enhancing scalability and quality.
- (7) **Digitization:** Digitization was introduced through contactless payments, remote-working solutions, and virtual events. There were initial challenges like resistance to change, data privacy and security, and integration with the existing system, but with time, digitization led to increased agility, improved efficiency, better customer engagement, access to new markets, and improved data analysis.

By adopting the above seven management practices, the profit margin of the company increased from 11% to 25% over a period of four years. The increase in profit is illustrated in Figure 24.



Key Strategic Growth Initiatives taken by Design2Occupancy during the Pandemic

The key strategic initiatives taken by Design2Occupancy to grow consistently in recent years included

- (1) strengthening online presence with effective digitization, expanding service offerings, and diversifying supply chains as a new business model;
- (2) adopting remote working using WFH and hybrid working, emphasizing health and safety;
- (3) conducting workshops and awareness programs, both national and international;
- (4) adopting new technologies (new software for modeling, BIM, etc.);
- (5) building a strong presence (opening new offices in India as well as in Canada), agility and reallocation; and
- (6) focusing on customer experience.

The net promoter score (NPS) of Design2Occupancy was also determined based on the information gathered and the analysis. The NPS was derived from the score matrix as given in Table 5:

TABLE 5

NET PROMOTER SCORE OF DESIGN2OCCUPANCY.

S. No.	Management's response to COVID-19	Practices in management adopted (yes/no)	Score (1~10)
1	Agile organization BP during COVID-19	Yes	9
2	Automation/mechanization during COVID-19	Yes	6
3	Digitalization/digital transformation during COVID-19	Yes	6
4	Building new business model	Yes	9
5	Hybrid/remote working in COVID-19	Yes	10
6	Talent acquisition during COVID-19	Yes	7
7	New market/customer development	No	0
8	Utilization of macro-level government policy	No	0
9	Cost optimization during COVID-19	Yes	8
	Total score of practices that were strongly adopted	7 out of 9	55 out of 90

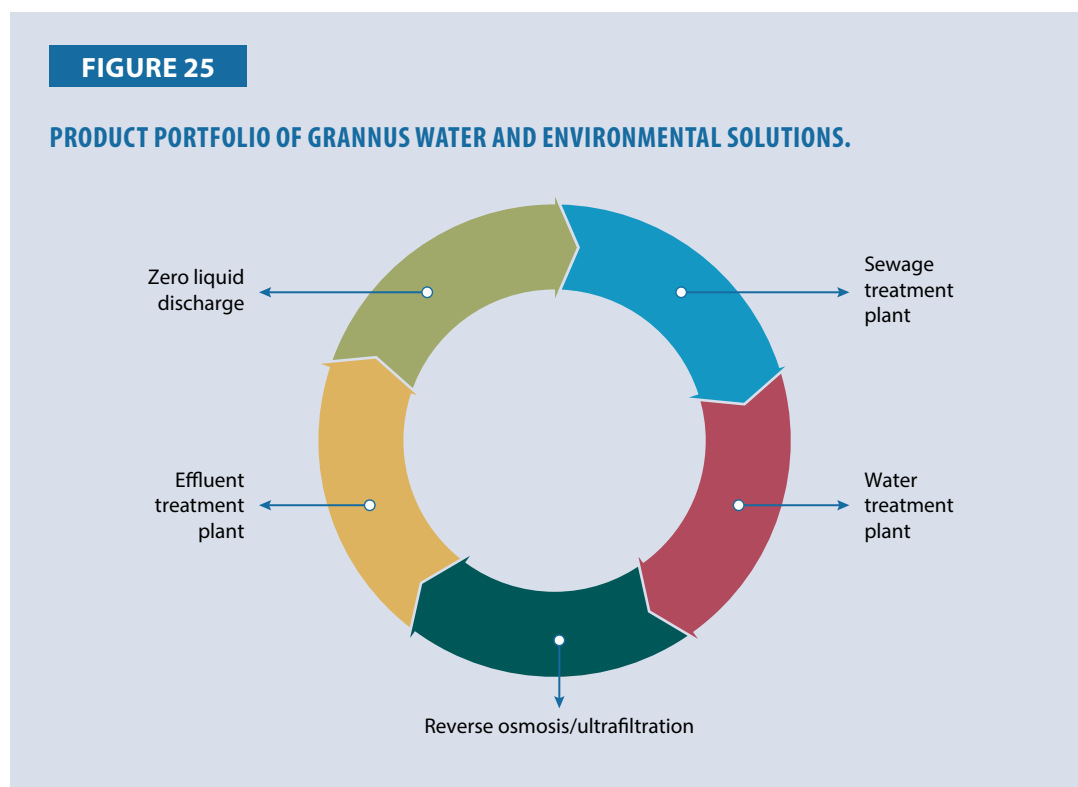
The NPS was 55 out of 90, considering it has adopted seven out of nine management practices.

Case Study 2: Grannus Water and Environmental Solutions Pvt Ltd

About Grannus Water and Environmental Solutions

Grannus Group is a consolidated water and wastewater management company located in Delhi, India [8]. Established in 2016, it specializes in designing marketing solutions for businesses in the water and wastewater management industry.

Their range of products and services include sewage treatment plant projects, water treatment plants, reverse osmosis (RO) systems, effluent treatment plants, UF systems, ZLD, etc. (see Figure 25).



The service domain of M/s Grannus Water and Environmental Solutions Pvt Ltd includes providing

- engineered, technological, and project-based sustainable wastewater management services to industries, infrastructure developers, institutes, and commercial establishments;
- services including design, erection and commissioning, and operation and maintenance of water, wastewater treatment, and recycling plants;
- expertise in achieving best quality of treated water;
- compact plant designs; and
- integrated water solutions.

Grannus Water has delivered more than 400 projects and services across the world and continues to serve national and international markets with high commitment level and quality work.

Growth of Grannus Water and Environmental Solutions in Recent Years

Details of growth of Grannus Water were obtained from the company in terms of turnover, employees, clients, beneficiaries, and national and international outreach. The quantitative details provided by M/s Grannus Water are given in Table 6.

FIGURE 26**CLIENTELE OF GRANNUS WATER AND ENVIRONMENTAL SOLUTIONS.****TABLE 6****OVERALL GROWTH TREND OF GRANNUS WATER.**

S. No.	Growth during past years	FY2019	FY2020	FY2021	FY2023
1	Turnover (in INR lakh)	350	458	720	1,000
2	No. of employees/team members	20	26	34	41
3	No. of clients	18	22	45	52
4	No. of beneficiaries	90	100	134	189
5	No. of states/countries reached	7/1	10/2	18/3	22/5

The growth of Grannus Water is illustrated in Figures 27 to 32.

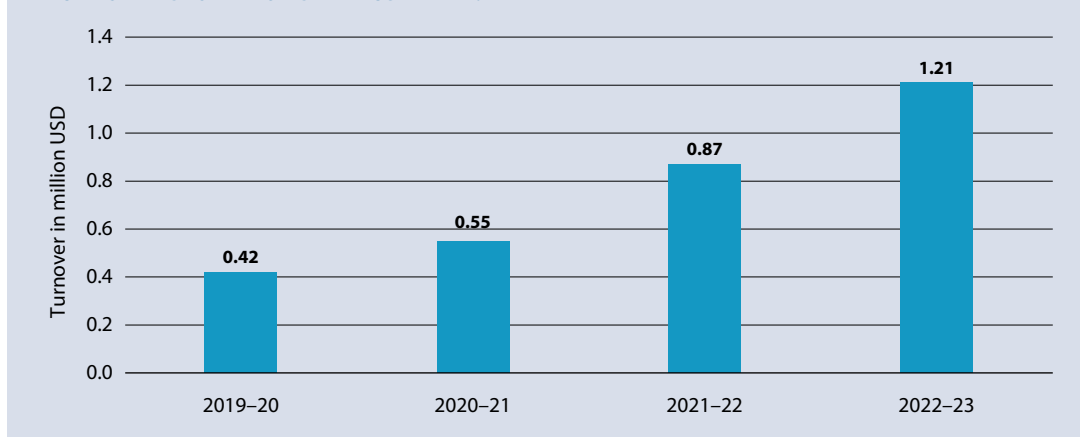
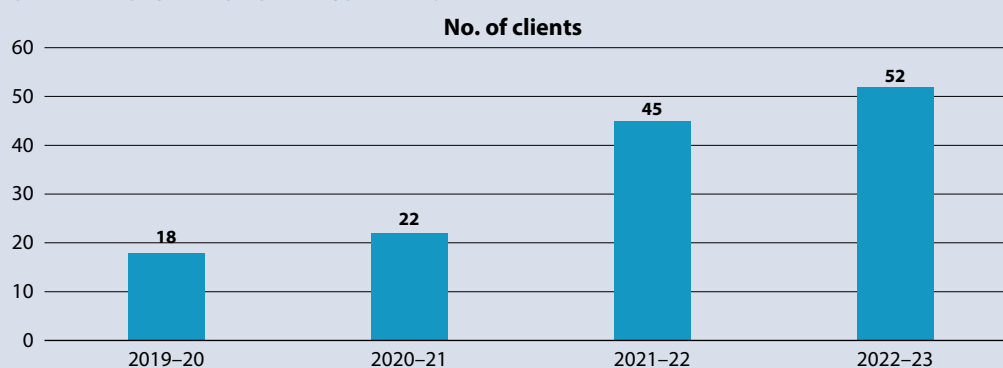
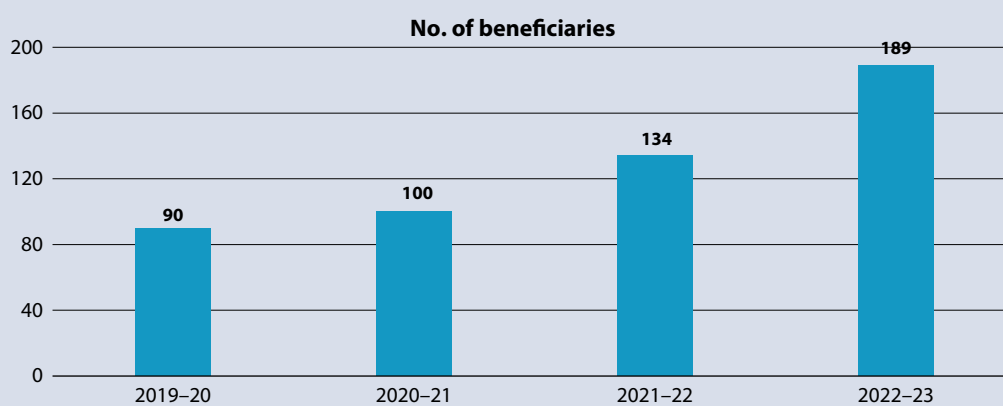
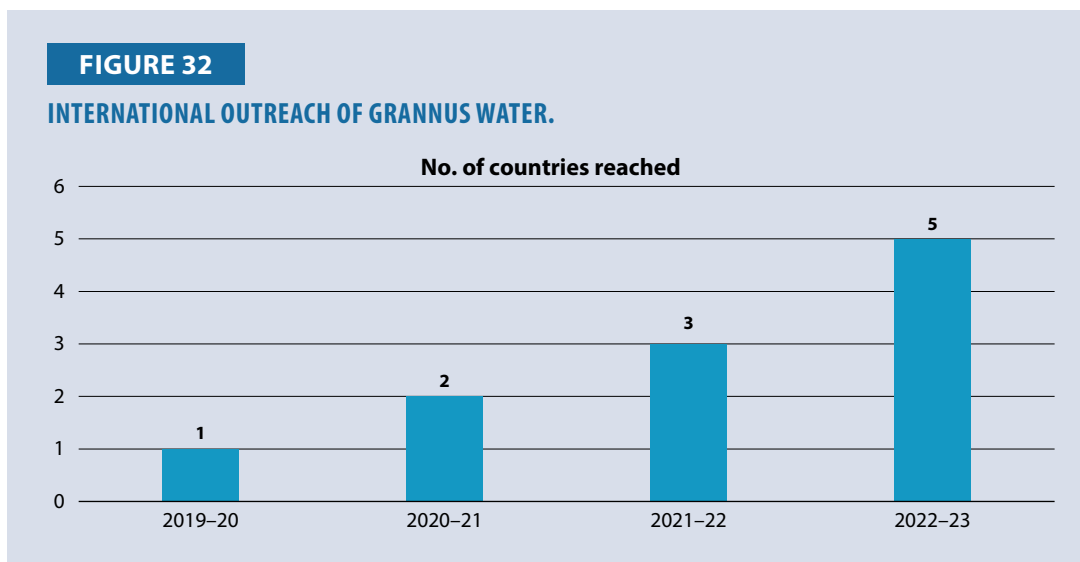
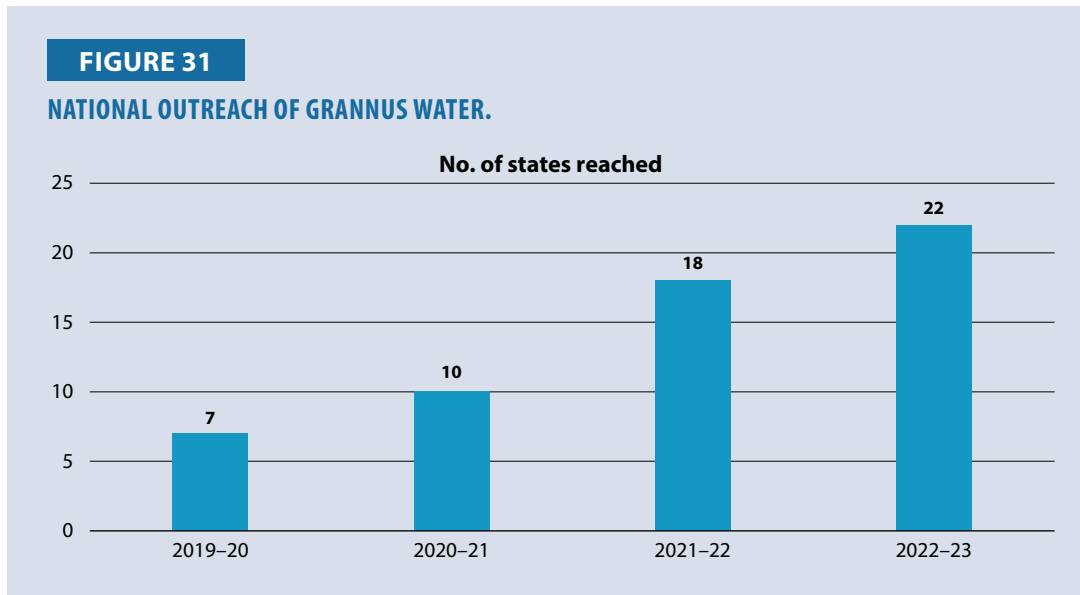
FIGURE 27**TURNOVER GROWTH OF GRANNUS WATER.**

FIGURE 28**EMPLOYEE GROWTH OF GRANNUS WATER.****FIGURE 29****CLIENTELE GROWTH OF GRANNUS WATER.****FIGURE 30****BENEFICIARIES GROWTH OF GRANNUS WATER.**



Reasons for Sustained Growth

Six out of the nine management practices and initiatives were taken by the company to grow and sustain during the pandemic, as noted in Table 7.

TABLE 7
MANAGEMENT PRACTICES ADOPTED BY GRANNUS WATER.

Management practices	Adopted (yes/no)
1. Hybrid working/WFH	Yes
2. Agility/flexibility/reallocation of resources	No
3. Exploring new business model	Yes
4. New skilling and talent acquisition	Yes
5. Redefining customer market	No

(Continued on next page)

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Management practices	Adopted (yes/no)
6. Utilizing macro government policies	Yes
7. Optimizing working/operating cost	Yes
8. Adopting automation and mechanization	Yes
9. Switching to digitization/AI tools	No
Total score	6 out of 9

Details of Management Practices Adopted by Grannus Water

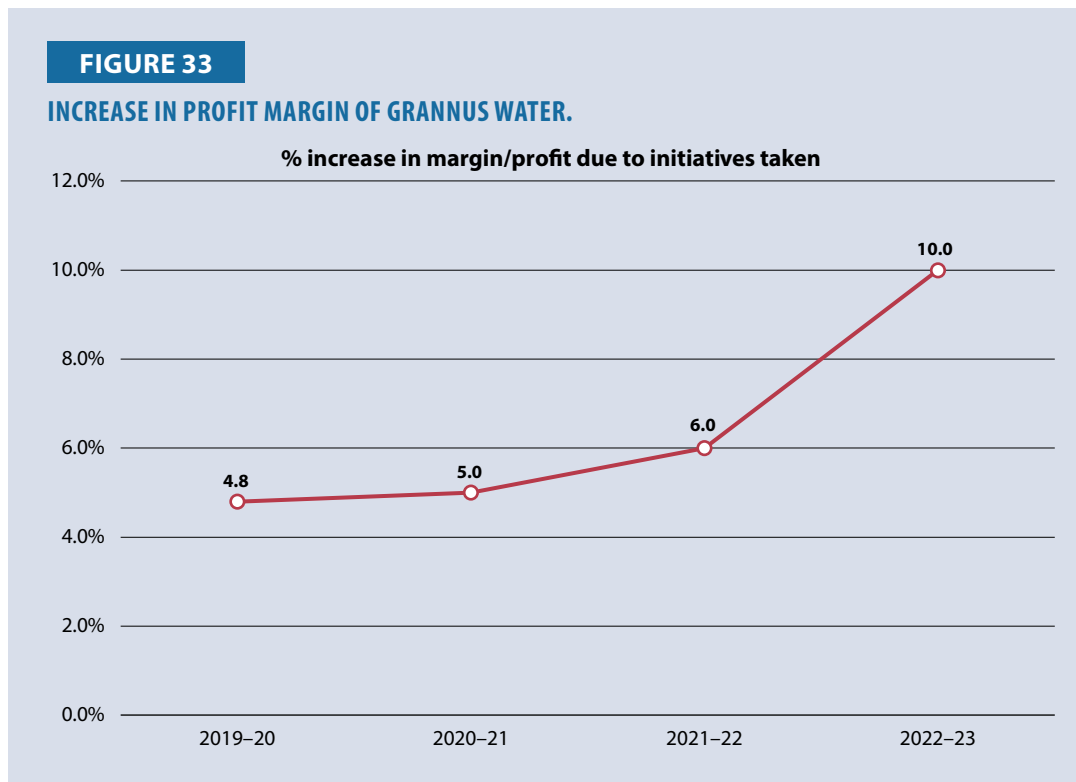
The details of management practices adopted by M/s Grannus Water have been collated after an analysis of the responses obtained from the questionnaire as well as the interaction with some key officials:

- (1) Hybrid working/WFH:** Hybrid working was implemented by providing proper access to the database for remotely located teams, providing adequate resources to the team, allocating sufficient work throughout the pandemic, and promoting emotional intelligence within the team at work.

Hybrid working led to smooth and uninterrupted operations, development of crucial training modules, no breakdown at work, and improved quality of work through flexibility and work-life balance. Tools like laptops and tabs were provided to the major operations team, while Zoom and similar online software were used to communicate effectively.

- (2) Exploring new business model:** New business model was explored via the throughput concept, i.e., by increasing customers across the world and increasing presence of the company in India and the international market.
- (3) Skilling and talent acquisition:** Skilling of employees was done by imparting regular training at all levels on new technological advancement, system upgradations, interdepartmental knowhow, etc.
- (4) Utilizing macro govt policies:** Existing government policies such as MSME Loan Pay were utilized. MSME Loan Pay helped in timely payments to employees (salaries) and vendors.
- (5) Cost optimization:** Operating costs of projects were optimized through timely procurement, timely payments, and reduction in lead times. This led to better management of cash flow.
- (6) Automation:** To minimize human contact, fully automatic plants/operatorless plants were offered. Although this involved high initial capex, it led to reduced manpower requirement, increased market demand, and added value to clients.

By adopting the above six management practices, the profit margin of the company also increased from 4% to 10% over a period of four years. The increase in profit is illustrated in Figure 33.



Summary of Key Strategic Initiatives for Growth during Pandemic

The key strategic initiatives taken by Grannus Water to grow consistently in recent years included

- (1) focusing on retention of clients, providing a system with 3–5 years warranty, and focusing on quality and technology (as a result of the new business model, the company became a preferred vendor in its domain);
- (2) 24x7 service and plant operation with high degree of automation and near-zero break-down time;
- (3) focusing on the Blue Ocean concept in addition to clientele;
- (4) adopting the throughput concept in optimizing operations through smart procurement; reducing time of execution by 30%; and reducing breakdown time by 90–95%;
- (5) ensuring employee welfare during the COVID-19 period with timely salaries, work from home options, benefits, job retention schemes, etc.;
- (6) service orientation;
- (7) making use of automation and technology for nonstop service;
- (8) focusing on organic growth and in developing indigenous products for patents; and
- (9) timely payments to suppliers/vendors and other operational suppliers even during the pandemic situation.

The NPS of M/s Grannus Water was determined based on the information gathered and the analyses. The NPS was derived from the score matrix as given in Table 8.

TABLE 8**NET PROMOTER SCORE OF GRANNUS WATER.**

S. No.	Management's response to COVID-19	Practices adopted by the management (yes/no)	Score (1~10)
1	Agile organization BP during COVID-19	No	0
2	Automation/mechanization during COVID-19	Yes	8
3	Digitalization/DX during COVID-19	No	0
4	Building new business model	Yes	7
5	Hybrid/remote working during COVID-19	Yes	10
6	Talent acquisition during COVID-19	Yes	8
7	New market/customer development	No	0
8	Utilization of macro-level government policies	Yes	10
9	Cost optimization during COVID-19	Yes	9
	Total score of practices that are strongly adopted	6 out of 9	52 out of 90

The NPS for M/s Grannus Water and Environmental Solutions was 52 out of 90, given that it adopted six out of the nine management practices.

Case Study 3: ICON India Pvt Ltd.*About ICON India*

Established in the year 2017, M/s ICON India is a small-scale manufacturing and trading SME from Patna that deals in

- manufacturing and trading of aluminum sections;
- hardware and metal composite panels;
- aluminum windows and doors;
- wardrobes; and
- modular kitchen, etc.

This manufacturing SME showed high growth during the pandemic by providing customized solutions and focusing on client satisfaction as also on quality, timely delivery, and getting repeat orders. It increased its product range for the same customers; created order volumes through the wholesale market; and increased margins through the retail market. It coped with the fluctuation in market rates through the retail channel and increased volumes of orders to minimize the cost of production.

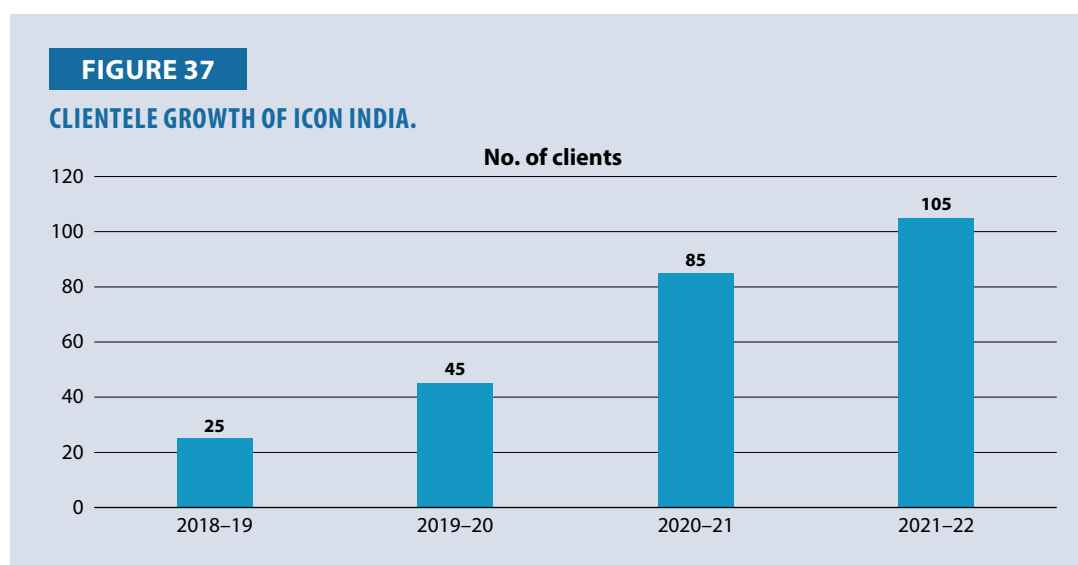
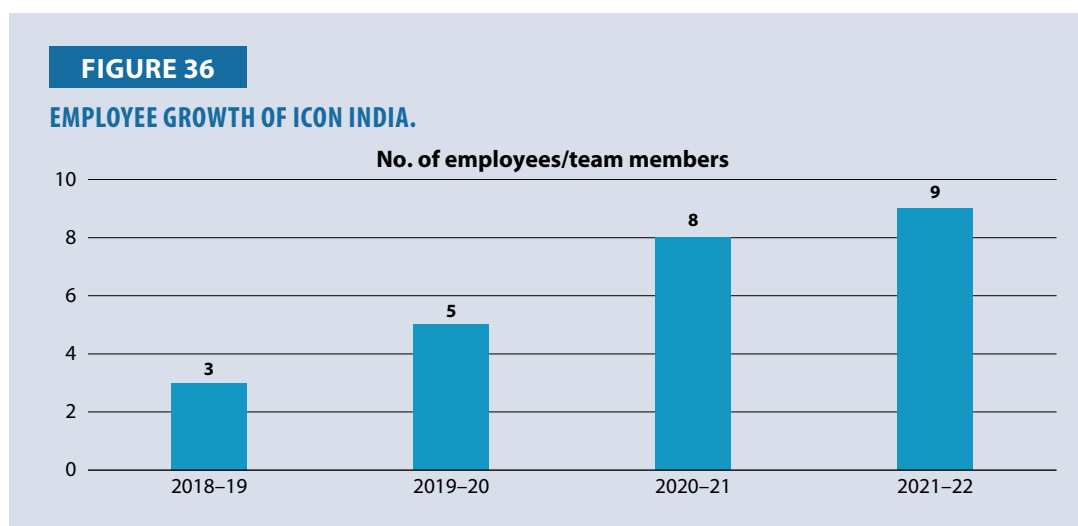
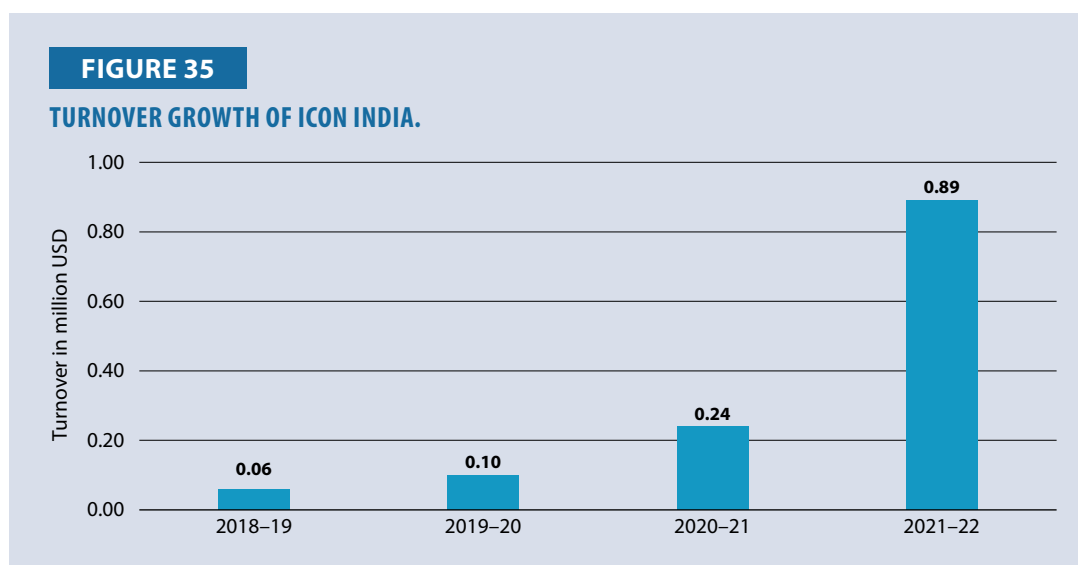
FIGURE 34**PRODUCT PORTFOLIO OF ICON INDIA.****Growth of ICON India in Recent Years**

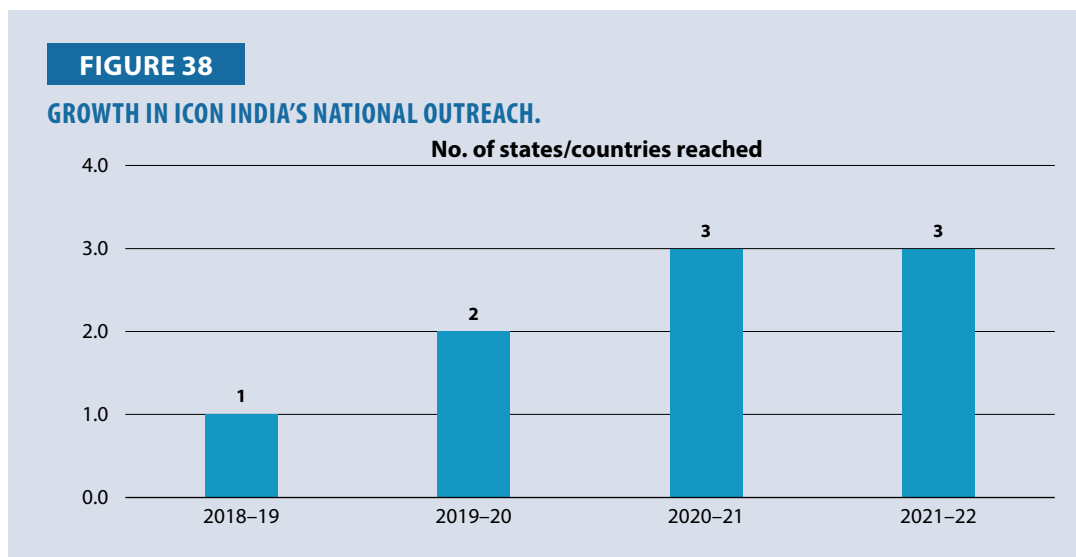
Details on growth of M/s ICON India were obtained in terms of its turnover, employee count, number of clients, and national outreach. The quantitative details provided by M/s ICON India are given in Table 9.

TABLE 9**OVERALL GROWTH TREND OF ICON INDIA.**

S. No.	Growth during past years	FY2018	FY2019	FY2020	FY2021
1	Turnover (in INR lakh)	45.87	82.34	202	739
2	No. of employees/team members	3	5	8	9
3	No. of clients	25	45	85	105
4	No. of states reached	1	2	3	5

The growth of M/s ICON India is illustrated in Figures 35 to 38.





Reasons for sustained growth

Five out of the nine management practices and initiatives were taken by the company to grow and sustain during the pandemic (see Table 10).

TABLE 10
MANAGEMENT PRACTICES ADOPTED BY ICON INDIA.

Management practices	Adopted (yes/no)
1. Hybrid working/WFH	No
2. Agility/flexibility/reallocation of resources	No
3. Exploring new business model	Yes
4. New skilling and talent acquisition	Yes
5. Redefining customer markets	No
6. Utilizing macro govt. policies	No
7. Optimizing working/operating cost	Yes
8. Adopting automation and mechanization	Yes (partly)
9. Switching to digitization/AI tools	Yes (partly)
Total score	5 out of 9

Details of Management Practices Adopted by ICON India

Details on various management practices adopted by M/s ICON India have been collated after analyzing the responses to the questionnaire as well as the interactions with some key officials. The following management practices were successfully adopted:

- (1) Exploring new business model:** A new business model was explored by expanding from direct customers to retailers, distributors, and wholesalers, while adding six new products in the basket and increasing the sales volume to improve margin.

The key challenges included hassles of the distribution system, dispatch and logistics hurdles because of poor coordination; team management; and limited cash flow. The challenges were addressed by taking a loan for three years for improving the cash flow.

- (2) **Cost optimization:** Specific measures by which costs of operations were optimized included purchase of own vehicle for transportation of raw material/products and own/self-branded packaging of products.

This optimization had no adverse impact on the product quality and improved the deliveries.

Further, costing was minimized by increasing purchase volumes while margins were improved by increasing sales volumes.

The challenge of cash flow was addressed by taking a loan for three years and having bill-to-bill payment terms (no credit).

By optimizing internal costing, the company could offer competitive sales prices (below market rates) and customers were satisfied with the prices, product range, and timely delivery.

- (3) **Skilling and talent acquisition:** The team was expanded through acquisition of new talent.

Focus was put on skills of marketing, coordination, customer relations, stock maintenance, and logistics planning among the new recruits.

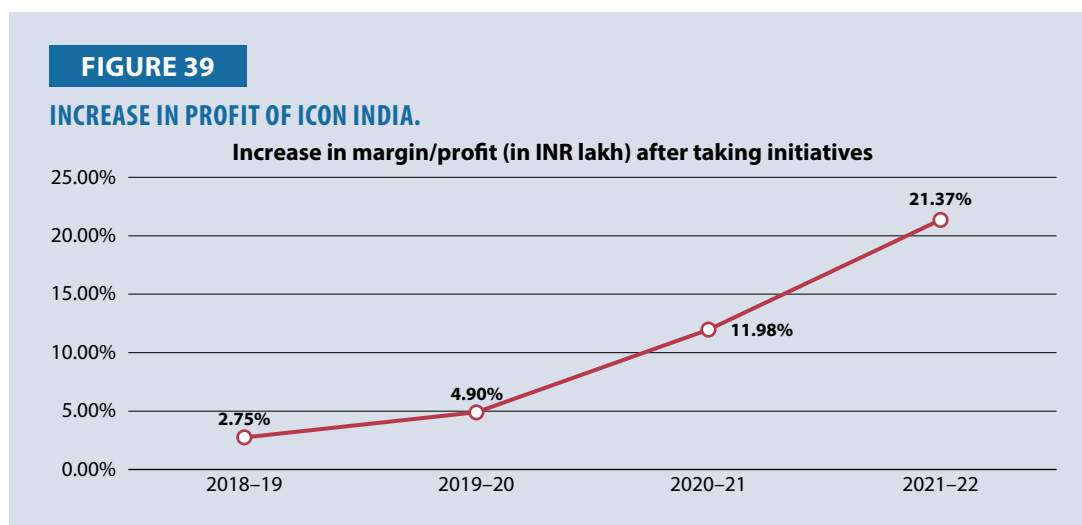
Increased team size led to seamless coordination, adequate workload distribution, and freeing senior management of daily activities, thereby improving availability for clients.

The performance was evaluated in terms of increase in sales in the same work duration.

- (4) **Automation:** To reduce the human interface, the company started venturing into sensor-based doors and windows. The demand rose because of the pandemic.

- (5) **Digitalization:** The payment mode was changed to digital mode to a large extent, unlike before the pandemic when 100% of the business was cash driven.

By adopting these management practices, the profit margin of the company also increased by 10 times over a period of four years. The increase in profit is illustrated in Figure 39.



Summary of Key Strategic Initiatives for Growth during Pandemic

The key strategic initiatives taken by M/s ICON India to grow consistently in recent years are summarized as follows:

- (1) Manufacturing-sector SMEs had to be different from service-sector SMEs as they had to grow without models like work from home and with limited scope for reallocation, contactless operations, etc.
- (2) Working through retailers, distributors and wholesalers, adding new products, and loans were the new business models.
- (3) When hiring new talent, the focus was on skills of marketing, coordination, customer relations, stock maintenance, and logistics planning.
- (4) Focusing on sensor-based product automation and digitization in payments was important.
- (5) Operational costs were optimized by purchasing own vehicle for improving logistics along with self-branded product packaging.
- (6) Employee welfare was key even during the pandemic period by measures such as timely salaries, benefits, and job retention schemes.

The NPS of M/s ICON India was also determined based on the information gathered about the enterprise and the subsequent analyses. The NPS was derived from the score matrix as given in Table 11.

TABLE 11
NET PROMOTER SCORE OF ICON INDIA.

S. No.	Management's response to the pandemic	Practices in management adopted (yes/no)	Score (1~10)
1	Agile organization BP during COVID-19	No	0
2	Automation/mechanization during COVID-19	Yes, partly	5
3	Digitalization/DX during COVID-19	Yes, partly	7
4	Building new business model	Yes	9
5	Hybrid/remote work during COVID-19	No	0
6	Talent acquisition during COVID-19	Yes	8
7	New market/customer development	No	0
8	Utilization of macro-level government policies	No	0
9	Cost optimization during COVID-19	Yes	10
Total score of practices that are strongly adopted		5 out of 9	39 out of 90

The NPS for M/s ICON India was 39 out of 90, considering it has adopted five out of nine management practices.

Conclusion

From the detailed study of the three case studies, it is very much evident that all the three SMEs have grown by virtue of adapting some key management practices and initiatives, in line with the hypothesis made at the inception of the study. The key initiatives that led to the growth of these SMEs are listed in Table 12.

TABLE 12
CONCLUSION SUMMARY.

S. No.	Key reasons for growth of the three SMEs	Management practices as per the hypothesis made
1	Adopting remote work	WFH and Hybrid
	Focusing on digital skills, adaptability and resilience, and remote collaboration	Reskilling and new talent
2	Rediscovering the market opportunity	New business model
	Expanding product/service portfolio	
	Focusing on client requirement/customized solutions	
	Expanding business to other countries/states	
3	Venturing into new services	Digitization and automation
	Digitization in business	
4	Increasing automation/online activities/remote operations	Cost optimization
	Minimizing costs to increase purchase volume; increasing sales volume to improve margin	
	Optimizing inventory	
	Outsourcing non-core functions	
5	Through timely procurement, timely payment, achieving reduction in lead time of a project	Utilization of government's macro policies
	Leveraging MSME Loan Pay for timely payments to employees (salaries) and vendors	

Thus, it may be concluded that the hypothesis made at the inception of the study holds true.

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INDONESIA

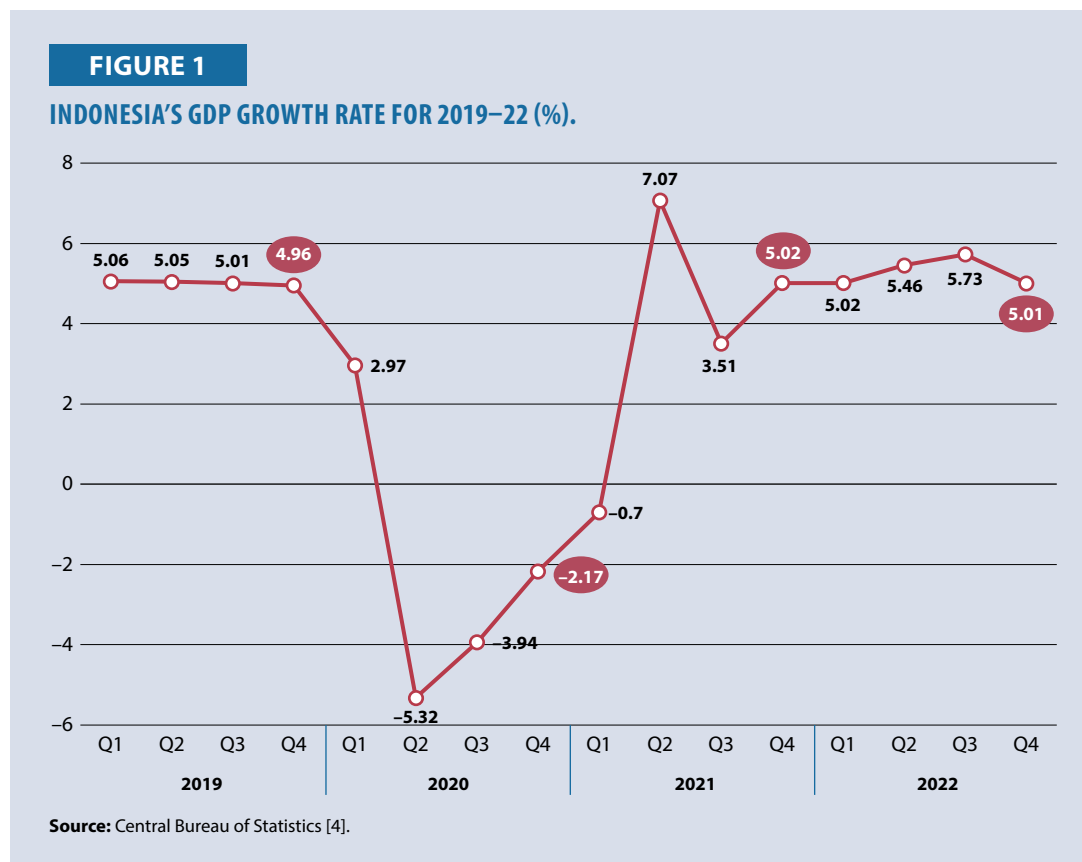
Economic Profile of Indonesia

Macroeconomic Condition

The COVID-19 pandemic has indeed had a significant impact on the economic growth of Indonesia. The economic growth contracted in 2020, with negative growth rates in each quarter leading to a recession. This contraction was primarily caused by widespread disruptions in various sectors, including manufacturing, services, tourism, and trade, due to the strict lockdown measures and travel restrictions implemented to contain the spread of the virus.

In the second quarter of 2020, when the pandemic was at its peak, Indonesia experienced a sharp decline in economic growth, with a contraction of -5.32% . This was a substantial drop from the positive growth rate of 2.97% in the preceding quarter. The contraction continued in the third quarter of 2020, with economic growth declining by -3.94% . In the fourth quarter too, the contraction persisted, albeit at a slightly lower rate, with the economic growth contracting by -2.17% (see Figure 1).

However, the pressures faced by Indonesia in 2021 were less severe than in 2020, despite a decline in economic growth in the third quarter. The emergence of the new delta variant of the virus caused a spike in COVID-19 cases, leading to localized lockdowns and restrictions. Nevertheless, compared with the previous year, the society and the industries had become more adaptable to the situation, implementing health protocols and adjusting their operations to function in the “new normal.”



Indonesia's central business fields, namely the processing industry, mining, and trade, contribute to over 60% of the country's GDP. However, the COVID-19 pandemic had a negative impact on all sectors, including these leading sectors. In 2020, the transportation, tourism, and hotel sectors were hit the hardest by the pandemic (see Figure 2).

The pandemic has also hindered the flow of foreign investments into Indonesia, as global uncertainties and disrupted supply chains led to a decrease in foreign direct investment (FDI) inflows.

However, in 2021, there were signs of economic improvement, as all sectors, except government administration, experienced optimistic growth. This indicated a recovery from the previous year's downturn. The decreasing number of COVID-19 cases also contributed to an improvement in the national economic conditions.

Additionally, the positive growth in Indonesia's economic sectors in 2022 can be attributed to several factors. First, the relatively high international commodity prices resulted in a positive value for Indonesia's net exports. Furthermore, the improving conditions of Indonesia's main trading partners, such as PR China, positively influenced the country's economic growth.

Indeed, the COVID-19 pandemic had a significant impact on employment in Indonesia, leading to an increase in the unemployment rate. In August 2020, the unemployment rate rose to 7.07%, marking a substantial increase of 2.13% compared with the pre-pandemic rate in February 2020, which stood at 4.94% (see Figure 3).

However, after the initial impact of the pandemic, conditions improved. The unemployment rate showed a decline in 2021 and 2022, indicating a gradual recovery in employment opportunities. As more individuals found jobs, the unemployment rate decreased, reflecting an improvement in economic conditions. Nevertheless, it is important to note that the labor market's full recovery may take time.

While the declining unemployment rate was an encouraging sign, it did not imply that all sectors and regions had fully regained their pre-crisis employment levels. Certain industries and vulnerable groups still faced challenges in terms of job availability and income restoration. The recovery in the employment conditions remains an ongoing process and requires sustained efforts to ensure a comprehensive and inclusive recovery.

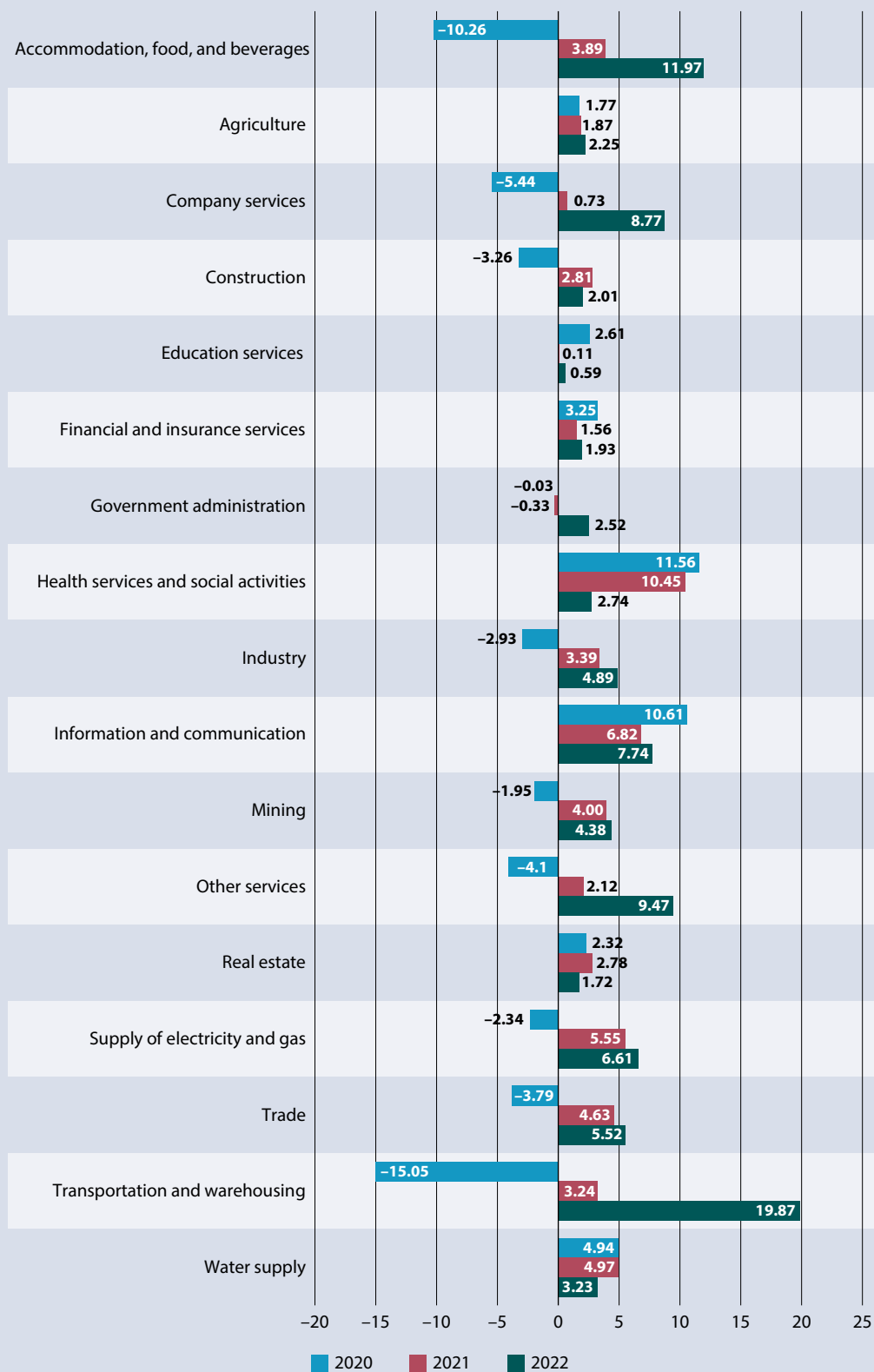
During the COVID-19 pandemic, the agricultural sector in Indonesia witnessed the highest labor absorption. This may be attributed to the movement of people, affected by the pandemic, from urban areas to rural regions, where they sought new employment opportunities in agriculture. The agricultural sector has always been significant in Indonesia, as the country is predominantly agrarian, with a large portion of the workforce engaged in farming activities.

However, there was a decrease of 1.1% in the number of workers absorbed in the agricultural sector in August 2021 (see Figure 4). This decline may be attributed to the gradual recovery of economic conditions, prompting people to return to urban areas in search of new job opportunities. As economic activities resumed and other sectors started recovering, individuals may have shifted away from agricultural work.

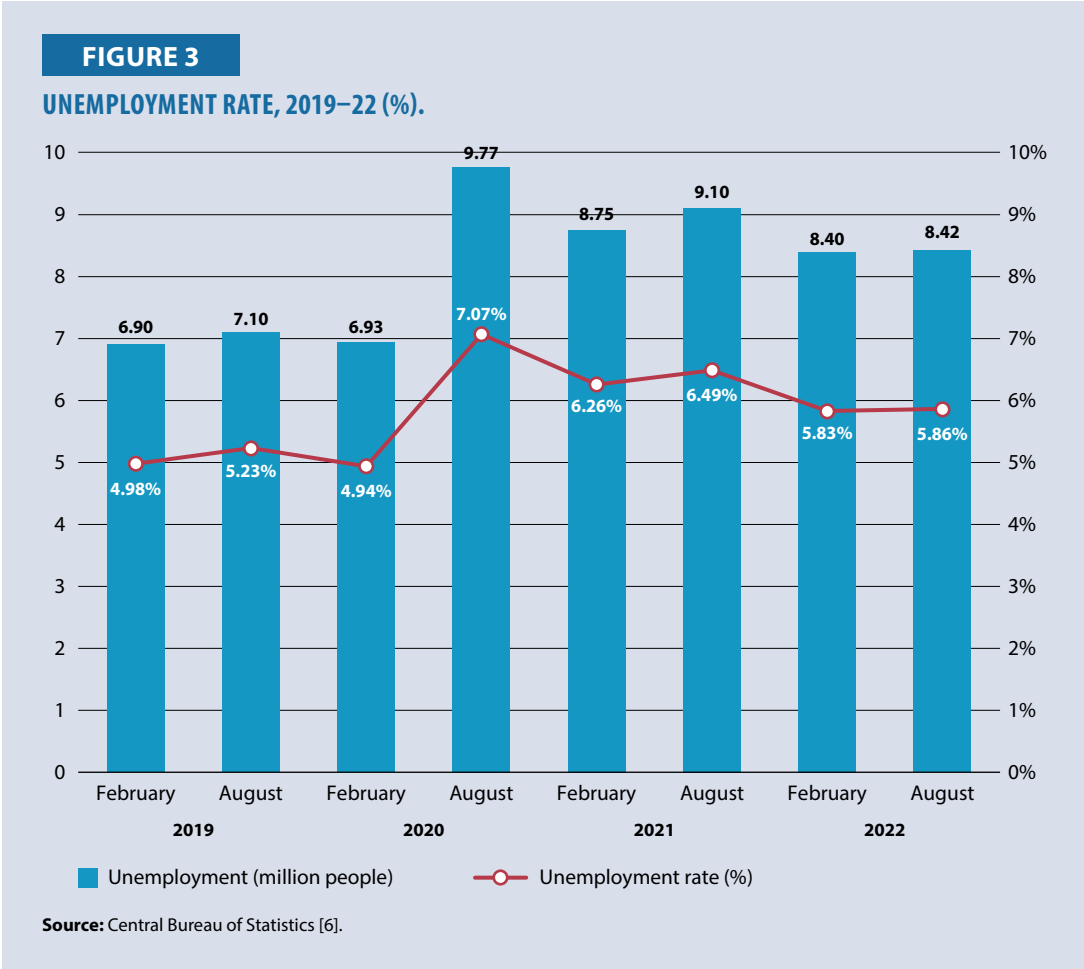
Conversely, the manufacturing industry experienced a substantial decline in employment during the pandemic. In August 2020, labor absorption in the manufacturing sector decreased by 1.30%,

FIGURE 2

GDP GROWTH RATE BY INDUSTRIAL ORIGIN (%).



Source: Central Bureau of Statistics [5].



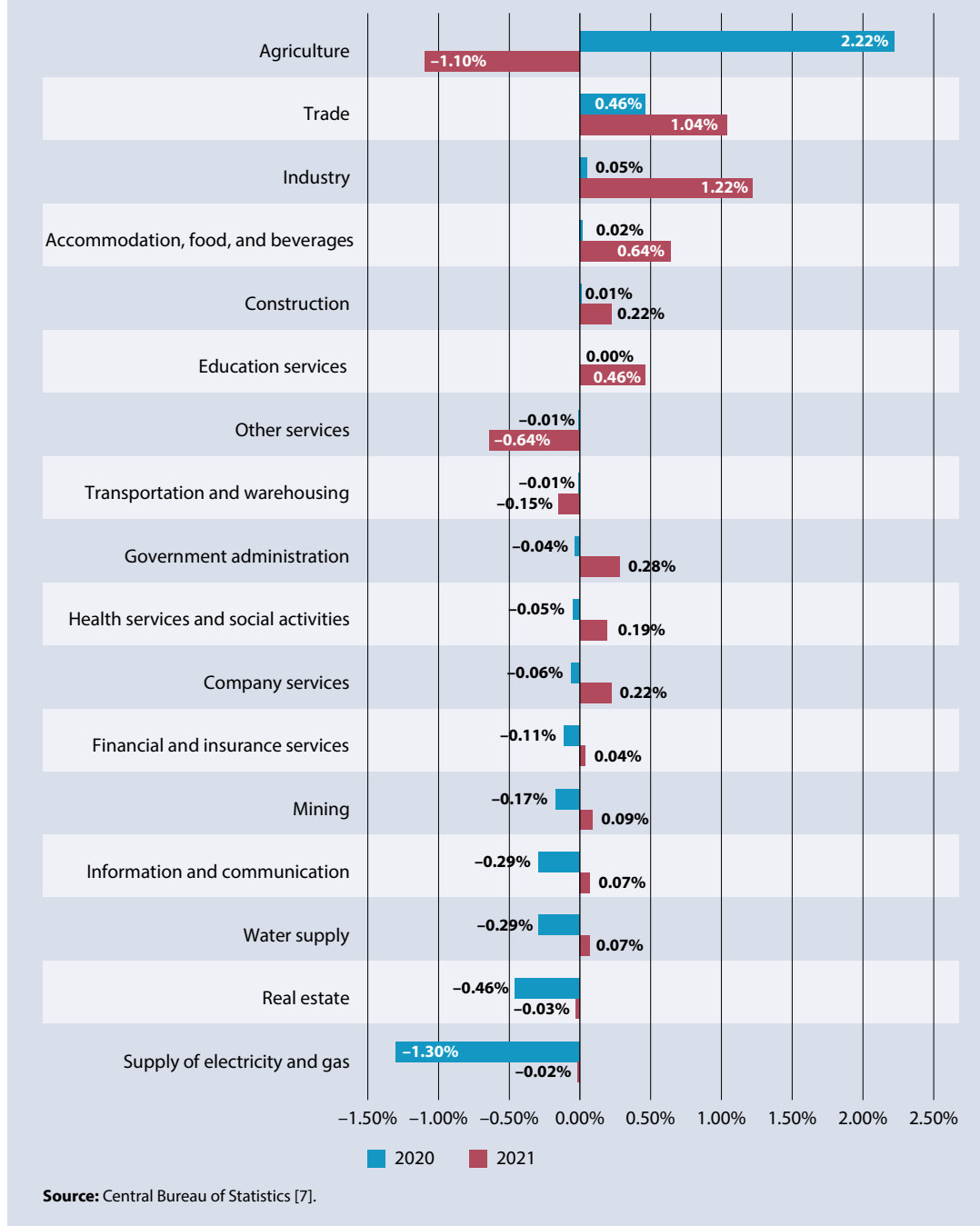
equivalent to approximately 1.45 million people. This decline can be attributed to reduced utilization in non-oil-and-gas-processing industries, as well as a decline in societal purchasing power. The manufacturing sector heavily relies on stable demand and consumption patterns, which were disrupted during the pandemic due to lockdown measures and decreased consumer spending.

These trends in labor absorption highlighted the shifting dynamics in employment during the pandemic. While the agricultural sector saw increased labor absorption initially, it experienced a decline as economic conditions improved. Conversely, the manufacturing sector faced significant challenges with decreased employment opportunities, reflecting the disruptions in demand and production.

The COVID-19 pandemic had a significant impact on the condition of companies, both large and small, in Indonesia. According to a survey conducted by the Ministry of Manpower in collaboration with the Institute for Development of Economics and Finance (INDEF) [15], a majority of companies reported losses due to the pandemic. Around 47.4% of the surveyed companies stated that COVID-19 had a detrimental effect on their operations, with 40.6% experiencing significant losses. Some businesses even had to close down due to continuous financial challenges. Less than 1% of companies reported being profitable during this period.

Micro, small, and medium enterprises (MSMEs) were particularly affected by the pandemic. A survey conducted by the Institute for Economic and Social Research, Faculty of Economics and Business, University of Indonesia (LPEM FEB UI), in collaboration with the United Nations

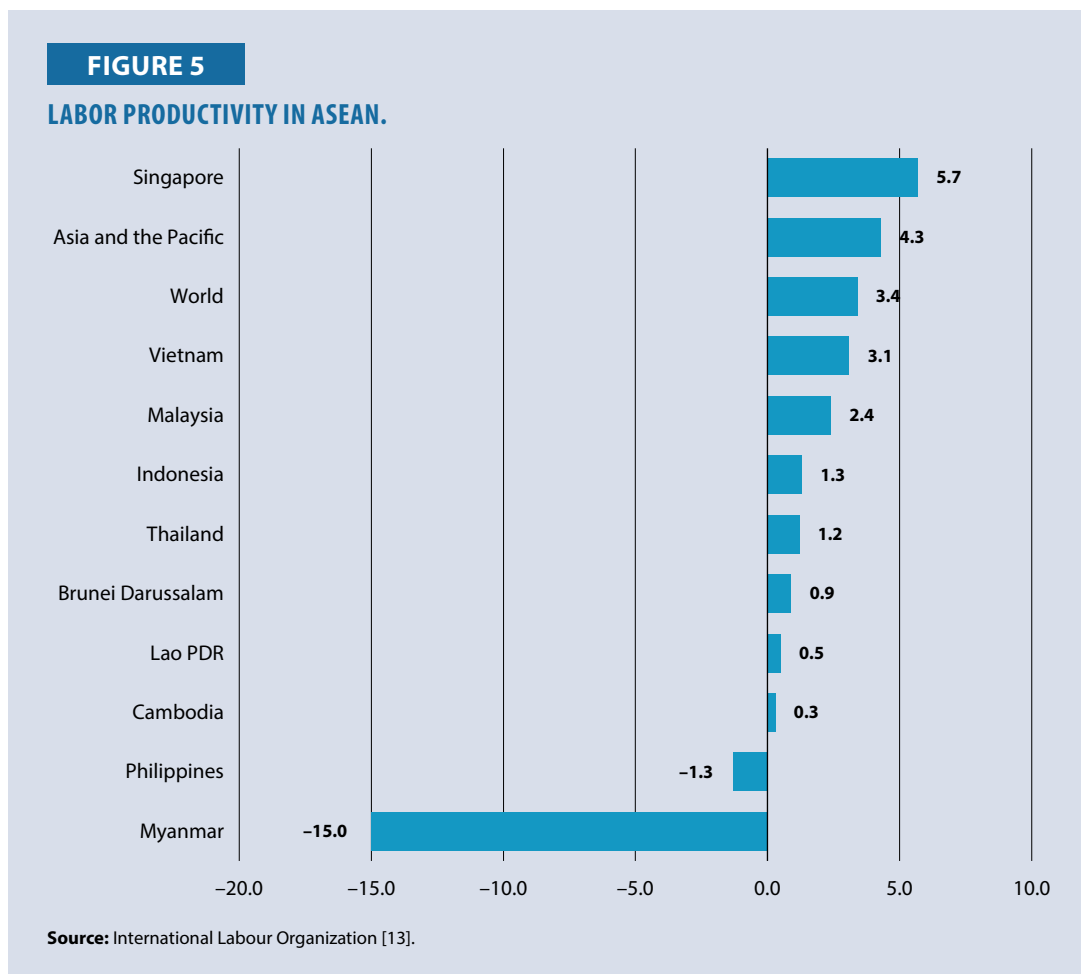
FIGURE 4
REORGANIZATION OF THE WORKFORCE DISTRIBUTION (%).



Development Program (UNDP), highlighted several impacts on MSMEs in Indonesia [12]. These included impairment of asset value, decreased product demand, difficulties in product distribution, decreased income, reduction in the number of workers, and challenges in obtaining raw materials.

Labor productivity played a crucial role in the performance of companies during the COVID-19 pandemic. Andrews, *et al* [3] suggested that companies with high labor productivity were more likely to survive and thrive during crises. Despite layoffs and decreased economic activity,

productivity becomes essential for companies to adapt and endure challenging circumstances. However, Indonesia has been struggling with low productivity levels compared with other ASEAN countries. In 2021, Indonesia’s labor productivity ranked sixth after Malaysia (see Figure 5).



During the pandemic, the Government of Indonesia implemented policies under the National Economic Recovery Framework, aiming to strike a balance between health management and economic recovery. These policies were designed to provide support and incentives to businesses for mitigating losses and maintaining their operations. Additionally, the government implemented social safety net programs to protect people’s purchasing power and alleviate the impact of the pandemic on communities.

To control the spread of COVID-19, the government implemented various restrictions on community activities to reduce public movement. Initially, large-scale social restrictions were imposed, limiting public mobility and allowing only essential businesses to operate. The government later transitioned to the Implementation of Restricting Community Activities or the *Program Kompetisi Kampus Merdeka (PPKM)* policy, which allowed a percentage of employees to work in offices while others worked from home. These measures were aimed at reducing virus transmission and temporarily suspending social and economic activities.

Expanding vaccine distribution was a key step by the government to improve public health and support economic growth. By achieving better overall health conditions, the government could

effectively manage the pandemic and maintain the momentum for economic recovery. As vaccine distribution became more widespread, the government gradually relaxed the PPKM restrictions and increased the implementation of work from office (WFO) arrangements. Ultimately, on 30 December, the government officially ended the implementation of PPKM.

The COVID-19 pandemic has brought about changes in people's behavior and activity patterns, including within companies. Businesses had to adapt to these changes and develop strategies to survive in the face of uncertain economic conditions. The cessation of production activities during the pandemic had a significant impact on Indonesia's economic growth rate, affecting companies' cash flows and overall efficiencies. The companies implemented different measures to navigate the challenges posed by the pandemic and to ensure their resilience.

MSMEs in Indonesia

MSMEs play a significant role in the Indonesian economy. According to Act Number 20 of 2008 [1] concerning MSMEs, these enterprises are independent and productive economic entities operated by individuals, households, or small business entities. The law emphasizes the need to empower MSMEs to support the country's economic development. By empowering MSMEs, there is potential for these enterprises to contribute toward income distribution and reducing economic inequalities within communities.

In line with the empowerment of MSMEs, the Government of Indonesia issued Government Regulation Number 7 of 2021 [10] concerning ease, protection, and empowerment of cooperatives and MSMEs. This regulation classifies MSMEs based on criteria such as business capital and annual sales. This classification provides a framework for identifying and supporting different types of MSMEs, ensuring that appropriate policies and programs can be implemented to assist them.

The categorization of MSMEs based on business capital and annual sales allows for tailored support and facilitation from the government, financial institutions, and other relevant stakeholders. By understanding the specific needs and challenges faced by different types of MSMEs, targeted initiatives can be developed to enhance their competitiveness, provide financial assistance, improve access to markets, and promote business development.

Empowering and supporting MSMEs is crucial for promoting inclusive economic growth, creating employment opportunities, and reducing income inequality. Through appropriate regulations and policies, the government aims to create an enabling environment for MSMEs to thrive, contribute to the economy, and uplift local communities.

TABLE 1

CRITERIA FOR CLASSIFICATION OF MSMEs.

Business size	Criteria	
	Net worth/venture capital	Annual sales
Micro	Up to IDR1 billion	Up to IDR2 billion
Small	IDR1 billion to IDR5 billion	IDR2 billion to IDR15 billion
Medium	IDR5 billion to IDR10 billion	IDR15 billion to IDR50 billion

Source: Ministry of Cooperatives, Small and Medium Enterprises [14].

Indeed, MSMEs have a crucial and strategic role in Indonesia's economic development. The data for 2019 from the Ministry of Cooperatives and SMEs emphasizes the significant contribution of MSMEs to the national economy.

According to the data, around 65.4 million MSMEs make up 99.9% of the total number of business actors in Indonesia. This highlights the dominant presence of MSMEs in the country's business landscape. Furthermore, MSMEs have played a significant role in creating jobs and employment opportunities, as they have absorbed 96.9% of the total workforce, providing employment for around 119.5 million workers.

In terms of economic contribution, MSMEs contribute approximately 60.5% to the national economy. In 2019, this amounted to IDR9,580.8 trillion. This also represented a notable increase of 5.7% compared with the previous year when the contribution was IDR9,062.6 trillion. The growth in the economic contribution of MSMEs underscores their importance in driving economic activity, generating income, and fostering economic resilience.

TABLE 2

DEVELOPMENT OF MSMEs FROM 2018 TO 2019.

No	Indicator	Unit	2018		2019		Growth	
			Value	Share (%)	Value	Share (%)	Value	Share (%)
1	Business unit	Million units	64.2	99.9	65.5	99.9	1.3	2.0
2	Employee	Million people	117.0	97.0	119.6	96.9	2.6	2.2
3	GDP at current prices	Trillion IDR	9,062.6	61.1	9,580.8	60.5	518.2	5.7
4	Total value of non-oil and gas exports	Trillion IDR	293.8	14.4	339.2	15.7	45.3	15.4
5	Investment based on current prices	Trillion IDR	2,564.5	60.4	2,619.4	60.0	54.8	2.1

Source: Ministry of Cooperatives, Small and Medium Enterprises [14].

The absorption by MSMEs in Indonesia averages only two people per business. Wholesale and retail trade, repair, and maintenance of cars and motorcycles account for over one-third of the MSME workforce. This sector is expected to grow with the increase in people's income and population. As people's purchasing power improves, consumption and demand for goods will increase, driving growth in the trade sector. This sector is relatively easy to enter as it requires relatively small capital and simple operations; does not demand specialized skills; and can be conducted on a small-scale basis, even from home. Consequently, many businesses in the trade sector are established by new business actors. The manufacturing sector and the accommodation and food services sector rank second and third, respectively, in terms of employment within MSMEs.

The Indonesian government is actively encouraging the growth of the MSME sector, particularly by promoting the export of MSME products. In 2019, non-oil-and-gas exports from MSMEs amounted to IDR339.2 trillion, showing a growth of 15.43% compared with IDR293.8 trillion in 2018. However, despite this growth, MSMEs exports accounted for only 15.65% of Indonesia's total non-oil-and-gas exports, which amounted to IDR2,167.1 trillion.

The government's focus on increasing MSME exports aims to boost the international competitiveness of MSMEs, expand market opportunities, and enhance the sector's contribution to the national economy. By promoting export-oriented MSMEs, the government aims to drive economic growth, generate employment opportunities, and reduce reliance on domestic markets alone.

To support MSME exporters, the government has implemented various policies and initiatives, including providing access to export-related information, facilitating export procedures, offering financial assistance, and promoting market access through trade exhibitions and international cooperations.

Encouraging the growth of MSMEs and expanding their participation in international trade will be crucial in further unlocking the sector's potential, fostering economic resilience, and achieving sustainable development in Indonesia.

TABLE 3

NUMBER OF EMPLOYEES AND AVERAGE ABSORPTION OF NON-AGRICULTURE MSMEs.

Category	Total employees	Labor absorption average
Mining	376,711	2
Industry	11,707,339	3
Supply of electricity and gas	53,538	2
Water supply	182,817	2
Construction	2,161,410	10
Trade	22,493,987	2
Transportation and warehouse	1,684,037	1
Accommodation, food, and beverages	8,530,342	2
Information and communication	977,381	2
Financial and insurance services	406,598	5
Real estate	507,937	1
Government administration	1,055,068	3
Educational services	5,873,101	10
Health services and social acts	893,338	4
Other services	2,363,281	2
Total	59,266,885	2

Source: Central Bureau of Statistics [8].

MSMEs have historically demonstrated resilience during economic shocks such as the Asian Economic Crisis in 1997–98 and the Global Financial Crisis in 2008–09. However, the COVID-19 pandemic, which began in March 2020, posed a more complex and challenging economic crisis. Reduced community activity and mobility, driven by both virus transmission fears and implementation of Large-Scale Social Restrictions or *Pembatasan Sosial Berskala Besar (PSBB)*, significantly impacted businesses, particularly MSMEs. The decline in their income was drastic, which led to many MSMEs experiencing financial difficulties, and unfortunately, some being forced to close [16].

Despite their resilience, MSMEs continue to face various challenges in business development and access to finance. Technical and operational capabilities of Indonesian MSMEs limit their ability to innovate; and they need improvement. The professional management of businesses is often hindered by a lack of qualified human resources. Furthermore, efficient production processes supported by environmentally friendly and socially responsible technologies are necessary for MSMEs to meet global standards. However, the implementation of such practices remains limited. Access to finance is another obstacle, making it difficult for Indonesian MSMEs to invest in technical capabilities, product innovation, human resources, and technologies to support their business development (Ministry of National Development Planning, 2020).

Addressing these challenges requires concerted efforts from various stakeholders. Providing support in the form of training programs, capacity building, and technical assistance can enhance the capabilities of MSMEs. Encouraging the adoption of sustainable and innovative practices, including the use of technologies, can help MSMEs align with global standards and improve their competitiveness. Access to financing should also be improved, ensuring that MSMEs have adequate resources to invest in their growth and development.

Case Studies on Emerging Economies

The APO conducted a study analyzing companies that successfully survived the challenges posed by the COVID-19 pandemic. Among the companies studied, two examples from Indonesia were examined.

The first company, Love Care Company, provides an application-based platform that offers healthcare professionals services catering to a wide range of age groups, from toddlers to older individuals. The service providers include nurses, caregivers, and babysitters. This company likely experienced increased demand for its services during the pandemic, as people sought specialized healthcare support and assistance in their homes. By leveraging technology and providing essential healthcare services, the company managed to adapt and thrive in the challenging business environment created by the pandemic.

The second company, Pacmann Academy, focuses on educational services in the fields of data, business, and engineering. Despite the disruptions to traditional education models caused by the pandemic, this company found success by adapting its services to an online format. By leveraging technology and providing remote learning opportunities, Pacmann Academy was able to continue delivering quality educational services to its customers. This demonstrates the importance of innovation and flexibility in adapting to changing circumstances.

These case studies highlight the importance of technology adoption, innovation, and adaptability in navigating the challenges of the COVID-19 pandemic. Companies that were able to pivot their business models, leverage digital platforms, and cater to changing customer needs were more likely to survive and thrive in such unprecedented times.

Case Study 1: Love Care Company

Based on the analysis conducted by the APO, Love Care Company, which operates in the services sector, showed resilience and adaptation during the COVID-19 pandemic. The company utilized technological advancements to provide health services, both medical and non-medical, by connecting service users with suitable healthcare professionals in a safe, fast, and convenient manner.

The Love Care application was developed in 2019 with the aim of innovating in the health sector and becoming a pioneer in Indonesia. The company's owner, who is actively involved with social empowerment, saw the need for medical and non-medical services that would allow patients to receive care and support in the comfort of their homes. The owner's personal experience and the desire to provide warmth and support to medically incurable patients led to the establishment of the Love Care Foundation, which provides nurses for patients in their homes.

To ensure the quality and professionalism of the nursing services provided, Love Care implemented a rigorous recruitment process. This process involved written tests, psychological assessments, and interviews conducted by a team of psychologists and head nurses. The company set high standards for its nurses to ensure that they were reliable and dedicated to serving the users of the Love Care app.

The company faced challenges when the COVID-19 pandemic emerged in early 2020. Planned development and recruitment activities had to be put on hold, and the team had to quickly adapt and make decisions to keep the company operational. Despite the uncertainties and instabilities caused by the pandemic, the company remained focused and motivated, providing continuous support and guidance to employees.

Table 4 outlines the specific actions taken by the company in response to the COVID-19 pandemic.

Overall, Love Care Company demonstrated resilience by leveraging technology, maintaining high standards in nurses' recruitment, and adapting to the challenges brought about by the COVID-19 pandemic. The company's commitment to providing quality homecare services and its mission to help people live safely at home contributed to its survival during the challenging times.

TABLE 4

MANAGEMENT PRACTICES IMPLEMENTED BY LOVE CARE.

No	Remedies for resilience and recovery	Management practices adopted	Strategy adopted	Most distinguished practices (1~10 score)
1.	Agile organization	Yes	Creating an adapted standard operating procedure (SOP) catering to the specific situation and conditions in Indonesia Providing customer service for partners and service users	9
2.	New market/customer	Yes	Implementing work from home (WFH) COVID-19-special service opportunities Collaborating with the School of Health and providing scholarships for graduates who would work at Love Care	10
3.	Building new business model	Yes	Providing caregiver services Providing babysitting services	9

(Continued on next page)

(Continued from previous page)

No	Remedies for resilience and recovery	Management practices adopted	Strategy adopted	Most distinguished practices (1~10 score)
4.	Automation/mechanization	Yes	Monitoring the movement of nurses through a large screen/dashboard using GPS. Implementing automation by utilizing data from daily reporting and establishing a point-and-reward system based on the reported data	9
5.	Digitalization/DX	Yes	Online marketing Online payments Online recruitment (artificial intelligence) Data validation (artificial intelligence)	10
6.	Talent acquisition and upskilling	Yes	Assigning tasks to employees beyond their primary responsibilities Imparting training to some employees to improve their skills	9
7.	Hybrid work/remote work	Yes	Flexibility of time and place of work	9
8.	Utilization of macro-level government policies	No	The company has not received direct assistance from the government but is currently trying to work together in providing reliable and professional health workers.	-
9.	Cost optimization	Yes	The company allocates budget priorities to develop the application system and provide incentives to nurses who demonstrate exceptional performance.	9

The Love Care Company implemented successful steps and strategies during the COVID-19 pandemic, resulting in significant growth in total transaction value and total workforce. In 2020, the total transaction value experienced an impressive increase of 1815%, indicating a substantial boost in business activities. Additionally, the total workforce also grew by 20% during that period, reflecting the company’s ability to create employment opportunities.

However, in 2021, both the total transaction value and total workforce witnessed a decline. The total transaction value decreased by 66%, and the total workforce decreased by 33%. Despite the decline, the total transaction value remained relatively high, suggesting that the company maintained a strong presence in the market.

In 2022, the Love Care Company was expected to bounce back with positive growth. The total transaction value was projected to increase by 126%, indicating a significant recovery in business activities. Moreover, the total workforce was expected to expand by 100%, indicating an increase in employment opportunities within the company.

These positive projections for 2022 reflected an effective management of the COVID-19 pandemic by the company. By implementing successful strategies and adapting to the challenges posed by the pandemic, the company could position itself for future growth and success.

TABLE 5**LOVE CARE'S REVENUE AND EMPLOYEE GROWTH AMIDST AND POST COVID-19.**

Indicator	2019	2020	2021	2022
Total revenue (in thousand USD)	16.21	310.34	106.90	241.38
Total revenue growth (%)	–	1815%	–66%	126%
Total employees	5	6	8	16

Note: 1USD= IDR14.50

Agile Organization

The Love Care Company faced significant challenges when the COVID-19 pandemic first hit Indonesia. The implementation of social restrictions meant that people were reluctant to let strangers enter their homes, which resulted in a decreased demand for the company's homecare services. This decline in demand directly impacted the company's profits.

To address this situation, the company swiftly developed a new standard operating procedure (SOP) to adapt to the conditions and challenges posed by the pandemic. It distributed work among the employees and made necessary adjustments, considering the government's policy that restricted activities outside the home to essential sectors only.

Implementing the new SOP proved to be challenging as the company was still in the process of introducing Love Care app to the community and needed to actively seek professional nurses. Nevertheless, the management's strong motivation and enthusiasm for work positively influenced the team, fostering solidarity and a focus on building the Love Care brand amidst the high transmission rate of COVID-19. Daily affirmations and confidence-building measures by the top management contributed toward improved teamwork and increased employee productivity.

Prior to the pandemic, Love Care had required employees to work from the office. However, in line with government policies on social distancing, the company transitioned to a work-from-home (WFH) arrangement. Employees were required to report on their work via Google Spreadsheet without specific working hours, as long as the work was completed and reported daily.

The company also implemented new SOPs for working nurses to ensure their safety and minimize the transmission of COVID-19. This included wearing personal protective equipment (PPE) during service visits to users' homes and undergoing COVID-19 tests. These adjustments aimed to address the concerns of service users while providing a safe working environment for nurses.

The implementation of new SOPs, along with the top management's continuous support and positive suggestions, boosted employee morale and contributed to a more solid team performance. Love Care demonstrated its ability to adapt and navigate through the challenges posed by the COVID-19 pandemic by implementing necessary changes and prioritizing the safety of both employees and service users.

During the pandemic, Love Care analyzed the opportunities to leverage its capabilities and resources. Despite having a limited number of employees, the top management synergized the abilities and directed

the information-and-technology team to conduct research and development (R&D) using existing technology. This was done to identify market needs and explore business opportunities during the pandemic.

Based on the team's research, it was found that many people needed COVID-19 services but were hesitant to visit hospitals due to the fear of virus transmission. Recognizing this opportunity, Love Care decided to provide special COVID-19 services that could be conducted at home. The company introduced a dedicated COVID-19 service, offering home-based COVID-19 tests such as polymerase chain reaction (PCR), swab, and antigen tests. To carry out these tests, the company established a collaboration with a laboratory that had the necessary testing equipment but required reliable nurses to conduct the tests. Love Care partnered with the laboratory, with nurses providing the testing services and the laboratory providing the necessary equipment. This collaboration proved to be successful, allowing Love Care to rebuild the company by focusing on COVID-19 services while minimizing costs.

One challenge faced by the company was the initial fear among working nurses in visiting COVID-19 patients. To address this, the R&D team sought alternatives to ensure nurse safety during patient visits. It was determined that the use of PPEs could significantly reduce transmission risks. The company motivated employees to use proper PPE kits and provided training on their correct usage. This ensured the safety of nurses while carrying out their duties.

In 2020, Love Care had a small number of nurses, but the demand for COVID-19 services increased significantly. The company highly appreciated and rewarded the nurses for their professionalism and dedication, despite their concerns about contracting the virus. Additionally, Love Care provided health-insurance coverage for all its nurses. As the COVID-19 service grew, the company identified further opportunities to assist patients. It observed an accumulation of patients at COVID-19 referral hospitals, which led to the deterioration of patients' conditions due to transmission within the hospital environment. In response, Love Care collaborated with doctors to establish an independent isolation assistance service for patients with mild symptoms. Nurses were assigned to directly accompany these patients, thereby reactivating the homecare service. The nurses maintained regular checkups of patients, consulting doctors through telemedicine to monitor and report on the patients' conditions. Patients were also given the opportunity to consult directly with doctors, thus ensuring timely and comprehensive medical care.

By identifying and adapting to market needs during the pandemic, Love Care successfully expanded its services, focusing on COVID-19 testing and home care. The company's ability to analyze opportunities, establish collaborations, and prioritize safety measures contributed to its growth and resilience during this challenging period.

Building New Business Model

As Love Care expanded its services to include caregiver assistance, the company faced the challenge of finding qualified nurses. To address this, the team collaborated with nursing schools to recruit nursing graduates who were ready to work as caregivers. In order to attract applicants, Love Care offered school scholarships in the field of health, with the condition that the graduates would join Love Care directly after completing their studies. This approach helped secure a pool of qualified candidates for caregiver positions.

As the caregiver service developed, Love Care opened registration for individuals from outside the health sector who had prior experience in caring for older people. This allowed Love Care to diversify its workforce and expand its pool of caregivers. With this development, Love Care distinguished between health services provided by nurses and non-medical assistance provided by

caregivers. Caregivers could be individuals from the general public who focused on providing companionship and assistance with daily activities, while nurses focused on delivering medical services to support health-related needs of their patients.

Love Care's services have continued to evolve and innovate. As the spread of COVID-19 decreased, the company planned to expand its service offerings by introducing babysitting services. Nurses, caregivers, and babysitters all go through a series of tests conducted by Love Care to ensure competence and suitability for their respective roles. They are referred to as "partners" by the company, highlighting the collaborative nature of their work.

Love Care places a strong emphasis on customer service and feedback. The company values the trust and satisfaction of both its partners and service users. Feedback and complaints from partners and service users are carefully evaluated, and Love Care strives to find the best solutions to address any issues. A dedicated call center is provided for partner complaints, as the company aims to elevate and protect its partners. Love Care also ensures that partners are provided with three daily meals, and if this requirement is not met, service users are obligated to provide cash payments for the meals. These privileges and support provided to partners foster a sense of belonging and dedication, motivating partners to work sincerely and wholeheartedly in serving the service users. Love Care also prioritizes the comfort of service users, recognizing that their positive experiences lead to repeat business and referrals to families and friends.

Overall, Love Care continues to innovate and explore market opportunities to grow its business while maintaining a strong focus on customer satisfaction, trust, and the wellbeing of its partners and service users.

Automation and Mechanization

Love Care, in its pursuit of business growth, is committed to enhancing operational efficiency through continuous improvements to its application. An example of this is the integration of technology to monitor partner activities during service provisioning. By utilizing GPS technology connected to a large screen/dashboard, Love Care can display real-time updates of partner movements as they attend to service users. This implementation simplifies the monitoring process, enabling the company to track partner progress and location without the need for individualized monitoring.

To ensure effective service delivery, Love Care classifies its partners into three distinct levels based on their skills and experience. Level 1 partners consist of beginners who are in the process of developing their skills and capabilities. Level 2 partners possess more experience but may still be working toward mastering all of Love Care's designated actions. Finally, level 3 partners are highly skilled and experienced nurses capable of performing both medical and non-medical actions with proficiency. This tiered categorization enables the company to assign partners based on their competency levels, ensuring that the appropriate level of care is delivered to service users.

By leveraging technology for monitoring purposes and implementing a tiered system for partner classification, Love Care aims to optimize its operational efficiency and uphold the delivery of high-quality services to its users.

Digitalization/DX

As Love Care strives to expand its business, the company has recognized the importance of robust marketing efforts. However, the limitations posed by the COVID-19 pandemic made offline marketing

challenging. To adapt to the situation, Love Care leveraged advancements in information technology to introduce its services to the public through online platforms, including Instagram, Facebook, Telegram, and WhatsApp. The company acknowledged the shifting trend toward online platforms in supporting various activities during the pandemic. Despite limited funds, Love Care was proactive in online marketing without engaging well-known figures. Additionally, as social restrictions eased, the company actively participated in social gatherings to broaden Love Care's reach.

Continuing to address user needs, Love Care has made improvements to its application, particularly in the area of payments. Online payments have been implemented, integrating with various payment platforms. Partner wages are managed within the application, and upon completion of work, partners can withdraw their earnings through a payout system. The frequency of fund withdrawals depends on the partner's level. Level 3 partners can withdraw funds a maximum of three times per month, level 2 partners twice per month, and level 1 partners once per month. Apart from regular wages, partners may receive bonuses for completing assignments and receiving positive feedback from service users.

Data confidentiality is a primary focus for Love Care, encompassing both user and partner information. The company ensures data security through an algorithmic system that maintains trust among Love Care, its partners, and service users. Love Care does not download any documents uploaded by partners or service users, and only allows access to view uploaded files. Furthermore, partners and service users have the ability to add or delete previously uploaded data. Access to partner and user identities is limited to designated leadership levels within the company.

Drawing inspiration from hospital practices, Love Care adopts the "observe, imitate, and modify" approach to enhance its services. This approach involves documenting partner activities to monitor the health conditions of service users. By converting these observations into a system language, Love Care allows service users to track the care provided by babysitters or caregivers to their children or elderly parents. This feature proves valuable for monitoring families assisted by Love Care, especially when service users are unable to be present due to work or other commitments.

Love Care had faced recruitment challenges during the COVID-19 pandemic. The company upheld a rigorous selection process, subjecting potential partners to a battery of tests, including psychometric assessments, job-fit evaluations, ethics assessments, and competency tests. Initially conducted offline, the pandemic necessitated the innovation of online testing methods while maintaining the integrity of the recruitment process.

Love Care harnesses technological advancements, such as artificial intelligence (AI), to facilitate online recruitment processes without compromising the flow of the selection process. After partners register, their documents undergo verification using eye detection technology, while verifying the consistency of information provided. If the verification is successful, partners proceed to the subsequent testing stages. These online tests employ a system language in place of psychology-based assessments, thus allowing the recruitment process to be conducted diligently. The tests closely evaluate partner movements, including body, head, and eye movements, as well as their responses during the online assessments. The application generates test results and provides recommendations based on partner performance and responses.

While test results determine partners' current abilities and expertise, Love Care acknowledges the potential for improvement and skill enhancement. To address this, the company has established a training center for partners who may require further development to meet the standards. When a

partner's evaluation falls below the set criteria, Love Care offers her or him the opportunity to participate in training programs at the center to enhance the partner's skills and qualifications.

Talent Acquisition and Upskilling

Love Care recognizes the importance of continuous learning and knowledge sharing for both its partners and employees. The company organizes information sharing sessions to provide ongoing training and education for those partners who require further development. These sessions are preceded by discussions to identify the specific topics that need to be covered. Senior partners, particularly those at level 3, take turns leading the training sessions, sharing their expertise and insights to enhance the skills and capabilities of their fellow partners.

In addition to internal training, Love Care conducts agile life activities that bring in experts from the healthcare sector to educate both partners and service users. These activities focus on addressing common challenges faced by partners and service users, with discussions centered around topics relevant to the Indonesian society. Diseases such as stroke, dementia, and diabetes, which are prevalent in Indonesia, receive particular attention. The agile life activities take place on a weekly basis, covering a wide range of engaging topics. The valuable insights gained from these activities are then shared through Love Care's social media platforms, allowing a broader audience to benefit from the information.

The company also places a strong emphasis on training its employees, particularly the information and technology team. Recognizing the fast-paced and ever-evolving nature of the technology industry, Love Care ensures that its employees' knowledge remains up to date. The information-and-technology team members are provided access to online training platforms such as Udemy that offer specialized courses in the latest advancements in technology. Furthermore, Love Care supports offline training activities for employees, primarily focused on leadership-level personnel due to budgetary constraints. This strategic approach ensures that decision-makers have the necessary knowledge and skills to effectively apply what they have learned, thus maximizing the impact of the training initiatives.

Hybrid Work/Remote Work

The Love Care company has undergone significant changes in work patterns due to the COVID-19 pandemic. In 2019, the company implemented a WFH policy for all its employees, providing them flexibility in their work arrangements. To monitor employee activities, the company utilized Google Spreadsheets, which allowed employees to fill in their daily tasks and progress. This approach was cost-effective as Google Spreadsheets is available for free. However, after several months, it was observed that the effectiveness of long-term WFH implementation diminished as employees started feeling bored and needed more inspiration in their work. As a result, Love Care decided to introduce a hybrid work system, particularly for employees in the technology and information systems departments.

Love Care continues to implement the hybrid work system, primarily for employees working in technology and information systems. Under this system, employees are required to come to the office three times a week for face-to-face meetings and discussions. This approach has been well-received by employees, especially the millennial workforce, who appreciate the flexibility of working in various settings such as cafes while carrying out their daily tasks. The hybrid work model is primarily applied to employees in the technology and information systems department, as their performance can be more easily measured in this context.

Utilization of Macro-level Government

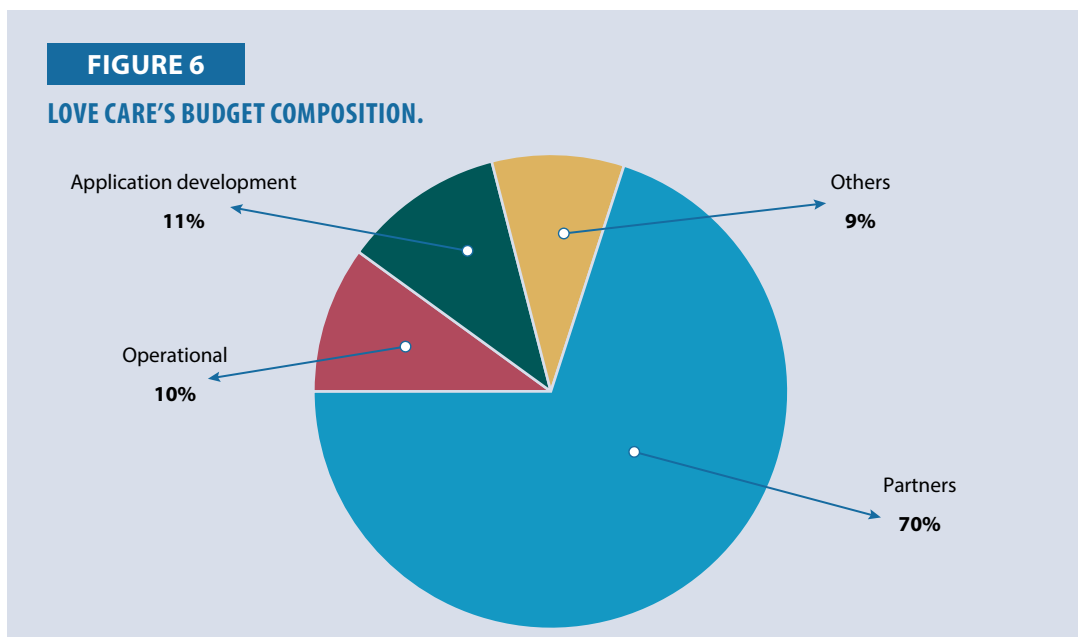
Although Love Care has not received direct assistance from the government, the company is actively seeking collaboration with various government agencies, including the Ministry of Manpower. The collaboration focuses on training initiatives. The Ministry of Manpower operates job training institutes across different regions, and Love Care aims to establish a partnership to leverage these facilities. The company’s high standards for nurses and the recruitment process it has implemented can be shared and incorporated into the vocational training programs offered by the Ministry of Manpower. This collaboration can contribute to the development of skilled healthcare workers, particularly in the field of caregiving.

Furthermore, the Ministry of Manpower is also engaged in cooperation with the Government of Japan for supply of healthcare workers, specifically caregivers. Love Care sees an opportunity to be a part of this partnership, as the company’s training and recruitment processes align with the requirements set by the Ministry of Manpower. By collaborating with the vocational training centers established by the government, Love Care can contribute to the empowerment of Indonesian migrant workers who previously worked as caregivers abroad. These workers can undergo training at the vocational centers to enhance their skills and qualifications, enabling them to reenter the caregiving field within Indonesia.

Cost Optimization

Love Care understood the financial challenges posed by the COVID-19 pandemic and had conducted a thorough cost analysis to optimize its expenses. During this period, the company had prioritized costs related to the COVID-19 service system development and the compensation for partners who performed well. Non-essential expenses were minimized, and daily operational costs were reduced due to the implementation of WFH arrangements for employees.

As the company’s financial condition stabilized, Love Care allocated a budget for various operational aspects such as training, marketing, and other expenses necessary for the company’s growth and development. However, the company had not yet focused on investing in assets as it remained dedicated to further developing its core operations. The most significant portion of Love Care’s costs is toward paying for partner services, thus highlighting the company’s commitment to



supporting and compensating its partners. Additionally, Love Care allocates approximately 11% of its budget to the continuous development of its application, emphasizing its determination to be a pioneering provider of application-based health services in Indonesia. Love Care is open to investors to grow more, particularly in the care economy sector.

Case Study 2: Pacmann Company

Pacmann, established in 2017, is a research startup specializing in the implementation and development of machine learning algorithms. Initially, Pacmann focused on providing consulting services related to big data and data science, while offering training programs to large companies. Currently, Pacmann is expanding its services and developing six programs that aim to provide users with flexible and comprehensive learning experiences in the fields of data, business, and engineering. These programs are designed as non-degree courses, allowing learners to study relevant materials in depth.

Pacmann has formed partnerships with various industrial partners and state-owned enterprises to leverage their expertise in machine learning and statistics. With these capabilities, Pacmann has two main products:

- (1) **Pacmann Academy:** This program provides users with affordable access to quality learning, offering in-depth curricula adapted from renowned universities worldwide. Pacmann Academy emphasizes the development of critical thinking, systematic analysis, and data-driven decision-making skills.
- (2) **Valiance Consulting:** Pacmann Valiance Consulting assists companies in digital transformation, offering services such as designing solutions, optimizing business processes, system planning, model development, and system implementation across various industries.

Despite encountering obstacles that led to a period of inactivity in 2018 and 2019, Pacmann found a turning point when the COVID-19 pandemic emerged in early 2020. The company seized the opportunity to refocus its efforts and embarked upon various innovations aligned with technology trends. As a result, Pacmann transformed into a holding company that provides data literacy services for individuals and data-driven solutions for organizations and businesses.

Recognizing the potential impact of the pandemic, Pacmann implemented strategies to mitigate its effects. These strategies, similar to Love Care, are categorized into nine different approaches, which are outlined in Table 6.

TABLE 6

MANAGEMENT PRACTICES IMPLEMENTED BY PACMANN COMPANY.

No	Remedies for resilience and recovery	Management practices adopted	Company strategies	Most distinguished practices (1~10 score)
1.	Agile organization	Yes	Developing key performance indicators (KPIs) based on existing problems and their corresponding solutions, rather than merely creating a to-do list of company goals Implementing WFH	8

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No	Remedies for resilience and recovery	Management practices adopted	Company strategies	Most distinguished practices (1~10 score)
2.	New market/customer	Yes	Engaging in “riding the wave” on social media platforms like Twitter (now X), focusing on current controversial topics that capture the interests of a broad audience Conducting webinars featuring experts and influential figures	10
3.	Building new business model	Yes	Diversifying the product range to align with market demands and areas of expertise Optimizing products to encourage previous users to return and utilize the company’s services again Expanding the product range based on market demands and areas of expertise	9
4.	Automation/mechanization	No	While the company has not yet implemented automation, it is currently in the process of developing an automated learning system for the long term	-
5.	Digitalization/DX	Yes	Doing all work via cloud Discuss online Online marketing Online learning system Service system (artificial intelligence)	10
6.	Talent acquisition and upskilling	Yes	Developing content and online learning systems based on literature and syllabi used by renowned institutions worldwide Recently graduated personnel who are not located in big cities are assigned less challenging tasks, such as creating PowerPoint presentations, which allows them to reap significant benefits Providing upskilling opportunities for newly graduated individuals to develop productive skills	9
7.	Hybrid work/remote work	Yes	Flexibility of time and workplace Supervisor controlling remote teams	10
8.	Utilization of macro-level government programs	No	While the company has not received direct assistance from the government, meetings have been held with government officials.	-
9.	Cost optimization	Yes	Priority costs are utilized to bolster company revenue through technology development, serving as a tool to achieve long-term objectives, particularly in sustainable technology advancement.	8

Based on the data provided, Pacmann has demonstrated significant growth in both total revenue and the number of employees during and after the COVID-19 pandemic. In 2019, the company generated USD500,000 in revenue with only 10 employees. However, in 2020, amidst the pandemic, Pacmann experienced substantial growth, with revenue increasing to USD1,200,000 and the number of employees doubling to 20. The positive trend continued in 2021, with revenue reaching USD2,500,000 and the employee count growing to 40.

In the subsequent years, Pacmann's growth trajectory remained strong. By 2022, the company's revenue soared to USD4,000,000, accompanied by an expansion of the workforce to 60 employees. The latest available data from 2023 shows that Pacmann's revenue has reached USD6,000,000, reflecting continued growth, with a total of 80 employees.

These figures indicate that Pacmann has successfully navigated the challenges posed by the COVID-19 pandemic and capitalized the opportunities to expand its business and increase its market presence.

TABLE 7

PACMANN'S REVENUE AND EMPLOYEE GROWTH AMIDST AND POST COVID-19.

Indicator	2020	2021	2022	2023
Total revenue (in thousand USD)	38.38	191.27	584.53	206.90
Total revenue (%)	–	398%	206%	–65%
Total employees	10 to 20	20 to 30	50 to 60	60 to 80

Note: 1USD= IDR14.50

Pacmann's success during the pandemic can be attributed to its ability to meet the unique and changing needs of the market. The company capitalized the increased demand for data scientists, a skillset that became more valuable during the pandemic. As individuals faced unemployment or job loss, there was a growing need for new job opportunities. Pacmann provided the necessary skills for those seeking employment in this field.

Furthermore, Pacmann leveraged the shift toward remote and hybrid work arrangements, which became prevalent during the pandemic. The company recognized the demand for workforce expertise that could effectively navigate and contribute to these new working models. By offering services that catered to these emerging needs, Pacmann was able to capture a significant market share.

However, in 2023, Pacmann's profits are expected to decline compared with the previous year. This can be attributed to several factors. First, as the remote or hybrid work systems become less prevalent, companies and the job market may require skills that are not necessarily aligned with the pandemic-era demands. This shift in job requirements could potentially affect Pacmann's target market.

Additionally, the increasing competition in the learning industry, including companies similar to Pacmann, has made the market more challenging. With more players entering the market, Pacmann's target market may become more saturated, thereby impacting its profitability.

To address these challenges, Pacmann has recognized the need to develop a new business model that can overcome these obstacles and sustain its growth in the evolving landscape. By adapting to

the changing market conditions and identifying emerging opportunities, Pacmann can position itself for continued success and mitigate the impact of any potential decline in profits.

Agile Organization

To cope with the impact of the COVID-19 pandemic, Pacmann implemented an acceleration strategy known as “agile organization.” This strategy aimed at adapting to the new challenges brought about by the pandemic, including changes in work methods and marketing strategies. One of the key aspects of this strategy was the adjustment of key performance indicators (KPIs) to address new problems and ensure ongoing alignment with organizational goals.

KPIs are measures or metrics used to evaluate the performance of an organization, individuals, or processes in achieving predetermined objectives. They provide a way to assess whether a business or organization is on track and functioning effectively. KPIs can take the form of specific and measurable numbers, ratios, percentages, or qualitative indicators. They serve as important reference points in business decision-making, particularly in evaluating company efficiency.

For example, Pacmann recognized the need to alter the size and alignment of their workforce in response to the pandemic. This adjustment allowed employees to realign their work goals and objectives accordingly. By revisiting and adapting the KPIs to the new circumstances, Pacmann ensured that its employees’ performances and targets were relevant and achievable in the pandemic’s context.

In addition to adjusting KPIs, Pacmann implemented the WFH policy in compliance with government regulations and industry practices. This approach was particularly advantageous for Pacmann due to the geographic dispersion of its workforce. The ability to work remotely allowed employees to continue their work while minimizing the risk of exposure to the virus and complying with social distancing measures.

Overall, the adaptation strategies implemented by Pacmann, such as adjusting KPIs and implementing WFH, helped ensure business continuity and employee wellbeing during the challenging circumstances of the COVID-19 pandemic.

New Markets and Customers

To expand its customer base and tap into new markets, Pacmann has implemented several strategies. First, the increasing demand for data science in technology-driven organizations such as startups, finance, and e-commerce companies presented an opportunity for Pacmann to offer training programs in data science. By capitalizing on the market’s interest and potential, Pacmann ventured into providing training tailored to data science skills, which attracted aspiring data scientists seeking to improve their abilities. While competition in the data science market is fierce, the market’s potential remains high, with people wanting to enhance their skills.

Second, Pacmann has leveraged social media platforms such as Twitter (now X) and others to reach and engage with new customers. By staying updated on popular or controversial topics and actively participating in discussions, Pacmann increases its brand visibility and attracts potential consumers from the social media sphere. This strategy aligns with the effectiveness of using social media as a marketing tool, particularly for generation Z, as demonstrated in studies by Syakuntala and Nurusholih [17] and Alfiani and Setiawan [2]. The rapid development of technology and social media facilitates information dissemination and enables Pacmann to tap into new trends and target audience awareness, thereby ultimately boosting product sales.

While utilizing social media, it is crucial for Pacmann to be cautious about creating controversy or negatively impacting existing businesses. Therefore, Pacmann ensures that the content produced is aligned with its values and goals for maintaining a positive engagement with its current audience. To achieve this, Pacmann has a dedicated content team that ensures the consistency and alignment of the company's content strategy.

Lastly, Pacmann organizes webinars featuring industry experts or prominent figures who can attract a wide audience. This strategy effectively introduces Pacmann's programs or company to the public while simultaneously building the company's reputation and authority in specific fields. By carefully selecting relevant and captivating experts or figures and topics of discussion, Pacmann maximizes the knowledge and experience shared in the webinars. Over time, this approach helps broaden Pacmann's program reach, expand its market presence, and attract broader participation.

In summary, Pacmann's strategies to target new markets and customers involve providing data science training, leveraging social media platforms, and organizing webinars with industry experts. These initiatives enable Pacmann to adapt to market demands, increase brand visibility, and establish its reputation in the industry.

Building New Business Model

During the COVID-19 pandemic, companies in Indonesia must adopt an acceleration strategy to adapt to the challenging circumstances. One crucial aspect of this strategy is product optimization, which involves tailoring products to meet the current needs and preferences of customers. Companies must consider the prevailing situation and make necessary adjustments to their product offerings. Additionally, improving after-sales services and refining manufacturing and distribution processes are essential to ensure customer satisfaction.

Pacmann serves as a prime example of a company that has excelled in adapting to the COVID-19 pandemic, particularly through product diversification. The company prioritizes product quality and continuously seeks customer feedback through discussions and programs, thereby enabling it to optimize and refine offerings to better meet customer needs. By employing effective adaptation strategies, companies can retain existing customers who have benefited from their products while also attracting new customers seeking improved product quality. Therefore, product optimization through diversification played a significant role in successfully navigating the pandemic.

What is more, Pacmann has successfully diversified its product portfolio by adding new programs that cater to market needs and align with its expertise. For instance, it has introduced a data science program to address the growing demand in today's digital era, which differs from its previous offerings. Pacmann utilizes its expertise and resources to develop new programs that align with the company's goals and market requirements.

When expanding product offerings based on market needs and expertise, Pacmann conducts thorough research and explores new business models to assess risks and opportunities. Furthermore, it analyzes the cost-benefit aspect to ensure sound decision-making.

By implementing effective product optimization strategies, companies like Pacmann could adapt to the challenging business landscape during the COVID-19 pandemic. These strategies enabled companies to diversify their offerings, meet customer demands, and position themselves for growth in an ever-changing market.

Automation and Mechanization

In the era of the Fourth Industrial Revolution, automation, which involves the replacement of human labor with machines, is becoming increasingly prevalent. While some industries in Indonesia may still heavily rely on human labor or a combination of human and machine power, the trend is moving toward utilizing machine or mechanical power for fundamental business processes [9].

Pacmann recognizes the importance of automation and its potential benefits for the company. Although it is yet to implement automation in its production process, Pacmann is actively developing an automated learning system for the long term. This strategic move aims to enhance the company's efficiency and productivity, thus enabling it to thrive in a highly competitive market. By implementing automation, companies can reduce production costs, accelerate production time, and improve overall product quality.

Despite not having implemented automation yet, Pacmann possesses significant potential to develop an effective automation system. The company boasts of a talented team led by an individual who possesses a genuine understanding of technology, innovation, and the evolving needs of the market. By conducting comprehensive market research and closely considering customer needs, Pacmann can create a tailored automation system that aligns with market demands and enhances company efficiency. Furthermore, this automation system has the potential to improve the overall quality of work.

As Pacmann moves forward in its automation journey, it is crucial for the company to carefully evaluate its options and choose the most suitable automation technologies. Implementing automation requires a comprehensive understanding of the company's processes and objectives, as well as considering the impact on the workforce and the overall business ecosystem. By embracing automation strategically and responsibly, Pacmann can position itself for continued success and growth in the evolving business landscape.

Digitalization and DX

Digitalization, or the utilization of digital technology and information in business processes, has become increasingly important for companies. It offers various benefits, including increased process effectiveness, higher product sales, cost savings, and more. During crises like the COVID-19 pandemic, digitalization is proven to be instrumental in overcoming operational obstacles [11].

Pacmann recognizes the value of digitalization and has implemented a digitalization strategy to achieve its goals. The company employs six key strategies in this regard:

- (1) **Cloud system:** Pacmann utilizes cloud-based work systems throughout its production stages. This approach improves efficiency, facilitates real-time access for the entire team, and eliminates the need for reliance on traditional applications like Word and PowerPoint. By staying up to date with the latest technology, Pacmann aims to enhance its overall efficiency and competitiveness.
- (2) **Online applications:** Pacmann leverages online applications for discussions and issue resolution. This allows teams to communicate in real time, thus effectively solving problems and facilitating coordination even when working remotely. Pacmann ensures that its teams are proficient in utilizing online applications to maximize their productivity and connectivity.

- (3) **Online marketing:** The company promotes its products through online platforms such as websites, social media, and marketplaces. Pacmann pays close attention to market trends and customer needs, ensuring that its products align with market demands while enhancing the effectiveness of its marketing efforts.
- (4) **Data-driven decision making:** Pacmann adopts a data-driven approach to plan and execute its marketing campaigns. By analyzing data from online platforms like Twitter (now X), Instagram, and TikTok, the company gains insights into market trends and customer preferences. This enables Pacmann to align its marketing strategies with market needs and improve overall efficiency and productivity.
- (5) **Online learning:** Pacmann provides flexible online learning opportunities for its employees and customers. Especially during the pandemic, online learning served as an effective means to enhance employee skills and introduce new products to customers. Pacmann ensures that its online learning programs are tailored to meet customer needs and are easily accessible by all employees and customers.
- (6) **AI in service systems:** Pacmann incorporates AI into its service systems, particularly in customer service. AI technologies, such as chatbots, are employed to automate and enhance customer support and technical assistance. These AI systems can efficiently respond to customer inquiries and provide accurate solutions. However, Pacmann understands the importance of maintaining the quality of the customer experience when using automation or AI systems and ensures that customer satisfaction remains a top priority.

By implementing these digitalization strategies, Pacmann aims to improve its operations, increase customer satisfaction, and stay ahead in the market. The company recognizes the value of embracing digital transformation and utilizing technology to its fullest potential.

Talent Acquisition and Upskilling

At Pacmann, talent acquisition is a crucial aspect aimed at enhancing the quality of employees. The company strives to identify and recruit talented individuals who can make optimal contributions to the organization. However, Pacmann understands that in order for employees to make the best contributions, they need continuous skill development and additional knowledge to meet the company's evolving needs.

As a significant portion of Pacmann's workforce consists of fresh graduates, the company places great emphasis on providing training opportunities for these individuals. Training equips them with the necessary skills and knowledge to contribute effectively to Pacmann's operations. Pacmann recognizes the potential of fresh graduates and endeavors to nurture their talents through comprehensive training programs.

To ensure that employees are assigned suitable roles, Pacmann takes into consideration their individual abilities and circumstances. Job assignments are tailored to align with employees' capabilities, enabling them to perform at their best. By leveraging their strengths, Pacmann aims to foster a productive and harmonious work environment.

Furthermore, Pacmann acknowledges the rapid advancement of technology and proactively adapts to these changes. The company provides training not only for its employees but also for consumers,

aligning with the latest technological trends. This ensures that both employees and consumers stay abreast of the developments in the industry and can effectively utilize the available technology.

To deliver comprehensive training services, Pacmann incorporates curricula from renowned universities worldwide. This approach enables users and consumers to receive high-quality training encompassing data, business, and engineering. By simplifying complex concepts and providing clear explanations, Pacmann strives to enhance understanding and facilitate effective learning experiences.

Through talent acquisition, continuous training, and responsive adaptation to technological trends, Pacmann aims to cultivate a skilled workforce that can contribute to the company's growth and success.

Hybrid and Remote Working

Pacmann has implemented a hybrid working model, combining both remote working and work from the office. While the company has an office in South Jakarta, it has embraced online working and introduced innovations to enhance worker productivity. Daily online meetings are conducted to foster strong relationships among team members and maintain effective communication.

To optimize the work processes, Pacmann utilizes various online tools for collaboration and file sharing, such as Google Docs and other Google tools. Additionally, the company employs an online communication platform, Discord, which allows all workers to stay connected and engaged.

In terms of structuring, Pacmann has identified specific positions or departments that require work from the office at least once a week, up to a maximum of three times a week. These strategic positions involve problem-solving within the company. Other operational positions have the flexibility to work remotely, particularly in emergency situations that call for remote work. However, supervisors closely monitor and exercise control over workers who are working remotely.

While implementing the hybrid working system, Pacmann strives to measure worker performance optimally. The department of human resources, responsible for KPI assessments, adjusts the KPIs on a monthly basis to align with upcoming possibilities and challenges while still adhering to Pacmann's overall targets.

The hybrid working model at Pacmann aims to provide flexibility and freedom to both management and employees. By balancing workflow, communication, and the tools and software used, the company expects this approach to optimize worker performance and productivity. The goal is to create an environment where employees can enjoy the benefits of flexibility while delivering excellent results.

Utilization of Macro-level Government

Pacmann, like Love Care, is actively seeking collaboration with various stakeholders. The company is focused on attracting investors to support its business development. While Pacmann has not received government assistance yet, discussions and hearings have taken place, aiming to establish cooperation in future. Pacmann sees potential collaboration opportunities with ministries involved in data and training, such as the Ministry of Education, Culture, Research, and Technology.

By partnering with relevant government ministries, Pacmann can leverage their expertise and resources to further enhance its data-related programs and training initiatives. Cooperation with government entities can also provide opportunities for Pacmann to contribute to national development goals in the fields of education, technology, and research.

While specific collaborations and agreements are yet to be formalized, Pacmann remains proactive in exploring partnership opportunities with key stakeholders, including government agencies.

Cost Optimization

Pacmann recognizes the importance of cost adjustments to ensure the company's sustainability and improve its quality and productivity. To achieve this, Pacmann adopts a focused approach on revenue generation and saving for future investments.

The company emphasizes saving by increasing its revenue and implementing a monthly strategy that involves financial adjustments and setting of targets. If the team successfully fulfills this strategy, Pacmann can achieve routine cost optimization through prioritization. The company carefully evaluates costs and considers the potential benefits before making investments.

Given Pacmann's focus on data science and data intelligence, regular technological development is an essential aspect of the company's operations. While technology development may incur significant costs, Pacmann prioritizes these expenses, recognizing the long-term benefits and the need to leverage technology and resources to achieve its goal of providing accessible and high-quality education, particularly in the field of data science.

By prioritizing cost adjustments, revenue generation, and technology development, Pacmann aims to create opportunities for individuals from all backgrounds to access education easily and receive quality training in the field of data science.

Summary

Based on the analysis of the two companies, several important strategies can be identified for companies to navigate business uncertainty caused by a pandemic like COVID-19. These strategies include:

- (1) **Agile organization:** Companies should focus on adapting to new circumstances by creating new SOPs, developing KPIs that are adjusted to current challenges, and implementing WFH policies.
- (2) **New markets/customers:** R&D efforts should be undertaken to identify new market opportunities and understand changing customer needs. Companies should be proactive in seeking out new customer segments and adapting their products or services accordingly.
- (3) **New business models:** Companies should diversify their product offerings and develop new business models based on insights gained from exploring new market opportunities. This allows for greater flexibility and the ability to address emerging customer demands.
- (4) **Automation/mechanization:** While automation may not be applicable to all service-based companies, exploring opportunities for mechanization and automation can help improve efficiency, reduce costs, and streamline processes wherever possible.
- (5) **Digitalization/DX:** Leveraging digital technologies and digital transformation initiatives is crucial in enabling remote work, facilitating marketing efforts, optimizing payment systems, streamlining recruitment processes, and harnessing AI for operational efficiency.

- (6) **Talent acquisition and upskilling:** Companies should invest in talent acquisition and upskilling programs to ensure that employees have the necessary skills to adapt to rapidly evolving technology landscapes. Training and development initiatives can help employees keep pace with technological advancements and contribute effectively to their organizations.
- (7) **Hybrid/remote working:** Embracing flexible work arrangements such as hybrid and remote working can enhance employee productivity and work-life balance, while also allowing companies to adapt to changing work patterns and reduce operational costs.
- (8) **Utilizing government support:** Companies can explore opportunities for collaboration and support from governmental agencies and ministries. Engaging with relevant government entities can provide access to resources, funding, and strategic partnerships.
- (9) **Cost optimization:** Companies should prioritize cost optimization efforts by allocating resources toward technology development and innovation, as well as assessing cost structures to identify areas for efficiency and effectiveness improvements.

By implementing these strategies, companies can enhance their resilience, adaptability, and competitiveness in the face of uncertainty and dynamic market conditions caused by a pandemic such as COVID-19.

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Appendix

Love Care Advertisements and Illustrations

Love Care is deeply dedicated to becoming the most dependable and trustworthy platform, delivering exceptional home care services for the people of Indonesia. Leveraging technological advancements, Love Care incorporates them into their marketing, nurse recruitment, and training processes. Notably, Love Care was invited as a speaker at the UN Women event held in Thailand.

Marketing for Online Caregivers

lovecare
Butuh Caregiver untuk Bantu Rawat Orang Tua?
 Percayakan pada LoveCare! LoveCare menghubungkan Anda dengan **caregiver profesional** yang dapat diandalkan.

- ✓ Pencarian petugas berdasarkan preferensi
- ✓ Petugas diawasi 24 jam
- ✓ Layanan fleksibel yang bisa disesuaikan

Hubungi Kami
 +62 882-8736-9887
 lovecareindonesia

Veronica Tan
 Founder LoveCare Indonesia

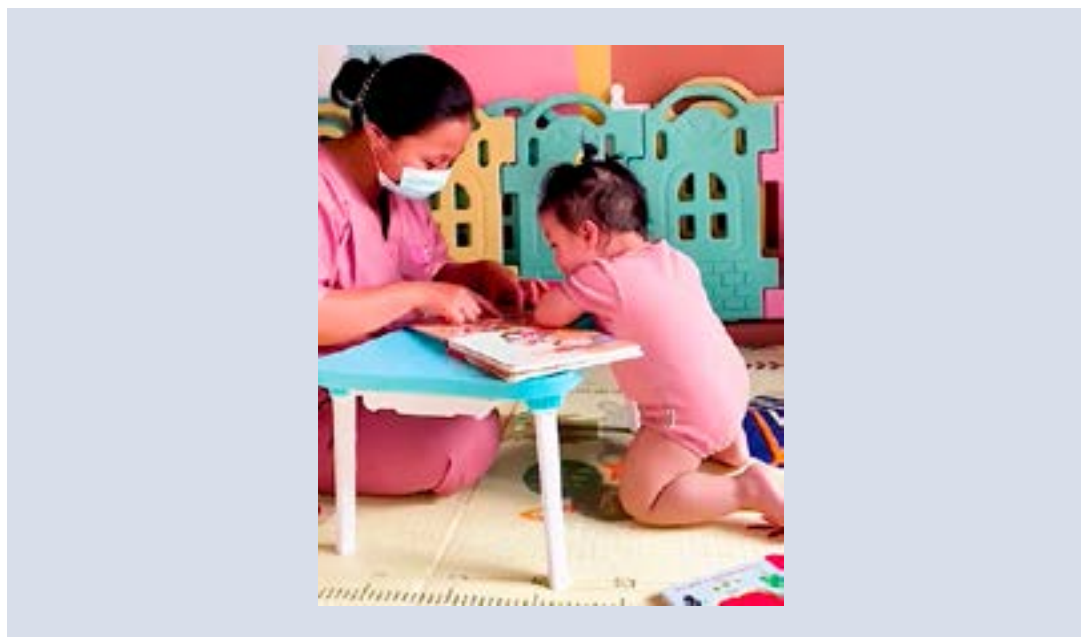
lovecareindonesia Looking for a caregiver to assist in home care for the elderly? Trust in LoveCare!
 LoveCare connects you to professional caregivers you can trust.
 Discover the various convenience of finding home care services safely and comfortably through LoveCare:

- Search of officers based on preference
- Officers are strictly selected
- Flexible services that can be adapted to your needs

Pesan caregiver home care lewat LoveCare sekarang! Untuk informasi dan konsultasi pemesanan, hubungi kami via Whatsapp 0882-8736-9887 atau klik link di bio.

#jagaPakehati #TrustinHomeCareApp #ButuhHomecareIngaLovecare #Homecare #caregiver #jajahomecareindonesia #perawat #pengasuh #perawatlansia

Babysitting Services



Love Care employs a dual approach to nurse recruitment, conducting direct roadshows and leveraging Instagram social media platform:

lovecare
Your Trusted Home Care

Jadilah Pengasuh Profesional bersama LoveCare!

Dan dapatkan **berbagai benefit** selama menjadi mitra LoveCare:

- ✓ Tarif gaji sendiri
- ✓ Point & Rewards
- ✓ Info loker terbaru
- ✓ Achievement & Awards
- ✓ BPJS Ketenagakerjaan
- ✓ Gaji 2x Lipat pada Inval hari raya

WhatsApp HR LoveCare: 0812-8095-6262 | lovecare.id/become-partner

lovecareindonesia

lovecareindonesia Mari bergabung jadi mitra LoveCare dan raih kesempatan menjadi caregiver profesional!

Dapatkan berbagai benefit selama menjadi mitra:

- Withdraw your own salary
- Point & rewards
- Gaji 2x lipat pada Inval hari raya
- Achievement & awards
- BPJS workforce
- Latest job vacancy info

Hurry up and join now! To register, click <https://lovecare.id/become-partner> or call Whatsapp HR 081280956262.

#GagaPakeHati #Truste@HomeCareApp
#ButuhHomecaretinggalLovecare #LebihDekatDengerLoveCare
titled - To - See original

47 likes

Add a comment...



Top-notch Training for Nurses



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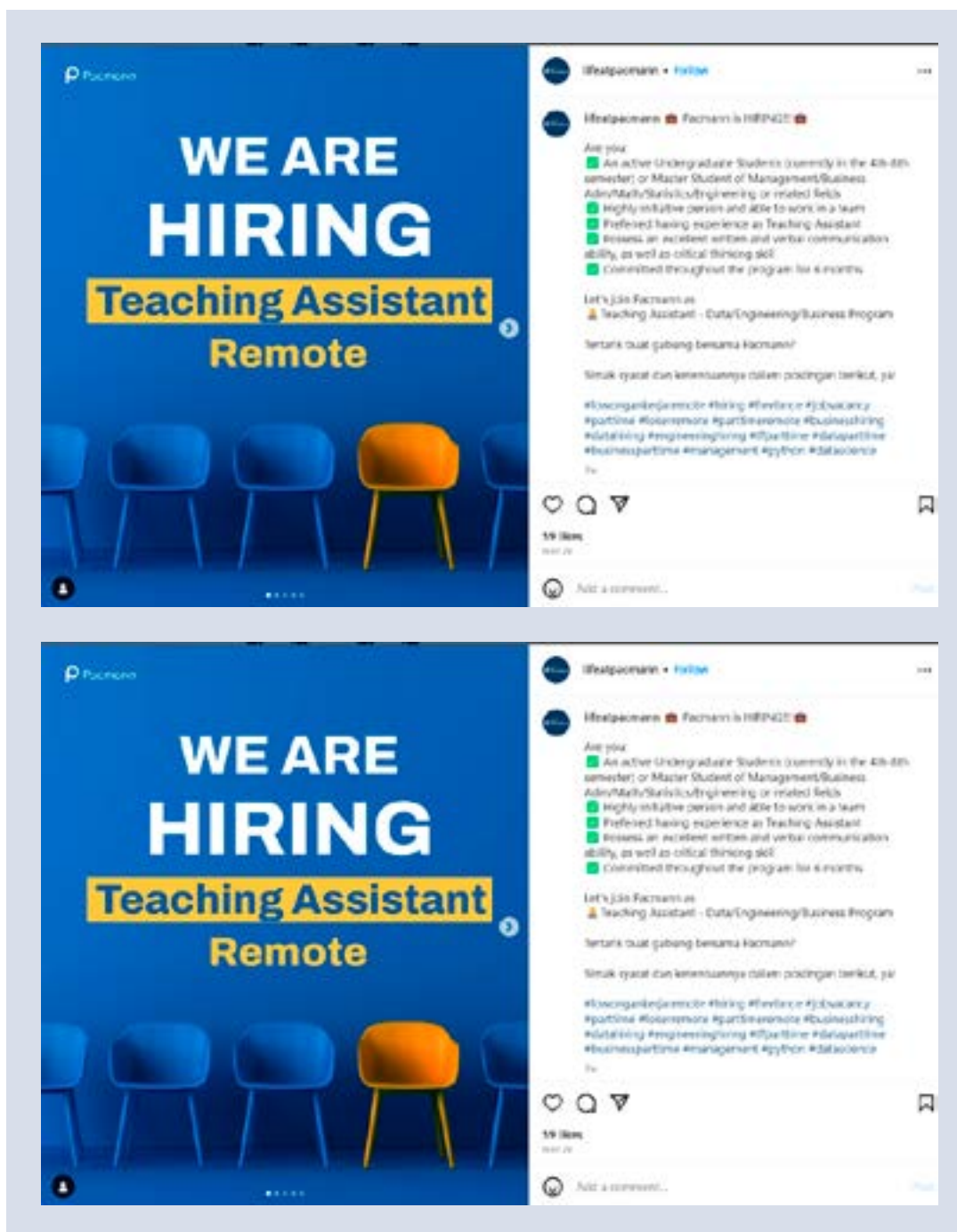
Love Care Speaker at the UN Women Event in Thailand



Pacmann Brochures and Advertisements

Pacmann, a startup specializing in IT and digitalization online education services, primarily facilitates learning through applications like Zoom. Additionally, it leverages social media platforms as an integral part of its marketing approach.

Open Recruitment for Pacmann Staff



Marketing for Online Education

The image displays three social media posts from the Pacmann brand, each featuring educational content and its corresponding social media interface.

- Post 1 (Top):** Titled "Intip Best Practices Portofolio Analisis Data". The graphic shows a smartphone displaying data charts. The text includes "Dari 5 Portofolio Siswa Pacmann Ini!" and "Save dan share untuk jadi inspirasi kamu". The social media interface shows 102 likes and a comment.
- Post 2 (Middle):** Titled "Kulik Ilmu Setiap Minggu". The graphic lists four courses: "Building Algorithmic Trading for Stock Market", "Optimizing Conversion Rate for Startups", "Building Automated Data Pipeline for Finance", and "Building Corporate Analytics for Retail Businesses". The price is listed as "Rp75.000/course". The social media interface shows 102 likes and a comment.
- Post 3 (Bottom):** Titled "INISERIOUS HARGA TERMURAH". The graphic features a person in a white shirt and lists two offers: "Pacmann Pro" (Rp6 juta to Rp2,5 juta) and "Job Preparation Program" (Rp27,7 juta to Rp11,9 juta). The code "midyear23" is provided. The social media interface shows 30 likes and a comment.

Online Learning via Zoom Meetings and the Pacmann Platform

The screenshot shows a Zoom meeting in progress. The main content is a web browser displaying the Pacmann platform. The page title is "About Course | Career Student". The main heading is "Welcome PacPeers!". Below this, a message states: "Halo selamat datang di kelas Python!". A sub-heading reads: "Kelas ini akan berlangsung selama 8 minggu dengan jadwal detail sebagai berikut:". A table lists the following sessions:

Pertemuan	Tgl	Waktu
Pertemuan 1-2	Tun, 13 Dec 2022	19.00-20.30 & 20.30-22.00
Pertemuan 3-4	Tun, 20 Dec 2022	19.00-20.30 & 20.30-22.00
Pertemuan 5-6	Tun, 27 Dec 2022	19.00-20.30 & 20.30-22.00
Pertemuan 7-8	Tun, 3 Jan 2023	19.00-20.30 & 20.30-22.00
Pertemuan 9-10	Tun, 10 Jan 2023	19.00-20.30 & 20.30-22.00
Pertemuan 11-12	Tun, 17 Jan 2023	19.00-20.30 & 20.30-22.00
Pertemuan 13-14	Tun, 24 Jan 2023	19.00-20.30 & 20.30-22.00

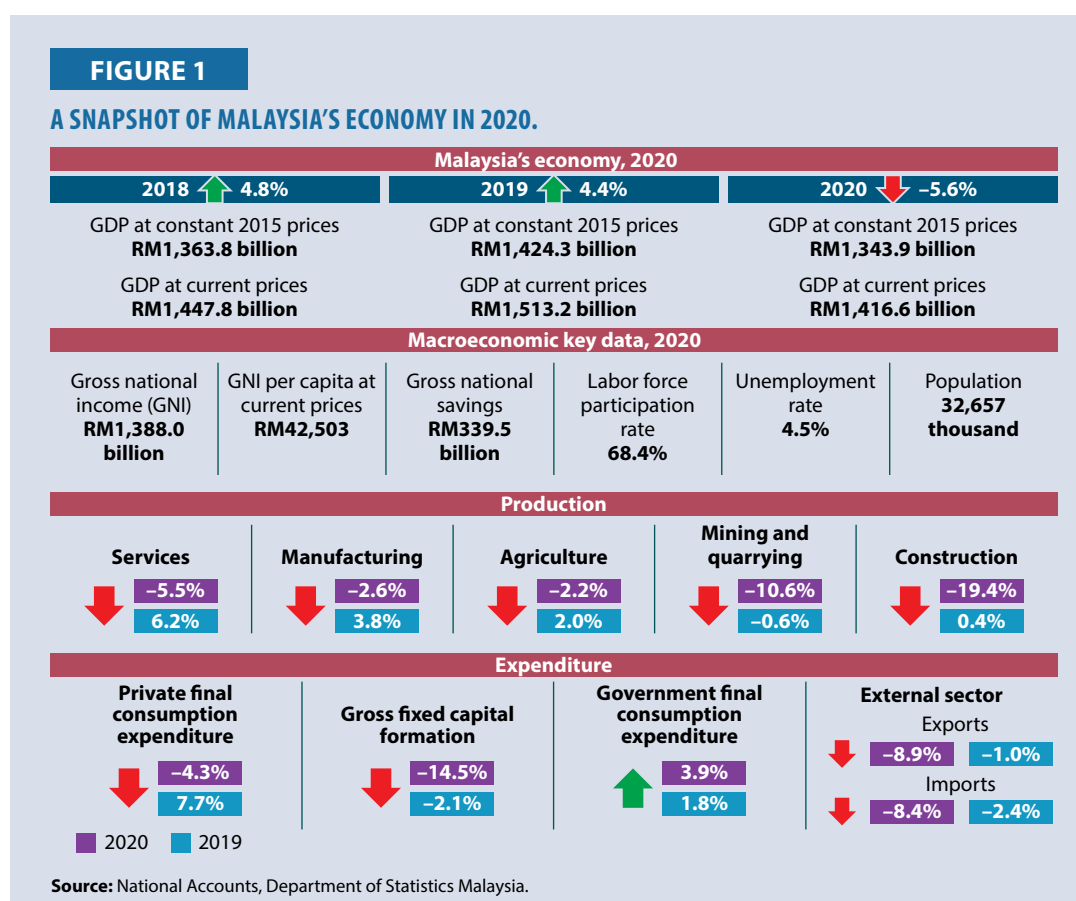
The Zoom interface on the right shows two participants: Yusuf FM and Angga Firdaus. The Zoom control bar at the bottom includes icons for mute, video, chat, and other meeting functions.

MALAYSIA

Malaysia's Macroeconomic Performance 2020–22

In 2020, Malaysia experienced a significant economic contraction of 5.6% due to the restrictions on economic activities imposed in response to the COVID-19 pandemic. This contraction was the largest since 1998 when Malaysia's economy declined by 7.4%. All five main economic sectors in Malaysia registered contractions, reflecting a challenging domestic operating environment and a lower global demand.

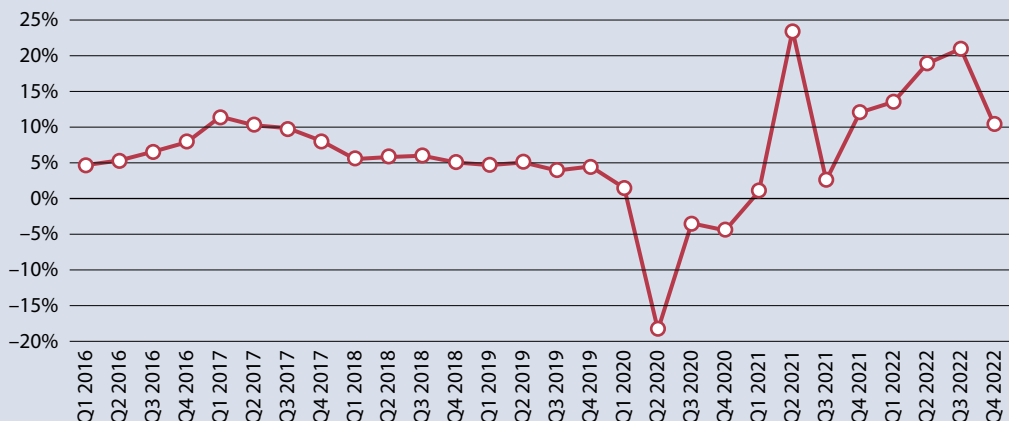
Meanwhile, Malaysia's GDP in current prices stood at RM1.42 trillion, while in constant 2015 prices, it amounted to RM1.34 trillion. The decline in GDP and weakened domestic economic activities can be attributed to the restrictions on economic activity implemented in response to the COVID-19 pandemic. As a result, Malaysia's gross national income (GNI) per capita deteriorated from RM45,311 in 2019 to RM42,503 in 2020.



In 2021, Malaysia's economy regained momentum as the country transitioned to Phase 4 of the National Recovery Plan (NRP) and interstate travel restrictions were lifted. This gradual recovery created opportunities for entrepreneurs to pick up business momentum, contributing to Malaysia's economic recovery. However, it is important to note that Malaysia's economic performance in 2021 remained lower than pre-pandemic levels in 2019 (see Figures 2, 3, and 4).

FIGURE 2

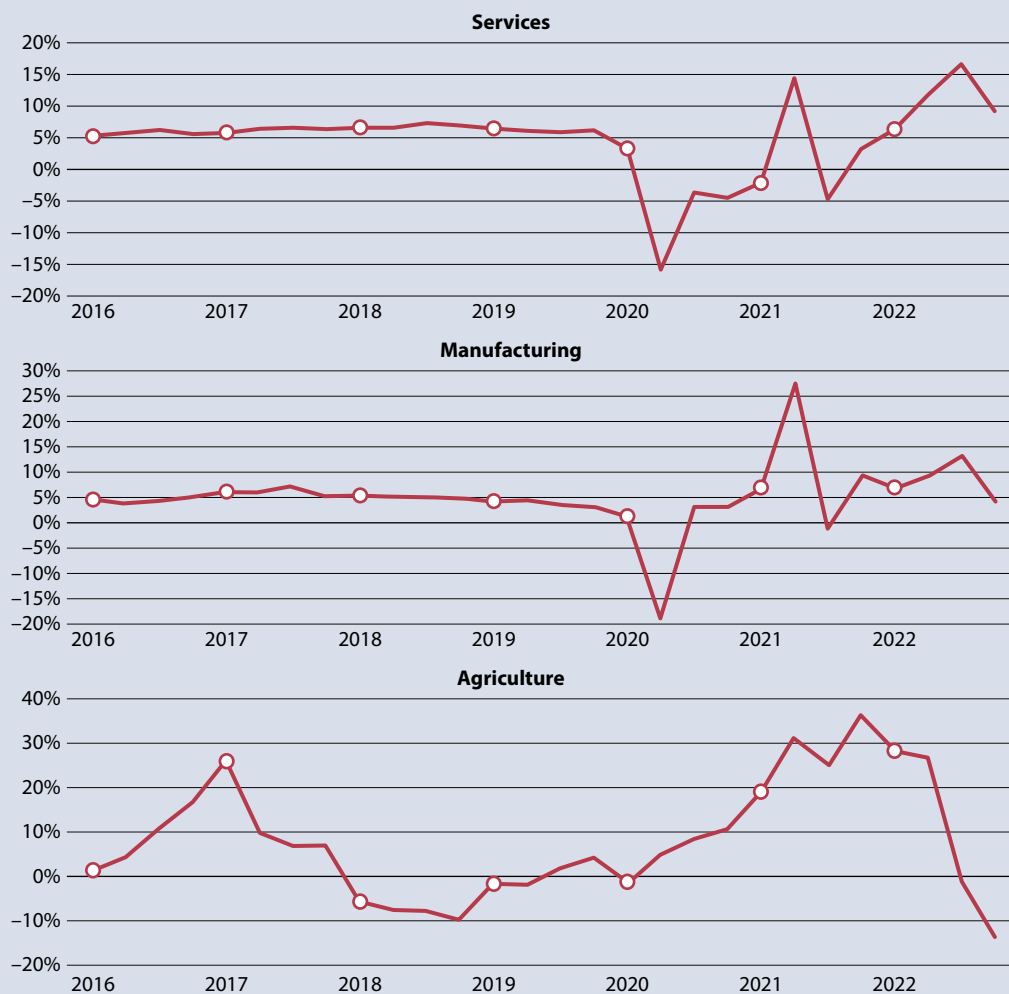
OVERALL GDP PERFORMANCE OF MALAYSIA, 2016–22.



Source: Department of Statistics Malaysia.

FIGURE 3

GDP PERFORMANCES OF SERVICES, MANUFACTURING, AND AGRICULTURE SECTORS, 2016–22.



Source: Department of Statistics Malaysia.



Micro, Small, and Medium Enterprises’ GDP in 2021

The definition of micro, small and medium enterprises (MSMEs) in Malaysia encompasses all sectors, including services, manufacturing, agriculture, construction, and mining and quarrying. The criteria used to determine the classification of MSMEs are based on sales turnover and the number of full-time employees, using an “or” basis.

For the manufacturing sector, SMEs are defined as firms with sales turnover not exceeding RM50 million “or” the number of full-time employees not exceeding 200. On the other hand, for services and other sectors, SMEs are defined as firms with sales turnover not exceeding RM20 million or the number of full-time employees not exceeding 75 (see Figure 5).

MSMEs in Malaysia are divided into two sectors: manufacturing; and services and other sectors.

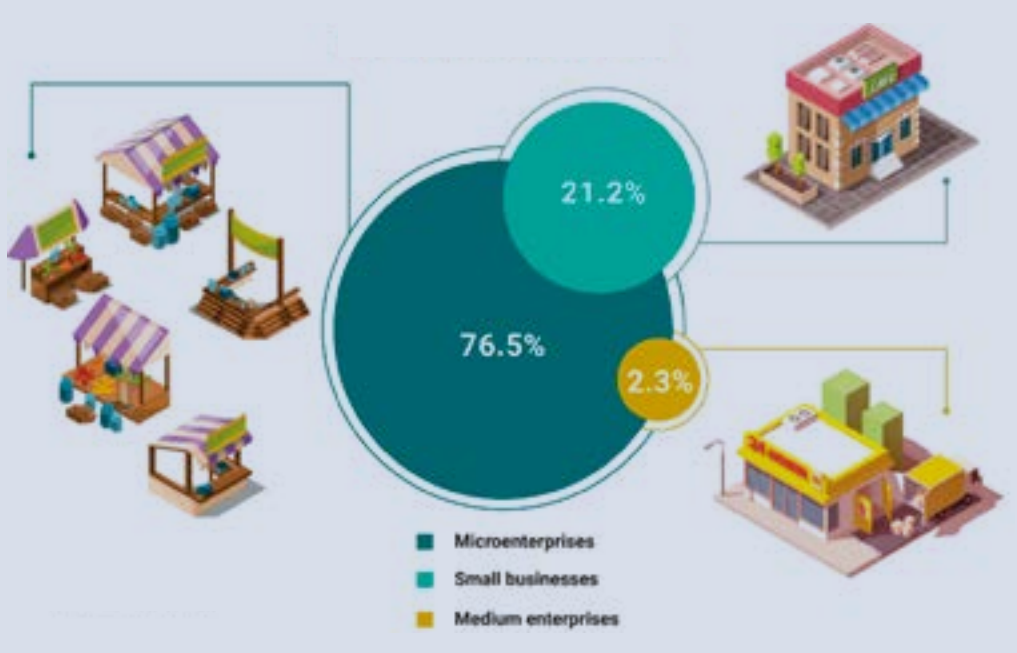
FIGURE 5
CLASSIFICATION OF MSMES BY SECTOR IN MALAYSIA.

Manufacturing		Services and other sectors
Sales turnover: RM15 million ≤ RM50 million or Employees: 75 ≤ 200	Medium	Sales turnover: RM3 million ≤ RM20 million or Employees: 30 ≤ 75
Sales turnover: RM300,000 < RM15 million or Employees: 5 < 75	Small	Sales turnover: RM300,000 < RM3 million or Employees: 5 < 30
Sales turnover: < RM300,000 or Employees: <5	Micro	Sales turnover: < RM300,000 or Employees: <5

Source: SME Corp. Malaysia.

In terms of SME establishment, approximately 76.5% are micro enterprises, 21.2% are small businesses, and only 2.3% are medium enterprises (see Figure 6).

FIGURE 6
SME ESTABLISHMENTS IN MALAYSIA.

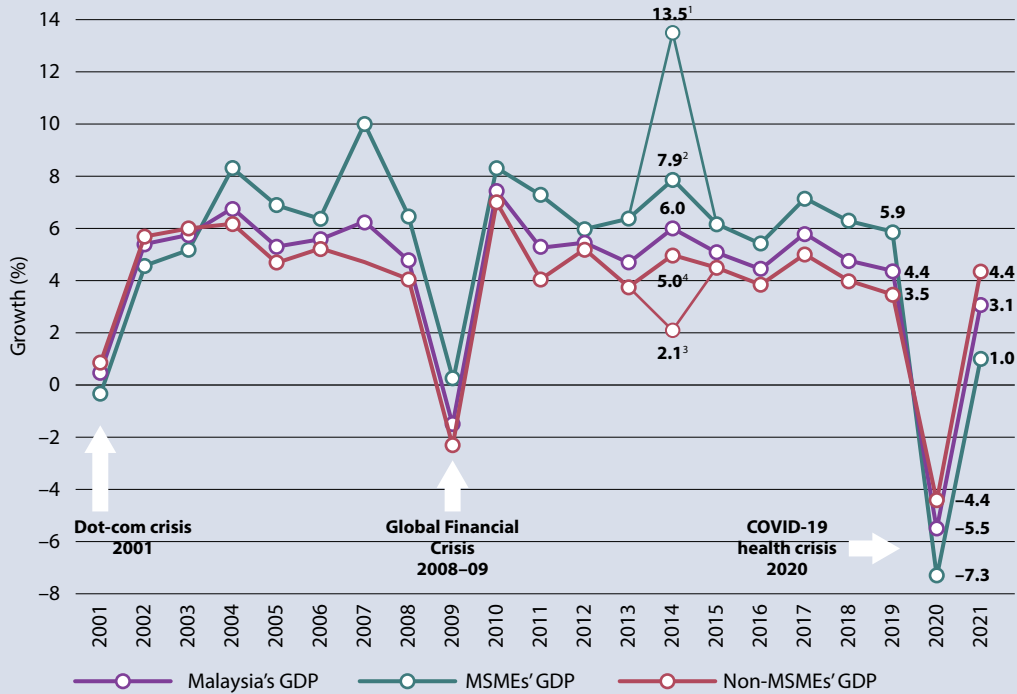


Source: SME Corp. Malaysia (2020).

Based on the information provided, Malaysia’s MSMEs experienced a GDP growth of 1.0% in 2021, which was slower than Malaysia’s overall GDP growth. This trend has been observed since 2020, according to the time series data of Malaysia’s GDP and MSMEs (see Figure 7).

FIGURE 7

PERCENTAGE CHANGE IN GDP OF MALAYSIA, MSMEs, AND NON-MSMEs, 2001–21 AT CONSTANT PRICES.



Notes: ¹ Growth of MSMEs' GDP based on 2014 new MSMEs' GDP definition versus 2013 old MSMEs' GDP definition
² Growth of MSMEs' GDP based on 2014 new MSMEs' GDP definition versus 2013 new MSMEs' GDP definition
³ Growth of non-MSMEs' GDP based on 2014 new MSMEs' GDP definition versus 2013 old MSMEs' GDP definition
⁴ Growth of non-MSMEs' GDP based on 2014 new MSMEs' GDP definition versus 2013 new MSMEs' GDP definition

According to the information presented in Figure 8, the contribution of MSMEs to the GDP declined to 37.4% in 2021. In terms of value added, MSMEs contributed RM518.1 billion to the GDP, compared with RM512.9 billion (contribution of 38.1%) in the previous year.

Figure 9 shows that the value added for MSMEs in the manufacturing sector experienced a notable rebound, with an increase of 8.5%. This positive performance comes after a decline of 2.9% in the previous year.

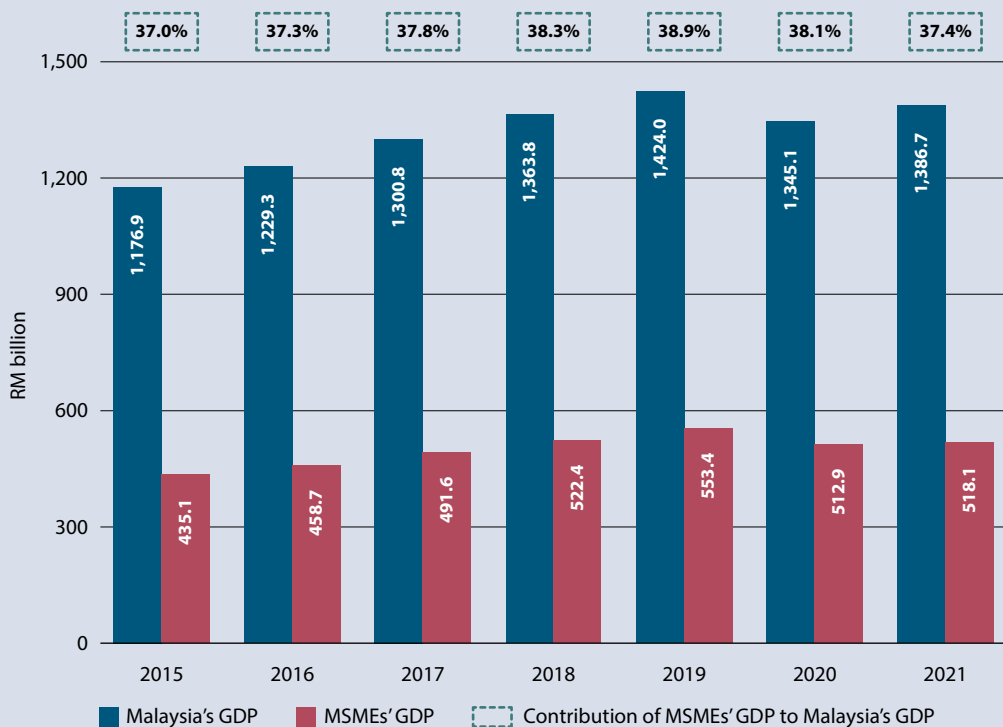
The rebound in the manufacturing sector's value added can be attributed to growth across all subsectors. Particularly impressive is the substantial growth in the petroleum, chemicals, rubber, and plastic products subsector, which surged by 14.4%. This subsector had only grown by 3.2% in the preceding year.

Furthermore, the food, beverages, and tobacco subsector also demonstrated a strengthened performance, with a growth rate of 4.6%, exceeding the 1.9% growth seen in the previous year.

The positive growth rates witnessed in different subsectors within the manufacturing sector contributed to the overall rebound and improved the value added of MSMEs in this sector.

FIGURE 8

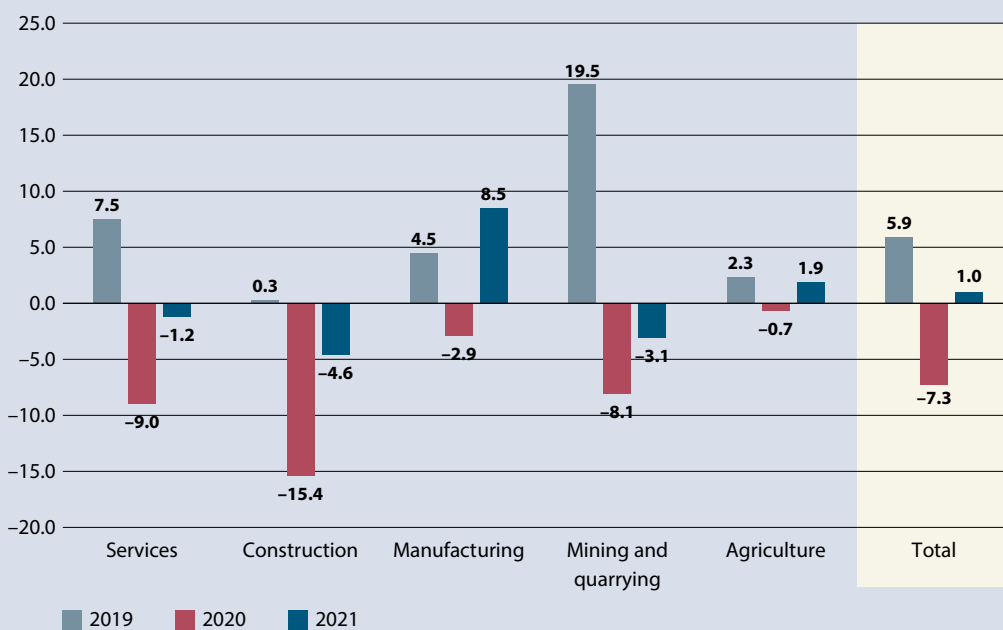
MALAYSIA'S GDP AND CONTRIBUTION OF MSMEs DURING 2001–21 AT CONSTANT PRICES.



Source: Department of Statistics Malaysia.

FIGURE 9

MSMEs' GROWTH IN VALUE ADDED BY SECTOR DURING 2019–21 AT CONSTANT 2015 PRICES.



Source: Department of Statistics Malaysia.

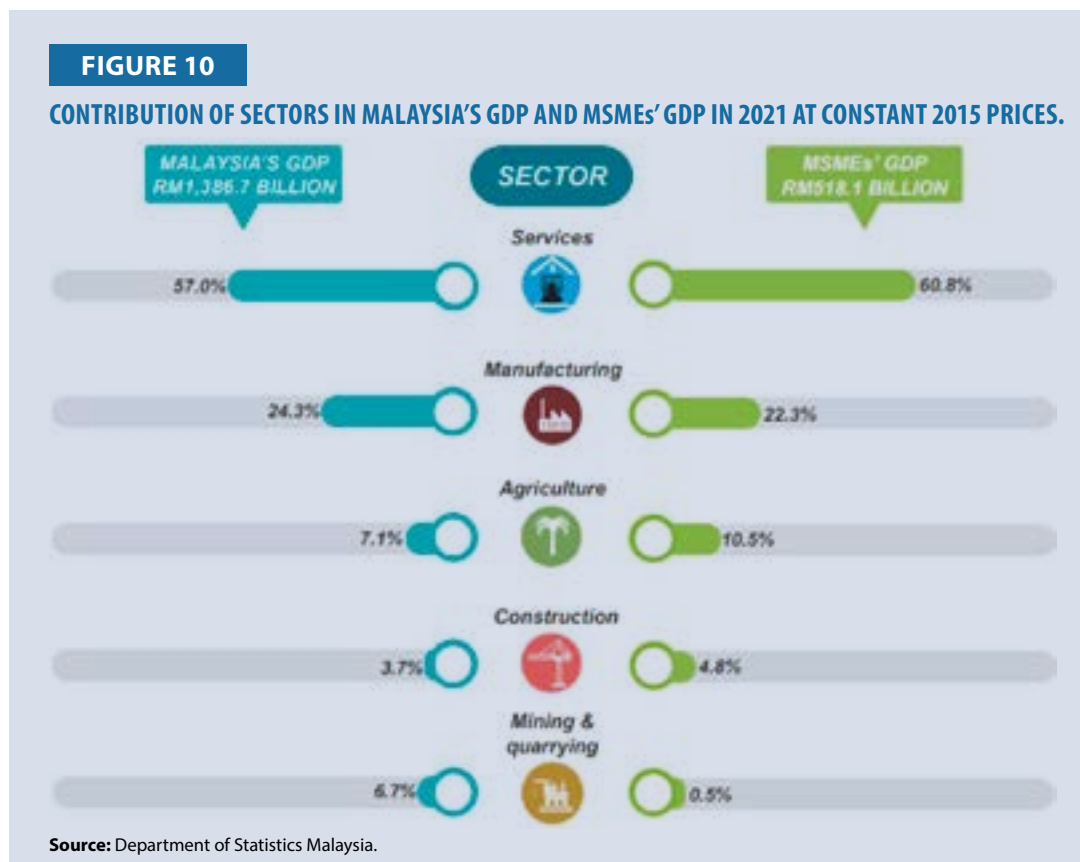
Likewise, the value added of MSMEs in the agriculture sector expanded by 1.9%, showing improvement compared with the negative growth (−0.7%) in the previous year. This growth was supported by the rubber, oil palm, livestock, and other agriculture subsector, which flourished with a growth rate of 2.5% in 2021, surpassing the 1.0% growth in 2020. However, the fishing subsector continued to experience negative growth in 2021.

In contrast, the value added of MSMEs in the mining and quarrying sector contracted by 3.1%, a smaller decline compared with the 8.1% contraction in the previous year. Similarly, the construction sector narrowed its decline to 4.6%, showing improvement from the negative growth of 15.4% in the preceding year.

Moreover, MSMEs in the services sector recorded a smaller decrease of 1.2%, marking a notable improvement from the negative growth (−9.0%) in the previous year. The decline in the services sector was influenced by a 5.8% drop in the finance, insurance, real estate, and business services subsector, although it was offset by the rebound in the wholesale and retail trade, food and beverages, and accommodation subsector, which grew by 0.5% after experiencing a decline (−7.7%) in 2020. Additionally, the transportation and storage and information and communication subsector registered expansion with a growth rate of 2.9%, recovering from a decline of 11.2% in the previous year.

Distribution by Types of Economic Activity

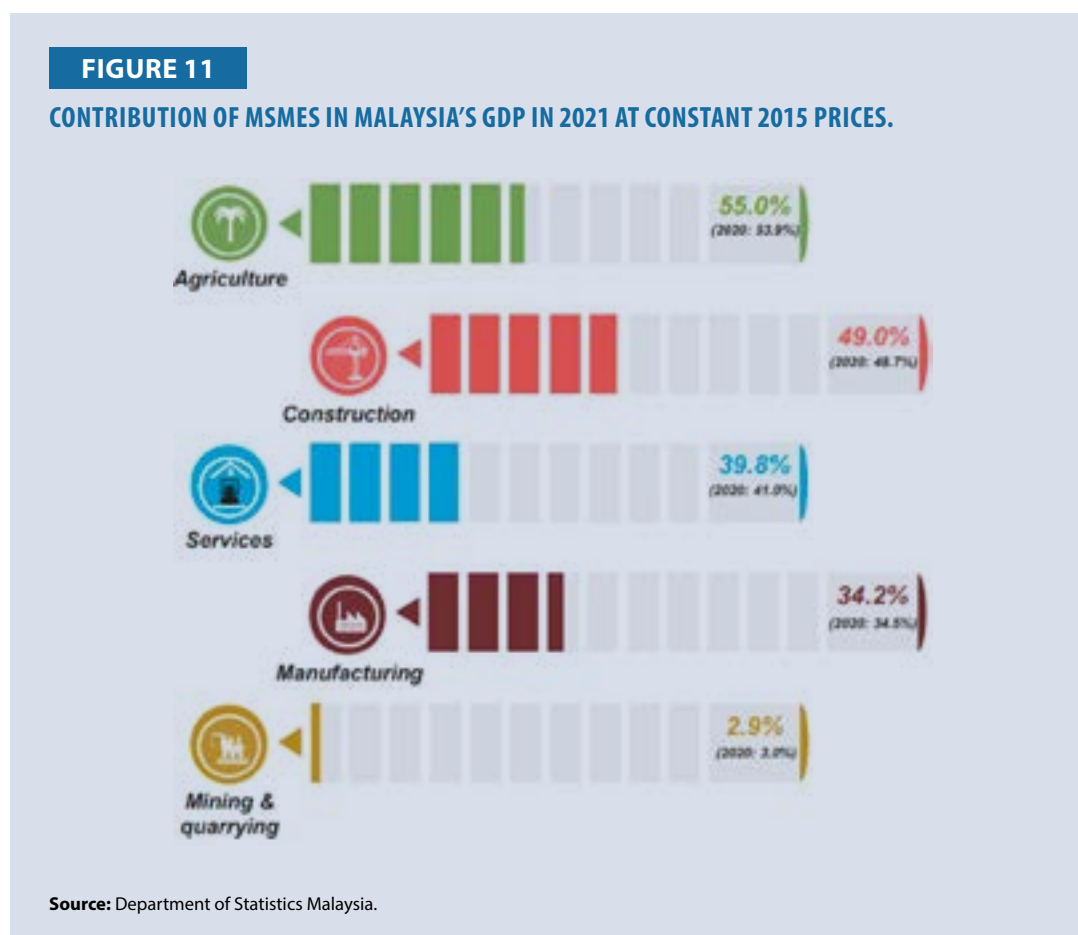
The services sector remained the primary contributor to MSMEs’ activities, constituting 60.8%. The manufacturing sector contributed 22.3% to MSMEs’ GDP (see Figure 10). The agriculture sector accounted for 10.5% of MSMEs’ GDP. In comparison, the construction sector contributed 4.8%, while the mining and quarrying sector contributed 0.5%.



Contribution by Types of Economic Activity

In terms of MSMEs' GDP contribution by economic activity, the services, manufacturing, and mining and quarrying sectors experienced declines in their shares in 2021. However, this decline was partially offset by growths in shares of agriculture and construction sectors.

The agriculture sector took the lead in MSMEs' GDP contribution, with a share of 55.0%, which increased from 53.9% in 2020. This growth can be attributed to the subsector comprising rubber, oil palm, livestock, and other agriculture, as depicted in Figure 11. The agriculture sector's increased share indicates its growing importance in MSMEs' overall economic output.



The share of MSMEs' GDP in the services sector decreased to 39.8% from 41.0% in the preceding year. The subsector comprising wholesale and retail trade, food and beverage, and accommodation dominated the services sector, indicating its significant contribution to MSMEs' overall economic output.

On the other hand, the manufacturing sector accounted for a share of 34.2% of MSMEs' GDP, slightly lower than 34.5% recorded in 2020. This sector's contribution to MSMEs' GDP was supported by the subsector comprising petroleum, chemicals, rubber, and plastic products.

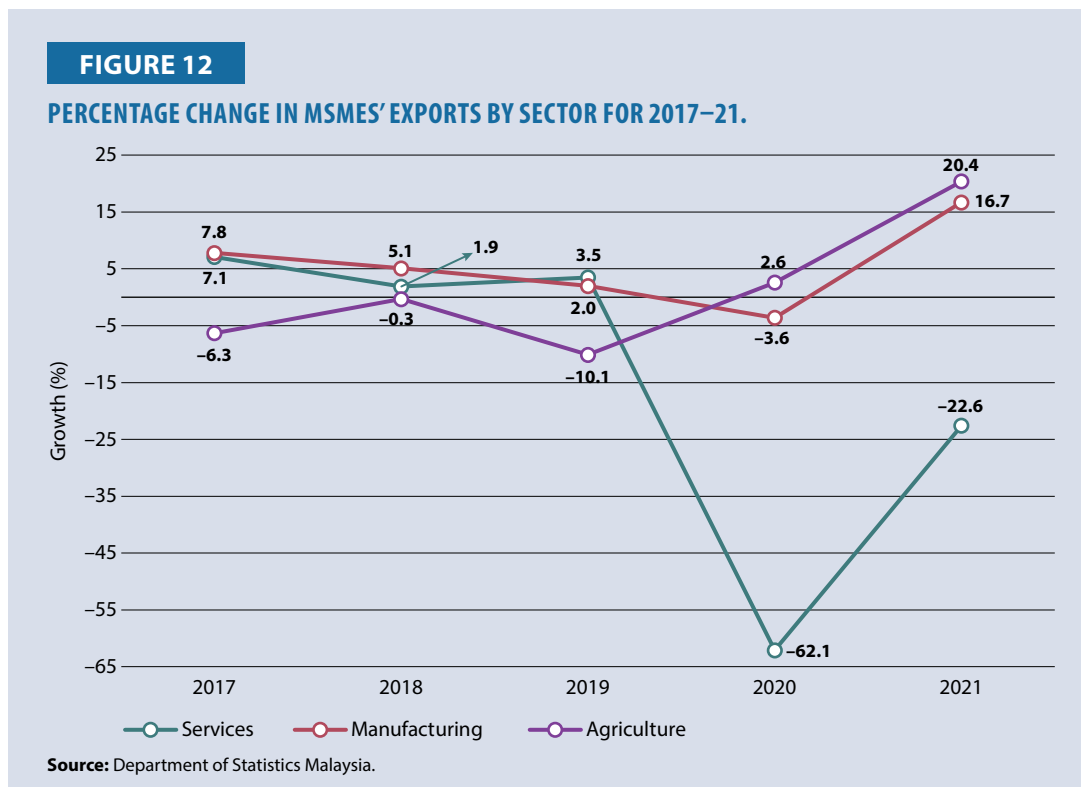
In the mining and quarrying sector, MSMEs' GDP recorded a share of 2.9%, slightly lower than that in the previous year (3.0%). Although this sector's contribution decreased slightly, it still contributed a portion to MSMEs' overall GDP.

Performance of MSMEs' Exports in 2021

In 2021, exports of MSMEs amounted to RM124.3 billion, marking a 5.4% increase compared with the significant decline of 33.1% in 2020. This growth was primarily driven by the manufacturing sector, which recorded a growth rate of 16.7%, and the agriculture sector, which saw a growth rate of 20.4%, as indicated in Figure 12.

The manufacturing sector dominated MSMEs' exports, contributing 76.6% to the total in 2021. This sector's export performance was stimulated by miscellaneous manufactured articles, manufactured goods, and chemicals. The main export destinations for the manufacturing sector were Singapore (18.8%); PR China (16.5%); and the USA (10.3%).

On the other hand, MSMEs' exports in the agriculture sector reached RM2.8 billion, representing a share of 2.3% of the total MSME exports in 2021. The agriculture sector experienced a growth rate of 20.4%, driven by increased export of fruits, poultry, and vegetables. Notably, exports of durian (including fresh, frozen, pulp, and paste) by MSMEs saw a significant increase of 73.5% in 2021, reaching RM998.1 million, compared with RM575.4 million in 2020. The main export destinations for durian in 2021 were PR China (73.8%); Singapore (7.5%); and Hong Kong (4.8%).



However, the services sector experienced a decline in MSMEs' exports, which was RM26.2 billion in 2021 compared with RM33.9 billion in 2020. This decline was primarily due to the impact on travel activities. The contribution of MSMEs' exports to total exports in 2021 was 11.7%, including contributions of manufacturing (9.0%); services (2.5%); and agriculture (0.3%).

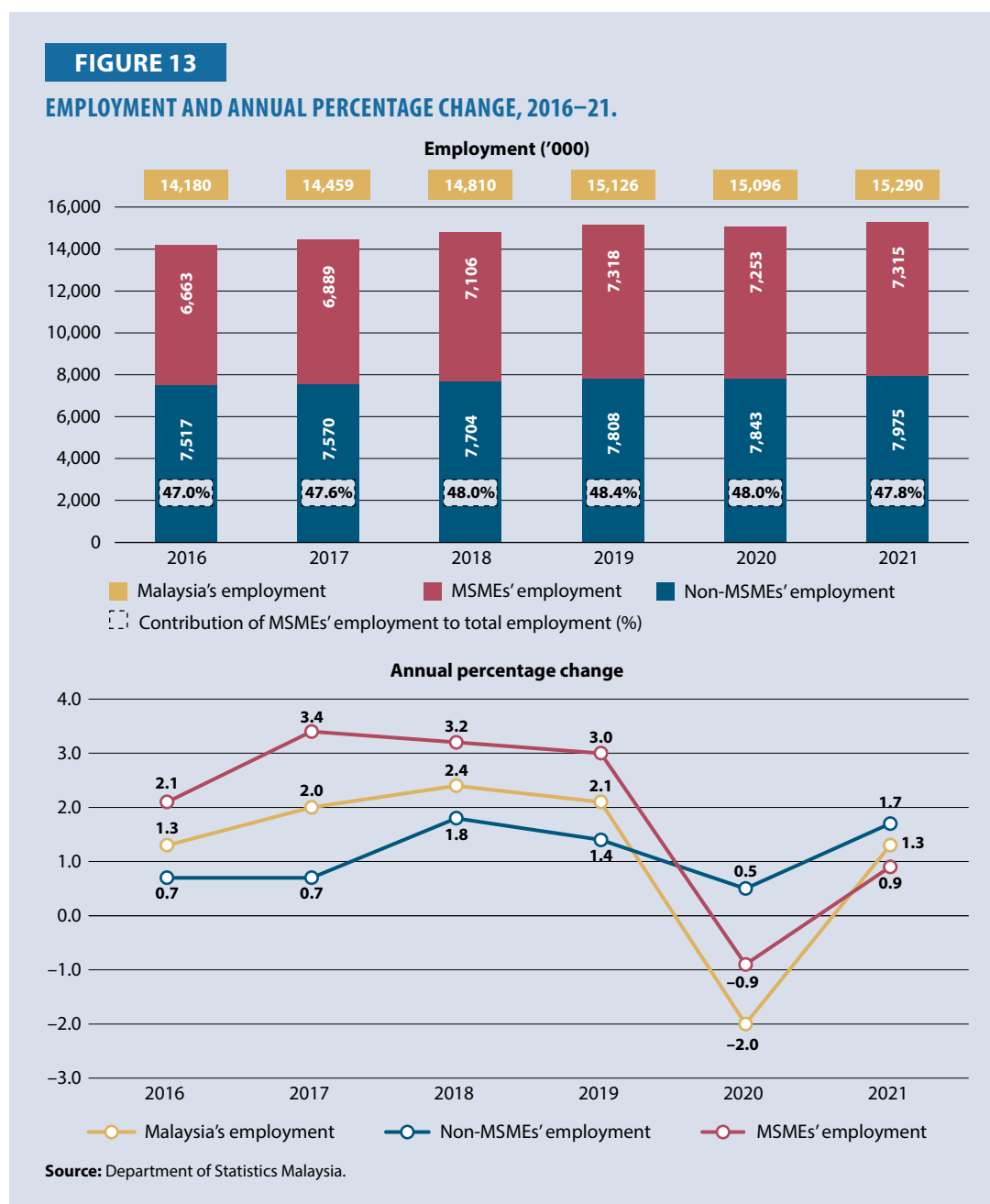
Performance of MSMEs' Employment in 2021

In 2021, employment in MSMEs increased by 0.9%, which added 62,000 individuals, totaling 7.32 million persons. However, this growth rate was slower than the national employment growth rate

of 1.3% as well as the employment growth in non-MSMEs, which was 1.7%. This indicates a comparatively slower recovery in employment for MSMEs, likely due to prolonged effects of the public health crisis.

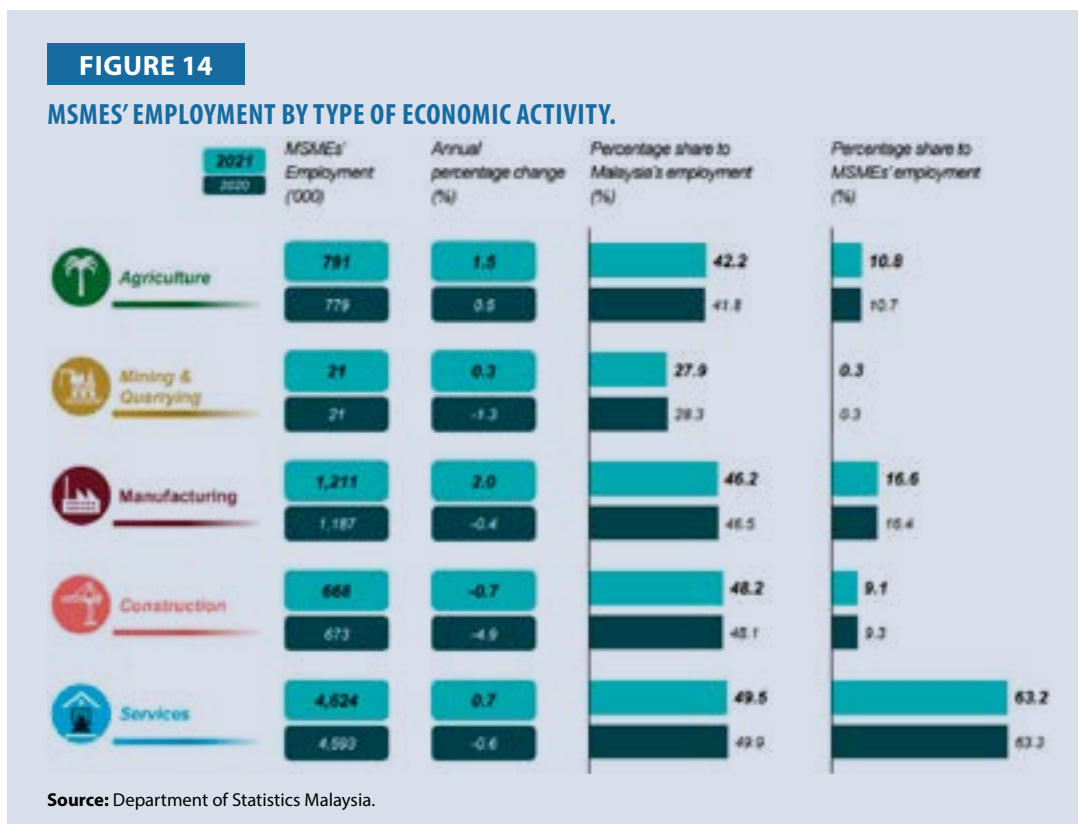
Additionally, the share of MSMEs' employment decreased by 0.2 percentage points in 2021, from 48.0% to 47.8%, as depicted in Figure 13. This indicates a slightly reduced contribution of MSMEs to the overall employment landscape.

The slower growth in MSMEs' employment and the slight decline in their share of total employment highlight the challenges faced by MSMEs in recovering from the impact of the public health crisis. Larger businesses may have had a relatively faster recovery, while MSMEs experienced a slower pace of employment growth.



MSMEs’ Employment by Types of Economic Activity in 2021

In 2021, MSMEs’ employment in the agriculture sector increased by 1.5%, reaching 791,000 persons (see Figure 14). This contributed 42.2% to the overall employment in the sector, a slight increase from 41.8% in 2020. MSMEs’ employment in the mining and quarrying sector rebounded by 0.3%, with 21,000 workers in 2021 accounting for 27.9% of the sector’s employment. In the manufacturing sector, there were 1.21 million MSME workers, comprising 46.2% of the total employment. Although the sector’s share declined, employment increased by 2.0%, driven by growth in the food, beverages, and tobacco subsector. MSMEs’ employment in the construction sector accounted for 48.2% of the sector’s employment, with 668,000 workers in 2021 marking a slight improvement. In the services sector, MSMEs’ employment reached 4.62 million persons, contributing 49.5% to the sector’s employment, with the growth driven by wholesale and retail trade, food and beverage, and accommodation, as well as other services. MSMEs’ employment was primarily concentrated in the services sector (63.2%), followed by manufacturing (16.6%); agriculture (10.8%); construction (9.1%); and mining and quarrying (0.3%).



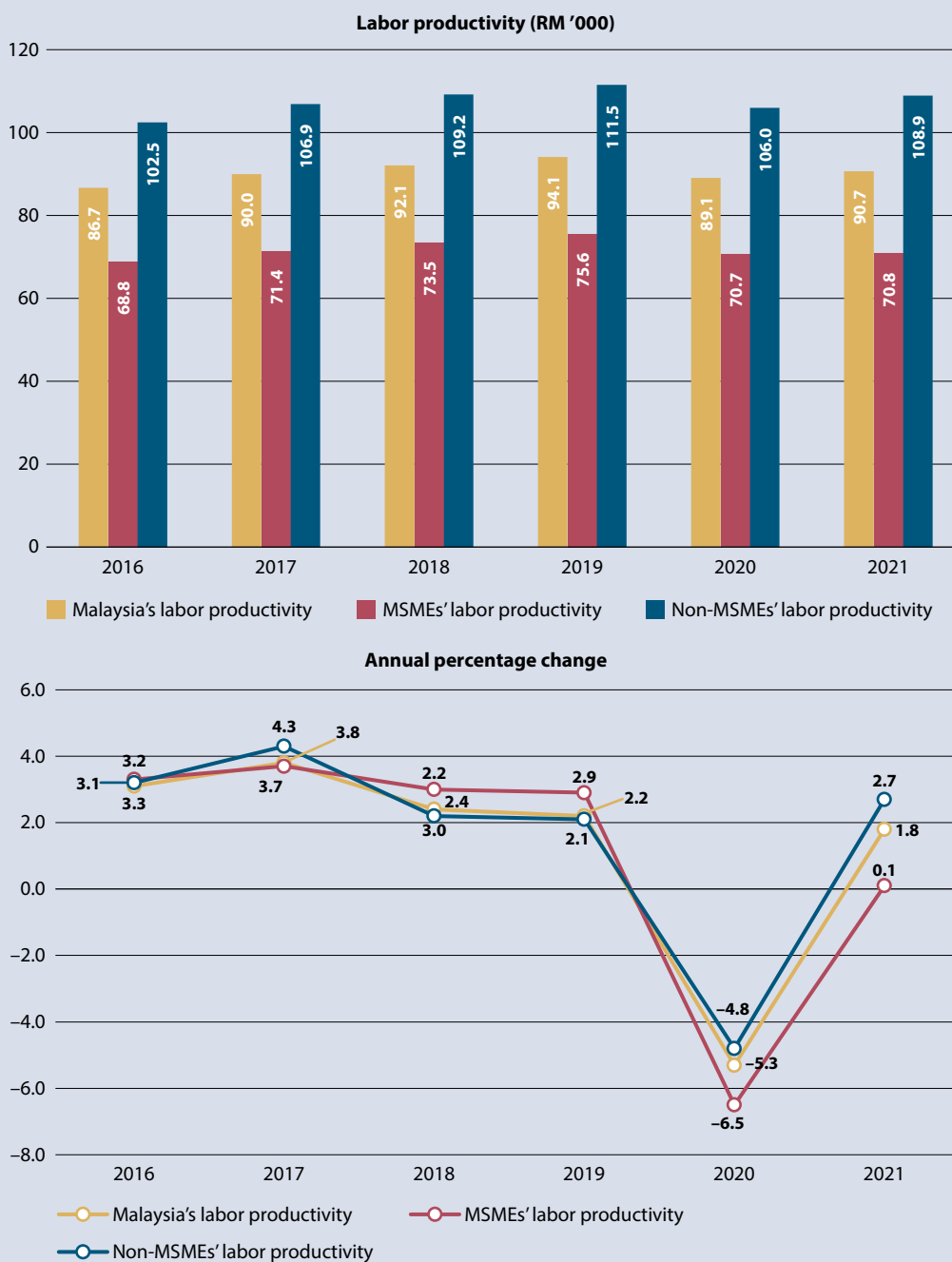
MSMEs’ Labor Productivity in 2021

In 2021, Malaysia’s MSMEs experienced a marginal growth of 0.1% in labor productivity, measured by value added per employment. This increase brought the productivity value to RM70,827 per person, slightly higher than the RM70,723 per person recorded in 2020. However, MSMEs’ productivity remained lower than the pre-pandemic level of 2019 (see Figure 15).

When compared with non-MSMEs, the growth rate of MSMEs’ labor productivity was slower. Non-MSMEs saw a rebound in productivity by 2.7% in 2021, compared with a decline of 4.8% in 2020 as shown in Figure 2.9. The value added per employment for MSMEs was consistently lower than both non-MSMEs’ labor productivity (RM108,921 per person) and the national average (RM90,697 per person).

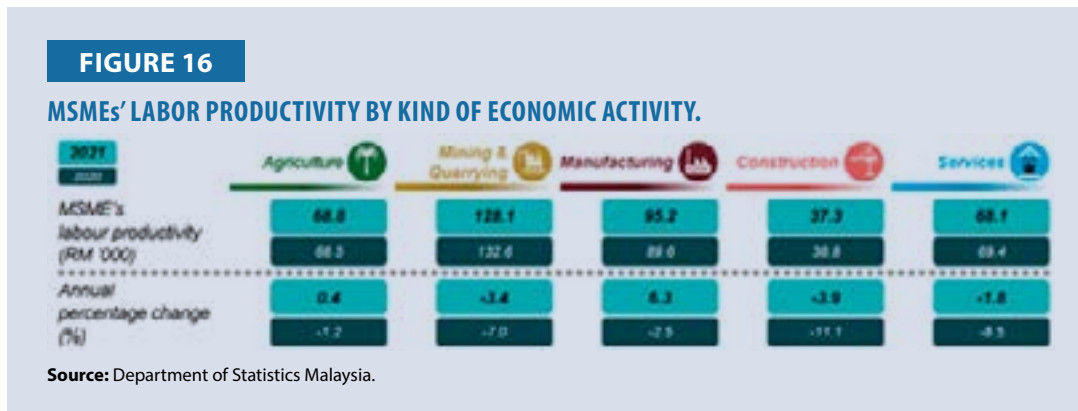
FIGURE 15

MALAYSIA'S LABOR PRODUCTIVITY AND GROWTH.



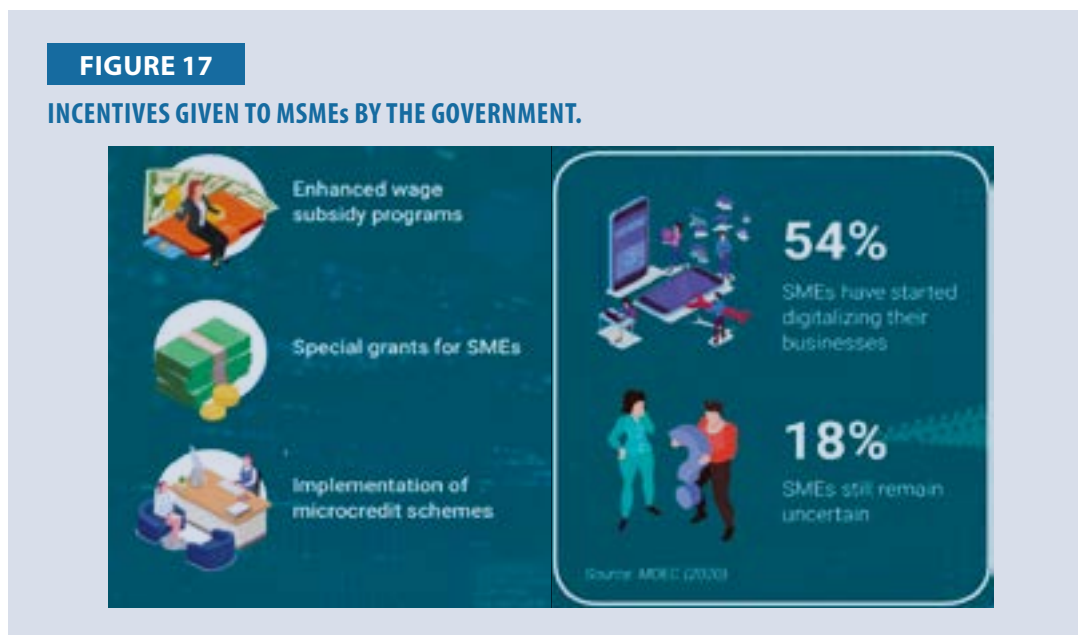
When analyzing MSMEs' labor productivity by economic activity, the agriculture and manufacturing sectors recorded increases in productivity in 2021, with growth rates of 0.4% and 6.3%, respectively. On the other hand, MSMEs' labor productivity in mining and quarrying (-223.4%); construction (-223.9%); and services (-221.8%) sectors continued to decline, albeit at a slower rate compared with the previous year (see Figure 16).

During the peak of the COVID-19 pandemic, the Malaysian government imposed lockdown measures on most sectors, excluding essential industries such as agriculture (food production) and manufacturing (production of medical equipment and rubber gloves).



Government Intervention

To support MSMEs during the economic downturn caused by the COVID-19 pandemic, the Malaysian government implemented various economic stimulus packages (see Figure 17). One such package was the *Perlindungan Ekonomi dan Rakyat Malaysia (PERMAI)* package, which aimed to provide assistance and incentives to MSMEs. The incentives are discussed next.



Malaysia Government's Assistance to Businesses during the Pandemic

In March 2020, Prime Minister Tan Sri Muhyiddin Yassin unveiled the first financial support package named *Prihatin*, valued at RM250 billion, to address the crisis. However, as the pandemic dragged on, this was followed by seven more economic packages: *Prihatin Plus* (RM10 billion); *Penjana* (RM35 billion); *Kita Prihatin* (RM10 billion); *Permai* (RM15 billion); *Pemerksa* (RM20 billion); *Pemerksa+* (RM40 billion); and *Pemulihan* (RM150 billion). Collectively, the eight economic packages were worth RM530 billion.

While this was a big number, many complained that they did not “feel it” or had benefitted much from it. Many of them compared these schemes with those in the USA, the UK, or Singapore, which were far more generous. Cash handouts in Malaysia were estimated to be around RM4,400 for those in the B40 group (B40 represents the bottom-tier households that have an income of below RM4,850).

Despite the large RM530 billion size of the eight packages, direct fiscal injections such as cash handouts and wage subsidies were estimated to total just RM83 billion, or 16% of the total packages. The remaining RM447 billion comprised RM50 billion in *Danajamin* loan guarantees, RM180 billion for the two loan moratoriums, RM170 billion for Employees Provident Fund (EPF) withdrawals, and RM47 billion for other initiatives.

What this suggests is that the government was directly funding only RM83 billion of the total package through fiscal injections and guaranteeing another RM50 billion of loans through *Danajamin*. Thus, Malaysians were effectively self-financing RM350 billion or 66% of the package themselves through loan moratoriums and EPF withdrawals. This was in contrast with many of the richer and more developed countries, where direct fiscal injections were very large.

This was followed by targeted loan moratoriums for affected borrowers, and a further six-month loan moratorium under the *Pemulih* program for all individual borrowers and micro enterprises. This loan moratorium was the first government-mandated, country-wide, all-encompassing loan moratorium anywhere in the world, in response to the COVID-19 crisis. The moratorium effectively restructured the entire debt portfolio of all individuals and businesses in Malaysia, extending their obligations and providing a lifeline for individuals and businesses by providing a much needed liquidity to face the unprecedented global crisis.

Liquidity and cash flow are the critical lifelines to help one ride through any crisis. Some may argue that loans were only deferred and would still need to be repaid and that they did not address the loss in income. Ultimately though, when it comes down to the crunch, liquidity and cashflow matter the most. They help buy the much needed time to address the balance sheet and income effects of any major crisis.

Impact of Cashflow on MSMEs

MSMEs are vital to Malaysia’s economy, contributing significantly to both GDP and employment. According to the Department of Statistics, in 2019, SMEs accounted for 38.9% of the GDP and 48.4% of the total employment. Therefore, it is crucial to provide support to MSMEs.

Notwithstanding, SMEs expressed concerns about the relatively small amounts of one-off grants provided to the sector. These grants typically ranged from RM1,000 to RM3,000 per instance, resulting in a total of around RM7,000 for most SMEs and RM10,000 for those in adversely affected sectors.

The government has primarily supported MSMEs through two key measures: the loan moratorium and wage subsidies. Under the *Prihatin* package, all SMEs received an automatic six-month loan moratorium, while micro enterprises enjoyed an additional six months under the *Pemulih* package. The adversely affected businesses were also given the option to restructure their loans or defer payments through targeted schemes.

The government’s wage subsidy program, aimed at preserving employment and preventing layoffs, has had a significant impact on SMEs. The program caters to a large number of employees, with up to 500 employees per SME for an extended period. SMEs generally need to demonstrate at least a 30% decline

in income to qualify for the wage subsidy. The subsidy pays the SMEs RM600 per month for each employee earning below RM4,000 per month, with a maximum of 500 employees per SME.

In the initial *Prihatin* scheme, the wage subsidy was as high as RM1,200 per person, while the RM4,000 salary cap was removed under the *Pemulihan* package. In theory, an SME with 500 employees could receive a subsidy of RM300,000 per month for 13 months.

While SMEs have expressed dissatisfaction with the grant amounts, they have benefited from the loan moratorium and wage subsidy programs. These initiatives provided crucial support to SMEs by easing their financial burdens and preserving employment during the challenging times.

Case Study 1: TGSK Kuala Lumpur

TGSK Kuala Lumpur is a brand that operates under Iseefood Resources and was established in 2020. The name TGSK originates from its snack named *Tempe Goreng Sambal Kicap* (fried soy cake with soy sauce), which the company has cherished since 1995. The concept for this brand came up during the pandemic when its plant nursery business was struggling. To revitalize the business, it decided to combine the nursery and food expertise and created a garden cafe that offered traditional and authentic local cuisine in a relaxed village atmosphere.

Since its inception, TGSK has gained recognition within the local community for its unique concept and quality food. The company has now diversified its offerings and expanded into other segments, including frozen food products, pastes, and dry products. This expansion allows it to reach a wider customer base and provide a range of convenient and flavored food options beyond the garden cafe.

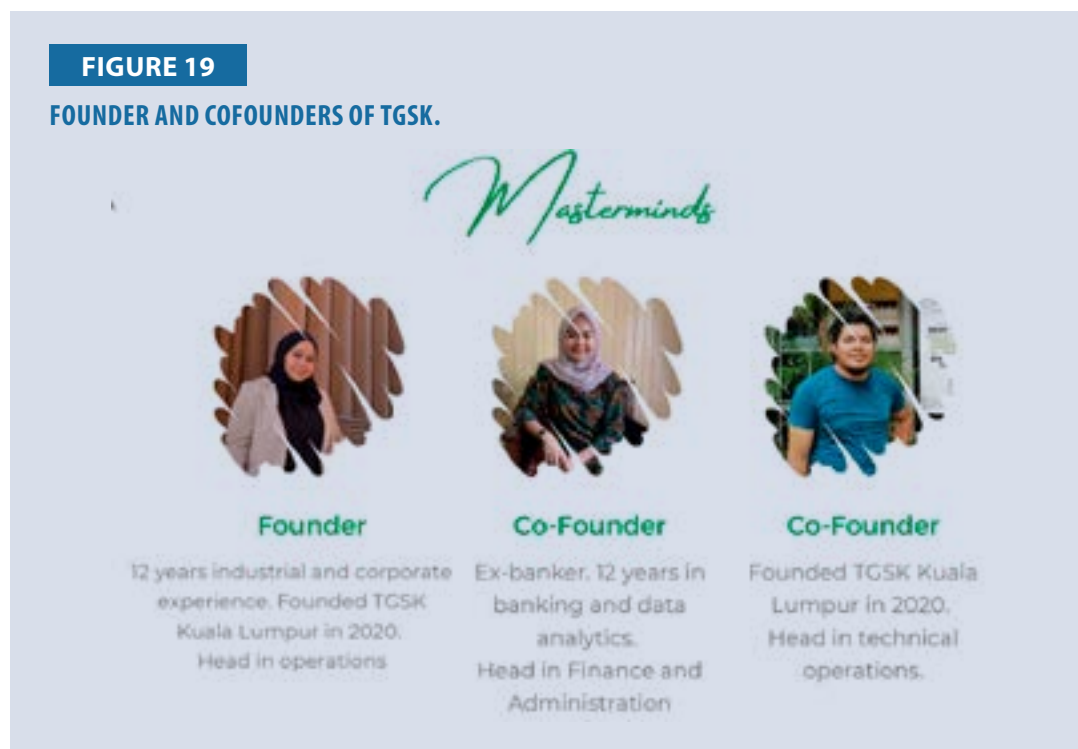
TGSK Kuala Lumpur has a clear mission and vision. The mission is to bring happiness to its customers by offering freshly made and affordable traditional and authentic Malaysian cuisines. It aims to be a leading food service brand in Asia, showcasing local and authentic Malaysian food. By prioritizing quality and staying true to the flavors of Malaysia, TGSK strives to provide a memorable dining experience that celebrates the country’s rich culinary heritage.

Signature Menu



Founder of the Company

TGSK was founded by Nurul Amiera Zailan, along with her family members, Nadira Abdul Rahim and Tuan Swaifulddin Tuan Mustapa (see Figure 19). Zailan took the role of the founder, while Rahim and Tuan Mustapa were cofounders. Being family members, they shared a common passion for food and a vision to create a successful and authentic Malaysian food brand. Together, they have worked toward building TGSK and establishing its presence in the local food industry.



Establishment of TGSK Kuala Lumpur

TGSK was founded in February 2020, just before the COVID-19 pandemic. Shortly after its establishment, in March 2020, the Malaysian government implemented the movement control order, which imposed a lockdown and posed significant challenges to the food and beverages (F&B) industry.

During the initial lockdown, most businesses, except those providing essential services, were required to cease operations. Essential services included areas such as water, electricity, telecommunications, transportation, healthcare, and food supply.

The F&B industry faced numerous difficulties during this time. The traditional physical nature of business dealings was disrupted, and the food supply chain experienced disruptions due to restricted operating hours, logistical challenges, and communication issues with suppliers, buyers, and customers. The pandemic caused a significant impact on the industry, leading to revenue losses, additional expenses, and a bleak economic outlook. Many businesses in the F&B sector struggled financially to sustain their operations during and after the COVID-19 pandemic.

Despite these challenges, TGSK Kuala Lumpur responded swiftly to the situation and implemented several initiatives to navigate through the difficult times (see Figure 20). This case study will analyze the specific actions taken by TGSK Kuala Lumpur to survive and adapt during the challenging period brought about by the COVID-19 pandemic.

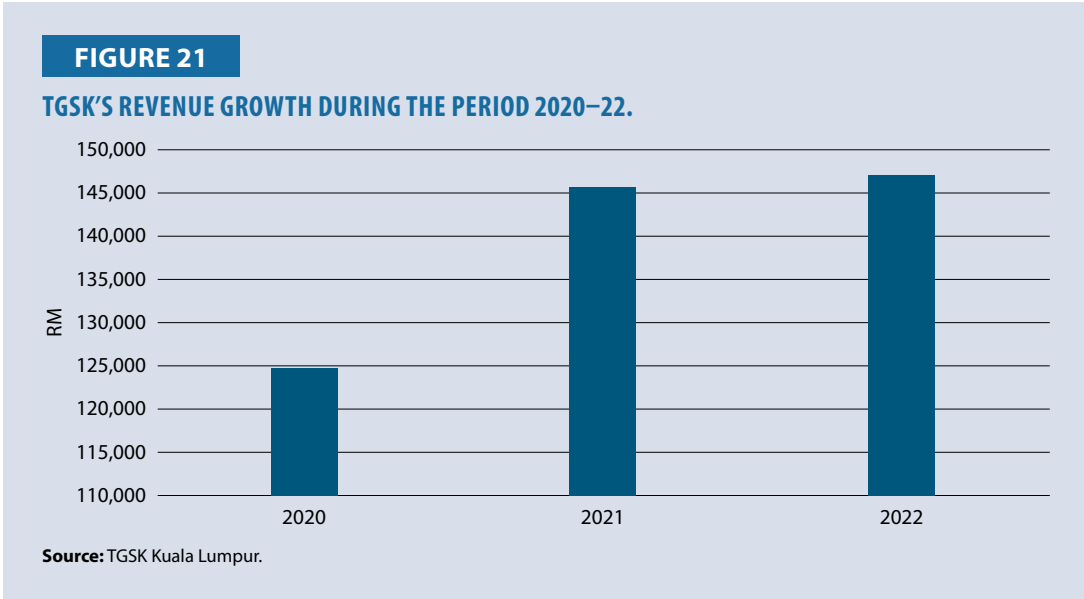


Sales and Revenues

TGSK Kuala Lumpur began its journey with a modest capital of RM500 and started operating on the streets. Despite the challenges posed by the pandemic, the business managed to survive and grow organically through various sales strategies and a zero-cost marketing approach.

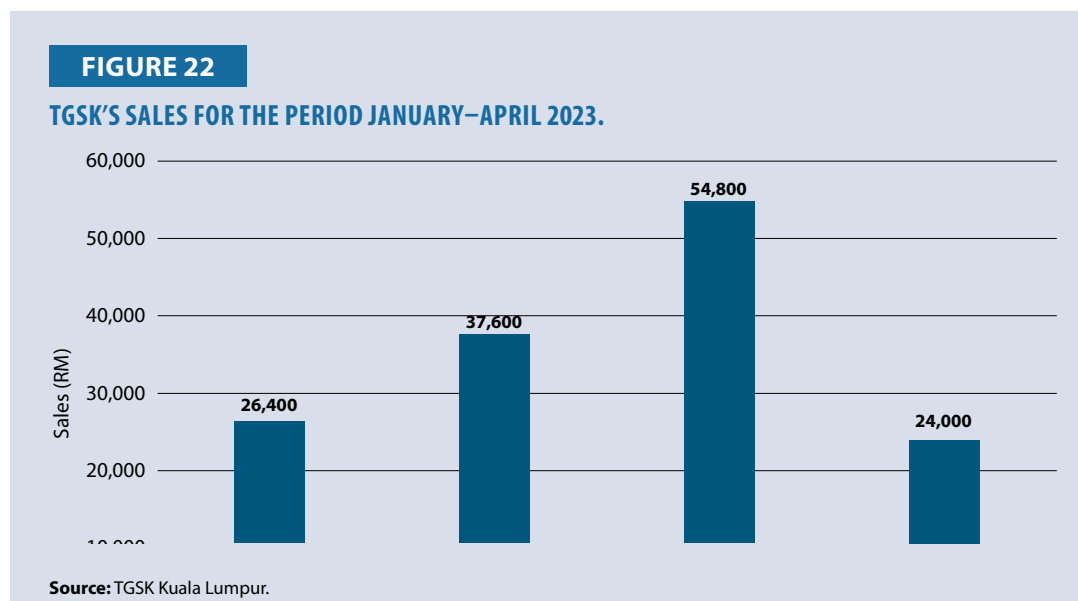
By implementing multiple sales strategies, TGSK was able to reach customers and generate revenue. These strategies included leveraging social media platforms, word-of-mouth marketing, online delivery services, collaborations with other businesses, and participating in local community events. Through these initiatives, TGSK effectively reached its target audience and attracted customers without incurring significant marketing costs.

The ability to adapt and be resourceful during challenging times allowed TGSK to sustain its business operations and thrive. By focusing on cost-effective marketing techniques and leveraging existing networks and community support, TGSK was able to continue growing despite the limitations imposed by the pandemic (see Figure 21).



The resourcefulness and agility demonstrated by TGSK Kuala Lumpur serve as a testament to the entrepreneurial spirit and resilience of the business in navigating the uncertain and challenging business landscape during the pandemic.

Figure 22 displays the sales data for TGSK Kuala Lumpur during the first quarter of 2023 (January to March). The purpose of the report is to analyze this sales data and offer valuable insights into the company's performance over this period. The graph in Figure 22 illustrates the monthly total sales revenue for each month of the quarter, providing a visual representation of the sales trends during this timeframe.



During the first quarter of 2023, TGSK Kuala Lumpur achieved a total revenue of RM142,800. The strongest month for sales was March, generating RM54,800, while January and February saw revenues of RM26,400 and RM37,600, respectively.

The significant increase in sales revenue from February to March indicates the effectiveness of TGSK Kuala Lumpur's sales strategy. However, the sales revenue declined in April due to factors such as limited production and reduced crowd at Ramadhan Bazar.

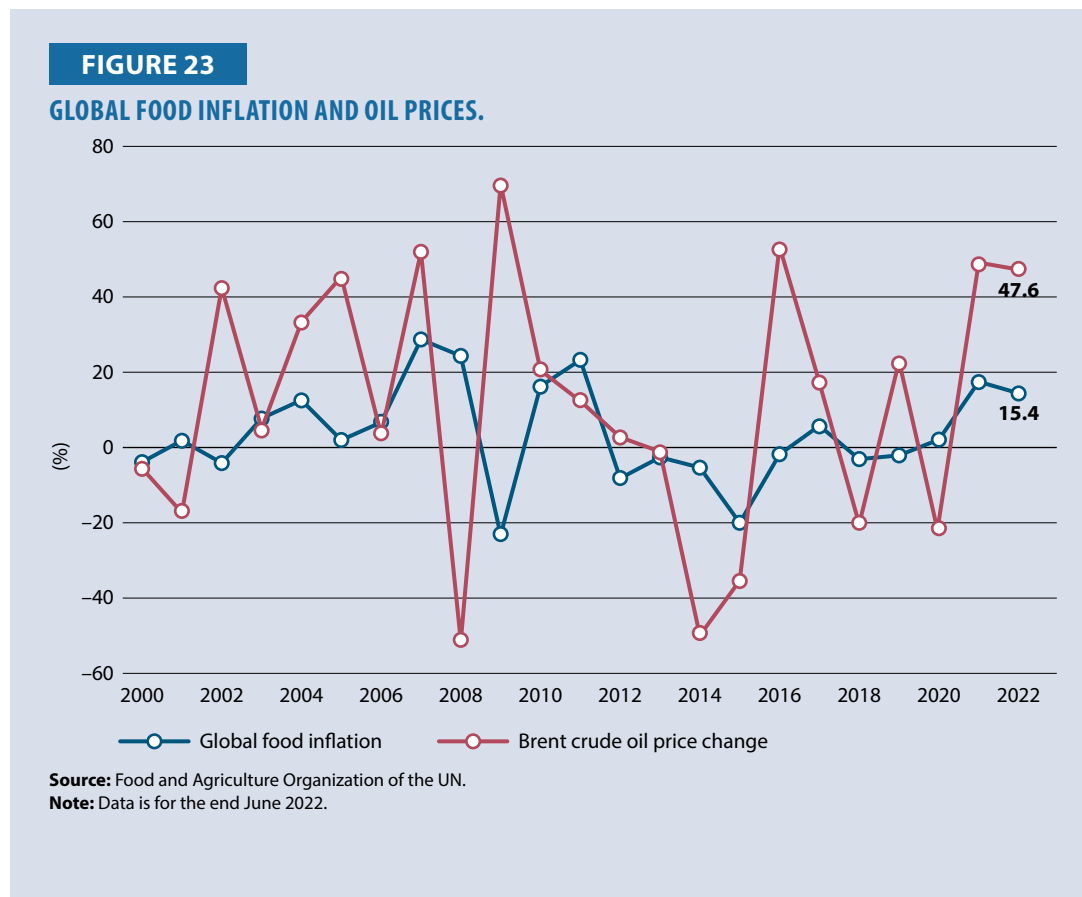
Overall, TGSK Kuala Lumpur's sales data for the first quarter of 2023 reflected positive performance and positioned the company well to meet its sales targets for the year.

The surge in sales revenue in March may be attributed to various factors, including heightened marketing efforts, particularly through social media platforms, where local food reviewers featured TGSK Kuala Lumpur's offerings. Additionally, the introduction of new products and seasonal demand for TGSK Kuala Lumpur's offerings likely contributed to the increase in sales.

It is important to acknowledge that despite the growth in sales, TGSK Kuala Lumpur encountered challenges associated with fluctuating prices of raw materials, a common issue in the food industry. Factors such as the impact of COVID-19 and disruptions in the global supply chain due to the Russia–Ukraine conflict have contributed to food price inflation. For instance, chicken prices in Malaysia experienced 17% year-on-year increase due to rising costs of chicken feed resulting from the conflict.

Food inflation has a more pronounced effect on developing countries, given their lower income levels and higher proportion of household spending allocated to food. In emerging Asian economies, food accounted for 25% of consumer spending in 2021, compared with approximately 17% in advanced economies. Nonetheless, rising food prices affect advanced economies as well, although their higher income levels provide some level of resilience (see Figure 23).

In summary, TGSK Kuala Lumpur demonstrated a promising sales performance in the first quarter of 2023. However, challenges related to food price inflation and raw material costs highlighted the ongoing complexities faced by the food industry.



Business Challenges

TGSK Kuala Lumpur, as a restaurant specializing in authentic and traditional Malaysian cuisine, encounters several challenges within the competitive F&B industry. These challenges include:

- (1) **High competition:** The Kuala Lumpur food scene boasts of numerous restaurants offering traditional Malaysian cuisine. To stand out, TGSK Kuala Lumpur must differentiate itself from competitors through unique flavors, exceptional service, and an inviting dining experience.
- (2) **Changing consumer preferences:** Consumer tastes and preferences for food are dynamic and evolve over time. TGSK Kuala Lumpur must stay abreast of these changes to cater to customer demands, adapt its menu offerings, and introduce innovative concepts to appeal to a diverse customer base.

- (3) **Cost of ingredients:** Maintaining the authenticity of traditional Malaysian cuisine often necessitates sourcing high-quality authentic ingredients. However, these ingredients can be costly, impacting the restaurant's profitability. TGSK Kuala Lumpur must strike a balance between quality and cost-efficiency to ensure a sustainable business model.
- (4) **Labor costs:** The F&B industry typically incurs significant labor costs. TGSK Kuala Lumpur must carefully manage its workforce to ensure efficient operations while also providing excellent service. Balancing staffing needs and costs is crucial to maintaining profitability.
- (5) **Digital marketing:** In today's digital age, online presence and reputation management are paramount. Customer reviews and feedback on social media and review sites can greatly influence a restaurant's reputation. TGSK Kuala Lumpur must actively manage its digital marketing efforts, engage with customers online, and promptly respond to feedback to maintain a positive image.

Despite the challenges, TGSK Kuala Lumpur remains committed to delivering high-quality, authentic Malaysian cuisine to its patrons. By continuously monitoring industry trends, enhancing its offerings, and providing exceptional customer experiences, TGSK Kuala Lumpur aims to retain its position as a leading restaurant in the competitive F&B landscape.

Continuous Improvement

TGSK Kuala Lumpur shares the belief that a sustainable business does not have to rely on hype and luxury. To stay relevant in the industry, TGSK Kuala Lumpur adopts the following approaches:

- (1) **Emphasize authenticity:** TGSK Kuala Lumpur differentiates itself by highlighting the use of authentic, high-quality ingredients in its traditional Malaysian dishes. This emphasis on authenticity attracts customers seeking an authentic dining experience.
- (2) **Maintain a unique ambiance:** The restaurant's ambiance and atmosphere play a crucial role in attracting and retaining customers. TGSK Kuala Lumpur consistently maintains a unique and welcoming ambiance, incorporating traditional Malaysian design elements and decor. The concept of a tropical garden with hanging plants and greenery creates a pleasant environment for customers to enjoy their meals.
- (3) **Innovate with new offerings:** While authenticity is important, TGSK Kuala Lumpur also embraces innovation by introducing new dishes and offerings. This approach keeps the menu fresh and exciting, enticing customers to return. The restaurant may experiment with seasonal ingredients to further enhance its offerings.
- (4) **Engage with customers:** With the prominence of social media and online reviews, TGSK Kuala Lumpur actively engages with customers and responds to their feedback. By prioritizing customer satisfaction, TGSK Kuala Lumpur builds a loyal customer base and cultivates a reputation as a customer-centric business.
- (5) **Collaborate with influencers:** TGSK Kuala Lumpur recognizes the value of collaborating with influencers and food bloggers. By inviting them to sample the menu and share their experiences on social media, the restaurant increases its visibility and attracts new customers.

By focusing on these strategies, TGSK Kuala Lumpur aims to remain relevant in the competitive F&B industry. Its commitment to authenticity, innovation, customer engagement, and influencer collaboration sets it apart and helps it establish a loyal customer base.

Digitalization in the Food and Beverage Industry

When the COVID-19 pandemic hit Malaysia, many businesses were caught off guard and faced unprecedented challenges. The nationwide lockdown implemented in March 2020 marked the beginning of a difficult journey for the F&B industry. However, businesses in the F&B sector, including TGSK Kuala Lumpur, showed resilience and adapted to the situation by embracing digitalization as a means to sustain their operations.

The pandemic prompted Malaysian F&B retailers, such as food suppliers, supermarkets, and restaurants, to shift their operations and embrace digital marketplaces. TGSK Kuala Lumpur and others in the industry maintained sales during the pandemic through adoption of food delivery services like Grab Food, Food Panda, Bekal, Lalamove, and others, especially during the Movement Control Order period.

Later also, although COVID-19 restrictions for eateries were gradually eased, dine-in sales had not fully recovered to pre-pandemic levels. Malaysian consumers had adjusted their lifestyles and become increasingly accustomed to takeaways and food deliveries. This shift in consumer behavior was crucial for F&B operators, prompting them to make informed decisions and develop strategies to cater to this new customer preference. Online food ordering experienced significant growth since the pandemic began, and consumers became more adept at scanning QR codes or accessing web links for their food orders.

According to Statista [3], revenue in the meal delivery segment was projected to reach USD519.20 million in 2023, with a CAGR of 12.58% for the period 2023–27. This is expected to result in a market volume of USD833.90 million by 2027. In the meal delivery segment, the number of users is projected to reach 13.04 million by 2027, with a user penetration rate of 30.5% in 2023 that is expected to rise to 37.2% by 2027. The average revenue per user (ARPU) is expected to be USD50.64.

Recognizing the significance of digital transformation, the Malaysia Digital Economy Corporation (MDEC) has launched “SME Digital Guidebook” and “Quick Guide,” specifically for the F&B and retail industries. These resources are aimed at assisting businesses in the F&B sector in assessing their digital opportunities and readiness. MDEC, a government-linked company, provides a step-by-step guide on how to enhance current digital capabilities and embark on a digital transformation journey [2].

These developments suggested a potential rebound for the Malaysian F&B industry if businesses proactively pursued digital transformation. By identifying and capitalizing new opportunities, F&B establishments can not only regain normalcy but also unlock avenues for future growth.

Training

TGSK Kuala Lumpur prioritizes maintaining food safety standards and consistency in taste to meet the expectations of its customers. To comply with the regulations set by the Ministry of Health and Local Council, all food handlers at TGSK Kuala Lumpur undergo food handlers training conducted by an approved food handlers training school recognized by the Ministry of Health. A failure to comply may result in penalties such as fines or imprisonment. Additionally, it is a requirement by the Ministry of Health for food handlers to receive the anti-typhoid vaccine.

The Food Handler course module covers various topics, including food poisoning, food contamination, personal hygiene, housekeeping and sanitation, food safety systems, and law and work ethics. TGSK Kuala Lumpur also provides training for its cooks on how to prepare the dishes listed on the menu, with the owners themselves taking charge of this aspect. Continuous on-the-job training for staff members is crucial for TGSK Kuala Lumpur, given the nature of their business that emphasizes food safety and quality.

Continuous research and development (R&D) in food technology and safety is essential for TGSK Kuala Lumpur. This allows it to optimize the use of raw materials, increase efficiency in food production and serving, and ensure the highest standards of food safety.

To streamline the operations and improve hygiene, TGSK Kuala Lumpur has shifted from traditional food production to automation using machines. This not only reduces preparation time but also enhances operational hygiene, improves quality control, increases efficiency and output rates, provides better visibility over ingredients, enables scalability and flexibility, and reduces food wastage through improved supply-and-demand management.

In terms of marketing, TGSK Kuala Lumpur has recognized the power of social media as a cost-effective tool for brand promotion and customer engagement. By regularly sharing high-quality photos and videos of their dishes on platforms such as Instagram and Facebook, it has increased brand awareness and expanded reach. It actively engages with customers through social media, responding to comments, questions, and feedback, which helps build strong customer relationships and encourages repeat business.

Social media has also facilitated user-generated content, as customers often share their dining experiences at TGSK Kuala Lumpur online. This user-generated content can be leveraged by the restaurant, shared on its own social media platforms, and acts as a free marketing vehicle to attract new customers. Collaborations with influencers and food bloggers on social media have further boosted TGSK Kuala Lumpur's visibility and credibility, as these individuals share their positive experiences with their followers.

Overall, TGSK Kuala Lumpur has embraced social media marketing to enhance brand awareness, engage with customers, benefit from user-generated content, and collaborate with influencers. It acknowledged the importance of creative marketing strategies and recognizes the potential for further investment in marketing to reach a wider audience.

Social Media Marketing

Social media marketing plays a significant role in promoting products or services, building communities, and driving traffic to businesses. TGSK Kuala Lumpur has effectively utilized social media to establish a strong online presence and cultivate a loyal following, all while keeping marketing costs low. It recognizes the importance of creative marketing strategies and acknowledges the need to invest more in reaching a wider audience (see Figure 24, 25, and 26).

Some ways in which TGSK Kuala Lumpur has benefited from social media exposure are:

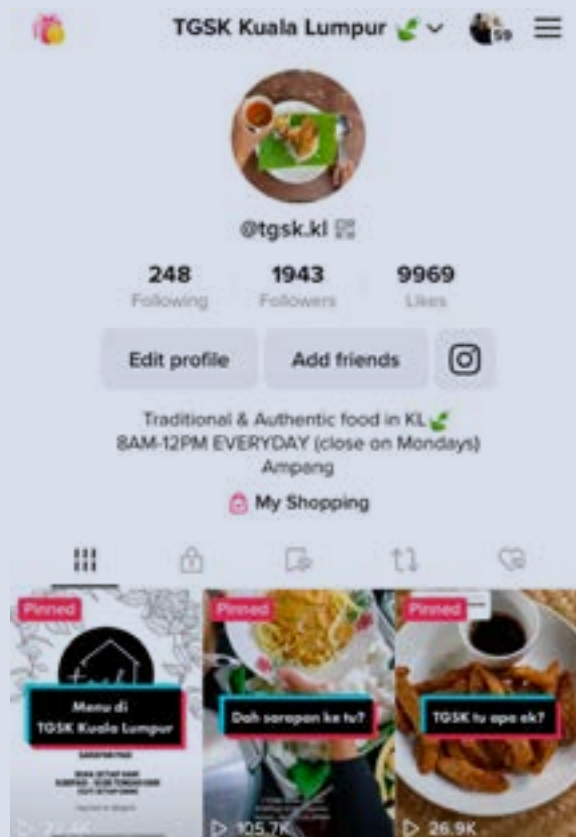
- (1) **Increased brand awareness:** By consistently sharing high-quality photos and videos of its dishes on platforms such as Instagram and Facebook, TGSK Kuala Lumpur has successfully raised brand awareness and expanded its reach to a wider audience.

- (2) **Customer engagement:** Social media enables TGSK Kuala Lumpur to engage with customers in real-time and promptly respond to comments, questions, and feedback. This interactive approach has nurtured strong relationships with customers, fostering loyalty and encouraging repeat business.
- (3) **User-generated content:** Customers who share their dining experiences at TGSK Kuala Lumpur on social media contribute valuable user-generated content. This content can be shared on the restaurant's social media pages, offering free marketing exposure and attracting new customers through authentic testimonials.
- (4) **Influencer marketing:** Collaborating with influencers and food bloggers on social media has been beneficial for TGSK Kuala Lumpur. These influencers share positive experiences at the restaurant with their own followers, boosting TGSK Kuala Lumpur's visibility and enhancing its credibility.

All in all, TGSK Kuala Lumpur has effectively harnessed the power of social media to increase brand awareness, engage with customers, leverage user-generated content, and collaborate with influencers. It recognizes the potential of social media as a cost-effective and impactful marketing tool in the F&B industry.

FIGURE 24

ORGANIC VIEWS AND GROWTH IN TGSK'S FOLLOWERS ON SOCIAL MEDIA.



Source: TGSK Kuala Lumpur's Facebook.

FIGURE 25

TGSK'S REVIEWS ON GOOGLE AND OTHER PLATFORMS.



FIGURE 26

TGSK FEATURED IN LOCAL TELEVISION COOKING PROGRAM.



Management Practices and Initiatives Taken to Grow and Sustain During the Pandemic

The COVID-19 pandemic presented a crisis of an unprecedented scale with profound social, economic, and environmental implications. Its impact on organizations has been far-reaching and severe, requiring them to confront challenges unlike any other disruptions caused by natural disasters, human-made incidents, technological failures, or operational issues.

Pandemic events differ significantly from other disruptions due to their potential for extensive scale, severity, and duration. As a result, organizations must go beyond traditional resilience planning strategies and incorporate pandemic planning considerations into their existing resilience management activities. This comprehensive approach is essential to ensure a robust response and continuity of critical products and services.

By integrating pandemic planning into their resilience management efforts, companies can better prepare for and navigate the unique challenges posed by a pandemic. This includes implementing measures to safeguard the health and safety of employees, customers, and stakeholders; adapting business operations to remote or alternative working arrangements; and mitigating the financial and operational impacts of prolonged disruptions.

Furthermore, organizations must stay informed about evolving guidance and regulations related to pandemics, establish clear communication channels to keep stakeholders informed, and regularly review and update their pandemic response plans to remain agile and effective in the face of changing circumstances.

In summary, the COVID-19 pandemic has necessitated a reevaluation of traditional resilience planning strategies. Organizations must incorporate pandemic planning considerations into their resilience management activities to effectively respond to the unprecedented challenges posed by a pandemic and ensure the continuity of their essential products and services.

Table 1 lists management responses to the COVID-19 pandemic adopted by TGSK Kuala Lumpur.

TABLE 1

TGSK MANAGEMENT'S RESPONSE TO THE PANDEMIC.

Management's response to COVID-19 pandemic	Practices in management adopted (yes/no)	Most distinguished practices (1~10 score)*
1. Agile organization BP during COVID-19	Yes	9
2. Automation/Mechanization during COVID-19	Yes	7
3. Digitalization/DX during COVID-19	No	–
4. Building new business model	Yes	9
5. Hybrid/remote working during COVID-19	No	–
6. Talent acquisition during COVID-19	Yes	7
7. New market/customer development	Yes	8
8. Utilization of macro-level government policy	No	–
9. Cost optimization during COVID-19	Yes	8
Total score of practices that are strongly adopted	6 out of 9	

Note: 1 = minimum; 10 = maximum.

Case Study 2: Talenta Ideas

Talenta Ideas, now known as Talenta, was founded in 2016 in Malaysia by a group of four young individuals. The company’s management team includes Muhammad Amin Jailani as the Managing Director, Nurhayu Rusdi as the Administration and Human Resource Manager, Khairul Imran Azman as the Graphic Designer, and Muhamad Nur Hafiz Rusdi as the Sourcing Executive.

Based in Kuala Lumpur, Talenta is a global creative agency that places great value on customization and exploration of infinite ideas. The agency is dedicated to providing analytical, precise, and focused solutions to meet its clients’ needs. Talenta aims to establish itself as a reputable creative partner, equipped with capable talents, and is committed to achieving sustainable growth in the industry.

With an emphasis on creativity, customization, and professionalism, Talenta strives to deliver innovative and impactful solutions to its clients, fostering long-term partnerships and contributing to the growth and success of its clients’ businesses (see Figures 27, 28, and 29).



The clientele includes both corporate and government sectors.





Creative Industry

According to the Department of Statistics Malaysia (DoSM), Malaysia's creative industry contributed 1.9% to the GDP over the past five years. However, the COVID-19 pandemic severely disrupted the cultural and creative industries in the country. A study conducted by the Malaysia Cultural Economy Development Agency (CENDANA) in mid-2021 revealed that more than 90% of arts and culture practitioners were negatively impacted, with 77% losing most or all of their income [4]. Additionally, 75% of jobs in the sector were reduced, and 8% of art venues were permanently closed.

Recognizing the potential of the digital creative content industry to drive Malaysia's digital economy, the government implemented several initiatives to support its growth. The Digital Content Ecosystem (DICE) policy, led by the MDEC under the Ministry of Communications and Multimedia, focused on attracting investments, developing local talent and companies, and strengthening the ecosystem through partnerships between the government and the private sector.

This strategy aimed at fostering a competitive and commercially successful industry, supported by a cohesive ecosystem of talent, businesses, government, and legislation. By combining technical and technological skills with art, creativity, and design thinking, the development of digital content serves as a leading policy initiative with potential spillover effects into other sectors of the economy.

The goal is to create an environment that nurtures innovation, empowers local talents, and enables the digital content industry to flourish, ultimately contributing to Malaysia's overall economic growth and positioning as a hub for creative and digital industries.

Creative Industry During COVID-19

During the COVID-19 pandemic, many entrepreneurs were forced to adapt and restructure their companies in order to survive. Creativity became a crucial element for success in these challenging times. Quarantine measures provided an opportunity for individuals to explore their creativity and find innovative solutions to overcome the obstacles they faced.

It was important to harness this creativity and use it to identify areas where the company could fill in the gaps. Understanding the strengths and weaknesses of each team member was essential. Talenta recognized the importance of employee skills and structured roles so that one person's strengths could compensate for another's weaknesses. By adopting a team mindset, hurdles could be overcome more easily and quickly.

Encouraging professional development for all staff members was also crucial. By expanding their skillsets, employees could contribute more effectively to the company's success. Talenta demonstrated this by sending its staff to attend various training programs, particularly those related to technology, artificial intelligence, and digitalization in the creative industry. Additionally, the Managing Director, Muhammad Amin Jailani, enrolled in a Master of Business Administration program to enhance his skills in business administration during the pandemic.

By embracing creativity, identifying strengths and weaknesses, and investing in professional development, Talenta could adapt to the changing landscape and find new opportunities for growth and success.

Revenue, Gross Profit, and EBITDA

Revenue is a term used to describe the sum generated by a company through its business operations. It represents the total amount of money earned from sales of goods or services.

Gross profit, on the other hand, is a financial metric that appears on a company's income statement. It represents the profit a company makes after deducting the costs directly associated with producing its products or providing its services. It is calculated by subtracting the cost of goods sold (COGS) from the company's total revenue.

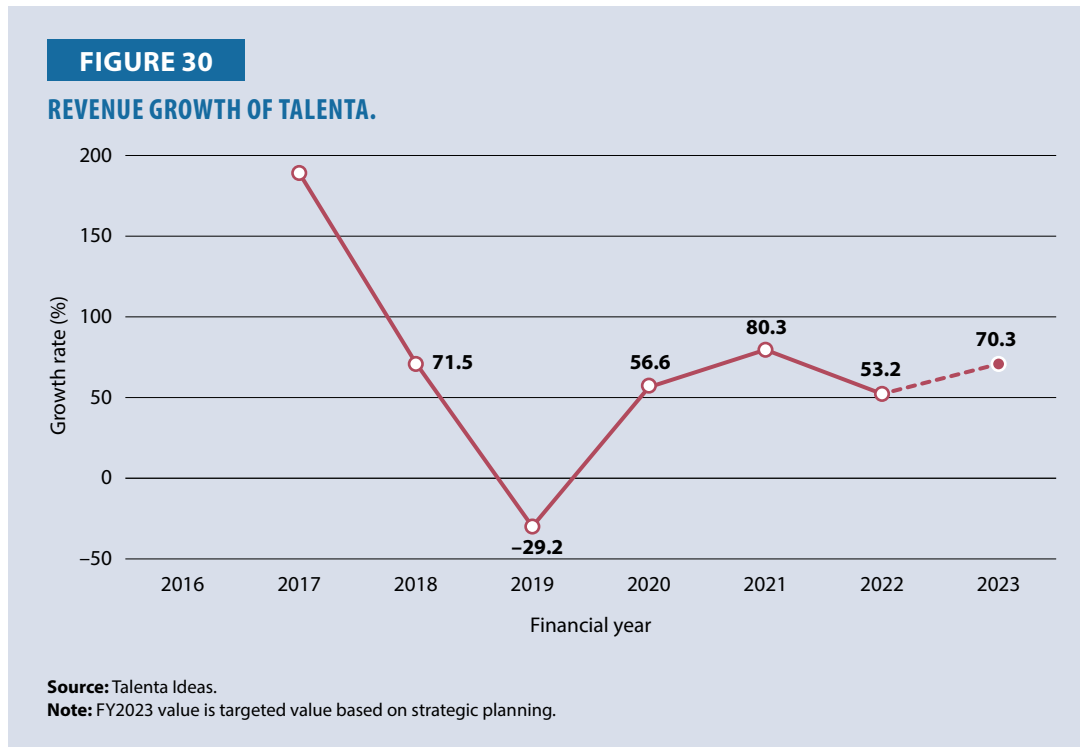
Earnings before interest, taxes, depreciation, and amortization (EBITDA) is another financial measure used to assess a company's profitability. It provides a broader view of a company's earnings by excluding non-operating expenses such as interest, taxes, depreciation, and amortization. EBITDA allows investors and analysts to evaluate a company's operating performance and compare it with other companies.

Talenta experienced a significant decline in revenues during the COVID-19 pandemic in 2019, as indicated by a -29% growth shown in Figure 30. However, the company managed to recover and exhibit positive growth in 2020, with the growth trend expected to continue in 2022 and 2023. The rebound in revenue reflects the company's ability to adapt and navigate the challenges posed by the pandemic.

The percentage growth of gross profit for Talenta showed a sharp decline from 2018 through 2020, primarily due to the impact of the COVID-19 pandemic. However, the business was able to bounce back in 2021 (see Figure 31), thanks to various reasons contributing to its revival.

One key factor that contributed to the revival of Talenta's business was the digitalization of its operations. With consumers largely shifting online during the pandemic, it became essential for businesses to tap into new opportunities and embrace e-commerce solutions. By adopting e-commerce platforms, businesses could reduce costs, save time, and tap into an existing network of users without heavy investments.

Another important aspect of digitalization was the implementation of cashless payments. Even before the pandemic, there was a growing preference for digital payments among Malaysian



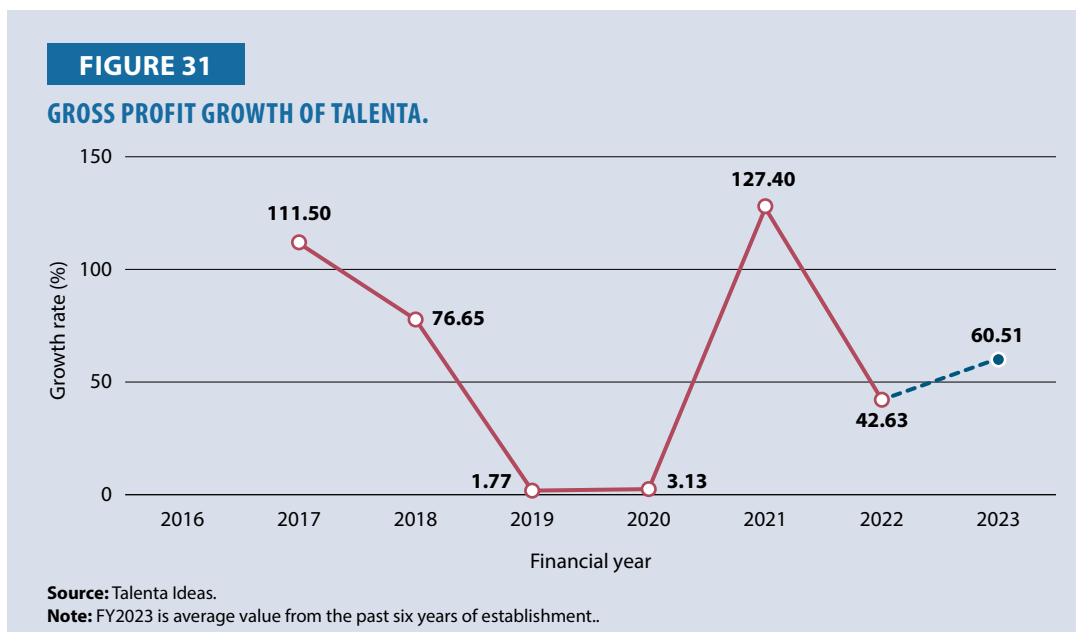
consumers. COVID-19 and government initiatives such as the *E-Tunai Rakyat* and *ePENJANA* programs further accelerated the adoption of cashless payments, providing convenience and safety for both businesses and customers.

In addition to digitalization and cashless payments, some businesses, including Talenta, may have invested in the automation and digitization of their operations and trade channels. Upgrading machines and software could lead to improved service, efficiency, and profitability. The government's ongoing initiatives, such as the SME Digitalisation Grant, SME Technology Transformation Grant, and Smart Automation Grant, provide support for businesses to embrace automation and digitization.

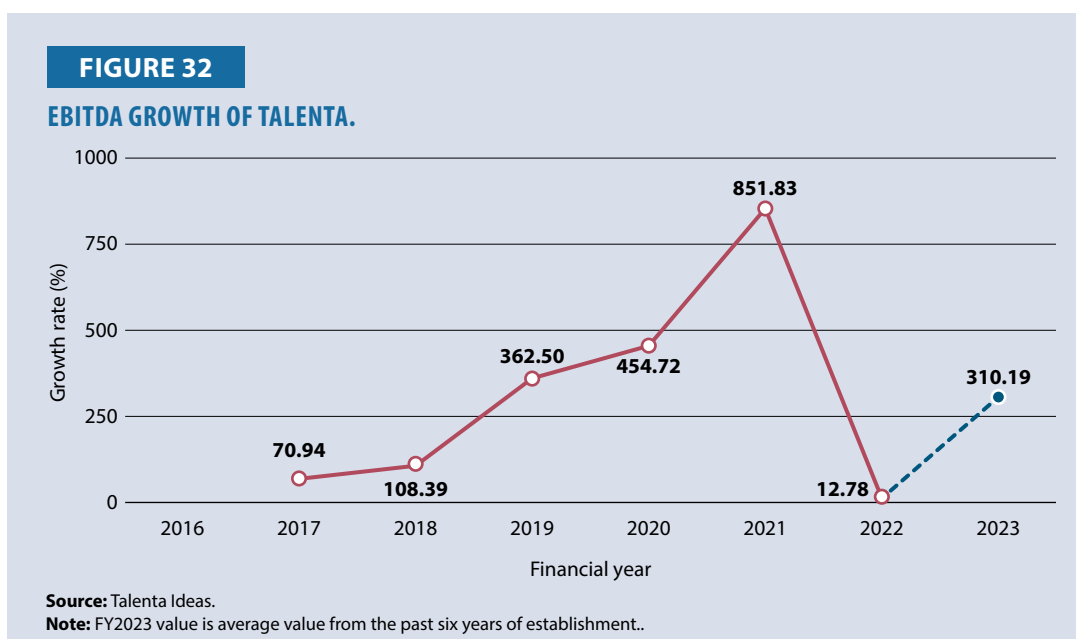
The case study will focus on the management practices and initiatives taken by Talenta to sustain and grow its business during the COVID-19 pandemic. These include digitalization, embracing e-commerce solutions, adopting cashless payments, and investing in automation and digitization. These strategies have allowed Talenta to adapt to the changing business landscape and position itself for sustainable growth.

EBITDA is commonly used to assess a company's operating performance. While EBITDA provides a measure of profitability, it is important to note that it does not directly indicate a company's overall value. Valuation typically involves a comprehensive analysis of various factors, including financial statements, market conditions, growth prospects, and industry comparables.

That being said, EBITDA can be a useful indicator of a company's operational efficiency and its ability to generate profits from its core operations. Investors and potential buyers often consider EBITDA as a proxy for a company's cashflow-generation potential. A positive growth trend in EBITDA over multiple years can indicate that the company's operations are improving, and it may be seen as a positive signal for potential investors or buyers.



Talenta showed positive growth in EBITDA from 2017 to 2021. This suggests that the company's operating performance improved during that period. However, its EBITDA dropped in 2022 (see Figure 32). A decline in EBITDA could indicate challenges for profitability in the future.

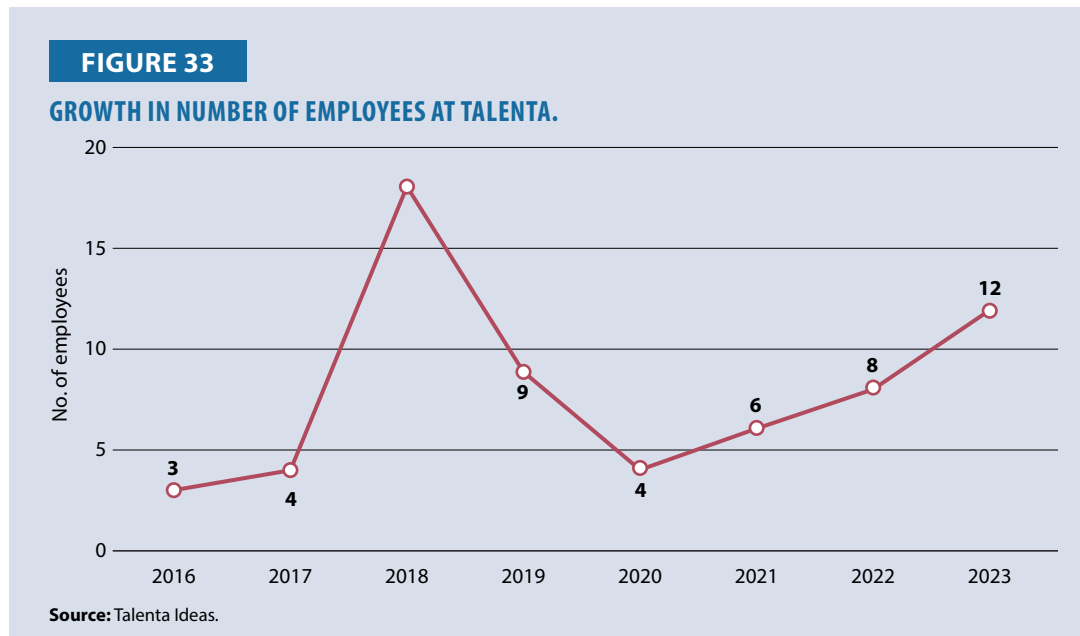


Employment

Talenta experienced reduction in the number of employees in 2019 and 2020 from 18 employees in 2018 to only four employees in 2020. This was due to the instant impact of COVID-19 on the business with no jobs available.

Talenta's business gained momentum and continued to grow in 2021. The increase in the number of employees from four in 2020 to 12 persons in 2023 is a positive indication of the company's expansion (see Figure 33).

Moreover, the fact that Talenta received the Shared Prosperity Organisation (SPO) Certificate from the Malaysia Productivity Corporation (MPC) in 2022 was an impressive achievement. This certification demonstrated the company’s commitment to productivity and efficiency.



Being recognized as an SPO has been a significant accomplishment for Talenta. It signifies that the company has prioritized the wellbeing of its employees even during challenging times (the COVID-19 pandemic). The decision not to resort to retrenchment or salary cuts and instead distribute bonuses to all workforce/team members reflects a strong sense of employee support and solidarity (see Figure 34).

Overall, these achievements and practices indicate that Talenta has been successful in fostering a positive work environment and maintaining steady growth.



Transformation and Improvements

It is commendable that Talenta has implemented various transformations and improvements to navigate through the challenges posed by the COVID-19 pandemic. This crisis has indeed created a unique opportunity for businesses to make meaningful changes and adapt to the rapidly changing market conditions (see Table 2).

Organizational agility is crucial during such times, and it involves the ability to quickly change and adapt to the evolving circumstances. This includes being responsive, innovative, and dynamic in thought and actions. However, alongside agility, there is a need for core elements that provide stability and ensure sustained success and scalability.

The COVID-19 pandemic accelerated the adoption of digitalization in ways that were previously unimaginable. According to McKinsey [5], the digital adoption of consumers and businesses had experienced a growth equivalent to five years in just eight weeks. This rapid shift led to structural changes in customer preferences toward digital engagement and the adoption of remote working models, which would persist even after the pandemic subsided.

Talenta's ability to pivot its business by embracing digitalization for operational and administrative purposes showcases its agility and adaptability. By leveraging digital tools and technologies, Talenta has likely been able to streamline processes, enhance efficiency, and ensure business continuity during the pandemic.

In summary, Talenta's strategic focus on digital transformation has allowed it to effectively navigate the challenges posed by the COVID-19 crisis and position itself for future growth in a digitally driven environment.

TABLE 2

NONFINANCIAL TRANSFORMATION AND IMPROVEMENTS AT TALENTA.

Business section	Before	After
Creative works	Targeting random video projects	Focusing on e-learning and technical/explainer videos
	Conducting physical event management	Leaping into online event management platform
	Word-of-mouth marketing	Word-of-mouth amplified by digital marketing through TikTok
Corporate trading	Tender and word-of-mouth marketing	Utilizing B2B e-commerce platform through Dropee & Lapasar
	Limited to merchandise and premium gifts	Diversifying into new products (out of business-as-usual, e.g., test kit supply, and agro products)
Operation and administration	Since 2019, Talenta has adopted remote working. 80% of operations (especially creative works) are conducted online, including administration (using Larks, Google Drive, SageOne, and Bukku). The team has smoothly adapted to the new normal during and after COVID-19.	

Talenta has devised a set of strategies to bolster its financial position, encompassing various areas such as operations and management system reorganization, capital diversification, non-project-based income generation, and expansion of other non-operating income business activities. These strategies have been outlined to help Talenta attain its revenue targets and enhance its overall financial stability (see Figure 35).



In 2022, Talenta achieved recognition as one of the top 10 vendors by Petronas Dropee (see Figure 36). Dropee is a Malaysia-based business-to-business (B2B) wholesale platform and e-commerce solution provider. Its primary focus is to facilitate greater connectivity and efficiency among SMEs by connecting retailers with qualified wholesale suppliers on an e-marketplace platform. Through Dropee, retailers can source products directly from reputable suppliers, streamline the procurement process, and enhance operational effectiveness. Talenta's inclusion among the top 10 vendors by Petronas Dropee signifies its success in meeting the criteria set by the platform and highlights the company's ability to deliver quality products and services to retailers through this B2B wholesale platform.



Management Practices and Initiatives Taken to Grow and Sustain During the Pandemic

The COVID-19 pandemic has indeed presented an unprecedented crisis with far-reaching implications across various sectors, including social, economic, and environmental aspects. Organizations worldwide have been profoundly impacted by the consequences of this crisis.

However, amidst these challenges, the creative industries have found an opportunity to harness new technologies and embrace digital transformation. The creative industries, which encompass sectors such as arts, entertainment, media, and design, have been able to push beyond conventional norms and leverage technology to explore new frontiers.

Digital transformation has played a pivotal role in enabling the creative industries to reimagine their practices and push the limits that were once considered groundbreaking. By embracing digital technologies, these industries have found avenues to connect with audiences, deliver their creative works, and explore innovative ways of expression [1].

This shift toward digitalization has allowed creative professionals to reach wider audiences globally, transcend geographical boundaries, and explore new revenue streams. Virtual performances, online exhibitions, streaming platforms, and digital content creation have become prevalent, offering new ways for artists, performers, and creators to showcase their talent and engage with their audience.

Moreover, the adoption of digital tools and platforms has facilitated collaboration, creativity, and innovation within the creative industries. Artists and creators can now collaborate remotely, access a global talent pool, and leverage digital tools for enhanced production and post-production processes.

In summary, the COVID-19 pandemic has propelled creative industries to embrace digital transformation and leverage new technologies. This shift has opened up new opportunities for creative expression, audience engagement, and revenue generation. By pushing past traditional boundaries, the creative industries have demonstrated resilience and adaptability in the face of the crisis while redefining what is possible and embracing the power of digital innovation.

Table 3 lists the management's response to the COVID-19 pandemic at Talenta Ideas.

TABLE 3

TALENTA MANAGEMENT'S RESPONSE TO THE PANDEMIC.

Management's response to COVID-19	Practices in management adopted (yes/no)	Most distinguished practices (1~10 Score)*
1. Agile organization BP during COVID-19	Yes	9
2. Automation/mechanization during COVID-19	Yes	7
3. Digitalization/DX during COVID-19	Yes	9
4. Building new business model	Yes	8
5. Hybrid/remote working during COVID-19	Yes	8
6. Talent acquisition during COVID-19	Yes	7
7. New market/customer development	Yes	7

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Management's response to COVID-19	Practices in management adopted (yes/no)	Most distinguished practices (1~10 Score)*
8. Utilization of macro-level government policies	Yes	7
9. Cost optimization during COVID-19	Yes	8
Total score of practices that are strongly adopted	9 out of 9	

Note: 1 = minimum; 10 = maximum

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THE PHILIPPINES

Background

This is part of the APO's research to identify and examine success factors in high-growth private-sector firms in selected developed and developing APO member economies. The findings will consequently be synthesized into methods for other enterprises or member economies to achieve similar success to support their productivity enhancement efforts. The study is also expected to look at both business resilience and innovation capacity of developing APO members and ways to strengthen them, especially in the aftermath of the COVID-19 pandemic.

The Philippines was one of the selected APO member economies for the research.

Research Methods

The research methods adopted in this report were two-pronged. First, a desk research approach was used to gather and analyze data on the macroeconomic background of the Philippines prior to and after the COVID-19 pandemic. This was done by reviewing government reports and other documents such as the annual economic reports, central bank reports, and other relevant publications. The information gathered from the desk research includes the Philippines' economic growth, employment data, and other macroeconomic indicators. Second, a case-study approach was used to gain in-depth understanding of how small- and medium-sized enterprises, which are considered to be economic drivers in the Philippines as well as in the developing world [2, 6, 10], were impacted by the pandemic. Two SMEs were selected for this study based on the criteria of

- (1) their ability to continue operations despite the lockdowns imposed by the government at the height of the pandemic between years 2020 and 2021; and
- (2) sustained growth even during the lockdowns in terms of gross sales, workforce, asset size, number of customers or markets, and production volume.

The case-study method involved conducting semi-structured interviews with the owners or managers of the selected SMEs. The interviews aimed to gather information on the challenges faced by the SMEs during the pandemic and how they were able to overcome these challenges. The interviews also focused on understanding the strategies adopted by the SMEs to sustain their growth during the pandemic.

The data gathered from the case studies were analyzed using qualitative methods. The qualitative data obtained from the interviews were transcribed and analyzed using thematic analysis. The research framework used in analyzing the qualitative data is described in the next section.

Research Framework

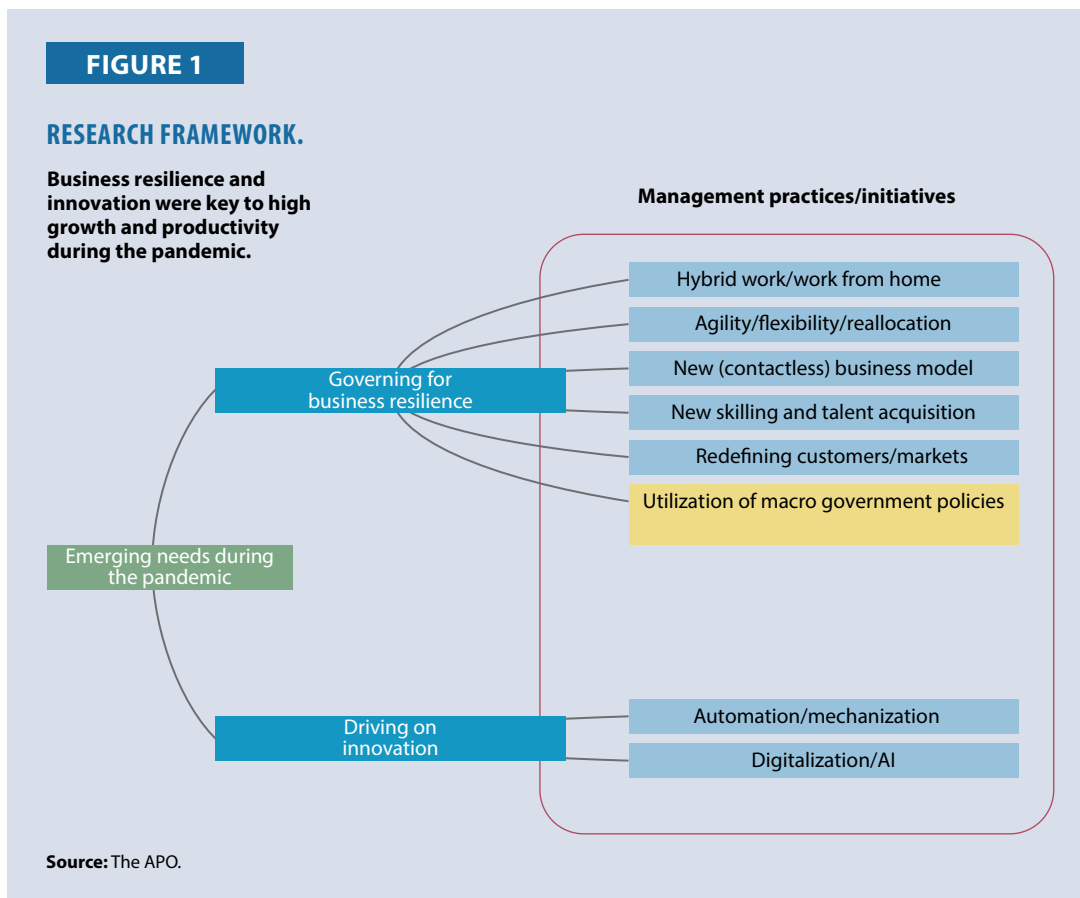
The research framework used in the analysis of data obtained in this research was related to the eight management practices or initiatives identified by the APO, namely,

- (1) hybrid work or work from home;
- (2) agility, flexibility, and reallocation;
- (3) new or contactless business model;
- (4) new skilling and talent acquisition;
- (5) redefining customer or market;
- (6) utilization of macro government policies;
- (7) automation or mechanization; and
- (8) digitalization or artificial intelligence.

Based on this research framework, a hypothesis was developed that “business resilience and innovation are key to high growth and productivity during the pandemic.”

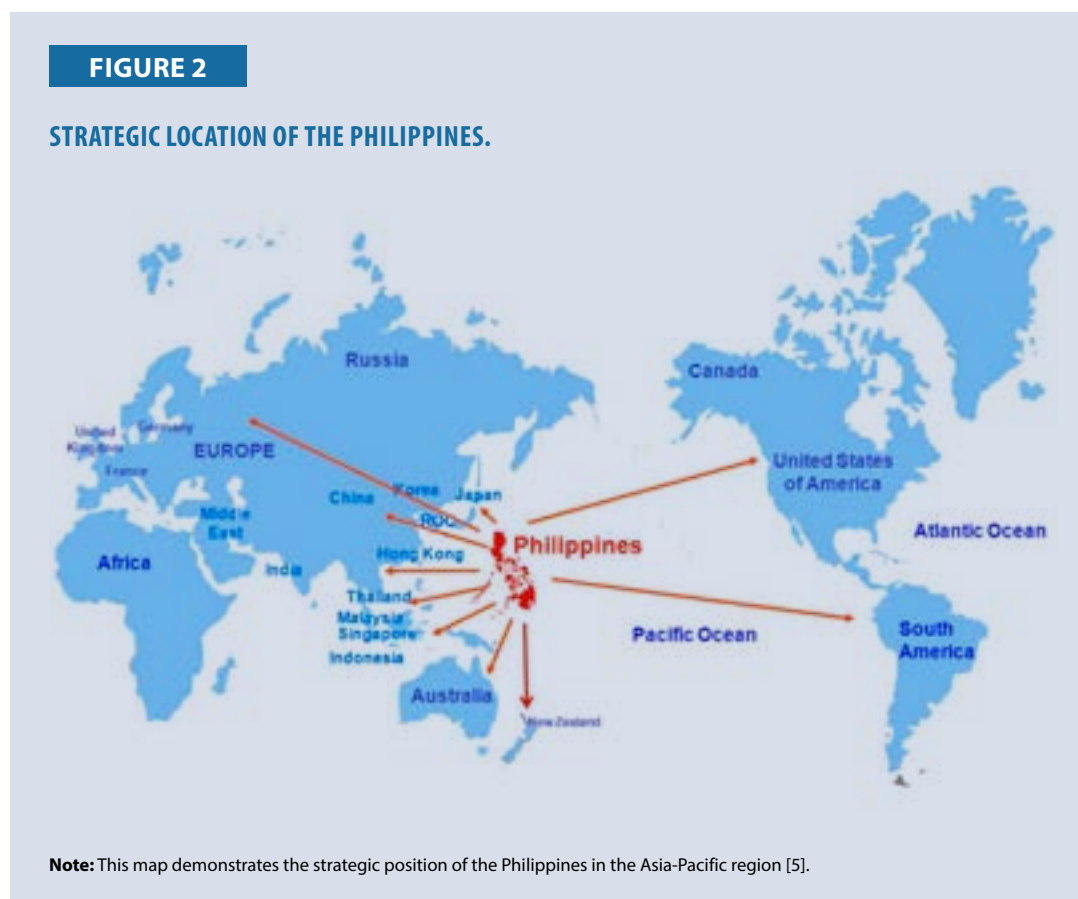
The test of the hypothesis lies in the direct relationship between the eight management practices and the expected outcomes, which are business resilience and innovation of the selected firms.

Figure 1 presents the research framework adopted in this study.



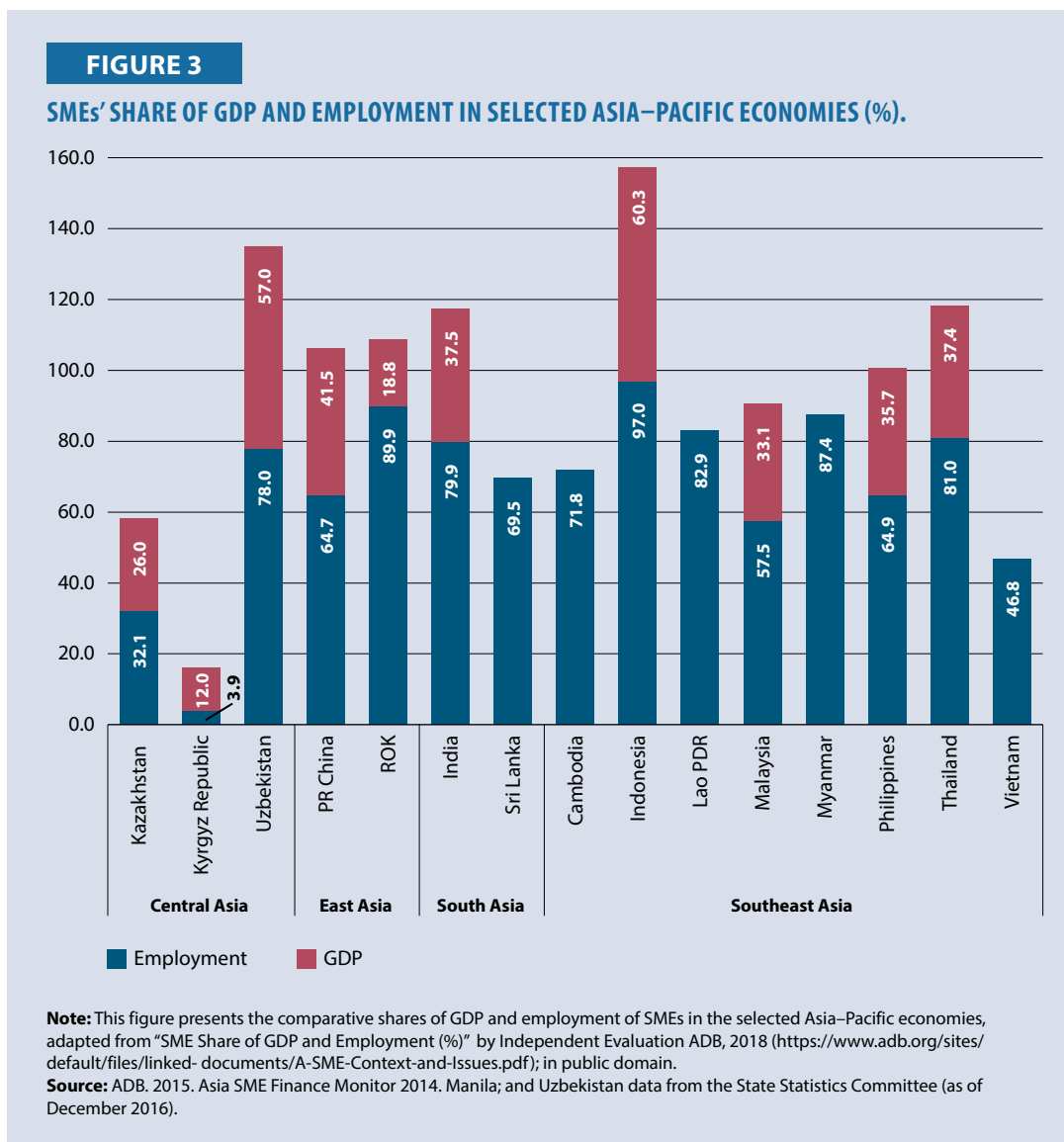
Philippine Economy's Growth Perspectives

An archipelagic nation in Southeast Asia, the Philippines sits in a strategic location close to at least three continents (i.e., Asia, North America, and South America) and the region known as Oceania. It conveniently lies between the east and west sides of the world. The map in Figure 2 illustrates the strategic location of the Philippines in the Asia–Pacific region.



As in most countries in the developing world, the Philippines is one whose socioeconomic development is driven by SMEs [2, 6, 10]. Despite holding the distinction of being strategically located in the Asia–Pacific zone, a bustling center for world trade and commerce, an expansive melting pot of human resources, and a prominent hub for agile technologies and innovations, Philippine SMEs perform below expectations in terms of their contribution to the macroeconomy. Although they overwhelmingly outnumber all large, registered firms in the Philippines and employ 61.6% of the total workforce, they contribute a paltry 35.7% to the national gross value added, which is far lower than the shares of their large counterparts [7].

As indicated in Figure 3, SMEs in the Philippines are also outperformed by their regional peers in PR China (41.5%); India (37.5%); Indonesia (60.3%); Thailand (37.4); and Uzbekistan (57.0%) according to the latest available data for the Asia–Pacific region (see Figure 3 for the chart showing the SMEs' shares of GDP and employment in selected Asia–Pacific economies). While some of their counterparts are already reaping the benefits of globalization and economic integration in the region, many SMEs in the Philippines are evidently not ready or are lacking in capabilities to realize the full potential of participating in free trade and global value chains [2].

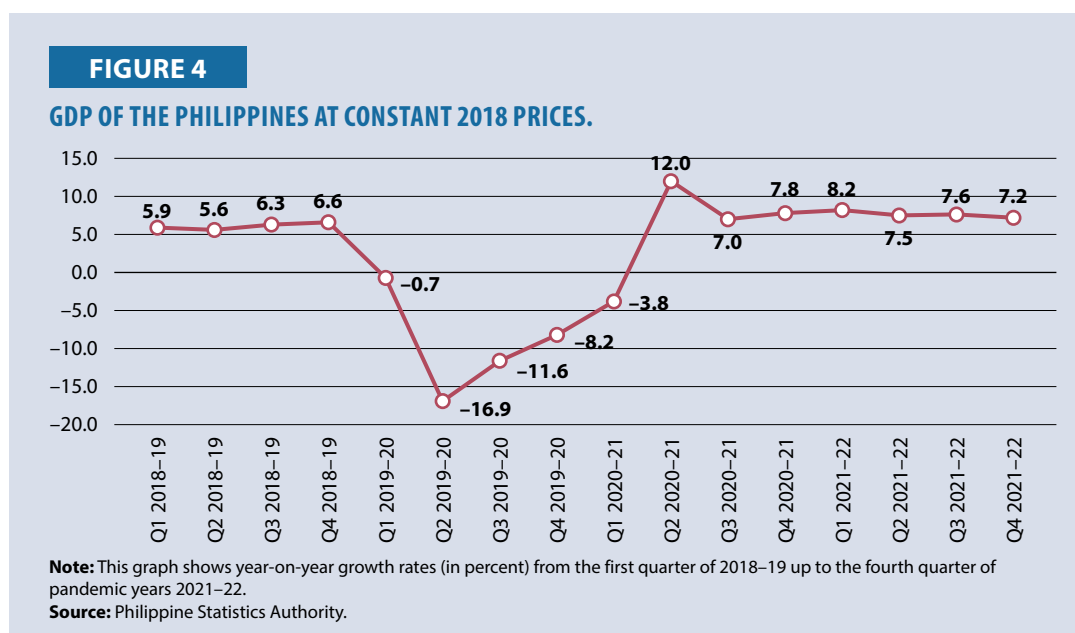


Impact of the COVID-19 Pandemic on Philippine Economy

The COVID-19 pandemic significantly impacted the economy of the Philippines with a sharp decline in economic activity in 2020 [12], due to global lockdowns, quarantines, and other mobility restrictions [8]. The archipelagic nation posted a growth rate of -8.3% in the fourth quarter of 2020 in terms of GDP, resulting in a -9.5% full-year growth [12]. Among the major contributors to the decline were construction (-25.3%); services (-9.1%); and accommodation and food service activities (-42.7%), as these were among the hardest hit sectors due to the prolonged lockdowns [12, 15].

As the pandemic extended into 2021, the Philippines' economic growth remained below pre-pandemic levels, although it started showing signs of recovery. In the fourth quarter of 2021, for instance, the country's GDP grew by 7.7%, resulting in a 5.6% full-year growth [1, 13].

The Philippines sustained its economic growth in 2022 as it posted growth rates of 7.2% in the fourth quarter and 7.6% for the full year [14]. Figure 4 shows the comparative GDPs of the Philippines from 2018 to 2022.



The figure indicates that the Philippines experienced a constant increase in its GDP from 2018 until it went through a significant slump due to the COVID-19 pandemic. Nonetheless, it registered a very steep rise in the second quarter of 2021 with a GDP growth rate of 12.1% [14]. It reverted to 7–8% levels in the succeeding quarters [14].

High-growth Sectors and Industry Performance

In 2022, the sectors that were main contributors to the economy were: wholesale and retail trade, and repair of motor vehicles and motorcycles (8.7%); manufacturing (5.0%); and construction (12.7%) [14]. Among the major economic sectors, agriculture, forestry, and fishing (AFF) posted 0.5% growth rate while industry and services registered growths of 6.7% and 9.2%, respectively [14]. They were the same sectors that led the economy of the Philippines in 2021 [13].

At the height of the pandemic in 2020, the sectors that were least impacted by the global health emergency were AFF (–0.2%); services (–9.1%); and industry (–13.1%) [12].

Overall Economic Trends

The Philippines is implementing its ‘cluster-based approach to industrialization’ in its development plan [11]. These clusters, described as ‘leading export sectors’ have been identified as: industrial, manufacturing and transport (IMT); technology, media and telecommunication (TMT); health and life science (HLS); and modern basic needs, and resilient economy (MBN) [11].

The IMT cluster includes sectors involved in the manufacturing and servicing of aerospace, automotive, and semiconductors [11]. Meanwhile, the TMT cluster refers to opportunities from digitalization of services such as information technology and business process management, creative industries, transshipment facility operations for global logistics, digital economy, and solutions using digital technologies like artificial intelligence, robotics, augmented reality, virtual reality, mixed reality, 5G connectivity, and internet of things, among others [11]. The HLS cluster covers life sciences and biotechnology sectors, vaccines, pharmaceuticals, medical devices, healthcare services, digital health products and services such as smart watches, wearables, sensors, telemedicine, and others [11].

The MBN cluster refers to businesses that cater to modern basic needs such as food security and agro-industrial industries including coffee, cacao, coconut, fruits and nuts, tropical fibers, rubber and other high-value crops, fishing, processed minerals, textile, and chemicals and plastics, among others [11]. The cluster also includes sectors that generate economic resilience such as energy efficiency, renewable energy and other products that improve the standard of living while minimizing waste of resources [11].

Small- and Medium-sized Enterprises in the Philippines

Like most developing countries of the world, the Philippines is one whose economy is driven by its small- and medium-sized enterprises or SMEs [2, 6, 10]. There are specific laws that define SMEs in the Philippines (as in most economies around the world). Table 1 presents the SME definition in terms of asset size as stated in Republic Act (RA) 6977, as amended by RA 9501, or the Magna Carta for Micro, Small, and Medium Enterprises [4].

TABLE 1

MSMEs BY ASSET SIZE IN THE PHILIPPINES.

Category	Asset size
Micro	< PHP3 million (USD53,700)
Small	PHP3,000,001 to 15 million (USD268,800)
Medium	PHP15,000,001 to 100 million (USD1.79 million)

Note: The table defines MSMEs in the Philippines as provided by law. Assets are inclusive of those acquired from loans but exclusive of the land on which the SMEs' offices, plants, or equipment are located. PHP = Philippine peso. USD1.00 = PHP55.79 as of writing.
Source: RA 6977, amended.

RA 6977 also created the MSME Development (MSMED) Council, formerly known as the SME Development Council. The council [9] promulgated the MSME classification based on the size of the workforce (see Table 2 for the MSME definition in terms of employment size in the Philippines).

TABLE 2

MSMEs BY EMPLOYMENT SIZE IN THE PHILIPPINES.

Category	Employment size
Micro	1 to 9 workers
Small	10 to 99 workers
Medium	100 to 199 workers

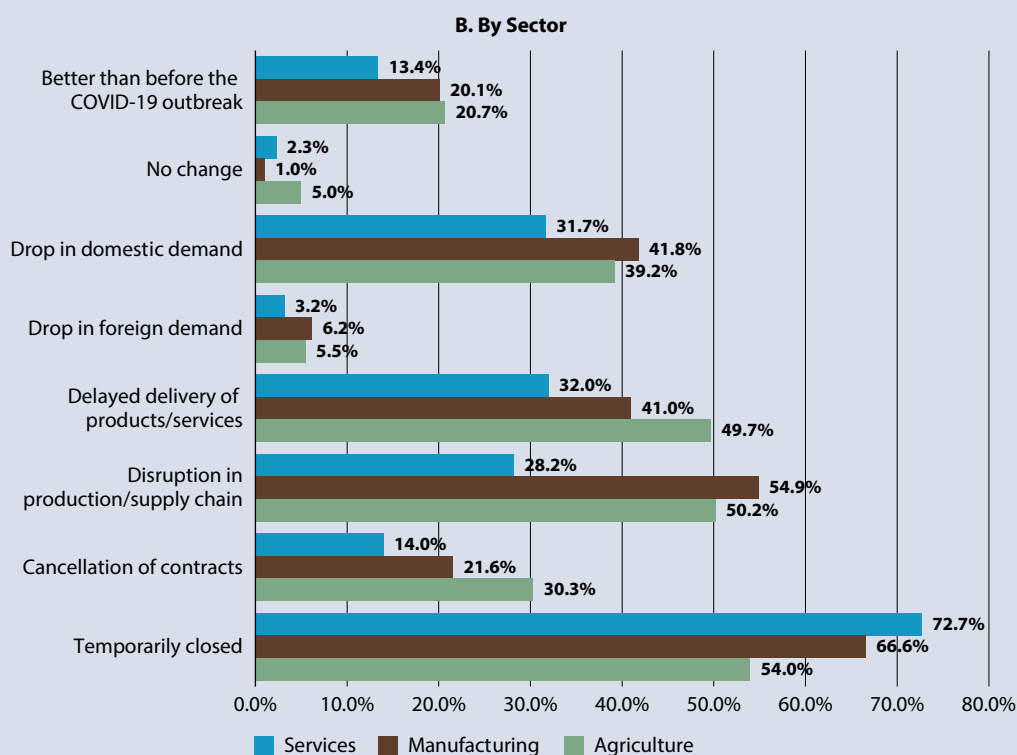
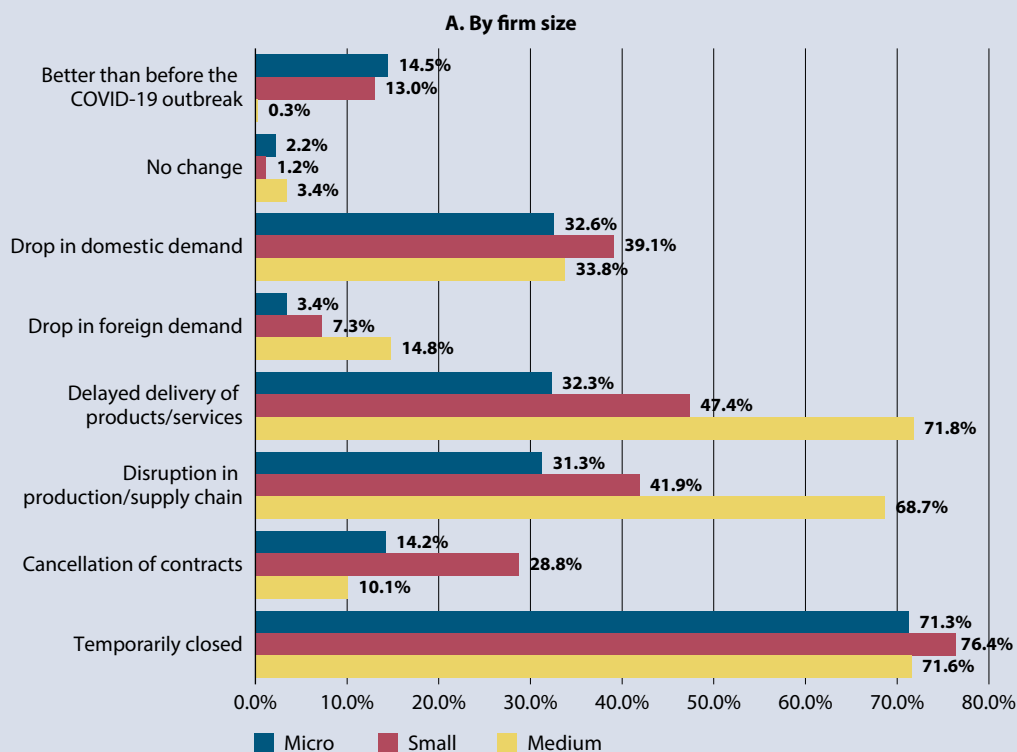
Note: The table categorizes MSMEs according to employment size in the Philippines.
Source: SME Development Council Resolution No. 1, series of 2003, 16 January 2003.

Impact of the COVID-19 Pandemic on SME Productivity

Globally, adopting ICTs in business has been one of the approaches that SMEs turned to during the COVID-19 pandemic. This global health emergency crisis seriously damaged many SMEs that were already facing constraints and challenges owing to their size and limited reach. They were one of the hardest-hit sectors in the fallout of the pandemic that greatly impacted people's lives, weakened economies, and damaged some industries [3, 8]. In the Philippines, a survey found out that 73.1% of the SMEs were forced to close their businesses a few weeks after the outbreak and the lockdowns [15]. The same survey found (see Figure 5) that these SMEs immediately faced delays in the delivery of their products and services (50.5%); confronted disrupted supply chains (47.3%); and experienced a sharp drop in the domestic demand (35.2%) [15].

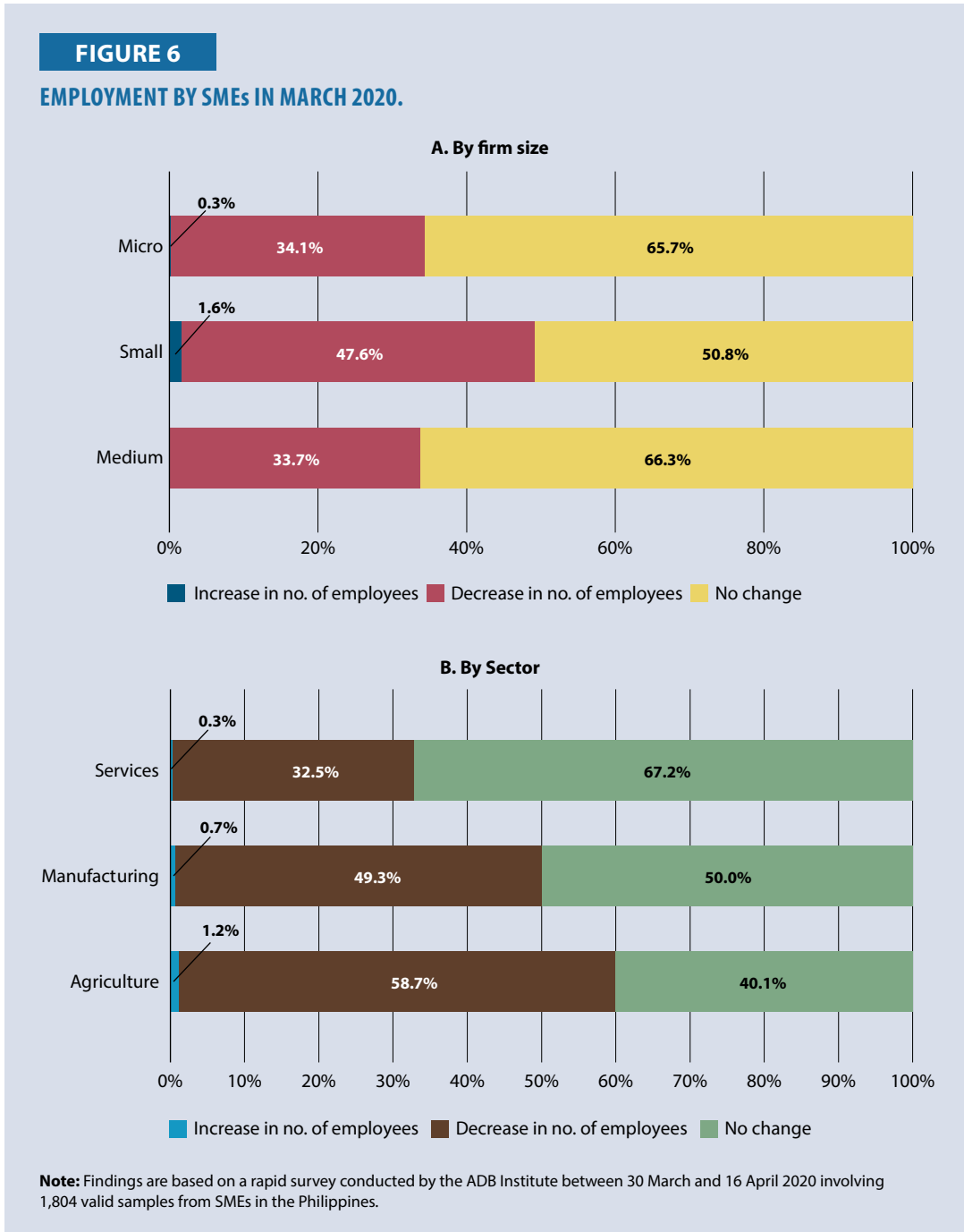
FIGURE 5

BUSINESS CONDITIONS IN THE PHILIPPINES DURING THE PANDEMIC.



Note: Findings are based on a rapid survey conducted by the ADB Institute between 30 March and 16 April 2020 involving 1,804 valid samples from SMEs in the Philippines.

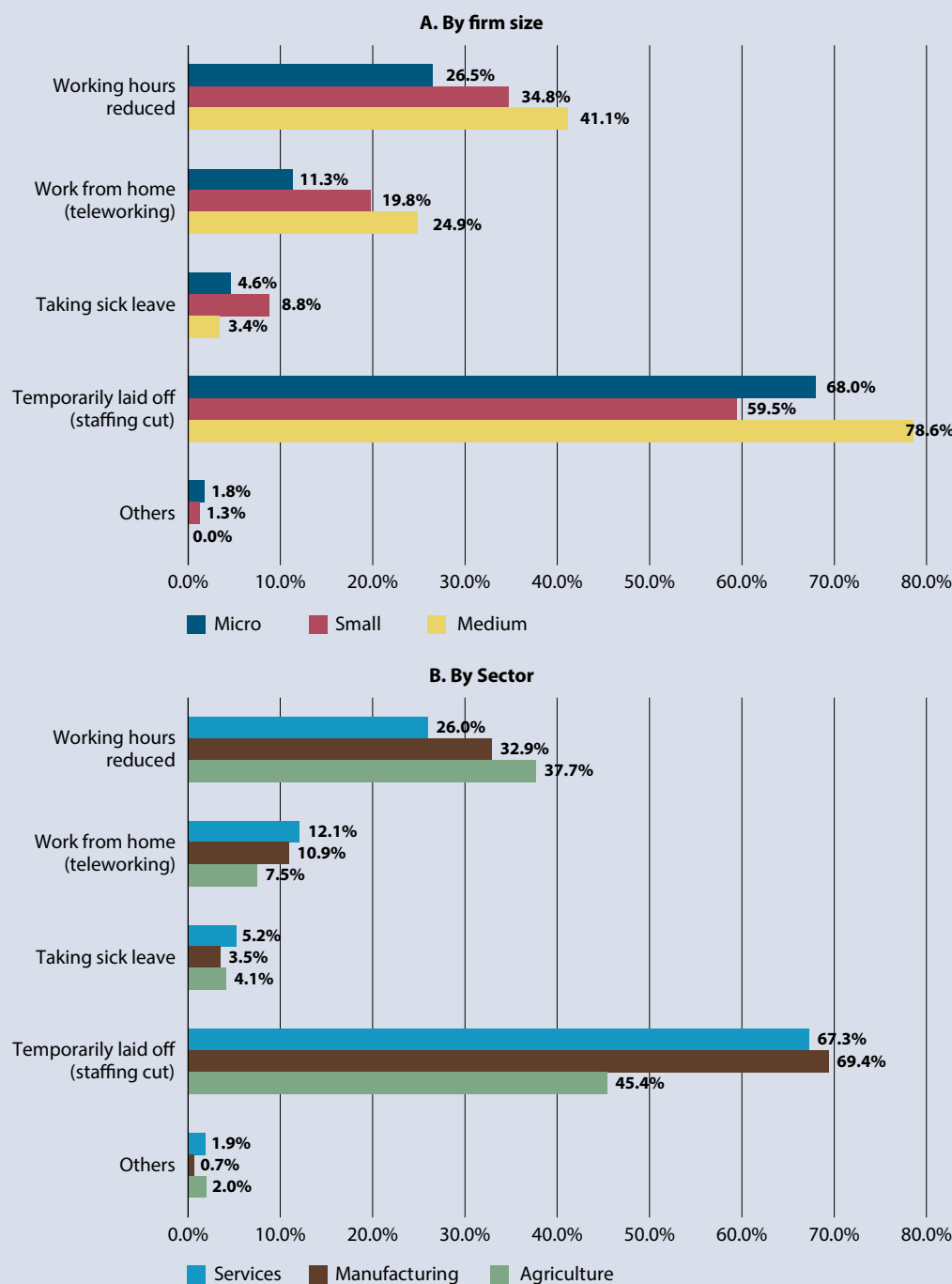
With respect to employment during the pandemic, most SMEs in the Philippines reported no change during the first month following the lockdowns but began laying off workers at a relatively early stage to survive [15]. The larger the firm size the more working options were available [15]. However, working from home was not a preferred option for many SMEs, as smaller firms had many challenges in introducing this kind of work setup [15]. Figure 6 shows the employment provided by Philippine SMEs in March 2020, i.e., at the start of the outbreak.



Many SMEs also reported some changes in the working environment because of the lockdowns due to the pandemic. These changes were: reduced working hours, work from home or teleworking, taking sick leave, and temporary layoffs or staff cuts [15] (See Figure 7).

FIGURE 7

CHANGE IN THE SME WORKING ENVIRONMENT DUE TO THE PANDEMIC.



Note: Findings are based on a rapid survey conducted by the ADB Institute between 30 March and 16 April 2020 involving 1,804 valid samples from SMEs in the Philippines.

Case study 1: Agricultural Enterprise in North Philippines

Located in Benguet, Philippines, an agricultural enterprise focused on sustainable farming was able to improve the quality of its romaine and green ice lettuce produce through implementation of an automated drip irrigation system. This system allowed for precise watering and fertilizer application, leading to improved crop quality, reduced water usage, and cost savings.

The enterprise also used a greenhouse and water impounding system to take advantage of rainwater, thereby further reducing its dependence on external water sources. The automated drip irrigation system, in combination with these other technologies, enabled the enterprise to become more sustainable and efficient in its farming practices.

A recipient of a national award by the Philippine government for its business resilience during the COVID-19 pandemic, the enterprise was able to sustain growth during the pandemic years 2020 and 2021. Table 3 shows its performance indicators during the period in terms of gross sales and number of workers.

TABLE 3**PERFORMANCE INDICATORS OF THE AGRICULTURAL ENTERPRISE IN 2020 AND 2021.**

Indicator	2020	2021
Gross sales	USD220,900.00	USD271,800.00
Number of workers	11	32
Asset size	USD390.00	USD900.00
Number of customers/markets	2	5
Production volume	183,000 kg	228,200 kg

At the peak of the pandemic, the enterprise implemented several measures to ensure the continuity of its operations and become resilient in the face of the pandemic. Specific information is highlighted in the subsequent sections.

Hybrid Work or Work from Home

Remote or hybrid work arrangements were implemented during the lockdowns in the Philippines. Nonetheless, the enterprise's operations were not completely halted because food production or agriculture, which is the nature of its business, was considered essential.

To further ensure the safety of its workers, the company implemented strict health and safety protocols in its operations. These included regular disinfection of work areas and provisioning of personal protective equipment (PPE) such as masks and gloves for all workers.

In addition, the company provided financial assistance to its workers who were unable to work due to health reasons or quarantine measures. This was done through a program that provided financial support to affected workers, which helped alleviate the economic burden brought about by the pandemic.

Despite the challenges posed by the pandemic, this agricultural enterprise in Benguet was able to adapt to the changing circumstances and continue providing high-quality produce to its customers. The implementation of remote or hybrid work arrangements, combined with strict health and safety protocols and financial support for affected workers, helped ensure the continuity of its operations and the safety and well-being of its employees.

Agility, Flexibility, and Reallocation

The enterprise also upgraded from a manual sprinkling watering practice to a gravity drip irrigation system, and then to an automated drip irrigation system. Earlier, watering was done with the aid of sprinklers, which made it challenging to regulate the amount of water. As a result, water was

wasted due to runoff and evaporation. With the implementation of an automated drip irrigation system, precise watering and fertilizer application became possible, leading to improved crop quality and reduced water usage.

In addition to the upgrade from manual and sprinkling watering practices to an automated drip irrigation system, the enterprise also implemented other water conservation measures. One such measure was the installation of a water impounding system, which allowed the company to capture and store rainwater for later use. This helped reduce reliance on groundwater sources and promote sustainable water usage practices.

Further, the company implemented a greenhouse system that enabled it to extend its growing season and increase crop yield. By using a greenhouse, the enterprise was able to control various environmental factors such as temperature, humidity, and light exposure, resulting in optimal growing conditions for its produce.

To improve the quality of its produce further, the enterprise also implemented a process of soil testing and analysis to ensure that the correct nutrients were being applied to its crops. This involved regular sampling of soil and water sources and laboratory analysis to determine the specific nutrient requirements for each crop. By tailoring its fertilizer application to the specific needs of each crop, the company was able to produce healthier and more vibrant produce.

Lastly, the company implemented a program to promote community involvement and support. This included collaborating with local schools and community groups to educate them on sustainable farming practices and the importance of supporting local farmers. Additionally, the company opened its doors to visitors and customers to showcase its farming practices and to build stronger relationships with the community. This program helped raise awareness about sustainable agriculture and support for local farmers while also providing a unique educational and experiential opportunity for visitors.

New or Contactless Business Model

The enterprise also adopted a new or contactless business model during the pandemic. To minimize physical contact, the enterprise began utilizing GCash for online payments, which allowed for a more seamless and convenient transaction process. Customers could now purchase their products by transferring payments through GCash. The company also accepted orders on e-mail, which helped further minimize physical contact.

In addition to the adoption of GCash and online orders, the agricultural enterprise also implemented the use of short messaging service (SMS) in its new business model. This was done to efficiently communicate with suppliers and customers as well as to recruit workers for the farm.

By utilizing SMS, the company was able to quickly and easily send updates and notifications to its suppliers and customers regarding their orders, delivery schedules, and payment confirmations. This helped streamline the ordering and payment process as well as improve customer satisfaction by keeping them informed on the status of their transactions.

Further, the use of SMS was also employed in recruiting workers for the farm. With social distancing measures in place during the pandemic, the company had to find alternative ways to reach out to potential workers. SMS was an effective solution to this problem as it allowed the company to easily and directly communicate with interested applicants and coordinate their recruitment process.

Overall, the adoption of GCash, online orders, and SMS in the new business model of the agricultural enterprise allowed the company to adapt and continue its operations amidst the challenges posed by the pandemic.

New Skilling and Talent Acquisition

As part of its efforts to remain resilient amidst the pandemic, the agricultural enterprise invested in new skilling and talent acquisition to strengthen its workforce and operations. The company provided its employees with training and upskilling programs to enhance their knowledge and skills in agricultural practices, specifically in the areas of precision farming, greenhouse management, and automated drip irrigation system operation. This allowed employees to adapt to the new technology and practices being implemented by the company, resulting in improved productivity and efficiency.

To further augment its workforce, the company also actively sought out new talent by participating in job fairs and online recruitment platforms. It sought to hire individuals who were knowledgeable in modern agricultural practices and possessed the necessary skills to operate the automated drip irrigation system and other technological tools being used by the company.

In addition to the recruitment of new talent, the company also implemented a mentorship program where experienced employees were paired with trained development practitioners to help them better understand basic management principles, including marketing and finance. This program helped ensure that new employees were able to quickly integrate into the company and become productive members of the team.

Overall, the new skilling and talent acquisition initiatives implemented by the agricultural enterprise helped strengthen its workforce and improve its operations, allowing it to remain competitive amidst the challenges brought about by the pandemic.

Redefining Customers or Markets

The enterprise also rediscovered new customers or markets during the pandemic. Due to the indirect effects of the COVID-19 pandemic and the changes in market demand, the farm expanded its production and practices to include multiple cropping and crop rotation aside from crop programming. This allowed it to adapt to changing market demands and increase its revenue streams.

In addition to the expansion of production and crop rotation practices, the enterprise also implemented several strategies to redefine its customers or markets during the pandemic. One such strategy was to partner with local restaurants and grocery stores to supply their produce directly. This allowed the enterprise to access a new customer base and establish long-term partnerships with local businesses.

Another strategy was to implement a direct-to-consumer model through online platforms. The enterprise established an online presence through social media platforms such as Facebook and Instagram, where it showcased its products and received orders. Additionally, the enterprise utilized GCash for online payments and SMS for communication with customers. These strategies enabled the enterprise to reach new customers and expand its market share beyond its local area.

To further increase its market reach, the enterprise also participated in agricultural trade shows and events to showcase its products and technologies. Through these events, the enterprise was able to connect with potential customers and partners from different regions and expand its market presence.

Overall, the enterprise's efforts to redefine its customers and markets allowed it to adapt to the changing market needs and create new revenue streams. These strategies also strengthened the enterprise's position in the market and increased its resilience in the face of future challenges.

Utilization of Macro Government Policies

The agricultural enterprise was able to take advantage of government policies aimed at SMEs' development through financing and technology upgrading. The company accessed financing programs offered by the government, allowing it to secure the necessary capital to implement technological upgrades in its operations.

The government's financing programs offered favorable terms and interest rates, enabling the company to access the funds it needed to invest in new equipment and technologies. These included purchase of the automated drip irrigation system and other modern agricultural equipment that helped improve the company's productivity and efficiency.

In addition to financing, the company also availed the government's technology upgrading programs, which provided training and support for SMEs looking to adopt new technologies in their operations. The company was able to access technical assistance and training on the proper use and maintenance of its new equipment, which helped ensure its proper functioning and longevity.

By taking advantage of these government policies, the firm was able to modernize its operations and remain competitive amidst the challenges brought by the pandemic. The new equipment and technologies that it was able to acquire through these programs helped improve its productivity and efficiency. This enabled it to continue providing high-quality produce to its customers while maintaining its commitment toward sustainability and environmental protection.

Automation or Mechanization

To continue with its operations and become productive and efficient, the enterprise implemented automation and mechanization. The automated drip irrigation system was implemented during the lockdowns at the peak of the pandemic. The system allowed for precise watering and fertilizer application, leading to improved crop quality, reduced water usage, and cost savings.

Aside from the automated drip irrigation system, the enterprise also utilized other mechanization technologies, such as a greenhouse and water impounding systems, to take advantage of the rainwater. These technologies helped the enterprise reduce water wastage and optimize water usage, thereby leading to significant cost savings.

Digitalization and Artificial Intelligence

The software used to automate the drip irrigation system enabled workers to increase their productivity since they could do other tasks in the farm. The system could be set based on a time schedule and would automatically operate and stop at the desired time or duration of the irrigation. This also aided in a more accurate and efficient distribution of water for a specific area within the specified time, thus conserving water and labor.

The farm incorporated a smart weather monitoring system that collects data on temperature, humidity, and precipitation. The system utilized these data to make informed decisions on when to irrigate crops, apply fertilizers and pesticides, and conduct other farming activities.

Additionally, the company adopted a digital crop management system that tracked the growth and development of each crop, including its history of fertilization, watering, and pest management. This system allowed farmers to monitor and adjust crop-care practices based on real-time data, resulting in better crop yields and quality.

To further enhance their digitalization efforts, the company also utilized existing third-party e-commerce platforms to sell produce directly to consumers. Accounts were set on the online store that displayed its available products, prices, and delivery options. Customers could easily browse, select, and purchase the products they wanted, and the company utilized GCash for online payments. Lastly, the company used social media platforms to promote its products and communicate with customers.

Case Study 2: Biotechnology Firm based in Manila, Philippines

The second case study is that of a biotechnology firm located in Manila, Philippines. Another national awardee for its business resilience during the COVID-19 pandemic, the firm specializes in manufacturing and application of early disease detection kits for animal and human viruses. In response to the pandemic, particularly the unprecedented demand for COVID-19 test kits, the company provided innovative solutions to increase its manufacturing and distribution capacity. In addition, it offered training services for startup diagnostic laboratories to fill the need for knowledgeable and skilled personnel toward increasing the country's testing capacity for the COVID-19 virus.

Because of the nature of the products and services provided by the firm, which were all related to measures aimed at mitigating the effects of the pandemic, the enterprise was able to register high growths during the pandemic years 2020 and 2021 in terms of sales and workforce. (See Table 4 for the firm's performance indicators during the period.)

TABLE 4

PERFORMANCE INDICATORS OF THE BIOTECHNOLOGY FIRM IN 2020 AND 2021.

Indicator	2020	2021
Gross sales	USD144,900	USD10 million
Number of workers	22	163
Asset size	USD389,200	USD1.5 million
Number of customers/markets	13 (local)	
0 (international)	60 (local)	
2 (international)		
Production volume	16 kits per day	800 kits per day

Although the operations were not disrupted by the lockdowns because the company was involved in providing essential products and services to the public, the enterprise nonetheless implemented some measures to protect its people from the virus while ensuring continued operations. Details about these measures are provided in the following subsections.

Hybrid Work or Work from Home

The Philippines implemented lockdowns during the pandemic, and the company implemented remote or hybrid work arrangements. However, the company's operations were not completely

halted because the nature of its business was considered essential. The company ensured that its employees had the necessary equipment to work remotely, such as laptops and stable internet connections, to ensure that the company's operations continued smoothly.

To comply with the safety protocols imposed by the government during the pandemic, the enterprise implemented remote or hybrid work arrangements for the administrative staff or personnel not doing essential work. This setup allowed them to continue working while minimizing the risk of exposure to the virus. Additionally, it allowed the company to conserve energy and resources, as fewer employees needed to travel to the office. Lastly, it gave the employees more flexibility in managing their time and balancing their work and personal lives, which led to increased job satisfaction and productivity.

Agility, Flexibility, or Reallocation

For improved oversight of the firm's environmental footprint, the company implemented several sustainability initiatives. One of these was the use of just-in-time inventory management, which helped reduce wastage by allowing for limited wastage of expired goods along with reduced warehouse utilization. By optimizing the inventory management system, the company was able to minimize its carbon footprint and energy output while ensuring that it was always well stocked to meet customer demand.

Further, the company has implemented waste reduction activities such as renovating its warehouse facility and maximizing the use of its spaces. These include the installation of energy-efficient lighting systems, use of recycled packaging materials, and adoption of ecofriendly waste disposal methods.

The company's agility and flexibility allowed it to quickly adapt to changes in the market and respond to the growing demand for diagnostic kits. With the onset of the COVID-19 pandemic, the company recognized the urgent need for reliable and accurate testing kits to detect the virus. To meet this demand, it quickly scaled up its operations and expanded its manufacturing facility with the construction of a new building dedicated to product development. It also acquired new equipment to complement the needs of a growing market.

In addition, the company continued to innovate and expand its product line. Besides developing a COVID-19 reverse transcription polymerase chain reaction (RT-PCR) detection kit, it also developed an African Swine Fever (ASF) PCR detection kit in response to the country's growing cases of ASF. By diversifying its product offerings, the company was able to expand its customer base and tap into new markets.

Overall, the company's commitment toward sustainability and innovation has not only helped it become a leader in the field of animal and human virus detection and early disease detection kits but also enabled it to operate efficiently and effectively amidst a challenging global environment.

New or Contactless Business Model

To adapt to the changing business landscape brought about by the COVID-19 pandemic, the company adopted a new contactless business model. This includes the development of an online platform that allowed customers to easily order and pay for tests, such as the COVID-19 RT-PCR test, from the comfort of their own homes. The platform is user-friendly and can be accessed through any device with an internet connection.

The company accepted various modes of payment, including GCash, PayMaya, debit and credit cards, and electronic bank transfers. This not only made it more convenient for customers to transact with the company, but also ensured a contactless and safe transaction process.

In addition, the company made the recruitment process for new personnel completely online. This included online interviews, online skills assessments, and online orientation programs. This approach not only allowed for a safer and more efficient recruitment process but also enabled the company to attract talent from anywhere in the world.

Further, transacting with suppliers was also made completely contactless. The company implemented an online procurement system that allowed it to easily communicate and transact with its suppliers without the need for physical meetings or exchanges.

By adopting a new contactless business model, the company was able to continue its operations safely and efficiently amidst the pandemic. This also opened up new opportunities for growth and expansion as the world became more connected digitally.

New Skilling and Talent Acquisition

To keep up with the changing needs of the market and to further enhance its operations, the company also adopted new skilling and talent acquisition strategies.

The company recognized the importance of continuous learning and development and offered various training programs and workshops for its employees. These training programs covered a wide range of topics, including the latest technological advancements in the fields of biotechnology, quality control, and production management. By investing in the skills and knowledge of its employees, the company was able to maintain a high level of productivity and efficiency.

Moreover, to attract and retain top talent, the company implemented various employee engagement initiatives. These initiatives included flexible work arrangements, employee wellness programs, and team-building activities. By prioritizing wellbeing and satisfaction of its employees, the company was able to foster a positive and productive work environment.

In addition, the company also partnered with universities and other educational institutions to offer internship programs and job opportunities for students and graduates. By providing opportunities for students to gain practical experience in the field of biotechnology, the company is able to nurture and develop the next generation of skilled professionals.

Furthermore, the company has also started a talent acquisition program that seeks out experienced professionals in the field of biotechnology. This program includes targeted recruitment efforts, competitive compensation packages, and a comprehensive onboarding process. By acquiring top talent, the company is able to strengthen its operations and maintain a competitive edge in the market.

Through these new skilling and talent acquisition strategies, the company is able to enhance capabilities, attract top talent, and maintain a strong position in the market.

Redefining Customers or Markets

At the start of the pandemic, the company responded to the country's diagnostic needs by producing a COVID-19 RT-PCR detection kit to aid in a competitive manner. In 2021, it also developed an

ASF PCR detection kit in response to the country's growing cases of ASF. Further, the company offered training services for startup diagnostic laboratories at the height of the COVID-19 pandemic, which helped fill the need for more trained personnel toward increasing the country's testing capacity for COVID-19. To aid in these efforts, the company also offered clinical testing services for the disease, thus easing the burden on hospitals and health centers and allowing them to focus on more critical cases. Finally, besides acquiring new partnerships, a subsidiary company was created to focus on the distribution of its products.

Utilization of Macro Government Policies

Although relatively new in the industry, the company was able to take advantage of the government's policies on SME development through financing and technology upgrading. This allowed the firm to secure additional funding for its expansion plans and to upgrade its equipment and technology. The enterprise also participated in government-led loan programs that provided low-interest loans to SMEs to support their growth plans. These funds were used to construct the firm's new building dedicated to product development. A building currently being constructed is intended to house the operations team of the company.

In addition, the firm was also able to access government programs that focused on technology upgrading. Through these programs, the enterprise was able to acquire new and advanced equipment to complement the needs of its growing market. These programs also enabled the company to enhance its digitalization efforts and implement real-time monitoring of its test kits in temperature-controlled conditions. The logistics department was also able to engage in robotics and Industry 4.0 practices, capturing big data and applying them toward improved efficiency of operations, thus reducing the company's carbon footprint.

With the assistance of government policies, the firm was able to keep up with the demands of the pandemic and provide innovative solutions for the country's diagnostic needs. The company continues to participate in these programs and looks forward to taking advantage of future initiatives to further improve its operations and contribute to the growth of the SME sector in the Philippines.

Automation or Mechanization

To continue its operations during lockdowns and become productive and efficient, the enterprise also implemented automation or mechanization. The company uses machines to mass-produce the detection kits while maintaining the quality and safety of its test kits. By automating the processes, the company was able to increase its manufacturing capacity while maintaining consistency in the quality of its products.

Further, the firm invested in the development of its staff's technical skills to adapt to the new technologies and processes. This investment included training programs and workshops for employees to learn how to operate and maintain the machines and technologies. This strategy also included the hiring of experts and consultants to provide technical assistance and advice to the staff.

Through these efforts, the enterprise was able to improve productivity and efficiency, reduce costs, and increase its manufacturing capacity, which allowed it to meet the increasing demand for its products. The utilization of advanced technologies and the development of its staff's skills also positioned the company for continued growth and success in the future.

Digitalization and Artificial Intelligence

The company is fully digitalized in its operations, allowing for more accurate and efficient production of the test kits, while conserving time and resources. The firm implements real-time monitoring of

stocks through its business management software and temperature-controlled conditions. Its logistics department engages in Industry 4.0 practices, capturing big data and applying them toward improved efficiencies of travels, thereby reducing the company’s carbon footprint.

In addition to implementing automation and mechanization, the company also utilized robotics to further improve its manufacturing processes. By utilizing robotics, the enterprise was able to increase the precision and speed of its manufacturing operations, leading to even greater efficiency and productivity. The robots were programmed to perform tasks such as mixing and dispensing reagents, labeling and packaging kits, and even carrying out quality control inspections.

Further, the company invested in advanced data analytics software to monitor and optimize its manufacturing processes. By collecting and analyzing data on factors such as production rates, downtime, and quality control metrics, the firm was able to identify areas for improvement and make data-driven decisions to optimize its operations. This resulted in further improvements in efficiency and productivity, while also maintaining the high quality and safety standards of its products.

To support these technology upgrades, the company also invested in employee training programs to ensure that its staff had the necessary skills and knowledge to operate and maintain the new equipment and software. This investment in human capital not only facilitated the adoption of new technologies but also improved the firm’s overall operational efficiency and effectiveness.

Discussion

This report has highlighted the best management practices implemented by two case-study companies in the Philippines, to maintain business resilience amidst the threats due to the COVID-19 pandemic. It has been noted that Philippine SMEs, despite being strategically located in the Asia–Pacific region, were found to be lacking in terms of how much they contributed to the country’s macro economy compared with similar-sized businesses in the region and large companies. Given this plight that Philippine SMEs faced, which was made worse by the pandemic because of the strict mobility restrictions and business closures imposed by the authorities, the two case studies were able to exemplify management practices that could be considered to be success factors in adopting business resilience amidst the threats of the global health emergency.

To determine the business resilience strategies adopted in the two case studies highlighted in this report with regard to the eight management practices identified, it is important to revisit the hypothesis developed earlier in this analysis, “Business resilience and innovation are key to high growth and productivity during the pandemic.” Table 5 shows the business resilience strategies adopted by the two companies.

TABLE 5

BUSINESS RESILIENCE STRATEGIES ADOPTED IN RELATION TO THE MANAGEMENT PRACTICE.

Management practice	Yes or no			
	Case study 1	Most distinguished practices (1–10)	Case study 2	Most distinguished practices (1–10)
Hybrid work or work from home	✓	7	✓	8
Agility, flexibility, and reallocation	✓	9	✓	9

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Management practice	Yes or no			
	Case study 1	Most distinguished practices (1–10)	Case study 2	Most distinguished practices (1–10)
New or contactless business model	✓	8	✓	8
New skilling and talent acquisition	✓	10	✓	9
Redefining customer or market	✓	9	✓	10
Utilization of macro government policies	✓	10	✓	10
Automation or mechanization	✓	10	✓	10
Digitalization or artificial intelligence	✓	10	✓	10

As indicated in the matrix, all the eight management practices were confirmed in the two case studies included in this report and were given scores accordingly. The results suggest that these practices are effective and can lead to successful outcomes in similar contexts. This provides evidence for the validity and generalizability of these management practices.

The findings also suggest that these management practices may be worth considering for adoption by other organizations that are facing similar challenges or pursuing similar goals. However, it is important to keep in mind that the effectiveness of management practices can vary depending on a specific context and organizational culture, so it may be necessary to adapt them to fit the unique circumstances of an organization.

Overall, the confirmation of all eight management practices in the case studies is a positive sign that these practices can contribute to organizational success and be useful resources for managers and leaders looking to improve their organizations' performance.

Conclusion

Based on the confirmation of all eight management practices in the two case studies included in the report, it can be concluded that these practices are likely to be effective in similar contexts. The evidence from the case studies provides support for the validity and generalizability of these management practices.

It is important to note that while the confirmation of these practices in the case studies is a positive sign, it does not guarantee success in all situations. The effectiveness of management practices can depend on a variety of factors such as the organizational culture, industry, and external environment. Therefore, it is important to carefully consider the specific context and adapt the management practices as needed.

Overall, the confirmation of all eight management practices in the case studies suggests that these practices can be useful resources for managers and leaders looking to improve their organizations' performance. However, it is important to approach the adoption and implementation of these practices with careful consideration and evaluation.

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THAILAND

Economic Profile of Thailand

Thailand's GDP growth was expected to be around 3.7% in 2023 despite the global slowdown, as per reports by the IMF [4] and the Bank of Thailand [2]. Thailand's economic growth was largely driven by manufacturing and services sectors, including important subsectors such as tourism, medical tourism, automotive manufacturing, and processed food exports. However, growth prospects from the export-led model that once powered Thailand's economic growth have diminished significantly due to stagnation in productivity, particularly in total factor productivity (TFP).

The tourism industry, which is one of the key engines for economic growth in Thailand, was hit hard by the COVID-19 pandemic. However, it gradually recovered after the relaxation of restrictions and the reopening of borders. In December 2022, the country had already reached the levels achieved in 2019 (see Figure 1).

During the pandemic, financial institutions in Thailand provided significant support to viable businesses by launching several measures such as soft loan facility, debt restructuring, debt moratorium, relaxing lending rules, lower interest rates, and suspension of debt repayment. Loans from financial institutions are considered major sources of funding for businesses in Thailand, and these institutions have supported various loan schemes that help smaller corporates easily access funding sources at reasonable costs.

According to an Asian Development Bank (ADB) report [5], Thailand's GDP growth is expected to be around 3.3% in 2023 and 3.7% in 2024, with per capita GDP growth expected to be 2.8% in 2023 and 3.2% in 2024. Inflation rates are also forecasted to be 2.9% in 2023 and 2.3% in 2024.

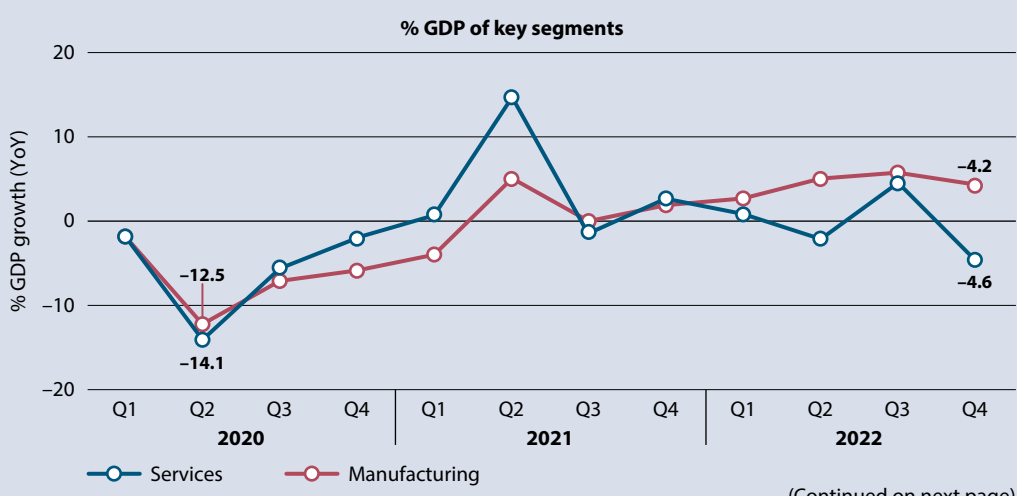
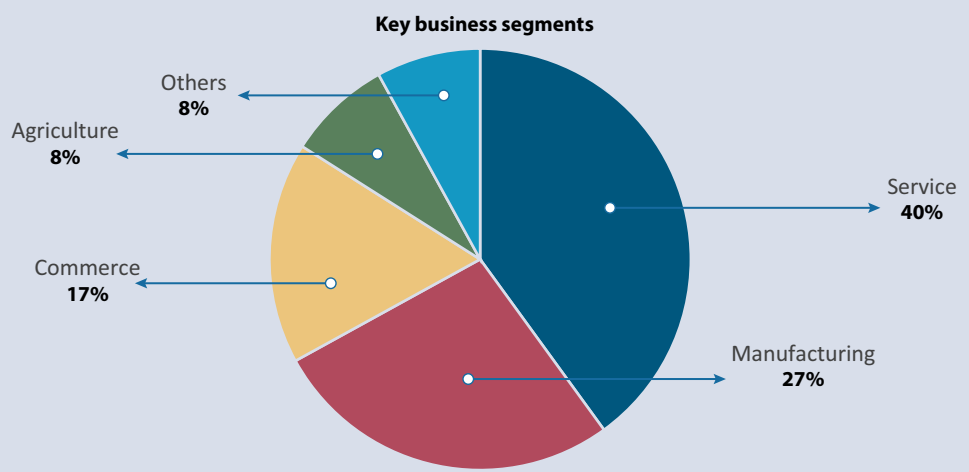
In conclusion, while Thailand's manufacturing and services industries are expected to continue to drive economic growth, the country needs to address the stagnation in productivity to ensure sustainable economic growth in the long term. Despite the challenges posed by the pandemic, the resilient financial infrastructure and support measures have enabled viable businesses to access funding and continue their operations, which bodes well for Thailand's future economic growth.

Thailand's economy had faced significant challenges due to the COVID-19 pandemic, but it is showing signs of recovery. According to a National Economic and Social Development Council (NESDC) report [3], the Thai economy is expected to expand in the range of 2.7–3.7% in 2023, mainly supported by further expansion of the tourism sector, increase in both private and public investments, the gradual growth of private consumption, and the continual expansion in the agricultural sector.

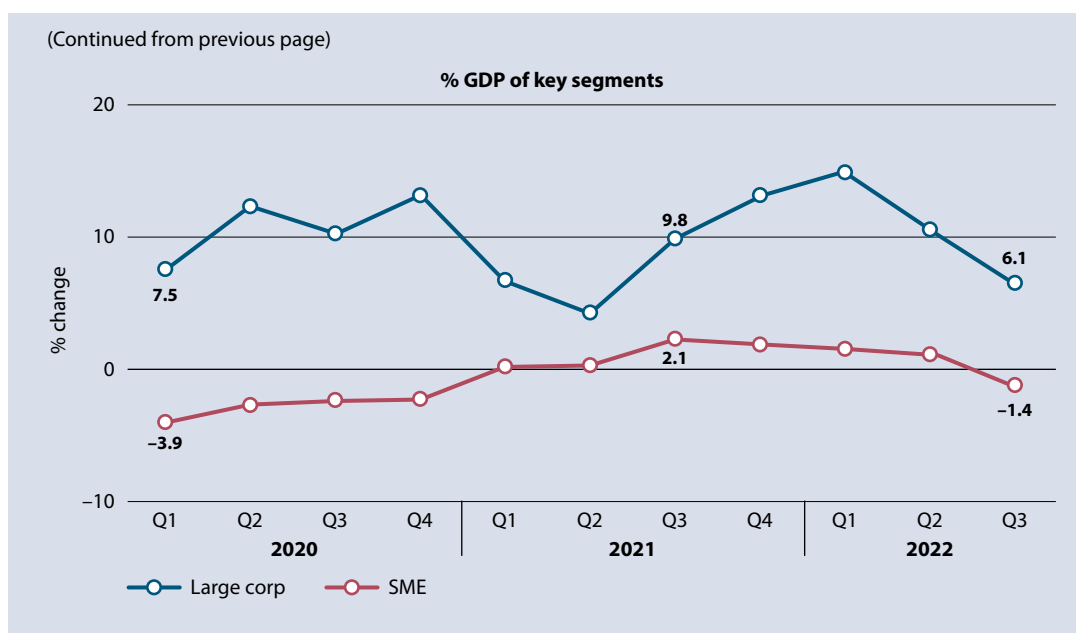
The recovery in the tourism sector has been a major contributor to economic growth in Thailand. As of December 2022, the country had already reached the 2022 tourism target of 10 million visitors. However, there has been a slowdown in global demand that has affected Thailand's manufacturing industry, particularly in the production of electrical appliances and chemical products. The value of merchandise exports started to contract in the last quarter of 2022, except for a few major export categories, including agricultural products such as cassava, durian, automobiles, and electronics.

FIGURE 1

ECONOMIC PROJECTION, KEY BUSINESS SEGMENTS, AND FINANCIAL INFRASTRUCTURE.



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The NESDC report also projects private consumption expenditure, private, and public investments to rise by 3.2%, 2.1%, and 2.7%, respectively. Inflation is projected to slow down to a range of 2.5–3.5%, and the current account is estimated to mark a surplus of 1.5% of GDP.

Overall, the Thai economy is expected to continue to recover in 2023, driven by a recovery of the tourism sector, expansion of private and public investments (see Table 1), and growth of private consumption and the agricultural sector. However, the export-led model that once powered much of Thailand's economic growth seems to have diminished due to a stagnation in productivity, and the global demand is uncertain, which could affect the export industry in Thailand in future.

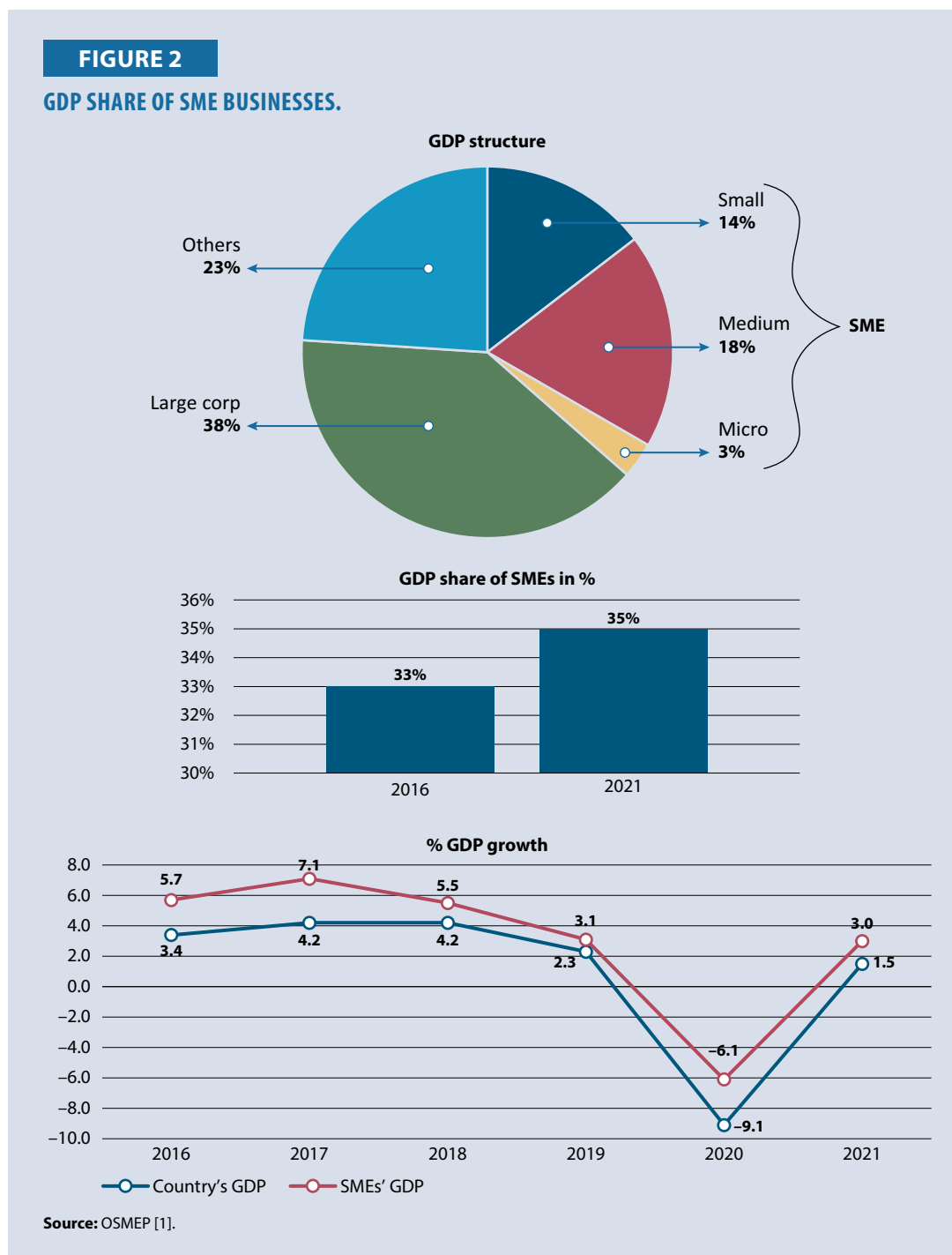
TABLE 1

ECONOMIC PROJECTION, PRIVATE CONSUMPTION, AND EXPORT INDICES.

%YoY	2021	2022	2023 (F)		
	Year	Year	Q3	Q4	Year
GDP (CVM)	1.5	2.6	4.6	1.4	2.7–3.7
Investment	3.1	2.3	5.5	3.9	2.2
Private	3.0	5.1	11.2	4.5	2.1
Public	3.4	-4.9	-6.8	1.5	2.7
Private consumption	0.6	6.3	9.1	5.7	3.2
Government consumption	3.7	0.0	-1.5	-8.0	-1.5
Export of goods	19.2	5.5	6.7	-7.5	-1.6
Volume	15.5	1.3	2.1	-10.3	-0.6
Import of goods	27.7	15.3	23.2	-0.3	-2.1
Volume	17.9	2.0	8.0	-9.2	0.4
Current account to GDP (%)	-2.1	-3.4	-6.4	1.0	1.5
Inflation	1.2	6.1	7.3	5.8	2.5–3.5

Source: The Office of SME Promotion (OSMEP) [1].

In summary, Thailand’s economy has been recovering since the COVID-19 pandemic, with the main drivers of growth being tourism and domestic consumption. While the services sector continues to be the main driver of growth, manufacturing production has decreased due to a slowdown in global demand. The government is focusing on improving innovation, technology, and sustainability through the Thailand Bio-Circular-Green (BCG) Economic Model to reestablish Thailand’s competitiveness in the global landscape. Small and medium-sized enterprises (SMEs) have become one of the most important drivers of Thailand’s economy, having contributed about 35% of the country’s GDP at the end of 2021 (see Figure 2). Their further improvement and expansion are considered key to Thailand’s future economic growth.



SMEs in Thailand

It is interesting to note that despite the challenges posed by the COVID-19 pandemic, certain SME industries in Thailand have demonstrated resilience and even achieved high growth rates. These include healthcare, financial services, and water pollution management businesses, with two-digit GDP growth rates ranging from 10% to 47% compared with the same period in the preceding year (see Table 2). This suggests that there are opportunities for SMEs in these sectors to thrive and contribute to the overall growth of the Thai economy.

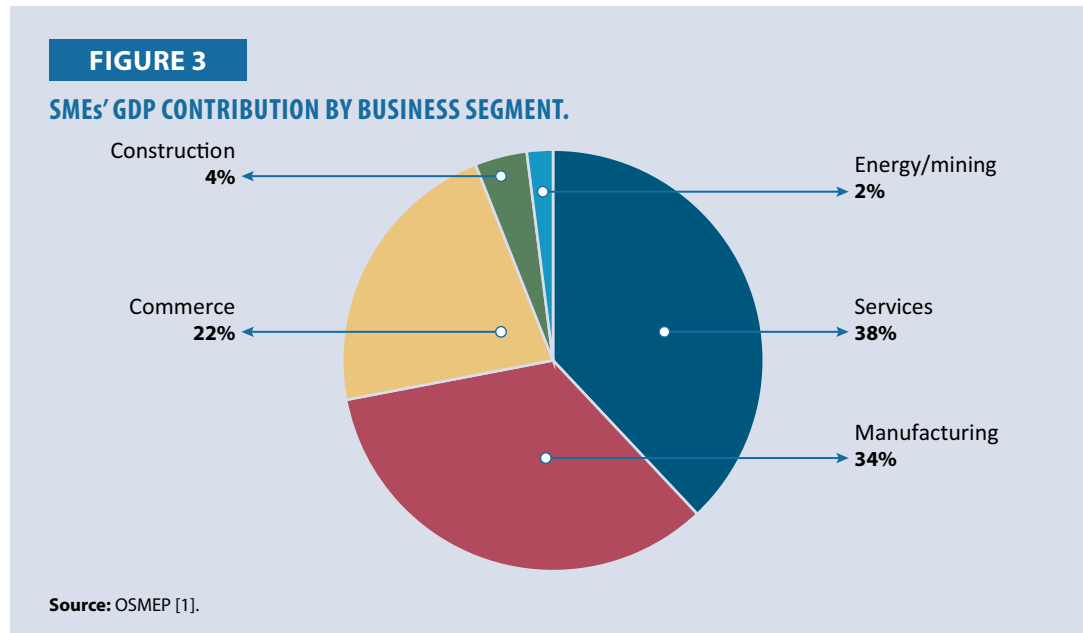


TABLE 2
PERCENT GROWTH OF SMEs' GDP BY BUSINESS SEGMENT.

Business Segment	COVID-19 breakout								Borders reopen		
	2020				2021				2022		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Agriculture	-2.3	2.7	4.8	6.2	7.5	8.7	8.9	5.9	6.9	6.6	-0.3
Mining	6.4	-10.0	-3.3	-5.9	-0.2	9.9	-5.6	-7.8	-46.8	-49.3	-44.4
Resource	-7.6	-20.2	-17.2	-20.8	-6.1	4.3	0.8	5.4	16.4	15.6	20.6
Water & pollution management	17.6	15.7	15.6	19.7	1.7	9.1	7.9	8.3	-3.1	-4.7	-4.3
Construction	-10.8	6.4	8.9	-1.3	13.0	2.6	-4.6	-1.3	-8.1	-7.1	-5.4
Commerce	5.4	-9.4	-4.9	-2.3	2.8	10.5	8.2	8.4	6.9	7.3	7.7
Transportation and warehouse	-37.4	-57.8	-47.4	-45.4	-17.8	9.1	-2.5	2.1	16.1	17.2	22.4
Hotel and restaurant	-22.4	-52.2	-38.2	-32.3	-36.9	16.4	-19.0	-4.9	34.3	45.7	54.4

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Business Segment	COVID-19 breakout								Borders reopen		
	2020				2021				2022		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Communication	-8.9	-9.9	-9.7	-8.7	-6.2	-5.1	-4.0	-5.4	21.0	21.6	20.1
Financial service	41.7	37.5	37.4	40.9	40.6	39.9	40.3	38.1	-20.7	-20.5	-21.3
Real estate	2.5	1.8	2.4	2.1	14.6	15.1	12.9	13.7	-0.3	1.0	1.6
Management and support service	2.8	-17.8	-13.8	-10.5	-0.1	14.6	10.8	9.1	5.8	6.8	11.6
Healthcare	40.6	40.1	42.0	46.7	33.8	35.6	36.8	38.7	-34.8	-33.7	-35.7
Entertainment	21.4	-40.1	4.9	3.2	-4.6	100.6	-5.4	-2.0	-2.8	-0.1	1.4

Source: OSMEP [1].

The SME Development Bank's survey on how SMEs coped with the COVID-19 pandemic reveals that the main strategies for SMEs to continue operations were cost reduction, introducing new products and services, partnering with upstream and downstream chains, and adjusting business models. SMEs that could adapt to these strategies were likely to incur less losses. In addition, incorporating innovation and digitalization into business models was essential for outperformance. However, only 61% of the SMEs utilized digitalization to improve their business, mainly through online advertisements, Facebook promotions, digital payments, and online platforms. Efficient utilization of government's support projects was also critical for success during the crisis. Therefore, SMEs that demonstrated high agility, efficiency, and innovative business models had higher potential for growth during the pandemic.

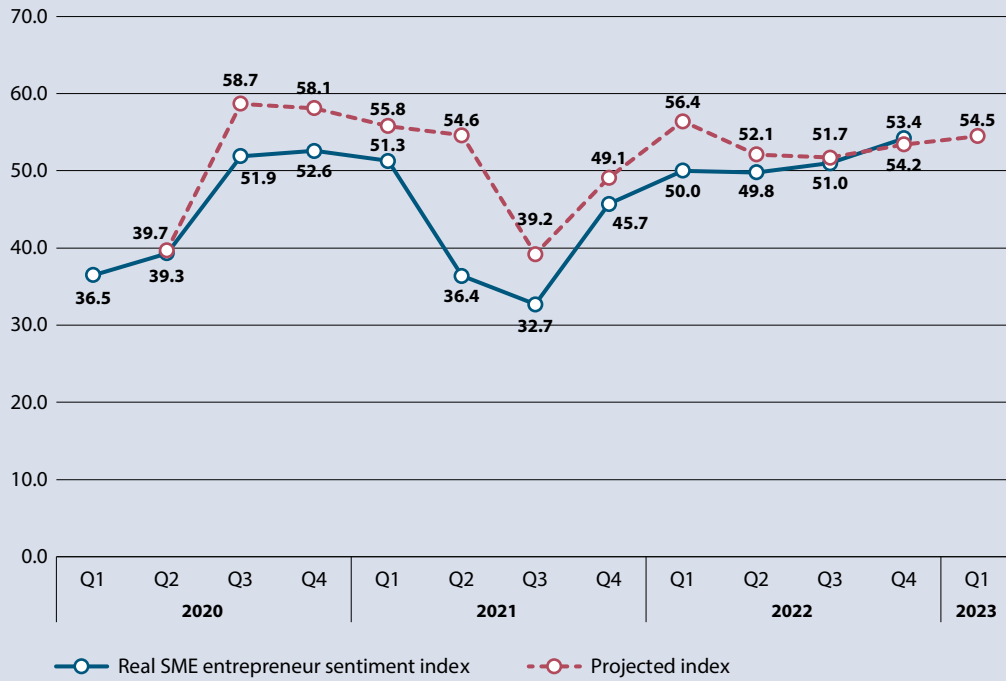
The SME Entrepreneur Sentiment Index (see Figures 4 and 5) shows a significant drop at the start of the COVID-19 lockdown in 2020 and at the peak of the Omicron wave in 2021. However, after the reopening of borders, the Index steadily increased and was expected to continue growing in 2023, especially in the service sector. The growth was in line with the purchasing powers of both Thai and foreign tourists and cost improvements from lower energy prices and raw materials. The manufacturing and service sectors contributed the most to this rise, particularly the hotel, construction, transportation, metal manufacturing, and cloth production industries.

The employment rate experienced a significant drop in 2020 but has been slowly recovering since 2021. The services sector is the main source of employment for SMEs, making up 39%, with the manufacturing sector following closely behind at 33% (see Figure 6), which is primarily concentrated in Bangkok. Looking ahead, SMEs in the tourism, healthcare, and digital markets are expected to have a higher demand for employees compared with other sectors, driven by the growing trend of digitalization and health concerns.

Rising interest rates pose a major potential risk to the future performance of SMEs, as that could result in higher costs for both short-term and long-term loans. A survey by OSMEP found that SME funding costs account for an average 45% of all expenses, with most SMEs relying on bank loans

FIGURE 4

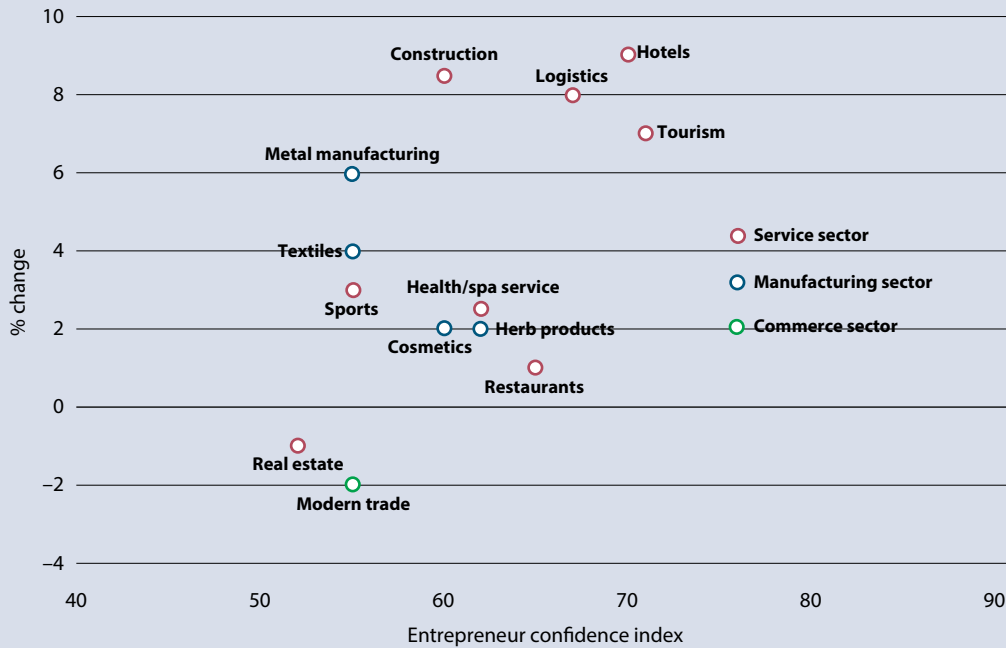
SME ENTREPRENEUR SENTIMENT INDEX.



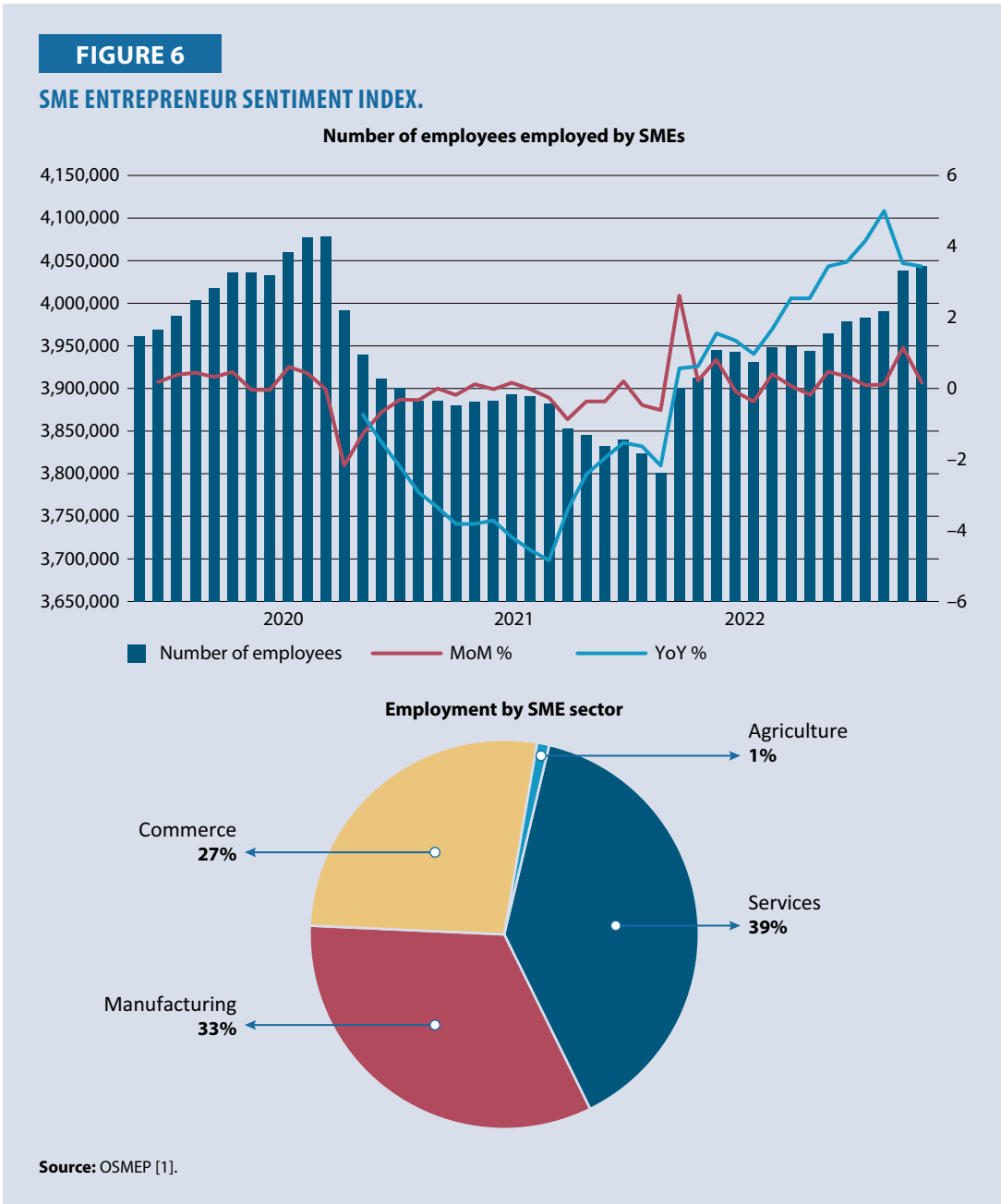
Source: OSMEP [1].

FIGURE 5

PERCENTAGE CHANGE IN SME ENTREPRENEUR CONFIDENCE INDEX.



Source: OSMEP [1].



that are closely linked with the policy rate. In response to the economic uncertainty, 81% of SMEs had developed a strategic plan to cope with higher funding costs, which included measures such as postponing investments, reducing operational costs, and adjusting their business models. However, SMEs also expected government support to help address funding issues, such as suspension of interest payments, extension of loan payment periods, and provision of soft loans. The manufacturing and commerce sectors are expected to be significantly affected by higher funding costs, as they require working capital from bank loans to carry out their daily operations.

New Productivity Trend

The Thai economy is experiencing three new trends that are shaping the way manufacturers and service providers operate. These trends are digital technology, environmental responsibility, and health concerns. To prepare for and adapt to this new normal (see Table 3), businesses must embrace

these trends and adjust their operations accordingly. As consumer demand shifts toward more environmentally responsible and health-conscious products and services, certain sectors are expected to benefit more than others.

TABLE 3
THE NEW NORMAL AND ITS EFFECT ON BUSINESSES.

New trend	Potential businesses	How new trends contribute to growth in business
Digital technology	<ul style="list-style-type: none"> • Manufacturing of electrical equipment/machine • Logistic • Packaging 	<ul style="list-style-type: none"> • Higher demand on electrical equipment to support innovation • Online shopping creates higher demand for carriers and packages
Environmental responsibility	<ul style="list-style-type: none"> • Electric vehicles (EVs) • Clean energy equipment • Environmental packaging 	Higher demand for green enterprise and products so firms move to green production.

Source: OSMEP [1].

The COVID-19 pandemic has emphasized the importance of digital technology in the survival and competitiveness of businesses. Many corporations have since increased their investments in technology, while customers now expect seamless online experiences, fast shipping, and easy returns. Several sectors are likely to benefit from this trend:

- (1) **E-commerce:** The pandemic has accelerated the shift toward online shopping and e-commerce, thereby leading businesses to establish an online presence quickly to adapt to the changing landscape.
- (2) **Equipment manufacturing:** Digital technology can enable equipment manufacturers to offer greater customization options to their customers by tailoring their products to specific needs and preferences.
- (3) **Logistics and packaging:** The increase in online users has resulted in a higher demand for packaging and carrier services, leading businesses to utilize technology to increase productivity and serve more demands at lower costs.

Businesses are increasingly recognizing the significance of environmental, social, and governance (ESG) considerations, and this has impacted all aspects of their operations. Stricter regulations require companies to disclose their environmental impacts and utilize more ecofriendly materials. Following are some potential business opportunities related to ESG:

- (1) The electric vehicle (EV) industry has become attractive to environmentally conscious consumers, especially younger generations, due to steady battery technology development and supportive policies such as tax reductions.
- (2) Companies involved in producing renewable energy products, such as solar or wind power and clean energy equipment, can benefit from increasing demand for clean energy solutions and policies that support their growth.

- (3) Businesses prioritizing ESG considerations can enhance their reputation by demonstrating their commitment to environmental and social responsibility through environmentally friendly packaging and other initiatives.

Government Measures

Thailand is striving to become an innovation-driven economy that attracts investment. To achieve this, it needs to address labor skill gaps and mismatches by investing in education and training programs and promoting a culture of lifelong learning. While the government has prioritized worker skill development, there are still challenges in improving labor productivity in Thailand, such as an increase in freelance workers who prioritize work–life balance and flexibility, a decrease in entry-level workers due to the COVID-19 situation, and the need for workers to develop a wide range of skills, especially in digital technology, data analysis, digital marketing, and money management. Additionally, the government should pay more attention to supporting informal workers who are unable to access state welfare, as the number of uninsured worker applicants seeking remedial support has continued to increase rapidly in 2021.

During the COVID-19 pandemic, the Thai government implemented various measures to support different sectors of the society. These measures included monetary support such as remuneration programs for insured employees and employers, money for state-welfare cardholders, half-price schemes for participating products, travel expense subsidies, tuition fee support for students, and compensation and subsidies for SMEs under Section 33. There were also expense reductions, such as 10% discount on electricity and utility bills for households during the pandemic period. Loan and lending support included debt payment suspension, loan rehabilitation, soft loans, debt suspension, and lowered interest rates for SMEs. Health welfare measures included free medication for COVID-19 infected individuals. These measures aimed to alleviate the burden of expenses and debts and provide different types of welfare during the pandemic period.

Business Resilience of SMEs

To enhance business resilience, SMEs can take various measures, including

- (1) diversifying their product or service offerings to reduce reliance on a single product or market;
- (2) developing strong relationships with customers and suppliers to ensure business continuity and support;
- (3) investing in new technologies and processes to improve efficiency and reduce costs;
- (4) building a strong financial position with adequate cash reserves and manageable debt levels;
- (5) conducting regular risk assessments and developing contingency plans for potential disruptions;
- (6) developing a culture of innovation and continuous improvement to adapt to changing market conditions;
- (7) investing in employee training and development to build a skilled and adaptable workforce; and

- (8) building strong networks and collaborations with other SMEs and industry associations to share knowledge and resources.

By implementing these measures, SMEs can enhance their operational and dynamic capabilities, which will help them adapt to disruptions and seize opportunities in a challenging business environment. Additionally, policymakers can bolster SME resilience by creating a business environment with access to financing, training, and development programs and supportive regulatory frameworks.

Case Studies in Thailand

The first case study is about Advance Web Service (AWS), an IT service provider in Thailand. The company had to face a significant challenge when a major client suddenly terminated its contract, causing a significant drop in revenue. However, the company was able to respond quickly and develop a new strategy to diversify its services and expand its client base. This was made possible by the company's dynamic capabilities, including the ability to identify new opportunities and respond to changes in the market.

In addition, the company's organizational agility allowed it to quickly implement the new strategy, restructure the operations, and train the employees to provide new services. The company also maintained close relationships with its existing clients, which helped it retain those clients and continue generating revenue. Overall, AWS was able to bounce back from a significant setback and continue to grow its business, thus demonstrating strong business resilience and agility.

The second case study is about Aromatic Farm, a coconut farming business in Thailand. The company faced a challenge when it was hit by a severe drought, which threatened its ability to produce coconuts. However, the company was able to respond quickly by developing new strategies to conserve water and maintain the health of its coconut trees. This was made possible by the company's entrepreneurial characteristics, including the creativity and the ability to think out of the box.

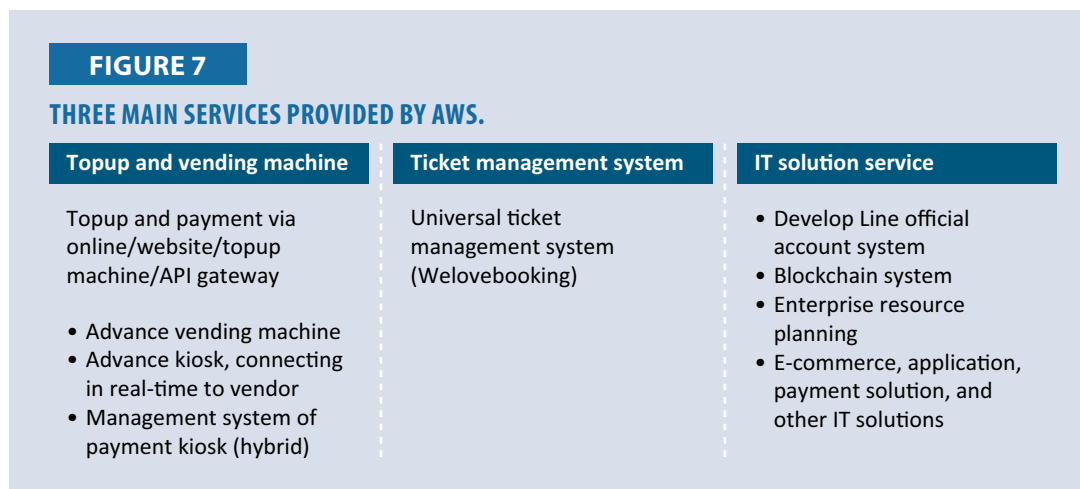
The company also demonstrated strong organizational agility by quickly implementing new strategies and training its employees to use them. As a result, the company was able to overcome the drought and continue producing coconuts, maintaining its revenue stream, and its position in the market. This demonstrates how a combination of entrepreneurial characteristics and organizational agility can help SMEs to overcome significant challenges and continue growing their businesses.

Case Study 1: AWS

About AWS

AWS is an SME that was established in 2004 with a registered capital of USD3.6 million. The company provides software design and development services to entrepreneurs and aims to become a leader in delivering innovative online technology. AWS offers three main services: payment and top-up solutions; ticketing management systems; and IT solution platforms, which deliver significant value to its clients' business operations (see Figure 7). By leveraging digital technology, AWS enhances database capabilities, streamlines workflows, maximizes performance, and helps businesses establish their own digital channels, thereby allowing them to focus on future growth instead of spending time on manual internal operations. AWS primarily serves local corporate

customers of all sizes from various industries, including retail, automotive, restaurants, hotels, entertainment, and sports, using a B2B and B2B2C business model. Around 99% of AWS’s customers are private businesses, while the remaining 1% are government organizations [7].



AWS is managed internally by a team of specialized IT and e-commerce professionals, consisting of 50–60 individuals. The company is highly regarded for its dependable services and high standards. Recently, AWS was listed on the LiVE exchange and platform, which was introduced by the Stock Exchange of Thailand to support crowdfunding for start-ups and SMEs. Utilizing blockchain technology, this platform allows SMEs to broaden their customer base and acquire capital funding from both private and public sectors. Even amidst the challenges brought about by the COVID-19 pandemic, AWS persevered and was able to get listed on the LiVE exchange, thereby indicating its strong resilience and potential for growth as it can now easily reach out to customers and investors.

Reasons for Sustained Growth

AWS has several competitive advantages that contribute to its success in the market. First, the company is able to constantly adjust its business plans to new trends while balancing performance and risk management. AWS has identified new opportunities, particularly in the creation and development of services that helped entrepreneurs overcome the crisis situation caused by the COVID-19 pandemic in 2020. By utilizing digital technology, AWS was able to help its customers adjust their business models to cope with the new normal and changing customer behavior, thus allowing them to continue their businesses and pursue further development. Developing digital marketing channels such as a “Line Official Account” is a key tool that entrepreneurs must accelerate to gain advantages, create added value, and increase competitiveness and efficiency. Second, AWS has a team of 50–60 professionals with specialized expertise in IT and e-commerce for providing reliable and high-quality services to AWS customers. The company is widely recognized for its high standards and reliable services. Third, AWS has been listed on the LiVE exchange and platform introduced by the Stock Exchange of Thailand. This enables the company to reach a broader audience and expand its customer base while sourcing support from both public and private sectors. This also helps them in finding capital funding from potential investors who may not otherwise be exposed to them. Finally, AWS is able to apply new innovations and technological solutions to entrepreneurs to elevate their operational efficiency and help their businesses accommodate changes in consumer behavior in the long run. These changes bring new opportunities for AWS to offer solutions and technological tools that align with the interests of its clients.

AWS differentiates itself by creating and developing unique digital services that enhance entrepreneurs’ business operations. The company has been a pioneer in inventing and implementing new digital solutions for over a decade. AWS’s commitment to innovation has been a key factor in its success, and it continually strives to create new solutions. Its recent focus on technologies such as blockchain and AI has resulted in remarkable progress. AWS has developed a completely balanced blockchain system, a blockchain certificate authority, and a traceability platform that stores and examines data systematically. These new innovations improve data security and reliability and can serve the needs of both private and government sectors. AWS has filed several patents for its innovative systems and has received numerous awards, including the Thailand ICT Award in 2016 and 2018, as well as ISO 29110 certification for its reliable services (see Table 4). The company’s dedication toward innovation and development of unique digital services gives it a competitive edge in the market.

TABLE 4
LIST OF PATENTS, TRADEMARKS, INTELLECTUAL PROPERTY, AND REWARDS RECEIVED BY AWS.

Patents, trademarks, and intellectual property		Patents, trademarks, and intellectual property	
Name	Year	Name	Year
Trademark “Siam Topup”	2012	Authentication system by QR code	2015
Trademark “Kapook Topup”	2012	Product pallet	2016
Mobile phone prepaid system that searches for service providers automatically by a server	2013	Two-dimensional bar code reader or QR code for controlling electrical equipment	2016
TV-rating system by QR code	2013	Vending machines with money change and payment systems via QR code	2017
RFID system for intelligent vending machine	2015	System and recording method for Blockchain Balanced Transactions	2018
Camera-recording system for access control using QR code	2015	Two-payment system QBOX	2022
Awards			

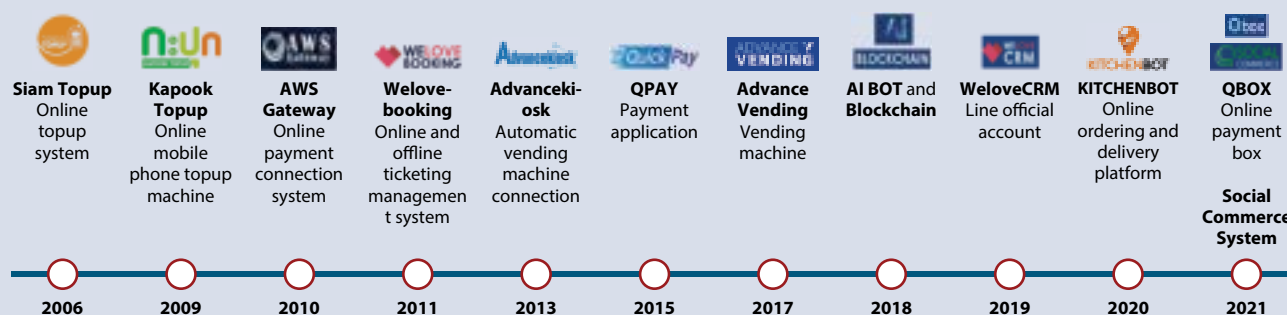
Thailand ICT Awards 2016: Runner Up: Research and Development QPAY Q member

Thailand ICT Awards 2018: Merit: Business Service(Finance and Accounting Solutions)

AWS has implemented a customer-centric business strategy by constantly diversifying its products and services to meet the evolving needs of its existing and new demand markets. To achieve this, AWS uses a data management system to understand customer behavior and create tailored products and services. This approach helps mitigate the risk of a future demand uncertainty and strengthens the company’s resilience in the face of various crises. Over the past decade and a half, AWS has modified existing products, developed new technologies and innovations, and invested heavily in R&D to add value and differentiate itself from competitors (see Figure 8). The company emphasizes and prioritizes R&D as a way to continually create new products and services and to survive during crises and thrive in competitive markets. AWS also adopts an agile approach that supports continuous learning and improvement, quickly adapts to changing customer needs, and makes rapid changes to its products and services based on customer feedback. As a result, the company was able to approach the COVID-19 pandemic as an opportunity to expand its product and service offerings. This not only benefits its customers but also positively impacts the wider economy.

FIGURE 8

CONTINUATION OF AWS'S PRODUCT DEVELOPMENT OVER THE PAST 15 YEARS.



Based on the financial statements from 2019 to 2022, the company was able to significantly increase its EBITDA during the pandemic due to its ability to adapt quickly, innovate, and optimize costs. The company successfully managed costs while creating new services to help entrepreneurs navigate the challenges posed by COVID-19, showcasing its resilience in a difficult environment. Despite the pandemic's impact on revenues, AWS was able to prioritize costs, use technology, implement lean management, and conduct a detailed performance analysis to manage resources more efficiently. AWS prioritized essential costs and reduced non-essential expenses, using AI and automation to eliminate the cost of waiting time between departments, thus saving time and money. AWS also invested in employee skill development, encouraging employees to learn continuously and make improvements. AWS's financial performance outperformed its competitors during the pandemic, reflecting the company's competitiveness and resilience in the industry. More information on these achievements is provided in Table 5.

TABLE 5

FINANCIAL PERFORMANCE OF AWS.

As of the end of December (USD)	2019	2020	2021	2022	Change 2021	Change 2022
Total revenue	3,727,879	3,020,909	2,731,818	2,030,606	(289,091)	(701,212)
EBITDA	(23,636)	208,182	615,152	624,848	406,970	9,697
Number of employees	92	86	53	61	-33	8
Sales per employee	40,520	35,126	51,543	33,288	16,417	(18,255)

Management Practices and Initiatives for High Growth and Productivity During the Pandemic

- (1) **Redefining customer/market:** Before the pandemic, businesses in the tourism segment had focused on boosting revenue and expanding investments, with a large number of employees running daily operations. Once the pandemic started to severely affect the tourism sector, such businesses were forced to reduce unnecessary costs and lay off many employees, or even temporarily close down their operations. These entrepreneurs eventually realized the importance of automation and digitalization, for reducing costs and better serving the changing demands and behaviors of customers. Therefore, corporate demand for online systems for customer orders, payments, marketing, and accounting sharply increased in all business segments. In other words, the series of lockdowns in 2020 and 2021 led to a new normal, where businesses and end-users were increasingly reliant on online platforms and systems to conduct their work and daily transactions, while businesses in the tourism sector had to quickly adapt and become proficient in the use of such digitalization. Also, they had to find ways to cut unnecessary costs (such as rent and salaries) to offset lost revenues.

In response to this digitalization demand, AWS leveraged the crisis and offered IT solutions that could help reduce operating costs. It used tools such as continuous integration, continuous delivery, and automated testing to ensure that it could deliver high-quality software to customers quickly and safely.

For instance, for businesses that used to have physical stores, AWS helped implement online vending selling channels through various platforms such as Line Official Account or a mini selling application on Line Official Account and KITCHENBOT (an online ordering and delivery platform), which reduced the burden of paying online platform fees (such as Grab, Shopee, or Lazada). Even after the pandemic, such online platforms stayed on as a new normal.

In 2021, most of those employees who were laid off during the pandemic had already found new jobs and would not return to the tourism industry. So, tourism enterprises should change to permanently replace employees with automation and digitalization. With the agility of AWS, once it received feedback from customers, it rapidly altered its products and services as well as adjusted its plans and priorities quickly in response to changing circumstances. For instance, it continued to launch two new services in 2021, including QBOX (an online payment box) and Social Commerce System (a social media system that widens brand audience and customer reach). These efforts reflect the company's agility in seizing new business opportunities amidst a challenging business environment with rapid adaptation and continuous delivery, which have helped it stay competitive and meet the evolving needs of its clients.

This strategy also improved diversification and compensated for the decreasing revenue in other products during the pandemic. The ticketing revenue had been significantly affected by a large decline in the number of tourists, so AWS moved to focus on new products that were more aligned with the changed situation to boost the overall performance of the company.

- (2) **Hybrid work/working from home/flexibility:** To promote flexibility and increase operational efficiency during the COVID-19 pandemic, AWS made changes to its internal operations by implementing a hybrid work approach. The company utilized online meeting platforms, such as Zoom, across all departments, which allowed for a more flexible and efficient approach to meetings. This hybrid work strategy led to improved operational efficiency, as more meetings could be scheduled and conducted with greater ease. Additionally, it enhanced employee satisfaction, as they now had more flexibility in managing their time and working in ways that were most effective for them. This approach also improved personal wellbeing and productivity of employees, resulting in a reduction in costs and an increase in workload efficiency. Overall, the implementation of hybrid work during the pandemic allowed AWS to adopt a better working process, improve efficiency, reduce hiring costs, increase control over work hours and location, mitigate burnout, and enhance productivity.
- (3) **New business model:** In response to the financial challenges faced by many businesses during the COVID-19 pandemic, AWS adjusted its pricing model to better suit the needs of its customers. Recognizing that liquidity was a problem for many, AWS switched from a one-time payment model to a subscription or installment payment model. This allowed

customers to pay less overall for the same services, making them more affordable and accessible. For example, a customer who previously had to pay a one-time fee of USD150,000 for a five-year contract service could now pay USD30,000 per year for five years. By providing greater flexibility and affordability in payment options, this new pricing model helped AWS maintain the revenue flow and retain existing customers during the pandemic.

- (4) **Risk management and product diversification:** Enterprise risk management (ERM) plays a vital role in preventing negative outcomes and minimizing risks due to investment uncertainties. AWS has a well-developed ERM plan and a policy that avoids aggressive investment in too many projects to boost revenue. Instead, it carefully weighs the benefits against operating costs to find a suitable solution with an acceptable level of risk, considering the rapid changes in technology and the high risk of obsolescence. AWS focuses not only on revenues but also on long-term consequences of its operations; and assesses future burdens and uncertainties carefully. It emphasizes the bottom line, net profit, and cost and risk management.

Furthermore, AWS has diversified its products and customer targets to ensure that its revenue will not be severely affected during a crisis. AWS is positioned as an SME, offering a wide range of technology services and diversifying its business to various markets and customers. In contrast, startups may be less resilient as they rely on a single product line and more aggressive funding sources from investors, making their investments riskier. Product diversification is, therefore, a key focus, allowing the company to confront the crisis by mitigating the impact of sales drops in certain products. For example, during the pandemic, AWS achieved growing revenue from its payment services, despite a significant drop in ticketing service sales.

- (5) **Management vision:** AWS's CEO has a risk-averse management style and emphasizes developing a stable and sustainable structure for the company's steady growth. The company's strategy balances risk and performance, rather than solely focusing on revenues, when making new investments and creating new products. AWS carefully considers various commercialization possibilities, as well as potential risks and uncertainties, ranging from best- to worst-case scenarios. Additionally, the CEO promotes a positive mindset and encourages employees to broaden their skills, allowing the company to adjust its operations quickly and outperform its competitors. This approach increased productivity, even during the crisis. In summary, the CEO's risk awareness and positive management vision enabled AWS to survive the crisis and maintain sufficient liquidity in a challenging business environment.
- (6) **New skilling and talent acquisition:** Continuous training is crucial for enhancing productivity and performance of employees by providing them with the necessary skills and confidence to perform their jobs. AWS has instilled a culture of learning that promotes engagement, motivation, and independence among its workforces. It encourages its employees to participate in training, attend classes, and explore new challenges and responsibilities while transitioning to other departments to acquire new skills and experiences. During the COVID-19 pandemic, AWS focused on upskilling its existing workforce to adapt to the changing demands of the business. The company offered training opportunities in new areas of expertise, reassigned employees to new roles, and discovered that its staff had more skills than previously recognized. This allowed AWS to use its

resources more efficiently and avoid the cost of hiring new personnel. The company also leveraged online training platforms provided by the government and other organizations, which enabled employees to attend courses from anywhere at a lower cost. AWS is committed to developing its employees' capabilities and providing opportunities for new skills development as technology trends and demands continue to evolve. The management highlights the negative consequences of not adapting and not learning new things and allows employees to weigh the costs and benefits before making decisions.

(7) **Cost management:** During the pandemic, AWS focused on managing costs by identifying essential versus non-essential expenses and implementing strategies to reduce costs while maintaining business operations. The company adopted a variety of cost-saving measures, including

- Reskilling of employees: AWS restructured roles and responsibilities to improve efficiency by training employees in different areas. This allowed the company to utilize existing resources more efficiently and avoid the cost of hiring new personnel.
- Upskilling of employees: AWS encouraged its employees to take on new challenges and responsibilities by offering training and development opportunities in new areas of expertise. This helped the company to discover that its employees had more skills than previously recognized, enabling it to utilize existing resources more efficiently.
- Utilization of technology: AWS adopted automation and used AI to handle call center positions instead of humans to reduce the cost of hiring employees. This helped create more economy of scale as the firm grew bigger.
- Lean management principles: AWS implemented lean management principles to reduce waste and optimize resources. It identified areas of wastage, which was the waiting time of processing between departments. By implementing fully automated data processing, the company significantly shortened internal processing time and improved cost efficiency.

Through these cost-saving measures, AWS was able to reduce its operational costs significantly during the pandemic. The company also prioritized upskilling its existing employees and outsourcing some duties to systems to control costs effectively and efficiently in future.

(8) **Utilization of macro government policies:** During the COVID-19 pandemic, AWS utilized various government policies to improve its liquidity and maintain daily operations. The Thai government implemented financial schemes such as interest rate reductions and payment deferrals, which helped the company to improve its liquidity. The government also offered free online education and training programs for employees, which AWS utilized to upskill its workforce. The company also worked with the Digital Economy Promotion Agency (DEPA), which provided a platform to market and improve sales opportunities for digital startups and SMEs. AWS participated in free exhibitions supported by the government to promote the company, lower the cost of accessing customers, and build the AWS brand. However, funding for R&D for SMEs was found to be relatively burdensome due to complex processing procedures and document requirements.

- (9) **Drive innovation:** AWS drives innovation through its company policy and mission that prioritize R&D to create new technology and respond to changing trends and demands. The company's top management works closely with employees to enhance their skills, experiences, and technology insights. AWS has a well-established risk management system that helps manage innovation-related risks effectively. The company takes a conservative view of sustainable growth and relies on the strength of its internal operations to foster new innovation. Most of AWS's innovations originate from its internal operations, and new services undergo internal testing before being offered to the market.

Despite the challenges posed by the pandemic, AWS continued to develop new online services from 2020 to 2022. At the start of the pandemic, AWS provided Line Official accounts to many small and medium businesses, giving them their own ordering and marketing platform without relying on costly third-party platforms. AWS also launched KITCHENBOT, an online ordering and delivery platform, to meet the high demand for delivery services. In 2021, AWS implemented new technologies such as QBOX, an online payment service, and the Social Commerce System, a social media system that expands brand audiences, to help businesses work better in a changing environment. AWS is also working on a healthcare platform to serve both businesses and end users, aligning with the trend of an aging society, with increased focus on health concerns.

- (10) **Automation:** During the pandemic, AWS implemented automation in various functions, such as marketing and after-sales customer services. This involved the replacement of marketing call centers with online marketing automation, which utilized sales data management systems to analyze marketing strategies. The adoption of automated operations resulted in several benefits, including improved productivity, reliability, availability, enhanced performance, and reduced operating costs. The after-sales system was also developed to enable remote monitoring of after-sales services, which allowed employees to service customers anywhere, anytime, without the need to travel. This not only reduced transportation costs but also enhanced customer satisfaction by providing more flexibility in after-sales services and improving communication between buyers and sellers. Overall, the implementation of automation during the pandemic proved to be a successful strategy that significantly reduced costs and improved performance.
- (11) **Digitalization/AI:** AWS has utilized AI to understand consumer behavior and develop products and services that meet their needs. This has allowed the company to expand into new segments and continuously grow. AI is also used internally to reduce waiting times between departments by retrieving data from the system, thereby reducing the time that each department needed to wait for the other before proceeding. This has resulted in significant reductions in processing time and unnecessary costs, thereby making operations more efficient.

The pandemic also forced the company to adopt digital solutions such as Zoom meetings to replace physical meetings, which resulted in improved efficiency and increased employee flexibility. Zoom became the new normal for work, allowing employees to work more efficiently and boost productivity. For instance, employees can easily switch between conferences, thus eliminating the need for travel. Online meetings have also increased employee satisfaction, as they get the ability to work from anywhere, such as the office, car, or even during lunch breaks. This has resulted in a more flexible workplace and led to a better work–life balance.

Summary

By adopting nine out of nine crucial management practices, AWS effectively addressed the challenges posed by the COVID-19 outbreak (see Table 6). The company’s proactive embrace of digital innovation and dedication to improving efficiency through automation and AI show valuable lessons for other businesses. Offering new innovative solutions for entrepreneurs and the ability to adjust business practices to cope with changing demands during the COVID-19 pandemic yielded favorable results for both maintaining existing markets and extending to new markets.

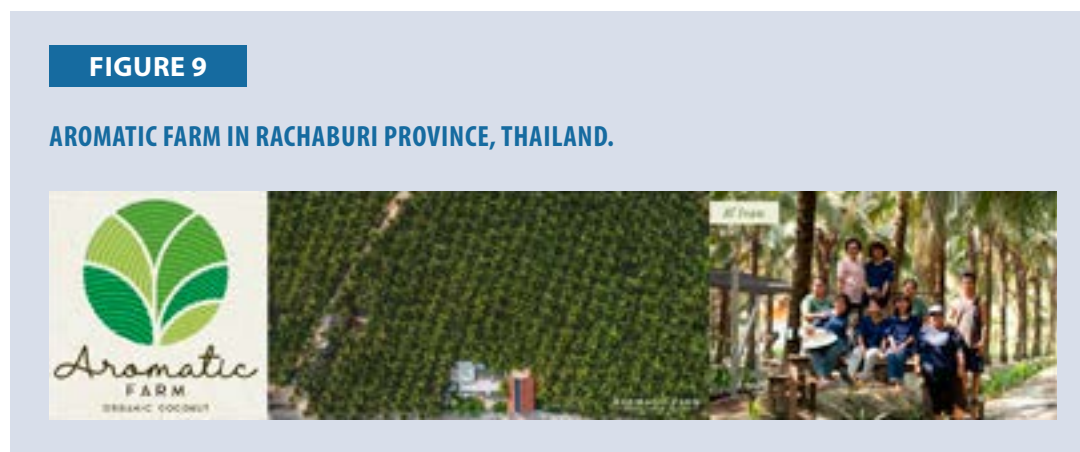
TABLE 6
MANAGEMENT PRACTICES ADOPTED BY AWS IN RESPONSE TO THE COVID-19 PANDEMIC.

Management practice	Adopted (yes/no)	Most distinguished practices (1~10 score)
1. Agile organization BP during COVID-19	Yes	9
2. Automation/mechanization during COVID-19	Yes	10
3. Digitalization/DX during COVID-19	Yes	10
4. Building new business model	Yes	9
5. Hybrid/remote work during COVID-19	Yes	10
6. Talent acquisition during COVID-19	Yes	9
7. New market/customer development	Yes	9
8. Utilization of macro-level government policy	Yes	8
9. Cost optimization during COVID-19	Yes	9
Total Score	9 out of 9	

Case Study 2: The Aromatic Farm

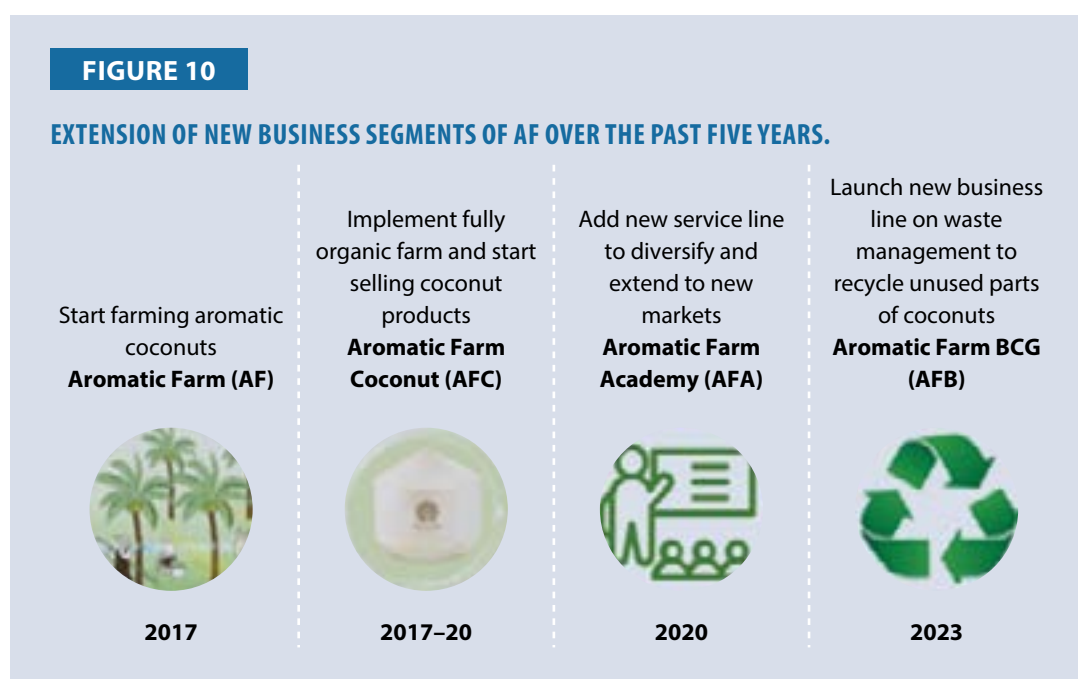
About Aromatic Farm

The Aromatic Farm (AF) is a regenerative organic coconut farm located in Damnoen Saduak district, Ratchaburi province, Thailand (see Figure 9). Founded in 2017 by Nuanlaor Dherdkiattikun, the company aims to promote sustainability while remaining profitable. Nuanlaor’s extensive experience in management, finance, and leadership, gained from working for large corporations such as Sasin, Thai Airways, and Coca-Cola, helped her successfully run her own business [6].



Nuanlaor’s passion for coconuts led her to spend six months learning and understanding the product thoroughly, from growing to selling, before starting to sell and earning revenue in late 2017. AF follows Thai organic standards (Earth Safe) and uses natural agricultural methods while combining local wisdom and modernization to preserve nature and build a strong community of farmers. The brand’s focus is on creating life balance, including health balance, for consumers and for life in Nature. AF has a registered capital of USD13,000.

AF is dedicated to organic farming and places a high value on the potential of natural nutrients. Its farming process is completely free of chemicals, including fertilizers and pesticides, and it prioritizes eco-friendliness while caring for the environment and the coconuts. To increase productivity and decrease pests, it has incorporated local wisdom and uses stingless bees for pollination and parasitic wasps as a form of pest control. The farm also grows pandan trees, which add to the aroma of its coconuts. Not only is its farming approach environment friendly, it also enhances the taste and quality of its products. In 2017, the company mainly sold coconut products under the Aromatic Farm Coconut (AFC) brand, but the COVID-19 pandemic and lockdown caused a significant decrease in sales in 2020. To address this, AF launched Aromatic Farm Academy (AFA) in the same year, offering courses to students and local farmers both online and offline to promote sustainable agriculture. In early 2023, the company expanded its business lines by launching Aromatic Farm BCG AFB, a waste management unit that recycles unused coconut waste, in alignment with the government-supported BCG Economic Model (see Figure 10).



AFC offers various organic coconut products with different cutting designs; coconut drinks; frozen coconuts; coconut jelly; and ice cream (see Figure 11). The farm boasts of a high productivity rate of approximately 70% of organic coconuts, while the remaining 30% are utilized to make packaged drinks, jelly, and ice cream. The target market for AFC products is exclusively domestic, with a focus on modern trade outlets such as supermarkets, retail stores, hotels, restaurants, and catering businesses, as well as B2C (small family businesses with over 200 accounts). Most of the customers are located in the Bangkok area (see Figure 12), and all products are shipped directly from the farm to the customers (the farm does not have a physical sales outlet).

FIGURE 11
TYPES OF AFC'S COCONUT PRODUCTS.

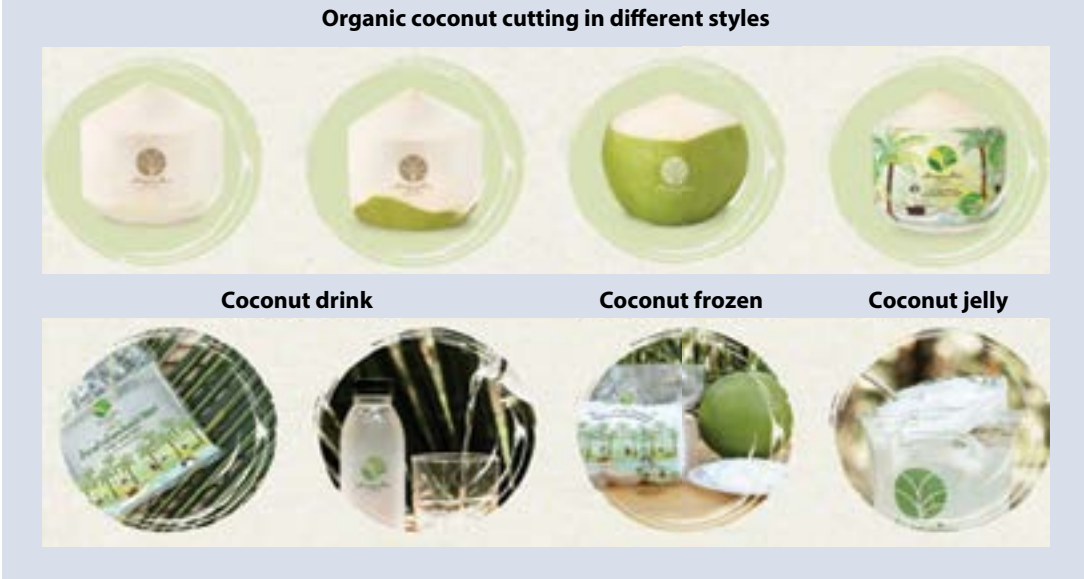
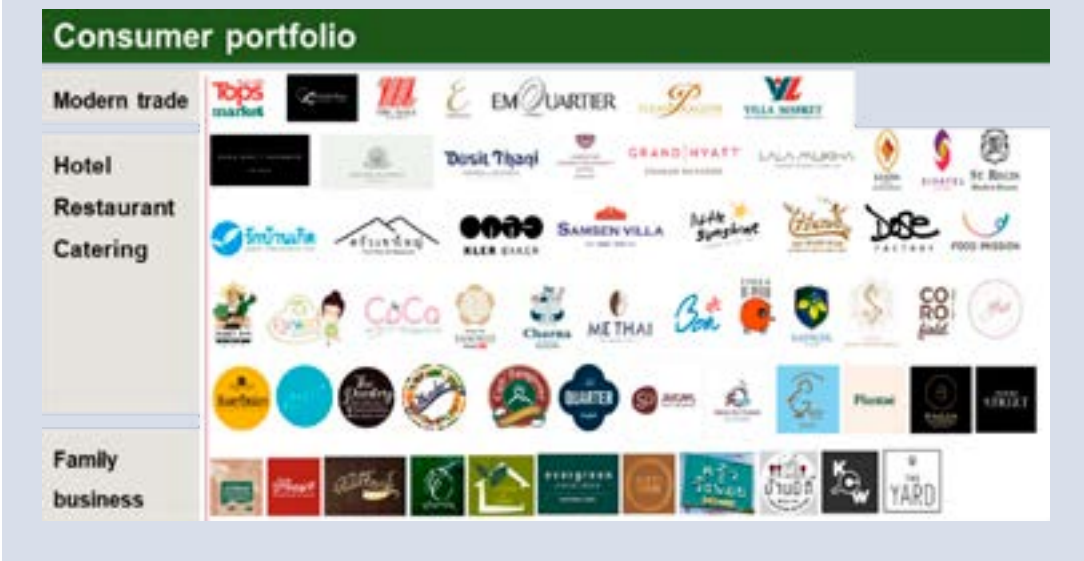


FIGURE 12
AFC'S CUSTOMER SEGMENT.



Reasons for Sustained Growth

- (1) **Sustainable and ecofriendly farming practices:** AF's commitment to sustainable and ecofriendly farming practices has set it apart from other farms in the industry. The use of stingless bees and parasitic wasps instead of chemical pesticides and fertilizers has not only reduced the harm to the environment but also contributed to the quality and taste of the products. Moreover, AF's waste management unit, Aromatic Farm BCG, which recycles unused coconut waste, further supports its dedication to the BCG Economic Model, promoting a green environment and encouraging sustainability (see Figure 13).

- (2) **Diversified business lines:** AF's diversified business lines, including AFA and AFB, have helped the company navigate through challenges, such as the COVID-19 pandemic, and expand its reach. AFA provides academic farming knowledge to students and local farmers, supporting and promoting sustainable agriculture. AFB is aligned with the BCG Economic Model and helps in managing waste, promoting a green environment, and encouraging sustainability.



- (3) **Direct sales to customers:** AF ships its products directly from the farm to customers, without the need for a physical sales shop. This direct-to-customer approach allows for efficient and cost-effective delivery, providing a competitive advantage over other farms. Additionally, AF's customer segments are solely domestic, mainly catered to through modern trade outlets such as Horeca and B2C. With a majority of AF's customers located in the Bangkok district, it is able to devise targeted and personalized marketing strategies.
- (4) **Digitalization:** AF's incorporation of technology and digitalization into its farming process provides it with a key competitive advantage. By attaching a QR code to each coconut tree, AF can trace and analyze important details such as its location, age, and fertilizer usage. This QR code is linked to a Google sheet that farmers can use to optimize planting, irrigation, and fertilization practices, leading to higher yields and reduced input costs. AF's collaboration with Kasetsart University to verify the authenticity and origin of its coconuts also adds value to its products and helps differentiate it from competitors. This unique selling point has helped maintain sales in modern trade segments, despite the challenges posed by multiple lockdowns in 2020 and 2021. Overall, AF's digitalization of its agricultural process has led to increased productivity, improved product quality, and reduced costs, thereby giving it an edge over its competitors.
- (5) **Leadership:** The CEO's multiskills and knowledge are certainly a key competitive advantage for AF. Her broad range of experiences and competencies can help the company navigate various challenges and opportunities and make effective decisions across

different functional areas. This can also lead to more innovation and better communication with stakeholders.

- (6) **Sustainability:** AF’s commitment to sustainability and benefiting the society can be an additional competitive advantage. Customers are increasingly looking for environmentally friendly and socially responsible products and companies, and AF’s focus on sustainability can help it stand out in the market. Additionally, AF’s BCG fund earmarked for community initiatives can help build a positive reputation for the company and foster customer loyalty.

AF was able to adapt its sales strategy during the pandemic and successfully launch a new service business line. Using online channels for sales and marketing is a cost-effective and efficient way to reach a larger audience, and it is good to see that AF was able to leverage this approach to drive sales growth. Additionally, the fact that AF’s unique and differentiated products were able to generate significant sales growth in 2022, even higher than before the pandemic, is a testament to the quality of its products and the effectiveness of the company’s agricultural processes.

TABLE 7
FINANCIAL PERFORMANCE OF AF.

As of end of December (in USD)	2019	2020	2021	2022	Change 2021	Change 2022
Total revenue	242,424	181,818	230,303	363,636	48,485	133,333
Coconut sale	242,424	181,818	212,121	303,030	30,303	90,909
Academy service	0	0	18,182	60,606	18,182	42,424
Number of employees	12	14	18	23	4	5
Sales per employee	20,202	12,987	12,794	15,810	(193)	3,016

Management Practices and Initiatives for Growth and Productivity during the Pandemic

- (1) **Extend business line to new market:** During the COVID-19 pandemic, AF faced a significant decline in sales due to a drop in customers from the tourism sector. To address this challenge, the company pursued several management practices and initiatives (see Table 7) that allowed it to maintain growth and productivity. One strategy was to extend its business line to a new service sector, AFA, with the support of USD150,000 in funding from the SME Development Bank. AFA provided training and development classes to various customer groups through a combination of online and offline activities, allowing students to access classes flexibly and employees to work remotely. Additionally, AF transformed its coconut drinks into more stable products, such as coconut powder, coconut concentrate, frozen coconut water, and coconut ice cream, to reduce food wastage and extend product shelf life.

To enhance long-term resilience, AF launched the business line, AFB, which adopts a sustainable development framework. This waste management model is developed in collaboration with the National Science and Technology Development Agency and uses pyrolysis machines to convert coconut waste into biocarbon charcoal, concrete, and natural fertilizer (see Figure 14). This approach is cost-effective, reduces waste, and benefits the local community. By implementing these management practices and initiatives, AF can build its resilience and maintain its growth potential in the future.



- (2) **Utilization of macro government policies:** Utilizing government policies to mitigate the pandemic's economic impact, AF was able to leverage the macro government policies implemented by Thailand during the COVID-19 pandemic to mitigate its economic impact and support affected businesses and individuals. The company effectively utilized the monetary policy measures, such as interest rate reductions, SME soft loans, and payment deferrals, to ease liquidity and provide sufficient working capital for daily operations. The CEO remained vigilant in taking advantage of as many financial support schemes as possible, given the uncertainties during the pandemic, and consistently followed news of financial support policies from various government authorities. This utilization of government policies allowed AF to expand its revenue base and have sufficient cash flow to continue operations without the need to lay off existing employees, thereby resulting in the creation of a new product line that boosted product diversification and lowered future risks. After the pandemic, AF received government funding support of approximately USD387,000 for its new business line of BCG, which involved a waste management system that turned coconut waste into a valuable commodity, in line with the government's sustainability objectives. The waste management process employs pyrolysis machines to transform a considerable amount of coconut waste into biocarbon charcoal, natural fertilizer, and concrete, which can provide the firm with additional revenue and reduce waste management costs associated with coconut products.
- (3) **New skills acquisition:** AF also invested in developing its employees' digital skills as the pandemic highlighted the importance of digitalization in business. To adapt to the changing business landscape, AF provided digital training programs for its employees, such as basic computer skills, social media marketing, and website management. These digital skills were important for the company to expand its business online, reach new customers, and increase brand awareness.

In summary, AF recognized the importance of developing its employees' skills and knowledge to meet the changing needs of the business environment. The company provided various training and development opportunities for its employees, including

those related to social responsibility, cross-functional collaboration, and digitalization. By investing in its employees' development, AF could improve its operational efficiency, reduce costs, and stay competitive in the market.

- (4) **Hybrid work/work from home/flexibility/reallocation:** Hybrid work and work from home became increasingly prevalent during the pandemic, and many businesses recognized the benefits that came with it, such as increased flexibility, cost savings, and improved work–life balance for employees. For AF, implementing hybrid work allowed instructors to take classes in different formats, which could reach a wider audience and create new business opportunities. In addition, providing flexibility for employees could improve their job satisfaction and retention apart from reducing absenteeism and attrition.

Reallocation of employees can also be an effective strategy for improving business operations, especially during times of crisis. By reallocating employees, AF was able to optimize its human resources, reduce costs associated with recruitment and training, and create opportunities for talent development and skill enhancement. Moreover, reallocation helped increase employee engagement and job satisfaction, leading to improved productivity and efficiency.

Overall, implementing a hybrid work model and reallocating employees were effective strategies that helped AF adapt to changing circumstances, improve its operations, and create new business opportunities in the long term.

- (5) **Management vision:** The CEO's mindset can play a crucial role in determining the success of a business. A CEO with a positive and future-oriented outlook can steer the company through challenges, inspire employees, and make strategic decisions that foster growth and innovation. AF's CEO exhibited a positive vision that enhanced the company's resilience, seeing crises as opportunities for learning and growth rather than as insurmountable obstacles. She aimed to create a company that generated both economic value and social impact; and she displayed prudence and thoughtfulness in her leadership style and decision-making. During the pandemic, she carefully assessed all potential risks and outcomes before making decisions and maintained open and transparent communication with all employees. The company did not lay off any staff during the crisis, and the CEO focused on opportunities rather than obstacles, creating a supportive workplace culture that boosted morale and engagement. She approached challenges with a creative and innovative mindset and embraced new ideas to pursue growth and innovation. For example, AF launched a new business line, AFA, during the pandemic to offset the loss of revenue from hotel and restaurant clients. This positive vision helped AF navigate the pandemic and positioned the company for expansion and growth, expanding from a single business line to three business lines after the pandemic.
- (6) **Cost management:** To manage its resources efficiently during the pandemic, AF implemented several measures, including reallocation, cross-training, developing new products, and using online channels for sales and marketing. The firm redeployed production staff in farming to make the best use of existing resources and avoid hiring new employees. Additionally, cross-training of employees allowed them to perform multiple tasks while increasing their efficiency and versatility. Developing new products aligned with AF's core competencies and market trends, such as converting

organic coconuts into frozen forms, powders, and ice cream with longer shelf lives, helped the company diversify its product portfolio and generate additional revenue streams. Lastly, AF promoted its products via the Line Official Account and the social media, which reached a wider audience and reduced marketing costs compared with traditional methods.

- (7) **Driving innovation:** Innovation has been a key driver of AF's success, and the company has leveraged technology and partnerships to enhance its agricultural processes and create unique coconut products. One such innovation was the implementation of a system that assigned a unique QR code to each coconut tree, allowing for easy tracking and monitoring of the tree's quality, location, and fertilizer usage. This improved traceability and quality control for the company. Additionally, AF partnered with Kasetsart University to authenticate and trace the origin of its coconuts, providing a unique selling point that has helped the company stand out among competitors, especially during the pandemic. The innovative use of technology and partnerships enabled AF to enhance its products and services, differentiate itself in the market, and continue to grow and expand.
- (8) **Automation:** AF implemented several measures to reduce the amount of human labor required in its operations, including the use of coconut cutting machines to automate the process of cutting coconuts. This led to increased efficiency and decreased reliance on manual labor. The farm also implemented pyrolysis machines for waste management, which convert coconut waste into valuable products such as biocarbon charcoal, natural fertilizer, and concrete. This not only helped the farm efficiently manage its waste, but also created new revenue streams. Furthermore, AF introduced innovative packaging designs for its products, resulting in a more visually appealing and higher-value product. As a result, the farm experienced increased revenue and profitability, while also enhancing customer experience.
- (9) **Digitalization:** AF implemented digitalization measures to improve the efficiency and flexibility of its business operations during the pandemic. One of the key changes was to shift from direct mail to a more user-friendly marketing method through the Line Official Account. This allowed the company to adapt to changing customer behaviors and increase engagement with its products. Additionally, AF introduced online classes via Zoom for its AFA business line, which eliminated the need for physical venues and transportation, thereby providing convenience for both customers and the company. By digitizing its business lines, AF was able to provide better customer experiences, reduce costs, and adapt to changing circumstances, thus showcasing the company's ability to innovate and adapt in response to market conditions. These measures are essential for achieving long-term success in today's rapidly changing business environment.

Summary

With a total score of nine out of nine crucial management practices (see Table 8), AF successfully overcame the difficulties brought about by the pandemic. With the visionary mindset and forward-looking approach of AF's CEO, the company effectively leveraged the government's financial support programs, which allowed the company to diversify its business into a new line of AFA and expand into previously untapped markets amidst the challenges posed by the pandemic. Moreover, a combination of local wisdom and technology in agricultural processes led to a distinctiveness in AF's products, thus enabling it to maintain customer loyalty even during the time of crisis.

TABLE 8

MANAGEMENT PRACTICES ADOPTED BY AF IN RESPONSE TO THE COVID-19 PANDEMIC.

Management practice	Adopted (yes/no)	Most distinguished practices (1~10 score)
1. Agile organization BP during COVID-19	Yes	8
2. Automation/mechanization during COVID-19	Yes	7
3. Digitalization/DX during COVID-19	Yes	8
4. Building new business model	Yes	10
5. Hybrid/remote work during COVID-19	Yes	8
6. Talent acquisition during COVID-19	Yes	7
7. New market/customer development	Yes	10
8. Utilization of macro-level government policy	Yes	9
9. Cost optimization during COVID-19	Yes	8
Total score	9 out of 9	

Conclusion

From the two case studies detailed above, it is very much evident that both the SMEs could grow by virtue of adapting key management practices and initiatives. This is in line with the hypothesis made at the inception of the research study. The key initiatives that led to the growth of these SMEs have been listed in Table 9.

TABLE 9

CONCLUSION SUMMARY.

Key reasons for growth of both SMEs	Management practices as per hypothesis made
1 Adopting remote work/online conference and training	Hybrid work
2 Reallocate employees to other departments to enhance skills and save costs	Agility/reallocation
3 New pricing model to adjust with customers' capacity	New business model
4 Reskilling of employees WW Upskilling of employees WW Encourage continuous learning/training	Reskilling and new talent
5 Extend to new market segment by offering new innovative products WW Diversify into new businesses to offset declining revenue	Redefining customers
6 Employing existing staff to handle multiple tasks, which eliminated the need for recruiting additional workers WW Leveraging artificial intelligence to minimize repetitive tasks	Cost management
7 Digital marketing/online classes WW Automation in internal working process WW AI to analyze consumer behavior	Digitization and automation
8 Obtain low-interest funding for business expansion. WW Use government online platforms to market and improve sales opportunities.	Utilization of macro govt. policies

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TURKIYE

Turkiye's Economic Profile During the Pandemic Period

Turkiye's Growth Perspective

The Turkish economy suffered an exchange rate crisis in the second half of 2018, resulting in a weak growth performance in 2019. In the second quarter of 2020, the economy was hit by the COVID-19 crisis and started to recover again in early 2021. On the other hand, Turkiye was one of the few countries to record positive growth in 2020 (1.8%). In 2019 and 2020, the services sector contracted, but growth in the manufacturing sector continued, thereby pushing the total industry to grow (see Figure 1). Private consumption and exports were the main drivers of economic growth. The reallocation of labor toward the services sector has been a key feature. At the same time, the manufacturing sector has become better integrated with global value chains. Turkiye's exports now account for more than 1% of the world's demand for goods and services [5].

With the gradual easing of COVID-19 related measures in Turkiye and abroad, Turkiye's growth rate in 2021 reached the highest level among G20 countries (11%). The economy grew by 5.3% in 2022. However, the economy has been losing momentum amidst a deteriorating external environment. Two devastating earthquakes struck on 6 February 2023, which beyond the human tragedy, resulted in physical damages in 11 provinces affecting 16.4% of Turkiye's population and 9.4% of its economy. Direct losses were estimated at USD34.2 billion, but the reconstruction needs could double. Reconstruction efforts are expected to support growth, which was forecasted to be 3% in 2023 and 3.4% in 2024 (see Table 1).

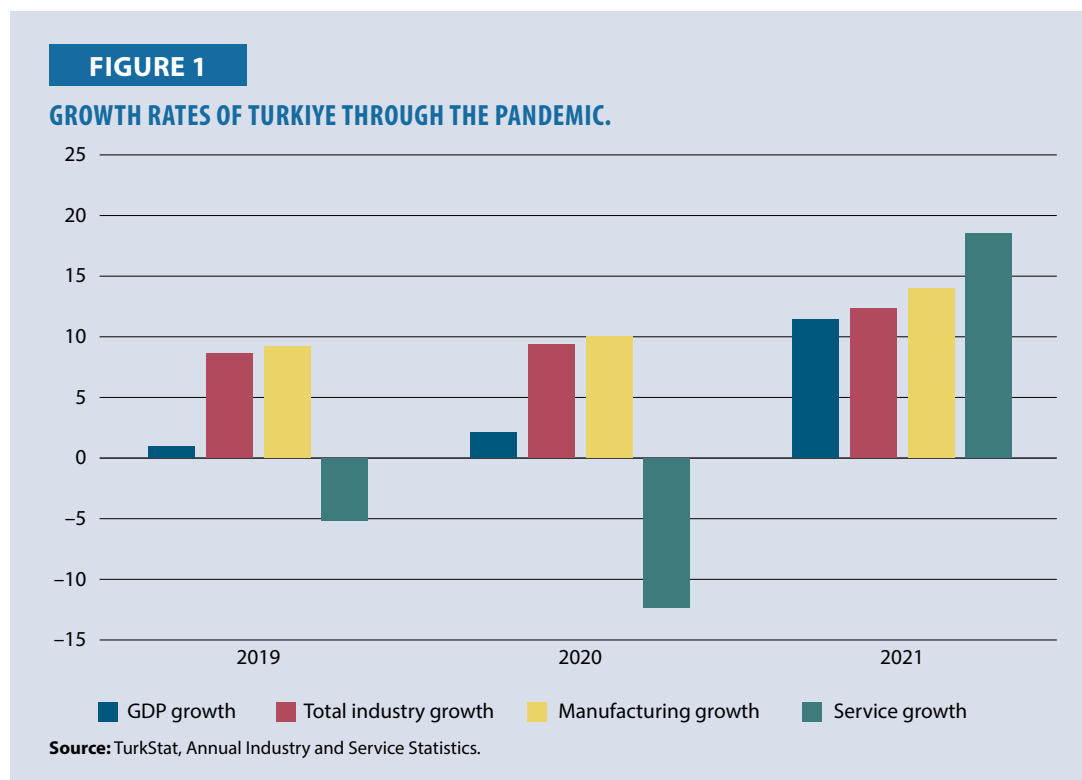


TABLE 1

MACROECONOMIC INDICATORS AND PROJECTIONS.

	2018 current prices (TRY billion)	Projections					
		2019	2020	2021	2022	2023	2024
GDP	3,758.8	0.8	1.9	11.4	5.3	3.0	3.4
Private consumption	2,111.9	1.6	3.0	15.7	15.2	4.1	3.4
Government consumption	552.0	4.0	2.2	2.7	0.2	3.0	2.3
Total domestic demand	3,768.1	-2.1	8.7	4.1	2.2	3.1	3.3
Exports of goods and services	1,171.0	4.6	-14.6	24.9	12.2	4.4	4.2
Imports of goods and services	1,180.3	-5.4	7.1	2.4	4.2	4.8	3.6
Net exports	-9.3	3.1	-6.9	6.4	2.8	-0.3	0.1

Source: OECD Economic Surveys: Turkiye 2023.

Turkiye's Industry Performance and High-growth Sectors

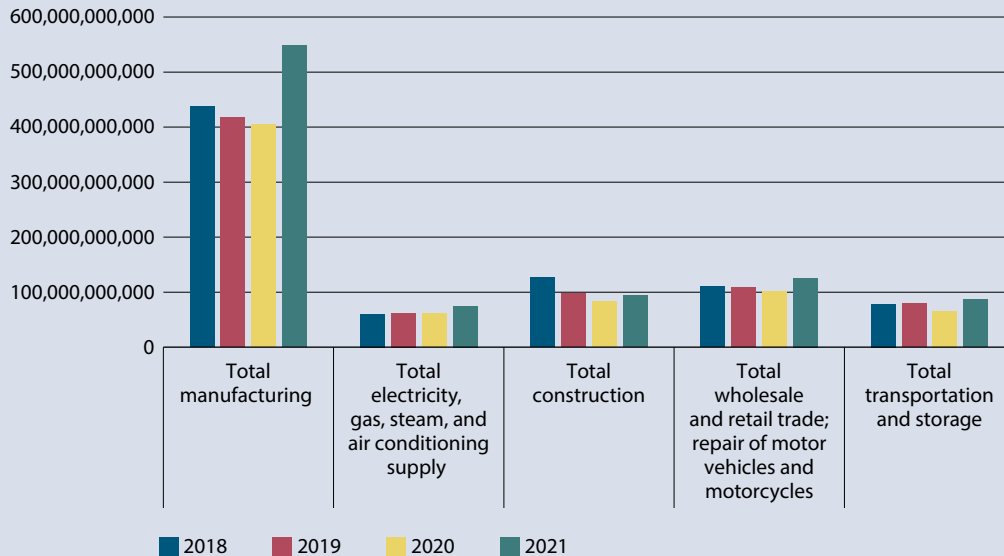
One of the most important components of the Turkish economy is the manufacturing industry. In the last 20 years, the manufacturing industry has had a significant share in GDP, ranging between 15% and 20%. The share of the manufacturing industry in GDP has always exhibited an upward trend, except for 2019, when the pandemic started (19.1% in 2018; 18.2% in 2019; 19.1% in 2020; and 22.2% in 2021).

Looking at the production values of the sectors in Figure 2, it is observed that although there was a general downward trend until 2021, production values in 2021 increased to 2018 levels and more. The only exception was the construction sector.

FIGURE 2

PRODUCTION VALUE BY ECONOMIC ACTIVITIES, 2018–21.

Value in USD.



Source: TurkStat, Annual Industry and Service Statistics.

SME Definition in Turkiye

The scope of SMEs in Turkiye is defined by the “Regulation on the Definition, Qualifications and Classification of Small and Medium-Sized Enterprises.” Accordingly, in Turkiye, SMEs are defined as enterprises that employ less than 250 employees and whose annual net sales revenue or financial balance sheet does not exceed 500 million Turkish Liras (see Table 2).

TABLE 2
SMEs’ DEFINITION IN TURKIYE.

Type	Number of employees	Financial criteria* (in million Turkish Lira)
Micro	< 10	≤ 10
Small	< 50	≤ 100
Medium	< 250	≤ 500

*Annual net sales revenue or financial balance sheet.

SMEs play a particularly important role in the Turkish economy, because of their number and also because of the large share of the workforce employed by them. Currently, Turkiye has an estimated 3.6 million active SMEs, representing 99.8% of all registered entities in the country. The SMEs constitute 61.7% of the country’s total sales, 55.1% of exports, and 72.7% of the workforce (see Table 3 and Table 4).

TABLE 3
SHARE OF SMEs IN THE ECONOMY.

	Share in %
Total enterprises	99.83
Total employment	72.7
Total value added	50.6
Total sales	61.7
Total investment	58.3
Total export	55.1
R&D expenditure	35.3

TABLE 4
NUMBER AND SHARE OF SMEs IN TOTAL ENTERPRISES.

	Number	Share in %
Micro	3,420,580	93.65
Small	193,304	5.29
Medium	32,585	0.89

High-performing Firms in Turkiye

High-performing firms (HPFs) are those with rapid growth potential. There is growing evidence that HPFs are responsible for stimulating economic growth and development. They do so by encouraging innovation, productive investments, and employment growth, accounting for a large

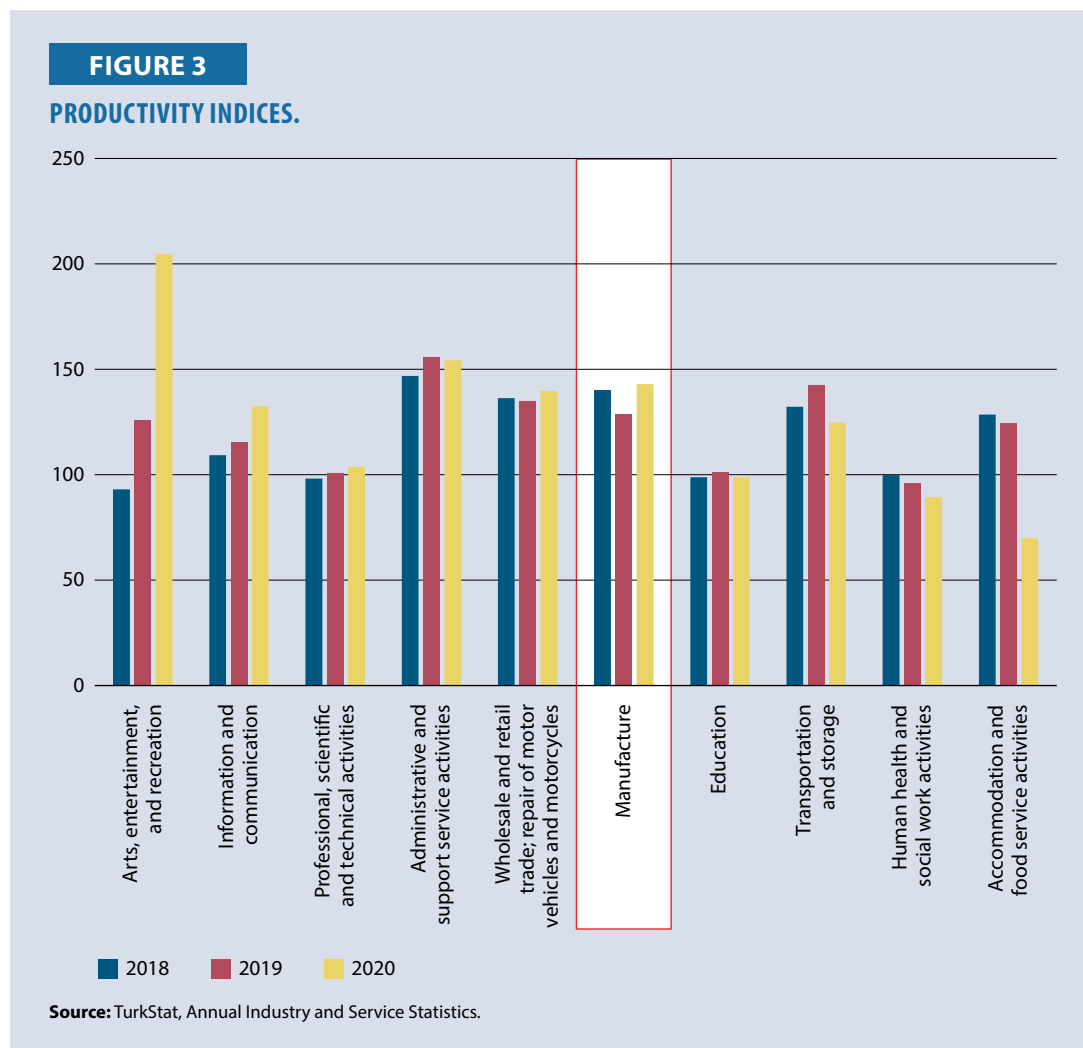
share of the new jobs created [1]. There is no consensus on the definition of high performance; but there is a shared opinion that these firms are sources of innovation and business leadership, and they contribute immensely to the economy and economic development [3, 4].

According to a study conducted to identify high-performing sectors in Türkiye, the fastest growing subsectors in the manufacturing sector are [1] basic pharmaceutical products and pharmaceutical preparation; computers; electronics; and optical products (the most salient subsectors in terms of performance and quality jobs).

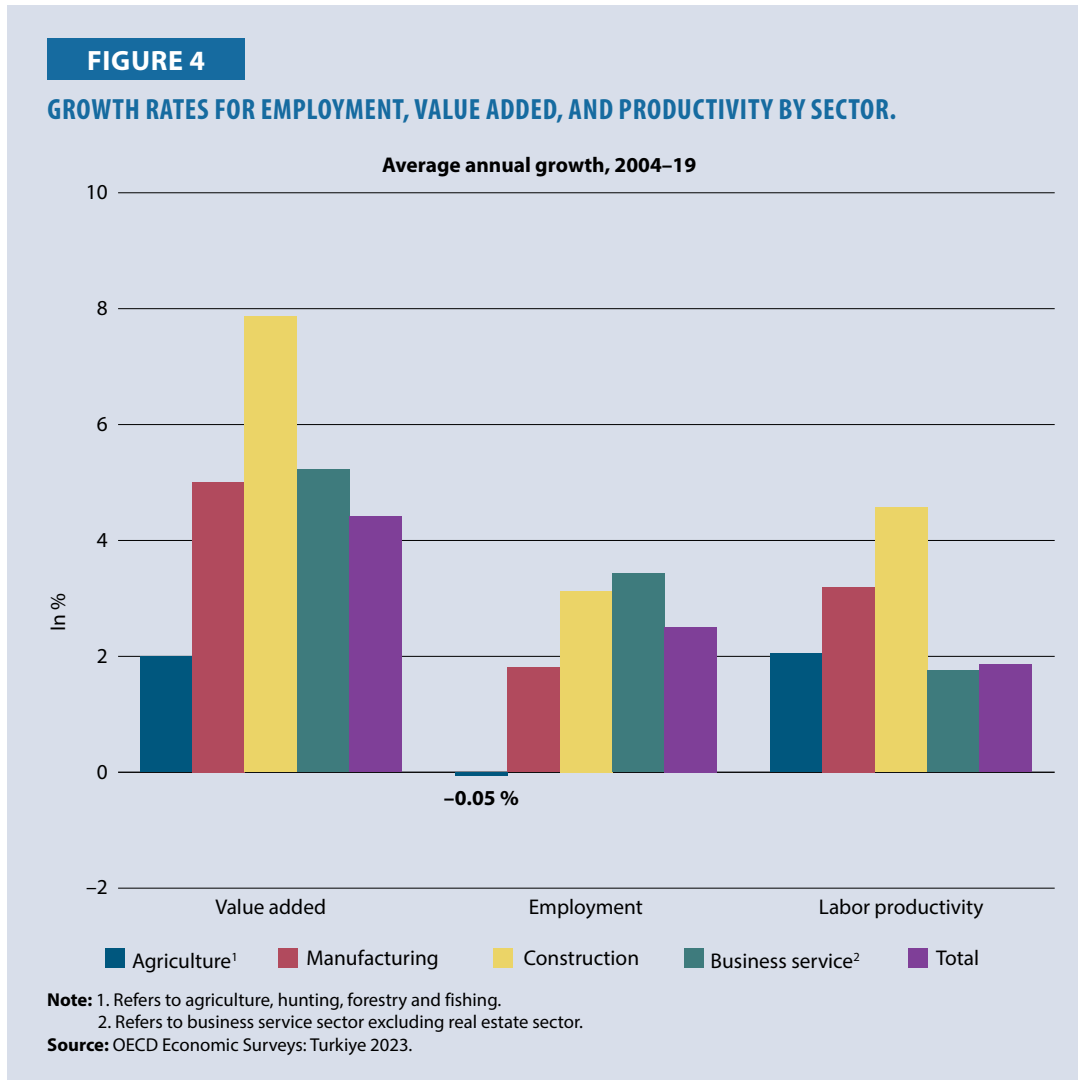
The top subsectors in terms of high performance and quality of jobs in the services sector are air transport; computer programming, consultancy, and related services; and security and investigation.

Turkiye’s Productivity Trends

Before and during the pandemic, the productivity of the sector comprising human health and social work activities consistently declined, while other sectors experienced fluctuations in productivity. In 2019, the manufacturing sector experienced a decrease in productivity. However, in 2020, the productivity index of this sector returned to its previous level. Notably, high-volume manufacturing industries maintained relatively high levels of productivity throughout this period (see Figure 3). Consequently, overall productivity levels remained high.



The structure of the Turkish economy has changed significantly over the last two decades and continues to do so. Urbanization and job creation in the commercial service and manufacturing sectors have raised living standards and enabled many workers to move away from low-productivity subsistence work in agriculture (see Figure 4). Spurred by increased competition with markets around the world, labor productivity increased by more than 3% per year during 2003–19 [5].

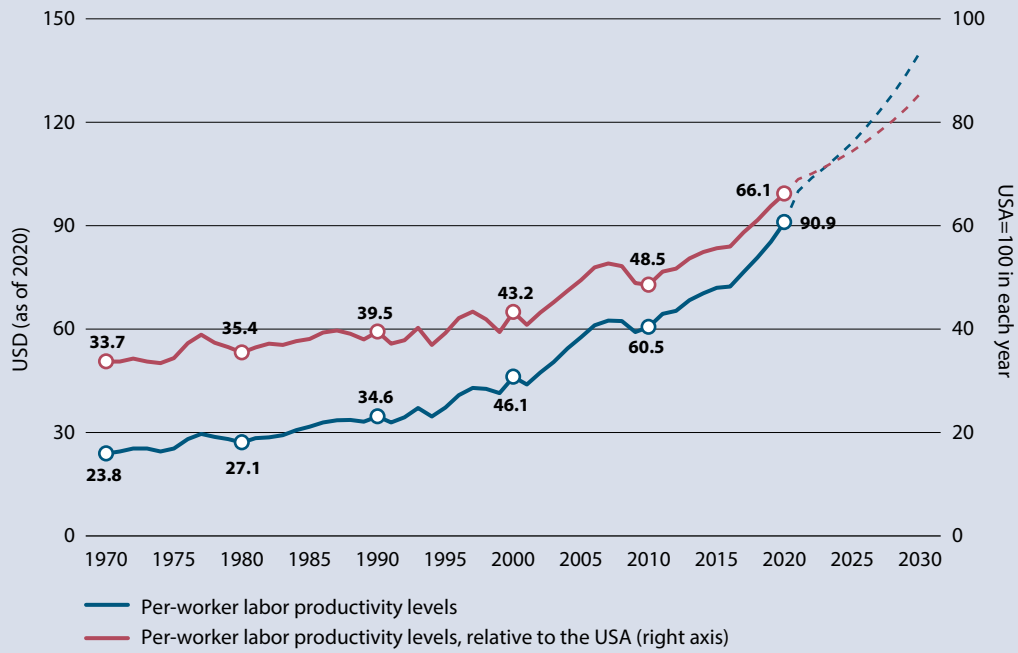


According to the APO Productivity Databook 2022 [2], in the labor productivity comparison of Asian countries and Turkiye (based on GDP at constant basic prices per hour worked), Turkiye and the Republic of Korea (ROK) were at the same level in the 2000s. However, Turkiye’s labor productivity increased in recent years and overtook Japan in 2020. As seen in Figure 5, labor productivity per employee has been increasing rapidly in Turkiye since 2020. This trend is predicted to continue in the near future.

Given that the exact capital stock is unknown, estimations are used for capital productivity rates. When capital plays a larger role in production, it is expected that total factor productivity (TFP) will move in conjunction with capital productivity, which tends to be significantly lower than labor productivity. In the case of Turkiye, the graph depicting TFP growth based on capital productivity shows a flat trend (see Figure 6).

FIGURE 5

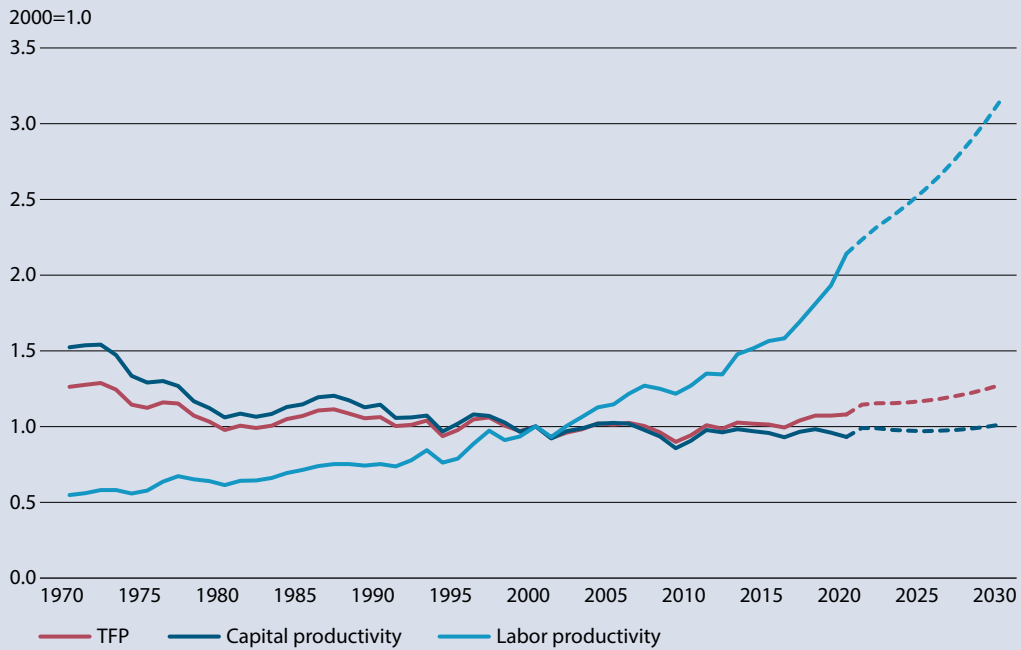
LABOR PRODUCTIVITY PER EMPLOYEE IN TURKIYE.



Source: APO Productivity Databook 2022 [2].

FIGURE 6

PRODUCTIVITY TRENDS IN TURKIYE.



Source: APO Productivity Databook 2022 [2].

Case Studies in Turkiye

In response to the pandemic, numerous companies, particularly large ones, have implemented significant measures to enhance productivity through automation, digitalization, and operational reorganization. These steps include a swift transition to remote work to increase efficiency and flexibility. According to a 2020 survey conducted by the World Economic Forum [6], 80% of firms intend to boost digitalization of their operations and expand their use of remote work, while 50% aim to accelerate the automation of production tasks.

The objective of this study is to assess the effectiveness of managerial practices, such as hybrid work/work from home; agility/flexibility; digitalization; and automation, in enhancing the growth and productivity of businesses in Turkiye during the pandemic.

The case selection for the research project involved identifying two successful case studies from each country participating in the project. These companies were chosen based on their growth trends and their willingness to share both qualitative and quantitative growth information. This section provides a detailed explanation of the management practices employed by these selected companies as case studies, which enabled them to achieve success during the pandemic period.

The research project involved the selection of two successful case studies from each country, taking into account various factors. First, the chosen enterprises demonstrated growth and productivity gains during the pandemic. Second, they operated in high-growth sectors highlighted for Turkiye in the World Bank's 2020 survey. Additionally, the firms' willingness to share qualitative and quantitative growth information influenced their selection. This section provides a detailed description of the management practices that enabled these case-study companies to thrive during the pandemic.

Case Study 1: Abfen Farma

Abfen Farma is a Turkish company established in 2005 that specializes in the production and sale of pharmaceuticals, medical devices, food supplements, and dermo cosmetics [1, 2]. The company (see Figures 7 through 9) operates from its factory located in Başkent Organized Industrial Zone, and has a sales team that is active throughout Turkiye [2].

FIGURE 7

EXTERIOR VIEW OF ABFEN FARMA'S FACILITIES.



Its mission has been to provide specific products for certain therapeutic areas to bring alternative therapies that improve human health and quality of life. In line with this mission, the company emphasizes the importance of people and human health and quality as a philosophy of life [1].

Abfen Farma is continuously improving and using advanced technology to produce safe, effective, and economical products according to international standards. The company is customer-oriented and aims to rank first in the prescription preferences of doctors in the market [1].

Abfen Farma began as an importer of medical devices but has since become a manufacturer to increase domestic production and reduce import dependency. The company exports to EU member countries and aims to grow in European and American markets [2]. The medical devices of Abfen Farma are certified according to EU requirements and are offered for sale in Italy and Poland [1].

FIGURE 8

EZEL TASKIRAN OGUZ, GENERAL MANAGER AT ABFEN FARMA.



Recognized for its achievements, Abfen Farma was ranked 47th in the list of the 100 Fastest Growing Turkish Companies competition organized by The Union of Chambers and Commodity Exchanges of Turkiye (TOBB). The company also ranked among the top 10 companies in the Innovation Awards competition organized by the Turkish Exporters Assembly [2].

FIGURE 9

AN INTERIOR VIEW OF ABFEN FARMA'S FACILITY.



Abfen Farma faced multiple challenges during the initial stages of the COVID-19 pandemic [1]. The prohibition of doctor visits by the Ministry of Health in its region greatly impacted the sales of the company, as its sales chart was directly proportional to the number of effective doctor visits. To overcome this obstacle, the company's representatives continued to meet with doctors outside the hospital and organize online meetings [1]. Additionally, they provided COVID-19 protection kits consisting of their own products and different products to doctors [1].

The company also realized that the number of patients who went to hospitals decreased, but the number of patients who approached local pharmacies and requested for consultancy services increased. For this reason, the company concentrated on these small community pharmacies and studied food supplements and products that could be effective in protection from COVID-19 [1]. The company also implemented an efficient tracking system to prevent the expiration of products on the pharmacy shelf, which had a positive impact on their relations with pharmacies. It helped the company avoid the problem of being left with out-of-date products [1].

Ernst & Young conducted a survey of 200 senior-level supply chain executives in 2020 and 2022 to understand the impact of COVID-19 on supply chains and the priorities for the next 1–3 years [3]. While this may not directly relate to Abfen Farma's approach to the pandemic, it is an example of how companies had to adapt to the pandemic's impact on their supply chains.

The use of automation in the management practices of Abfen Farma during the COVID-19 pandemic proved to be advantageous. The company invested in software and hardware infrastructure to increase capacity and product quality [1]. The company's decision to prioritize investing in software that is used by international companies allowed it to keep up with the latest technologies and stay competitive [2].

The implementation of the ROTA software program enabled the company to more closely monitor the doctor and pharmacy visits of its representatives. With this program, the number of planned and completed doctor and pharmacy visits of representatives could be followed on a daily basis and pharmacy orders can be entered. The ROTA program also allowed employees to enter their leave requests through the system. Vehicle usage by the representatives could also be monitored more effectively [1].

The ROTA program was piloted in select provinces before being launched across the enterprise. Employees were trained to ensure an effective use of ROTA. Although there were initial glitches in providing data entry to the system, this problem was overcome after a short time with ongoing training and development opportunities. ROTA is constantly being developed in line with unprecedented demands, where new modules have been added to the system. As such, ROTA's success is measured by pilot schemes [1].

The implementation of the ROTA program resulted in increased efficiency of representatives' visits to doctors/pharmacies by 40% or more. The program also enabled performance evaluations of representatives to be more accurate and created an important archive for doctor and pharmacy visits of representatives. Additionally, employee productivity increased during this period as effective communication and cooperation were ensured between the representatives and the factory [1].

The case of Abfen Farma illustrates the impact of the COVID-19 pandemic on companies' digital transformation efforts. The company decided to pivot toward e-commerce and set up its own

website to sell its products [1]. By doing so, the company aimed to provide after-sales support and increase brand reliability [2]. Furthermore, the company invested in software and hardware for digital monitoring of production, stock management, and sales data processes [2]. Thanks to the company's good infrastructure and logistics, the digitalization implementation process was not very difficult [3]. Digitalization also led to increased product accessibility and availability, resulting in an exponential growth in the company's sales and awareness [1, 3]. The CEO also stated that the company's projects in automation and digitalization minimized downsizing due to the pandemic and contributed significantly to the company's growth in the following years [3].

Abfen Farma used the pandemic period as an opportunity to reassess areas needing improvement and growth opportunities for the company that it could not prioritize before the pandemic [1]. As a result, the company integrated a new business model by pivoting toward e-commerce during the pandemic and started influencer marketing to increase its online sales [1]. The company also evaluated the inherent problems that could occur in the supply chain during the pandemic period and planned accordingly for the future. Abfen Farma focused on the problems of producing raw materials used in food supplement products and decided to invest in this area to preclude problems that could occur in the supply chain. The company planted medicinal plant extracts such as black elderberry and thyme, and made plans to plant echinacea in the coming period [1].

Moreover, the company expanded its product portfolio (see Figure 10) by adding new production lines for lozenges and products that strengthen the immune system, in response to the increase in demand for effervescences through the pandemic period [1]. The pandemic also prompted Abfen Farma to benefit more from technology in its business model by using the Zoom application for employee training and development, which boosted employee morale and grew their skills [1].



The success of the new business model is measured using various criteria such as sales, number of products prescribed, and employee turnover rate. With the new business model, the company increased its revenues by 10% by adding new products to its product portfolio, while the employee turnover rate in the company was less than 10% per year [1].

Abfen Farma had implemented a hybrid work model before the pandemic with its medical representatives working all over Turkiye, and the company's headquarters located in Ankara [1]. However, due to COVID-19 protocols, the company switched to remote working for its representatives during the initial stages of the pandemic, with daily communication and evaluation meetings held to maintain productivity and ensure feedback [1]. The company also provided its employees with the necessary tools and technology for effective remote working, including the

Zoom application, of which the company later took an annual membership [1]. The CEO of Abfen Farma noted that remote working had a positive effect on employee commitment and motivation, as well as the organizational climate, with the company investing in data security to ensure the safety and integrity of its systems [1]. Overall, Abfen Farma's experience suggests that remote and hybrid working can be effective with proper communication and technology support.

Abfen Farma also prioritized employee training and development during the pandemic period in order to adapt to the changing demands of the sector. The company identified key skills and focused on increasing employee product knowledge and communication skills [1]. This was in line with the growing trend of upskilling and reskilling employees in response to the increasing use of automation and artificial intelligence in various industries, including pharmaceuticals [2, 3].

To adopt a continuous learning approach, Abfen Farma started periodic remote access training during the pandemic period. The success of this approach led the company to carry out more efficient and faster training even after the pandemic period [1]. The company also emphasized the importance of communication throughout the pandemic, ensuring that Abfen Farma's products were prescribed even online. Success stories in this regard were included in the remote access training held with the participation of all employees, which enabled representatives to develop better relations with doctors and increase pharmacy sales [1].

In addition to the training aimed at increasing product knowledge and communication skills, Abfen Farma also organized training to guarantee the effective use of the ROTA intranet program, which as mentioned earlier, was launched during the pandemic period. Employees were also given training on relevant subjects needed for electronic commerce [1].

The success of the employee training and development program was measured through criteria such as the number of products prescribed after representative visits, product delivery time span, and the number of defective products. The program increased work quality and employee productivity, which in turn led to an increase in customer demand. Prior to the pandemic, Abfen Farma was known only for its products, but now it has started to be recognized as an innovative and technology friendly corporate [1].

What is more, Abfen Farma re-evaluated and recalibrated its marketing strategy during the COVID-19 pandemic. Before the pandemic, Abfen Farma was only using marketing strategies aimed at doctors and pharmacies. However, due to the pandemic, the company implemented diverse ways to evaluate different markets and customer segments, which resulted in the integration of e-commerce and digital marketing to reach new customers. The pandemic triggered a re-evaluation of the company's marketing strategy, along with the relocation of the company's factory. The company increased its customer service representatives and started selling products on its own website to ensure customer loyalty and create word-of-mouth referrals. The success of the social media project was mainly measured by the interaction received by social media channels such as Instagram and YouTube, as reported by the company's social media agency. Furthermore, influencer marketing was used to promote products, resulting in an increase in sales by approximately 20% for three products in total. The company also analyzed different international markets, with the European market being identified as a priority market. Given that the regulations for medical devices were not compatible with the USA market, Abfen Farma targeted the European market. Additionally, the company plans to invest in new products such as dermocosmetic products, in line with the feedback from customers [1].

Abfen Farma's approach to optimizing costs during the pandemic was commendable. Companies across industries were forced to analyze their business processes and expenditures to sustain during the pandemic. In the pharmaceutical industry, where products required special conditions for storage and transportation, cost optimization became even more critical [1].

Zero-based budgeting, which was a significant shift in the cost-management philosophy, was successfully implemented by Abfen Farma [1]. However, despite the positive view of zero-based budgeting in the pharmaceutical industry, only a few pharma companies had deployed this approach [1]. According to management consultant Bain & Company, the adoption of zero-based budgeting is limited among pharma companies, despite its potential benefits [1].

The COVID-19 crisis has had a grave impact on manufacturing firms, and 60–90% of them experienced significant losses. Taking short-term reactive measures was inevitable, as per management consultant Oliver Wyman [3].

Abfen Farma's optimization strategy indeed contributed to increased productivity and customer satisfaction. By implementing cost optimization strategies like zero-based budgeting and short-term reactive measures, Abfen Farma was able to navigate the challenges posed by the COVID-19 pandemic and other crises in the pharmaceutical industry.

Abfen Farma appears to have demonstrated agile capabilities during the pandemic, with a flexible working principle that allowed for quick decision-making and implementation [1]. The company started daily meetings using digital technologies to ensure that all employees were working consistently toward common goals, thereby improving team spirit, communication, and cooperation within the company [1]. Abfen Farma also expanded its product portfolio and started selling on its own website in response to customer demand, thus demonstrating its ability to adapt to changing circumstances quickly [1].

To turn the pandemic period into an opportunity, Abfen Farma prioritized what needed to be done, focusing on employee training and development when hospital visits of representatives were prohibited [1]. The company also implemented an intranet software to automate some business processes and make hybrid working models more effective, which had been contemplated but not implemented before COVID-19 [1]. The company's flexible structure allowed for the revision of individual targets to maintain employee motivation and promptly give feedback during the pandemic period [1].

Agile organizations are defined as those that can respond quickly and efficiently when confronted with unpredictability [1]. Abfen Farma's ability to adapt quickly to changing circumstances during the pandemic demonstrated its agile capabilities [1]. By prioritizing what needed to be done, Abfen Farma was also able to turn the pandemic period into an opportunity to expand its product portfolio and develop new capabilities [2]. The company's daily meetings and use of digital technologies to improve communication and cooperation within the company also aligned with the stable practices of agile units related to process and people [3].

Abfen Farma was fortunate to enter the pandemic debt-free and financially solvent, but benefiting from government support was still important for the company. During the pandemic period, the company benefited from temporary working allowance subsidies. This support contributed to sustainable payment of employees' wages during the remote working period.

Abfen Farma also made strategic investments to leverage various forms of support and incentives. One such investment was the acquisition of a commercial property in an organized industrial zone (OIZ) with the intention of producing medicinal plant extracts. This move directly qualified the company for investment incentives provided by the Ministry of Industry and Technology. Additionally, Abfen Farma benefited from KOSGEB support, which facilitated the acquisition of capital machinery for targeted factories (see Table 5).

The company received consultancy services in order to benefit from public support effectively. Thus, the firm received various grants from diverse governmental support programs by utilizing consultancy services. The company’s CEO stated that it was absolutely necessary to utilize consultancy in order to benefit from public support. It was stated that there were some bureaucratic processes in order to benefit from the support and it was difficult to prepare a support application because it required preparing an abundance of documentation. It was said that in order to be able to benefit from government support effectively, it was necessary to utilize consultants, but for this, the company must be financially strong and should be able to allocate financial resources.

The CEO stated, “While public support was beneficial for SMEs, there were difficulties in accessing support and distinguishing which governmental program was suitable for our enterprise; not all are appropriate for our situation.”

TABLE 5
MANAGEMENT PRACTICES AND INITIATIVES TAKEN BY ABFEN FARMA DURING THE COVID-19 PANDEMIC.

Management’s response to the COVID -19 Pandemic	Management practices adopted (yes/no)	Most distinguished practices (1–10 score)
Agile organization BP during COVID-19	Yes	6
Automation/mechanization during COVID-19	Yes	8
Digitalization/DX during COVID-19	Yes	8
Building new business model	Yes	8
Hybrid/Remote Work during COVID-19	Yes	9
Talent acquisition during COVID-19	Yes	7
New market/customer development	Yes	9
Utilization of macro-level government policy	Yes	7
Cost optimization during COVID-19	Yes	7
Total score of practices that are strongly adopted	9 out of 9	

Case Study 2: Obilet

It seems that the company has had a successful trajectory since its inception in 2012. Initially, Obilet focused on providing an online platform for comparing and booking intercity bus tickets in Turkiye. It is impressive that the company managed to sell its first bus ticket only a few months after its foundation.

By 2015, Obilet had reached a significant milestone of selling 1 million bus tickets and received investment from Earlybird Venture Capital during its Series B financing round. In the same year, Obilet’s mobile applications were recognized as the best transportation application in the “Mobile Top App Index” by Mastercard.

FIGURE 11
OBILET BRANDING.



Obilet expanded its services in 2016 by providing inventory management software (IMS) to bus carriers, which was a new addition to the company's platform. The following year, Obilet began listing and selling flight tickets from domestic and international airlines alongside bus tickets.

Finally, in 2018, Obilet received a second round of investment from Earlybird. This suggests that the company has been successful in attracting investment and growing its business over time. Overall, it seems that Obilet has been successful in expanding its platform (see Figure 11) to offer a wider range of transportation options, which have likely contributed to its growth and success.

In 2019, the European Bank for Reconstruction helped the company expand its operations further. Then, in 2021, both Earlybird and EBRD reinvested in the company, which suggests that they continued to see potential for growth and success in Obilet.

Obilet's acquisition of Biletall, one of its main B2C and B2B competitors, was likely a strategic move to further expand its market share. By adding new transportation options such as ferry tickets and airport transportation services, Obilet continued to diversify its offerings and attract more customers.

It is also impressive that Obilet now offers car rental and hotel reservation services, which makes it one of the few companies in the world that offers five core travel options (other than train) in one platform. Additionally, the company's expansion into Romania and partnerships with Distribution Bus and CheckMyBus suggests that it has ambitions to grow globally.

Finally, it is noteworthy that Obilet has received recognition and awards from important institutions such as Deloitte and TOBB. Winning the International Travel Award for Europe's Best Air Ticketing Company in 2021 was also a significant achievement.

FIGURE 12

OBILET COFOUNDERS ALI YILMAZ AND YIĞİT GÜROCAK.



Overall, Obilet's growth and success demonstrate the potential for online travel platforms to disrupt and innovate the travel industry, and it will be interesting to see what further developments happen at the company in the future.

Obilet was significantly impacted by the pandemic due to the curfews and the resulting standstill in intercity travel. However, the company responded to the situation by reviewing its current activities and making changes to its strategy and business model to become more resilient against similar bottlenecks in the future. Additionally, the company identified processes that could be automated and digitized, which helped improve its efficiency and productivity during this challenging period. This shows how companies can leverage technology to enhance their operations and adapt to changing circumstances. Moving forward, it will be interesting to observe Obilet's continued growth and development.

During the pandemic, the company implemented measures to automate some internal workflows to adjust to the transition from working full-time at the office to remote working. As the company shifted to a hybrid work model, it was necessary to re-evaluate some processes that were affected by the fact that not everyone worked in the same environment. For instance, the company used Logo's e-flow infrastructure to automate approval processes, including user expense entries and contract signing, which used to be carried out quickly when employees worked together at the office. The automation of these processes facilitated the company's adaptation to remote work.

Prior to the pandemic, air ticket transactions only constituted about one-sixth of the company's current transactions, and there was a manual process of issuing invoices to users for air tickets. This process was automated by the company, where invoices entered into Obilet's own ERP systems

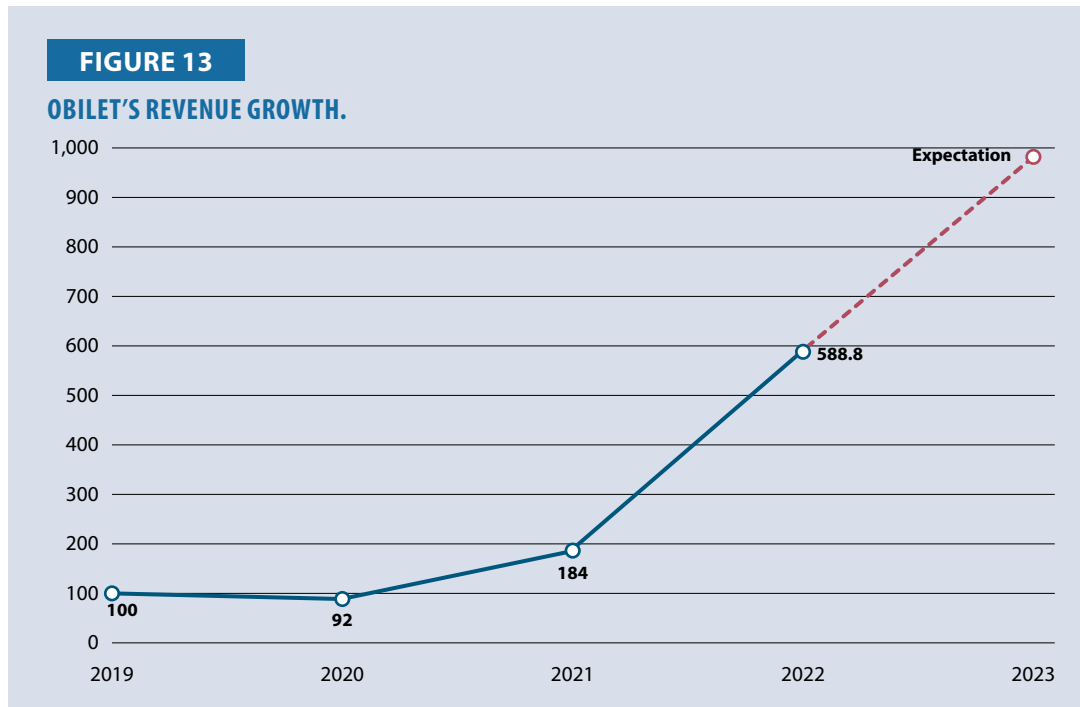
were automatically transferred to the government-provided e-invoice infrastructure through various integrators, thereby reducing the workload for the finance team. Although the increase in airline ticket sales raised the need for additional personnel in the finance department, the automation of the invoice process helped the company meet the need without hiring additional staff.

The automation of tasks had a positive impact on employees since there were processes that required less control and human intervention. However, employees initially found it challenging to adjust to the e-flow system since it was a change from their usual ways of working. To overcome this, the company organized in-team training sessions and clearly communicated the purpose of the platform to employees through various channels. The feedback received from employees was used to improve the system and include it in their daily routines. The company currently evaluates the efficiency of each automated process regularly, implementing optimizations every one or two months.

Obilet faced a significant challenge in the digital transformation of bus ticketing in Turkiye, as the infrastructure was underdeveloped. However, with the development of the IMS infrastructure application, the company was able to provide end-to-end capabilities to customers, allowing them to handle after-sales transactions through the website and mobile applications, leading to significant savings in manpower costs. The pandemic led to the breaking of resistance among bus companies toward online ticket cancellations and suspensions, thus enabling Obilet to offer after-sales services that were previously not available. The company also implemented a live chat interface application and a call center application, allowing customers to cancel or change tickets through various platforms without any agent. Obilet did not require any additional software or human resources for digitalization, as it already had a technology-and-product team of 70 employees, who channeled their efforts into digitalization. The company also implemented a process for employee COVID-19 status tracking, ensuring the safety of employees and the office. Obilet's priority was to ensure the security of user information; and the company's operations before and after the pandemic were unchanged. The company developed its own B2C marketplace operation and ERP infrastructures but would also use solutions developed by others for its digitalization infrastructure.

The company was able to grow around 2.5 times since the beginning of the pandemic with its investment in automation and digitalization. The company closed the year 2020 with an 8% contraction compared with the previous year. In 2021, however, it realized a growth of around 200% on a net revenue basis. In 2022, the growth realized was around 320%. Obilet's growth expectation for 2023 was 66% (see Figure 13).

The company implemented a remote working system during the pandemic where teams worked in virtual rooms using Zoom to ensure that employees saw each other's faces. To help employees track their own schedules, a tool was used to measure productivity. Due to the negative impact of the pandemic on the travel marketing business, Obilet reviewed and expanded its business model to reduce risks, maintain revenue flow, and promote growth by diversifying its product offerings. To meet the demand for private transportation options with fewer people, the company entered the car rental business after conducting user surveys and making financial projections. This venture was successful and allowed the company to create links between its products. The company also attempted to launch a bus rental model, but it was not successful. To further diversify its product range, the company has recently entered the accommodation sector. However, since there is high competition in this field, a larger marketing budget is needed to achieve growth. To accommodate these new business models, the technology and finance departments had to be expanded and restructured to accommodate new tasks and reporting requirements.



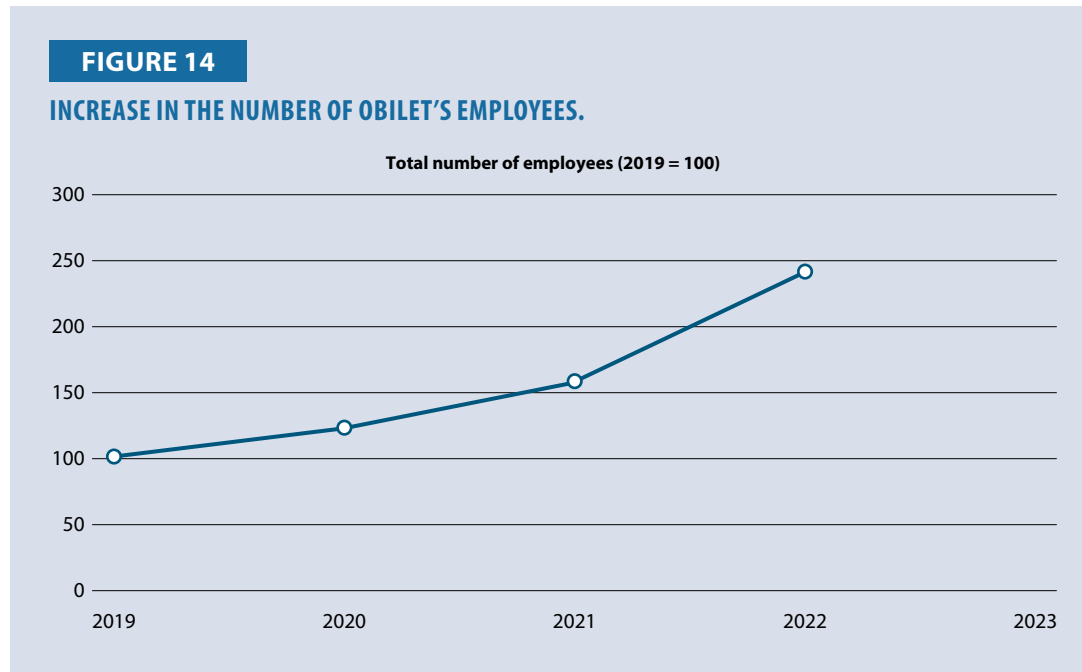
During the pandemic, the company shifted to remote work and after the pandemic, it adopted a hybrid work model. In order to enhance remote work efficiency, the company invested in digital tools like Zoom, RescueTime, and Udemy. Even after the pandemic, the technology department continued to work completely remotely. Although the company executives were initially concerned that remote work would lead to decreased productivity, they did not observe any significant loss of productivity. However, they also did not see a significant increase in productivity that could be measured with metrics. The CTO believes that remote work has a positive impact on employee productivity, but there are also some overheads like increased workload and the need for frequent communication, which do not have a significant effect on productivity. Due to these factors, productivity has not changed significantly, but the hybrid strategy or remote work model are more sustainable for both employees and the company, especially for the technology department. Remote working has become a norm, especially in the software industry, and is expected by software developers. This has increased employee loyalty to the company. The main benefit of remote or hybrid work is that it saves a lot of time for employees.

The company ensures that its users and relevant departments are provided with training and explanatory documents when a new tool is added to its systems or when a process is automated. They also assign an owner department for each new process, such as the finance department for e-flow, which is responsible for the administrative aspects of the system and solving problems for other users. This clear ownership and responsibility structure leads to faster problem resolution.

To digitalize its training processes, Obilet uses systems like Enocta, which provides online training portals for all employee competency levels. All exams for these training courses are also held on the same platform, and retraining is offered to those who do not score a passing grade. During the pandemic, the company switched to a web-based HRM software called KolayİK to effectively manage processes like employee personal information and permissions. It also created a digital employee handbook called Obi'Journey that contains all necessary information for employees starting from their first day at Obilet.

Enhancing the employee experience, Obilet tracks the experience and development of its new employees during their first, third, and fourth months of employment using an online HR management software.

The company did not reduce the number of personnel during the 2.5-month period when it could not do any business during the pandemic period and also did not increase the number of personnel in proportion to its growth thanks to the efficiency gains achieved through managerial practices. Averaged over 12 months, the total number of employees increased by 23% in 2020 compared with 2019. This number increased by 29% in 2021 and 55% in 2022 (see Figure 14).



Obilet identified digital channels as the most effective means to reach new markets and customer segments due to pandemic restrictions and people's reluctance to go out. With the aid of tools such as SimilarWeb and Google Trends, the company gained a better understanding of the market based on data. It discovered that international flight ticket sales had surpassed pre-pandemic levels, whereas domestic flight ticket sales had not yet reached previous levels. Consequently, Obilet increased focus on international markets in its airfare marketing campaigns.

During the pandemic, there was a significant increase in e-commerce across all countries and sectors, particularly in markets with low online penetration. Therefore, Obilet concentrated its new market selection on countries where e-commerce was growing rapidly, and large masses of people who had never previously engaged in e-commerce were becoming e-commerce customers. Obilet prepared roadmaps for entering these countries, anticipating that as e-commerce developed, the online travel industry would also expand. It started implementing these roadmaps as soon as the pandemic's effects eased.

Digitalization investments by Obilet helped optimize costs, especially in after-sales services. The cancellation of approximately 7–8% of the daily 50,000 tickets sold by the company would have required additional agents if handled manually, costing the company more. However, redirecting ticket cancellations and changing transactions to digital channels allowed the company to handle

the work efficiently without increasing the number of customer representatives. Nevertheless, some users still preferred to cancel or refund with a customer representative. Obilet’s live chat interface also provided a cost advantage in after-sales operations. Obilet also minimized Google ads and AWS costs during the pandemic and kept overhead costs low by maintaining a hybrid working model and eliminating the need for a larger office.

The company sees hybrid working as an opportunity for cost optimization. According to its CTO, Obilet may not be able to fully implement all 12 points of the agile manifesto as best practices, but the pandemic allowed the company to become more agile in its work and structure. The shift from working in the office to remote working made the company more horizontal and agile. The CTO believes that the most effective agile approach for technology companies is to deliver output as early as possible, test it with end users, and shape the final output based on feedback. Obilet’s technology team also largely follows agile principles, including work prioritization, team structuring, and work management. Remote working has made daily meetings and weekly retrospectives more necessary, which has increased alignment within and between teams. Despite seeming futile, this has significantly increased productivity in the remote working environment (see Table 6).

During the pandemic, Obilet took advantage of the temporary working allowance subsidies offered to its employees. The company also attempted to secure a low-interest loan from public banks through the Resource Utilization Support Fund, though it was ultimately unsuccessful in receiving it. As a result, Obilet had to rely on private bank loans to meet its working capital needs.

Previously, the company had applied for the KOSGEB support intended for small and medium-sized enterprises, but was unable to benefit from it. This was largely due to the complexity of the legislation surrounding the support, as well as the numerous bureaucratic processes involved, which resulted in a significant delay between the application and the approval of the support.

TABLE 6
MANAGEMENT PRACTICES AND INITIATIVES BY OBILET TAKEN DURING THE COVID-19 PANDEMIC.

Management’s response to COVID-19 pandemic	Management practices adopted (yes/no)	Most distinguished practices (1–10 score)
Agile organization BP during COVID-19	Yes	8
Automation/mechanization during COVID-19	Yes	8
Digitalization/DX during COVID-19	Yes	9
Building new business model	Yes	8
Hybrid/remote work during COVID-19	Yes	9
Talent acquisition during COVID-19	Yes	7
New market/customer development	Yes	9
Utilization of macro-level government policy	Yes	6
Cost optimization during COVID-19	Yes	8
Total score of practices that are strongly adopted	9 out of 9	

Conclusion

Based on the information provided, it is clear that the case study conducted in two companies during the pandemic period showed that management practices to manage business resilience and foster innovation enabled them to grow rapidly and increase their productivity. The companies that implemented these practices exhibited financial resilience, organizational capabilities, and strategic focus, which allowed them to invest and adapt throughout the crisis. They accelerated digitization, reorganized and reskilled for operational efficiency, and became more agile, both in terms of product and business model innovation. Table 7 captures a snapshot of the management practices adopted by the two case-study companies.

TABLE 7

CONCLUSION SUMMARY.

Management practices/initiatives	Remarks
1 Hybrid work/work from home	<p>Both companies have adopted remote or hybrid working. To make remote working more effective they,</p> <ul style="list-style-type: none"> • automated their business processes and digitalized them with intranet applications; • invested in digital tools such as Zoom, RescueTime, and UDEMY to increase remote working efficiency; • prioritized training for employees to get used to the remote working model and ensure their development; • held weekly meetings with remote access to strengthen communication with and between employees and to keep employee motivation high; and • made a significant investment in data security to ensure the safety and integrity of data and systems; <p>Thus, there were no productivity losses due to not working together during the remote working period.</p>
2 Agility/flexibility/reallocation	<p>Although both companies do not exactly define themselves as agile organization, they are taking important steps toward becoming agile by focusing on</p> <ul style="list-style-type: none"> • fully understanding customer expectations, developing products and services in line with their expectations, and delivering them in the fastest way possible; • leaning work and making processes more transparent; • creating a faster, dynamic management structure; and • strengthening interdepartmental communication and team spirit.
3 New (contactless) business model	<p>Both companies</p> <ul style="list-style-type: none"> • re-evaluated their business models in order to be less affected by crises such as pandemics; • decided to enter new business areas in which they had not previously operated; • reviewed their product portfolios during the pandemic and started to offer new products or services by expanding their product ranges; • by diversifying their product portfolios, managed to reduce their risks, maintain their revenue streams, and achieve growth; and • added more employee training and periodic meetings to their business models with the shift to remote or hybrid working.

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Management practices/initiatives	Remarks
4 New skilling and talent acquisition	<p>Both companies</p> <ul style="list-style-type: none"> • first identified core skills and then prioritized strengthening their communication skills; • started to digitize their training processes; • started to organize periodic trainings to improve the competency levels of their employees through trainings provided by their own intranet systems or various training portals; • provided training sets and explanatory documents to the relevant departments on the business processes they automated or digitized and made them available on their intranet systems at all times.
5 Redefining customer/market	<p>For both companies, the pandemic has been an important factor in reviewing their marketing and sales strategies. During this period, one company started selling its products through its own website, while the other focused its new market selection on countries where e-commerce was growing the fastest and where large masses of people who had never done e-commerce before were becoming e-commerce customers.</p> <p>Due to the acceleration of e-commerce during the pandemic period, both companies invested in increasing their visibility in this field.</p> <p>Both searched for new markets and made changes in their marketing methods.</p>
6 Automation/mechanization	<p>Both companies</p> <ul style="list-style-type: none"> • identified key areas that could be automated, and invested in automation to increase their capacity and product/service quality; and • carried out efforts to automate some internal workflows. <p>The automation of processes facilitated work follow-up and approval processes, resulting in increased productivity.</p>
7 Digitalization	<p>The increase in e-commerce during the pandemic period forced companies to invest more in digitalization.</p> <p>Both companies took important steps toward digitalization during this period. One of the companies started selling its products on its own website, i.e., started e-commerce. The other company added interfaces such as chatbox, FAQs, IVR to its customer service or after-sales services, enabling customers to do business on their own through digital channels.</p> <p>By digitalizing some of their processes, both companies were able to save on manpower and reduce costs.</p>

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Management practices/initiatives	Remarks
8 Cost optimization	<p>Both companies</p> <ul style="list-style-type: none"> analyzed business processes, expenditures, revenues, extra costs and non-essential expenses to identify potential business bottlenecks; were able to optimize their costs as a whole by investing in digitalization and outsourcing some software related to certain administrative processes such as payment and approval processes or by outsourcing consultancy services in business processes such as promotion/marketing; and considered that hybrid working offered a significant opportunity for cost optimization.
9 Utilization of macro government policies	<p>Both companies</p> <ul style="list-style-type: none"> benefited from temporary work allowance support during the pandemic period (this support contributed to sustainable payment of their employees' wages during the remote working period); stated that they had difficulties in determining the right public support program, that the bureaucratic procedures in the application were too much, and that the time taken between the application period and the support period was too long, as important problems related to public support.

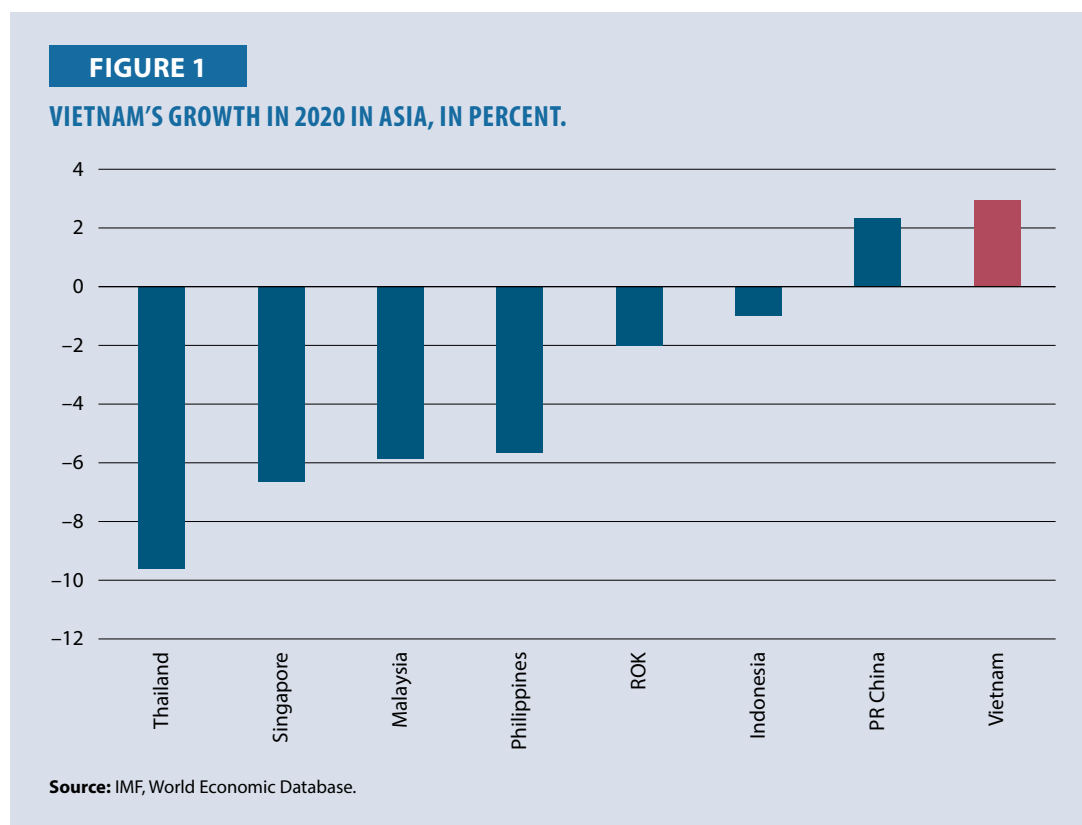
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VIETNAM

Country Growth Perspectives in 2020–22

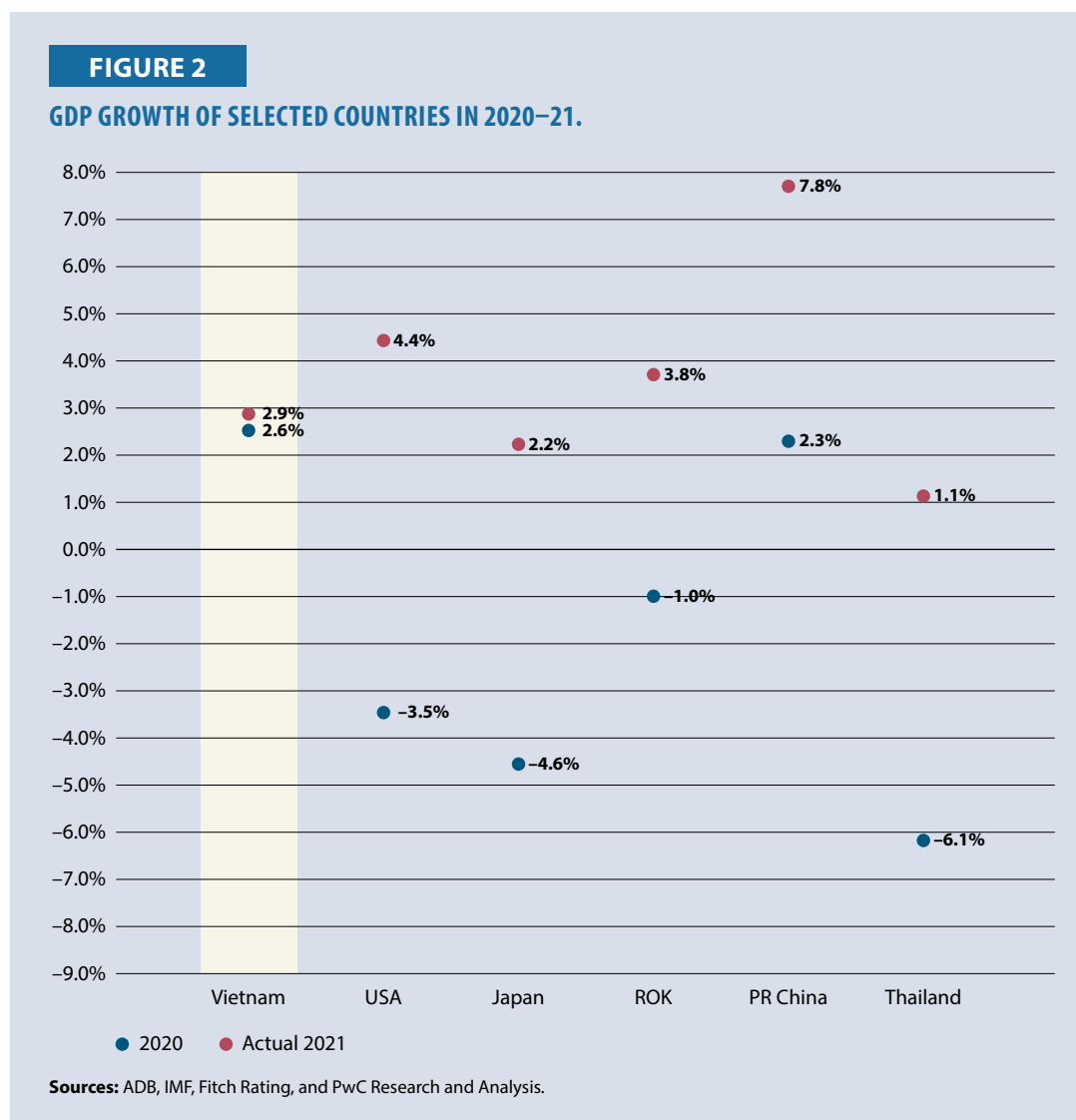
Vietnam has been one of the few economies to achieve consecutive years of growth since the beginning of the COVID-19 pandemic, though the GDP growth rate does not fully reflect the true impact of the pandemic. Vietnam experienced what is commonly referred to as a K-curve effect, where different industries were affected in varying ways. Sectors such as tourism, hospitality, and food services were hit the hardest, while other sectors displayed resilience over the two years.



The pandemic hit the economy hard, but Vietnam has taken decisive steps to limit both the health and economic fallouts. Successful containment, along with timely policy support, also helped limit the economic fallout and the size of the emergency response package. In 2020, the Vietnamese economy expanded by 2.9%, one of the highest growth rates in the world (see Figure 1), backed by an early rebound of domestic activities and robust export performance, particularly high-tech exports of electronics as people around the world worked from home.

According to the data released by the General Statistics Office (GSO), Vietnam recorded 2.58% GDP growth rate, thereby becoming one of the very few countries with the growth rate lower in 2021 than in 2020. This is unsurprising, as the nation went through an extended lockdown in the second half of 2021, causing serious economic ramifications. However, when considering both 2020 and 2021, Vietnam has been among the rare economies to record two consecutive years of growth since the start of the pandemic (see Figure 2).

Corporates in Vietnam entered the crisis with relatively weak balance sheets, particularly the small and medium enterprises that dominated the hardest hit sectors. COVID-19 further deteriorated their liquidity and solvency positions, raising financial stability concerns through bank exposures. Monetary, fiscal, and financial sector policies implemented by the government helped mitigate the immediate risk of a surge in corporate defaults and mass layoffs.

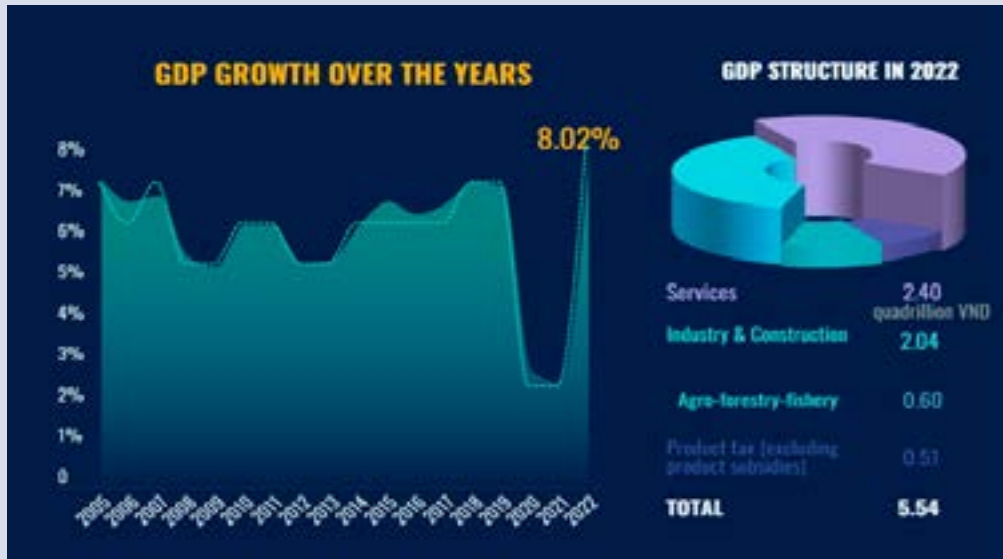


The Vietnamese government's efforts to reduce the regulatory burden, improve firms' access to resources, enhance governance and access to technology and innovation, and address skills mismatches have contributed to the country's economic growth. In 2022, Vietnam experienced a significant increase in gross domestic product (GDP) at a rate of 8.02%, which was the fastest pace since 2005.

Several factors contributed to this robust GDP growth. Strong domestic retail sales and exports played a vital role in driving economic expansion. Despite the challenges posed by the COVID-19 pandemic and the resulting lockdowns, Vietnam managed to rebound and recover from the impact on the economy. The growth rate of 8.02% surpassed the official growth target of 6.0–6.5% set by the government.

FIGURE 3

VIETNAM'S GDP GROWTH FOR THE PERIOD 2005–22.



Source: Finance Plus, Ministry of Finance.

High-growth Sectors and Industry's Performance

Overall Picture of 2020

In 2020, the COVID-19 pandemic had a significant and negative impact on various sectors of Vietnam's economy. However, despite the challenges, the economy still managed to grow, albeit at a slower rate compared with the previous years. Below is a breakdown of the growth rates and contributions of different sectors to the overall economic growth:

1. Agriculture, forestry, and fishery sector:
 - The sector experienced an increase of 2.68% in 2020.
 - It contributed 13.5% to the overall growth rate of the economy.
 - Major livestock products and shrimp production saw significant growth.
 - The forestry sector increased by 2.82%, making a minimal contribution of 0.02 percentage points.
 - The fishery sector grew by 3.08% and contributed 0.1 percentage points.
2. Industry and construction sector:
 - The industry and construction sector grew by 3.98% in 2020.
 - It contributed the most to the overall growth rate, accounting for 53%.

- The processing and manufacturing industry played a crucial role, experiencing a growth rate of 5.82% and contributing 1.25 percentage points.
- Electricity production and distribution increased by 3.92% and contributed 0.19 percentage points.
- Water supply, waste and wastewater management, and treatment saw growth of 5.51% and contributed 0.04 percentage points.
- However, the mining sector experienced a decline of 5.62%.
- The construction industry recorded a growth rate of 6.76% and contributed 0.5 percentage points.

3. Services sector:

- The services sector was severely impacted by the COVID-19 pandemic, resulting in the lowest growth rate in 2020.
- Wholesale and retail trade increased by 5.53% and contributed 0.61 percentage points.
- The finance, banking, and insurance sector grew by 6.87% and contributed 0.46 percentage points.
- However, transportation and warehousing witnessed a decline of 1.88%, causing a decrease of 0.06 percentage points.

Overall, while the COVID-19 pandemic posed significant challenges to Vietnam's economy in 2020, several sectors managed to show resilience and contributed to the country's growth. The agriculture, forestry, and fishery sector, along with the industry and construction sector, played crucial roles in driving the economy forward. The services sector faced the most significant setbacks due to the pandemic's impact on commercial and service activities.

Overall Picture of 2021

In 2021, the COVID-19 pandemic continued to have a significant impact on the Vietnamese economy, resulting in a GDP growth rate of 2.58%. The effects were particularly pronounced in the third quarter when many key economic regions implemented prolonged social distancing measures to control the spread of the virus. Despite the challenges, different sectors contributed to the overall growth:

1. Agriculture, forestry, and fishery sector:

- This sector experienced a growth rate of 2.9% in 2021.
- It contributed 13.97% to the growth rate of the total value added of the economy.
- Most crops saw good productivity, livestock had steady growth, and the export turnover of certain agricultural products increased.

- The agricultural sector grew by 3.18% and contributed 0.29 percentage points.
- The forestry sector increased by 3.88% and contributed 0.02 percentage points.
- The fisheries sector saw a growth rate of 1.73% and contributed 0.05 percentage points.

2. Industry and construction sector:

- The industry and construction sector witnessed a growth rate of 4.05% in 2021.
- It contributed 63.80% to the overall growth rate.
- The processing and manufacturing sectors remained the driving force, with a growth rate of 6.37% and a contribution of 1.61 percentage points.
- The electricity production and distribution industry increased by 5.24% and contributed 0.19 percentage points.
- However, the mining industry decreased by 6.21%, mainly due to a decline in crude oil and natural gas production.
- The construction industry grew modestly by 0.63% and contributed 0.05 percentage points.

3. Services sector:

- The services sector faced significant challenges due to the COVID-19 pandemic.
- Wholesale and retail trade decreased by 0.21%, resulting in a decrease of 0.02 percentage points in the overall growth rate.
- Transportation and warehousing industry saw a decline of 5.02%, reducing the growth rate by 0.3 percentage points.
- The accommodation and foodservice industry experienced a sharp decline of 20.81%, contributing to a decrease of 0.51 percentage points.
- The health sector and social assistance activities achieved the highest growth rate within the services sector, with an increase of 42.75% and a contribution of 0.55 percentage points.
- Financial, banking, and insurance activities increased by 9.42% and contributed 0.52 percentage points.
- The information and communication industry grew by 5.97% and contributed 0.36 percentage points.

Overall, the COVID-19 pandemic continued to present challenges to Vietnam's economy in 2021. While the agriculture, forestry, and fishery sector, as well as the industry and construction sector,

experienced positive growth, the overall service sector, especially industries related to commerce and hospitality, faced significant contractions. The health sector, financial activities, and the information and communication industry showed resilience and contributed to the overall growth to some extent.

Overall Picture of 2022

In 2022, Vietnam's GDP experienced significant growth, reaching 8.02%, which was the highest increase in the period from 2011 to 2022. Different sectors contributed to this growth as follows:

1. Agriculture, forestry, and fishery sector:
 - This sector played a supportive role in the economy, with an increase of 3.36% in 2022.
 - It contributed 5.11% to the overall growth rate of the total added value of the economy.
 - Output of perennial industrial crops increased, livestock production showed steady growth, and agricultural product exports achieved impressive results through quality improvements, trade promotion, and diversification of export markets.
 - The agricultural sector grew by 2.88% and contributed 0.27 percentage points.
 - Forestry increased by 6.13% and contributed 0.03 percentage points.
 - The fishery sector saw an increase of 4.43% and contributed 0.12 percentage points.
2. Industry and construction sector:
 - Businesses in this sector demonstrated greater proactivity in labor, production, and business plans, overcoming difficulties to recover and expand production.
 - The processing and manufacturing industry remained the growth engine of the economy, with an increase of 8.10% and a contribution of 2.09 percentage points to the overall growth rate.
 - Water supply, waste and wastewater management, and treatment increased by 7.45% and contributed 0.04 percentage points.
 - Electricity production and distribution increased by 7.05% and contributed 0.26 percentage points.
 - The mining industry grew by 5.19% and contributed 0.17 percentage points.
 - The construction industry experienced a growth of 8.17% and contributed 0.59 percentage points.
3. Services sector:
 - The services sector showed a strong recovery in 2022, with a growth rate of 9.99%, the highest in the period from 2011 to 2022.

- Several market service industries experienced sharp increases, contributing significantly to the overall growth rate.
- Wholesale and retail trade increased by 10.15% and contributed 0.97 percentage points.
- Transportation and warehousing saw a growth rate of 11.93% and contributed 0.69 percentage points.
- The accommodation and food services sector had the highest increase within the services sector, with a growth rate of 40.61% and a contribution of 0.79 percentage points.
- Financial, banking, and insurance activities grew by 9.03% and contributed 0.53 percentage points.
- The information and communication industry increased by 7.80% and contributed 0.5 percentage points.
- However, the health sector and social assistance activities decreased by 7.6%, down 0.13 percentage points, as the COVID-19 epidemic was under control, resulting in reduced spending on disease prevention and control compared with 2021.

In summary, the Vietnamese economy demonstrated robust growth in 2022, with the agriculture, forestry, and fishery sector; the industry and construction sector; and the services sector all contributing significantly to this positive performance.

Overall Productivity Trends

Productivity enhancement is crucial for Vietnam's socioeconomic development and attainment of high-income status. Labor productivity in Vietnam grew at an average annual rate of 5.8% during 2016–20, outperforming the average growth rate of 4.3% during 2010–15. However, due to the impact of the COVID-19 pandemic, labor productivity growth was lower, with rates of less than 5% recorded in 2020–21. In 2022, despite high GDP growth, labor productivity had not yet fully recovered, with a growth rate estimated at 4.8%, which was significantly lower than the average growth rate prior to the pandemic (see Figure 4).

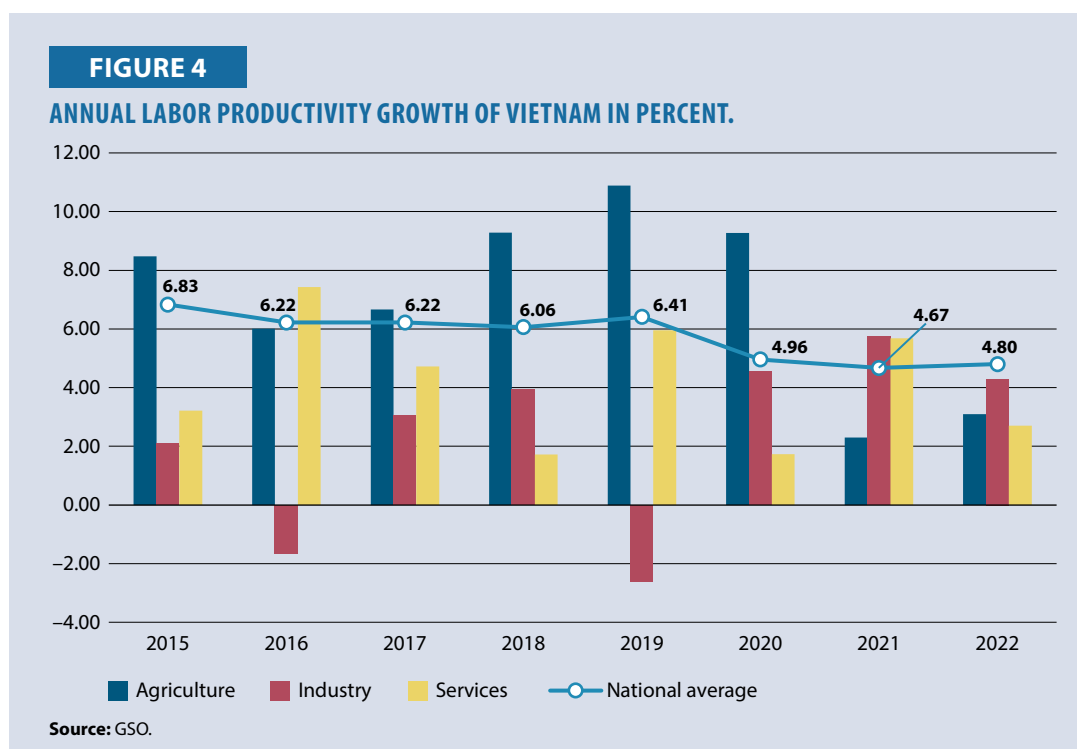
To address this, strategies have been put in place to make productivity a key driver across all sectors by leveraging new scientific and technological advancements, advanced management systems, and tools for productivity improvement, along with human resources training and retraining in the era of the Fourth Industrial Revolution. These strategies aim to achieve an annual labor productivity growth rate of over 7.5% and contribute around 50% to the economic growth.

The implementation of the strategies involves the participation of 30–35 cities and provinces, along with 5–7 business groups and corporations. Moreover, at least 500 small- and medium-sized enterprises (SMEs) will develop and implement key projects for productivity improvement, and at least 20 universities and vocational training centers will establish productivity improvement clubs for students.

The strategies also emphasize the improvement of the legal framework to boost labor productivity and TFP through science, technology, and innovation. These strategies will promote research, consultation, and training, as well as the development of organizations that support productivity improvement. The adoption of advanced management systems, models, and tools in businesses is encouraged, along with increased awareness campaigns on productivity.

Furthermore, the strategies call for the development of training programs in productivity and career counseling in universities and vocational training centers. They also emphasize cooperation among technology solution providers participating in major productivity improvement projects in specific areas.

By implementing these strategies, Vietnam aims to enhance productivity across sectors, leverage technological advancements, and improve human resources to foster sustained economic growth and development.



Case study 1: Rang Dong Light Source & Vacuum Flask Joint Stock Company

Company Introduction

TABLE 1

COMPANY INFORMATION ON RALACO.

Business name: Rang Dong Light Source & Vacuum Flask Joint Stock Company (RALACO)

Address: 89 Ha Dinh, Hanoi and Factory in Que Vo Industrial Park, Bac Ninh.

Website: <http://Rangdong.com.vn>



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Company's logo



Main production and business activities

Design, manufacture and supply of specialized and intelligent LED products and lighting solutions for smart homes, smart cities, hi-tech agriculture, etc.; manufacture and supply of electrical equipment; and production of vacuum flasks.

RALACO, previously named Rang Dong Lamp and Thermos Factory, was established in 1958 as part of a government initiative to develop Vietnam's industry following the war of independence. The company transitioned to a joint-stock company through equitization in 2004 and subsequently became listed on the Ho Chi Minh Stock Exchange (HOSE) on 6 December 2006, with the ticker symbol RAL. By 2015, the government had fully divested its ownership in RALACO, marking a significant milestone for the company's independent operation and growth.

RALACO currently operates from two facilities, namely the head office located in Hanoi and a satellite base situated in the Bac Ninh Que Vo Industrial Park. The company has established a broad distribution network spanning all 64 provinces of Vietnam. Additionally, RALACO operates seven sales branches in the central and south regions, along with three branches in the north. To further support its customers, the company has set up three lighting consulting service centers in the north, central, and south regions. Moreover, RALACO has a dedicated center focused on developing an LED ecosystem.

The company employs approximately 2,000 full-time employees. As of 2021, the company's production capacity had reached over 65 million LED products per year and over 25 million vacuum flask products per year. The company successfully exported its products to 47 countries worldwide. Despite the fluctuations and impacts of the COVID-19 pandemic and the instability of the global and domestic economies, the company maintained a continuous growth rate of 15–20% for over 15 years.

Business Context in 2020–21

RALACO faced the adverse effects of the COVID-19 pandemic on the global economy, including disruptions in production and business activities, supply chain challenges, inflationary pressures, and decreased market purchasing power. The company also encountered difficulties in its export markets in Europe and America due to the uncertainties and instability caused by the pandemic.

Domestically, RALACO had to maintain continuous production while adhering to stringent governmental requirements during and after the COVID-19 pandemic. These requirements aimed to ensure the safety of the production environment, prevent the spread of infections, and safeguard the health of workers and the community. RALACO had to implement measures to meet these requirements, such as implementing safety protocols, maintaining non-infectious production practices, and prioritizing the wellbeing of its workforce and the surrounding community.

Due to the influence of the COVID-19 pandemic and digital transformation, customer consumption behavior underwent rapid changes. As a result, there was a trend toward contactless transactions

through online channels, replacing traditional sales channels. RALACO, with its well-established network of traditional sales agents spanning 63 provinces and cities, has been impacted by this shift. Customers now demand faster response and supply times, ranging from months and weeks to even days or hours. Moreover, customers expect RALACO to provide not just individual products but comprehensive solutions. For example, RALACO is now expected to offer smart lighting solutions instead of just selling LED lights, and multi-purpose products like hot water dispensers that can serve coffee and herbs and act as gifts.

Fierce competition in market prices with similar products imported from the ROK, Japan, the EU, and especially from PR China, has compelled RALACO to take several strategic actions to maintain competitiveness in both domestic and export markets. To provide more choices and improve product quality, RALACO has diversified its product offerings. This move allows the company to cater to different customer preferences and capture a wider market share. By expanding its product range, RALACO aims to differentiate itself from competitors and attract more customers who are seeking variety.

Internally, RALACO faced a significant challenge in transforming its traditional organizational structure, which had been established for more than 60 years, into a lean, flexible, and adaptable one suited for uncertain contexts. The company also needed to address several factors, including an aging workforce, asynchronous machinery and equipment systems, and the step-by-step implementation of digital transformation, to maintain its growth momentum.

Good Practices that were Deployed

To navigate the unprecedented changes and challenges in the business landscape between 2020 and 2021, RALACO undertook significant efforts and consistently adopted the following best practices (also summarized in Table 2) through a process of continuous learning, adaptability, and persistence.

Agile organization BP in COVID-19: RALACO undertook several transformative practices in response to the challenges of the 2020–21 period. These practices involved a shift from being a product-centric business to one focused on providing solutions and customer services, with an emphasis on enhancing customer experience. Additionally, RALACO gradually transitioned from a labor-intensive production model with low added value to producing technology products with high added value, thus positioning itself as a high-tech enterprise.

To support these transformations, RALACO reviewed and restructured its organizational structure, moving away from a rigid functional approach and adopting a more flexible and organic block structure with agile teams. Key programs were formulated on annual and quarterly basis; evaluated against key performance indicators, objectives, and key results; and implemented by cross-functional project teams.

The company embraced a learning-organization approach, starting from the leadership team and extending down to operational teams and production lines. This involved a model of learning through training and mentorship by industry experts, followed by internal training within groups. Despite the challenges posed by the COVID-19 pandemic, RALACO maintained smooth training and meeting activities through online channels such as Zoom and Microsoft Teams.

Investment and development activities were prioritized, with 2% of revenue allocated to these areas and 20% of post-tax profit dedicated to knowledge development, science, technology, and

innovation. This commitment to investment provided the foundation for RALACO's creativity and productivity during and after the pandemic. The company also sought out talented and dedicated consultants to assist in identifying and implementing the transformation process.

The work environment was redesigned to adapt to the changing circumstances, allowing for stable on-site production and work locations with multi-channel flexibility, including on-site work, online collaboration, and work-from-home arrangements.

RALACO fostered a culture of creativity, innovation, and risk-taking within its community, embodying the philosophy of "let's go then the road will be created!" Internal communication was prioritized through newsletters, periodic updates, videos, and internally produced programs, fostering solidarity, overcoming challenges, and motivating employees.

The company also emphasized effective communication with customers and partners through various channels to ensure continuous and regular information sharing, connectivity, and timely support.

Automation and digitalization of BP during COVID-19: In addition to focusing on productivity and quality improvement, RALACO's leadership recognized the importance of automation and digital transformation. They implemented automation pilots in various areas with manual processes, gradually moving toward automating and connecting processes throughout the production line. RALACO also developed its own automation processes.

The company devised a seven-step roadmap for digital transformation in its production system including

- (1) standardizing the process;
- (2) computerization;
- (3) connection;
- (4) display;
- (5) transparency;
- (6) predictability; and
- (7) adaptation.

RALACO decided to upgrade its Ha Dinh facility to a smart factory, and subsequently built a smart factory in Hoa Lac. These facilities were established to develop products and solutions for the digital ecosystem, including single smart products, electronic components, smart local solutions, smart IoT, Green-Smart Human Centric Lighting (G-S-HCL) lighting solution system, high-tech agricultural products, products utilizing digital technology, integrated intelligent control systems, smart lighting solution systems, products using renewable energy, and products incorporating new materials in their models. RALACO also implemented an ERP platform for management by integrating software into the ERP system to manage operations such as supply chain, production, customer management, knowledge management, product lifecycle management, human resource

management, and financial management. The company also created digital job positions and established a digital executive office.

To further drive digital transformation, RALACO launched the RALACO Venture Fund in early 2020. This fund provided material support, moral encouragement, and incubation for projects, aiming to generate breakthroughs in production and business activities.

Building new business model BP during COVID-19: Currently, RALACO recognizes the presence of a hybrid business model, which involves both the consolidation and renewal of the traditional business model, as well as the development of a new business model on the digital platform. This approach is guided by a fresh mindset focused on enhancing customer experience, personalizing value for groups or individuals, spreading value within groups, personalizing brand value, and fostering emotional communication and inspiration.

Consolidation of the traditional business model entails strengthening the distribution system, improving service quality, expanding coverage, optimizing product flow, and optimizing the “push” model.

Renewing the traditional business model involves the application of new tools such as dealer management system, customer relationship management, call centers, point-of-sale systems, and development of e-commerce platforms using the online-to-offline (O2O) model. Additionally, online communication and engaging with customers through their networks are emphasized, enabling the implementation of the “pull” model.

Building and developing new business models include

- (1) collaborating with technology companies to conduct business on their platforms;
- (2) developing RALACO’s own platform to facilitate business operations;
- (3) creating customer experience models that enhance engagement and satisfaction; and
- (4) experimenting with innovative models, such as light rental combined with service delivery platforms.

By adopting a hybrid business model and exploring various strategies, RALACO aims to adapt to the changing business landscape, leverage digital platforms, and deliver enhanced value and experiences to its customers.

Hybrid work/remote work BP during COVID-19: RALACO implemented several strategies and practices to adapt to the changing work environment and enhance its operations. Here are the key points:

- (1) **Redesigned work environment:** RALACO redesigned its work environment to facilitate stability, productivity, and flexibility. This included allowing production locations to operate and accommodate living arrangements in a single location, implementing multi-channel work options such as on-site, online, and work-from-home (WFH) practices. These adaptations were aimed at ensuring continuous operations during and after the epidemic.

- (2) **Learning organization:** RALACO fostered a learning organization culture from the core leadership team to operational teams and production lines. The leadership team received training and mentorship from industry experts, which was then disseminated internally through group-based training. Training and meetings were smoothly conducted through online channels like Zoom and Microsoft Teams, thus supporting ongoing learning and development.
- (3) **E-commerce channels:** RALACO opened up e-commerce channels across various platforms to reach end users. This expansion into e-commerce allowed for wider market access and provided convenient purchasing options for customers.
- (4) **Internal communication:** RALACO promoted internal communication through periodic newsletters, clips, and videos to keep employees updated. The company encouraged employees to contribute to internal programs, which fostered solidarity and promoted creativity among the workforce.
- (5) **Multichannel communication with customers and partners:** RALACO utilized multiple communication channels to maintain regular and continuous information sharing with customers and partners. This ensured strong connections, timely support, and effective collaboration.

The implementation of hybrid work practices yielded several benefits for RALACO, including

- protection against the COVID-19 pandemic by preventing the spread of the virus within the company;
- safeguarding employee health and wellbeing and avoiding work interruptions and wage cuts;
- facilitating the implementation of export and international integration strategies in the “new normal” context;
- developing the domestic market by maximizing comparative advantages and creating resonance in key marketplaces;
- establishing new business models, such as trading LED 4.0 ecosystem products, high-tech agricultural products, and specialized lighting products;
- advancing modern retail and e-commerce models, particularly the O2O approach;
- developing platform business models;
- establishing a unified, real-time operations center with multichannel and multichain capabilities; and
- implementing an on-site export model and streamlining export operations.

These strategies and practices enabled RALACO to adapt to the changing business landscape, enhance operational efficiency, and drive growth and innovation across multiple areas of the organization.

Talent acquisition BP during COVID-19: RALACO's commitment to investment and development activities is reflected in its allocation of 2% of the revenue and 20% of the post-tax profit toward knowledge development, science and technology, and innovation. This financial investment has played a crucial role in fostering creativity and increasing productivity for RALACO, both during and after the pandemic.

To support the company's transformation process and address specific challenges, RALACO has established a team of talented and dedicated consultants. These consultants join the company in identifying and implementing the necessary transformations while addressing any anomalies that arise along the way. Their expertise and guidance have been instrumental in guiding RALACO's transformation journey.

RALACO recognizes the importance of applying science and technology in its production processes, understanding that they are key drivers for improving product quality. As a result, the company has gathered highly experienced and qualified scientists to tackle specific challenges and solve technical problems to enhance quality. RALACO provides mechanisms and conditions that enable scientists to contribute their expertise and solve technical issues, ensuring that they can utilize their full potential. Moreover, the company has implemented a reward mechanism that encourages scientists to contribute their talents to RALACO.

RALACO has established four R&D centers, two of which were established in 2020: the Digital Transformation Consulting Center; the Lighting R&D Center; the Digital Technology R&D Center; and the Modern Business Models R&D Center. These centers have assembled a team of 12 professors and associate professors, and over 30 doctors and engineers from various fields.

The science and technology products developed by RALACO are the result of cumulative knowledge and technological mastery, as well as collaborations with external entities. These include knowledge transfer from the International Solid Lighting Alliance; strategic partnerships with world-leading LED manufacturing corporations such as Samsung, Seoul Semiconductor, and EverLight; and collaborations with technology corporations in Vietnam such as FPT, Viettel, VNPT, the Vietnam Academy of Science and Technology, universities, and the Innovation Investment Fund BK.

RALACO has implemented its transformation process according to a roadmap, progressing in stages and conducting thorough research and refinement tailored to specific needs and contexts.

In collaboration with expert consultants from leading groups such as TUV-SUD and SIEMENS, RALACO has defined a digital transformation roadmap based on three pillars: technology, process, and organization (people). The company has designed and provided training programs that align with these pillars to ensure successful implementation of the digital transformation strategy.

New market/customer BP during COVID-19: RALACO made strategic decisions to align its product offerings with energy efficiency and environmental sustainability. Traditional lighting products that consume excessive electricity and have adverse environmental impacts, such as incandescent bulbs, fluorescent tubes, and compact fluorescent lamps, were discontinued. Instead, RALACO focused on developing LED lighting products as key spearhead products, specifically the LED 4.0/LED digital ecosystem. The company aimed to transition from being a product supplier to becoming a provider of green-smart lighting systems and solutions that promote human health and happiness, particularly through G-S HCL solutions. Additionally, RALACO specialized in lighting solutions and systems for high-tech agriculture (HTAL) to support agricultural productivity.

To support its diversified product offerings, RALACO employed a multichannel distribution strategy that synergized traditional and innovative approaches. The company reviewed and strengthened traditional channels, such as physical points of sale through agents and supermarkets, to ensure a positive customer experience. Simultaneously, RALACO leveraged digital technologies to enhance market efficiency and reach customers through 3D simulation applications. The company also established an online virtual store, allowing customers to experience the smart lighting solutions offered by RALACO without the need to physically visit showrooms. Integration of smart lighting system features into mobile control apps further facilitated customer engagement. These initiatives resulted in significant sales growth for RALACO’s new products.

Furthermore, RALACO expanded its market presence by opening e-commerce channels across various platforms and providing direct access to end users. This enabled the company to enter new markets and offer lighting solutions for smart homes, smart cities, and lighting rental services.

RALACO’s strategic focus on energy-efficient and innovative lighting solutions, along with its diversified distribution channels, positioned the company to cater to evolving customer demands and expand its market reach in the lighting industry.

Cost optimization BP during COVID-19: RALACO has strategically aligned its product offerings with energy efficiency and environmental sustainability objectives. The company discontinued traditional lighting products like incandescent bulbs, fluorescent tubes, and compact fluorescent lamps due to their excessive energy consumption and negative environmental impact. Instead, RALACO focused on developing LED lighting products, specifically within the LED 4.0/LED digital ecosystem. This transition allowed RALACO to transform from a product supplier to a provider of green-smart lighting systems and solutions. The company emphasized HCL solutions to enhance wellbeing and happiness. Additionally, RALACO specialized in providing lighting solutions for HTAL, as noted earlier.

To effectively distribute its diversified product portfolio, RALACO adopted a multichannel strategy that combined traditional and innovative approaches, as detailed earlier. Mobile control apps were integrated with smart lighting features, enhancing customer engagement. These initiatives resulted in significant sales growth for RALACO’s new product lines.

Moreover, RALACO expanded its market reach by embracing e-commerce channels across various platforms. This strategic move granted the company direct access to end-users, enabling it to enter new markets and offer lighting solutions for smart homes, smart cities, and lighting rental services.

By focusing on energy efficiency and innovation in lighting solutions, and by implementing a multichannel distribution strategy, RALACO positioned itself to meet evolving customer demands while expanding its market presence in the lighting industry.

TABLE 2
SUMMARY OF BEST PRACTICES.

Practices in management	Adopted (yes/no)	Score (1–10)
1. Agile organization BP during COVID-19	Yes	10
2. Automation and digitalization during COVID-19	Yes	9
3. Building new business model	Yes	10

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Practices in management	Adopted (yes/no)	Score (1–10)
4. Hybrid work/remote work BP during COVID-19	Yes	9
5. Talent acquisition BP during COVID-19	Yes	10
6. New market/customer BP during COVID-19	Yes	8
7. Cost optimization BP during COVID-19	Yes	9
8. Utilization of macro-level government policy during COVID-19	No	0
Total score	7 out of 8	

Through dedicated and determined efforts, RALACO successfully achieved its business and growth objectives for the period of 2019–22. The company maintained a steady growth momentum that had been established over the past 15 years, thus establishing a solid foundation for the upcoming period of 2023–25.

Business Results

TABLE 3

BUSINESS RESULTS OF RALACO FOR THE PERIOD 2019–22.

No.	Indicator	Unit (VN currency)	Year 2019	Year 2020	Year 2021	Year 2022
1	Total assets	Billion	3,015	4,026	5,392	6,638
2	Liabilities	Billion	2,180	2,947	4,023	4,061
3	Equity	Billion	835	1,079	1,369	2,622
4	Revenue	Billion	4,256	4,922	5,709	6,910
5	Profit (before tax)	Billion	162	424	502	610
6	Profit (after tax)	Billion	125	336	398	486
7	ROE	%	15.0	31.1	29.1	18.5
8	ROA	%	4.2	8.3	7.4	7.3
9	Productivity	Billion/employee	1.995	2.343	2.907	3.045
10	Number of initiatives		359	1390	1613	1355
11	Number of applied initiatives		269	880	1099	1115
12	Success rate of initiatives	%	75	63	68	85

According to Table 3, RALACO experienced continuous growth in profits from 2019 to 2022, with significant increases in 2020 and 2021. The company's profitability indicators, such as return on equity (ROE) and return on assets (ROA), also showed strong growth, reaching their peaks in 2020. This can be attributed to the company's improved asset efficiency, as reflected in the increasing asset turnover over the years.

Despite the challenging circumstances caused by the COVID-19 pandemic and the natural disasters in 2020, RALACO achieved impressive results. Revenue increased by 15.6% compared with that in 2019, while profit saw a growth of 17.8% compared with the previous year. The average income of employees increased by 4.3% and the company's contribution to the budget increased by 8.3%, compared with 2019.

In terms of innovation and improvement initiatives, RALACO made significant progress in 2020 and 2021 compared with 2019, with an actual application rate of nearly 70%. This demonstrates the effectiveness of the company's mechanisms for incentivizing and developing the capacity of employees, fostering proactiveness, and empowering individuals, which unleashed their creativity.

RALACO also garnered several achievements and recognitions. The company was listed as one of the TOP 100 Famous Brands of ASEAN and ranked 290th among the Top 500 Largest Enterprises in Vietnam (consistently ranked by VNR since 2012). It was also positioned as the 159th largest private enterprise in Vietnam (consistently ranked by VNR since 2012) and ranked 255th among the Top 500 fastest-growing enterprises in Vietnam. Additionally, RALACO's LED Ecosystem 4.0 products were honored with the title of Top 1 "Vietnamese goods loved by consumers" in 2020.

Lessons Learnt

The achievements of RALACO in recent years have yielded valuable lessons, noted below:

- (1) **Lesson on culture of innovation:** Building a culture of innovation within the organization is crucial for sustainable development. RALACO has demonstrated the importance of fostering a culture that encourages continuous improvement and innovation at all levels. This involves establishing clear vision, mission, and action plans; developing new and improved products and processes; and creating mechanisms to motivate and support employees in implementing innovation activities.
- (2) **Lesson on leadership role:** Effective leadership is a key factor in driving innovation and transformation. RALACO's leaders, including the Board of Directors, have shown strategic vision, courage, and organizational capabilities to navigate through an unpredictable and competitive business environment. They have also led by example, while continuously learning, providing opportunities, and serving as a source of inspiration and guidance for employees.
- (3) **Lesson on accepting proactive changes:** RALACO has embraced new knowledge and proactively adapted to the evolving business landscape. The company has invested in training programs to equip its employees with the necessary skills and knowledge. It has also fostered collaborations with institutes and training institutions to enhance creativity and innovation. This lesson highlights the importance of continuously learning and adapting in a rapidly changing and competitive market.
- (4) **Lesson on releasing resources and fostering creativity through trust and empowerment:** RALACO recognizes the significance of empowering employees and creating an environment that encourages innovation. The company has entrusted young engineers and workers with opportunities to experiment and innovate. Challenging goals have been set to stimulate creativity and drive the development of new product lines. RALACO has established organizations, mechanisms, and incentives to effectively release resources and foster a creative environment.

By embracing these lessons, RALACO has successfully implemented innovation and improvement initiatives, positioning itself as a leader in the industry. The establishment of a New Idea Creation Center, Venture Capital Fund, and Innovation Festival further demonstrates RALACO's commitment to continuous improvement and innovation. These lessons can serve as valuable insights for other Vietnamese businesses seeking to compete in an increasingly competitive and globally integrated market.

Case Study 2: Thanh Giong Computer and Communication Joint Stock Company

Company Introduction

TABLE 4

COMPANY INFORMATION ON THANH GIONG COMPUTER.

Business name: Thanh Giong Computer and Communication Joint Stock Company (Thanh Giong Computer in short)	In Da Nang:
Address:	Address: K80/18 Le Huu Trac, An Hai Dong Ward, Son Tra District, Da Nang City
In Hanoi:	In Ho Chi Minh city:
Head office: No. 34/90 Lang Ha, Dong Da, Hanoi	Office: 8th Floor, Lot A, Waseco Building, No. 10 Pho Quang, Ward 2, Tan Binh District, City. Ho Chi Minh
Transaction Office: No. 37/97 Nguyen Chi Thanh, Dong Da, Hanoi	Factory: Km 27, National Highway 1A, KP. Quyet Thang, Binh Thang Ward, City. Di An, Binh Duong Province
Factory: Lot A2 CN5 Industrial Park Tu Liem, Minh Khai, Bac Tu Liem, Hanoi	
Website: http://www.thanhgiong.com.vn/	
Company's logo	
Main production and business activities	Producing, assembling, and distributing Vietnamese brand computers

Thanh Giong Computer Company, founded in 2005, emerged during a period when Vietnam was actively promoting information technology (IT) among the general public. The company aimed to bring IT into every household, playing a significant role in the popularization of technology in the country. With over 18 years of operation, Thanh Giong Computer has established itself as a prominent player in the industry, operating factories and a R&D unit focused on IoT products.

Currently headquartered in Hanoi, Thanh Giong Computer has expanded its reach with subsidiaries in Da Nang and Ho Chi Minh City. The company operates two factories, one located in Hanoi and the other in Binh Duong Small and Medium Industrial Park. Its products are distributed nationwide, reaching all provinces and cities and finding applications in numerous locations across the country.

In its early days, Thanh Giong Computer had a core team of only four members. However, as the company has grown, it now maintains around 30 full-time employees along with over 50 seasonal employees, primarily students from technical universities in the surrounding areas who join during peak production periods. In 2020, the Vietnam Productivity Institute assessed the factory's assembly and production capacity to be approximately 320,000 sets per year.

With a strong focus on continuous improvement and growth, Thanh Giong Computer is committed to refining its operations and expanding its offerings. The company exhibits great potential for further development and strives to enhance its performance on a continuous basis.

Business Context in 2020–21

During the challenging year of 2020, Thanh Giong Computer Company, like many other businesses, faced significant difficulties and had to adapt to the essential changes caused by the COVID-19 pandemic. The company experienced disruptions in the global supply chain, resulting in scarce computer components and fluctuating prices. These challenges led to a shortage of raw materials and increased production costs. Furthermore, the cancellation of orders due to high prices added to the strain on the company.

The implementation of social isolation measures, such as movement restrictions, social distancing, and quarantines, posed significant barriers to the company's business activities. The shift to remote work also resulted in reduced consumer demand and shopping. Customers became more cautious with their spending and were less inclined to purchase high-priced items, including Thanh Giong Computer's high-end PC sets.

To navigate these challenges, Thanh Giong Computer recognized the importance of product diversity and price optimization to provide customers with more choices. The company aimed at improving product quality and optimizing production processes to reduce costs. Balancing production and business difficulties while maintaining the workforce became a challenging task for the company's leadership team. They also needed to implement solutions to ensure employee safety and wellbeing.

The primary questions that arose during this time were how to effectively combat the pandemic, continue production, maintain customer relationships, and ensure the welfare of employees. These were pressing concerns that required strategic planning and adaptability to address the evolving situation and sustain the company's operations during a time of uncertainty.

Good Practices that were Deployed

In order to navigate the unprecedented changes and challenges in the business landscape during 2020–21, Thanh Giong Computer Company demonstrated remarkable resilience by actively adopting and persistently implementing the following strategies and practices:

Agile organization BP during COVID-19: Initially, in response to government directives, Thanh Giong Computer Company implemented remote work arrangements utilizing online meeting and communication software. However, as a small and medium-sized manufacturing company, it found that remote work was not as effective and focused as desired. Many employees felt a loss of motivation and were easily distracted in their home environments. Consequently, the company made the decision to allow employees to return to the office and adapted flexibly to government policies, particularly those pertaining to travel permits and on-site production during the epidemic.

Given the presence of approximately 50 seasonal employees who were largely inactive during the COVID-19 pandemic, the company swiftly implemented a modified production model. Departments were reorganized into smaller groups, with each group comprising accounting, sales, and technical staff. This restructuring allowed for a seamless and timely flow of information between departments, facilitating efficient collaboration and problem-solving. Additionally, all employees were stationed at the factories to ensure the smooth operation of both production and business activities. This flexible organizational model enhanced departmental understanding of interconnected tasks and fostered greater cohesion among employees during these exceptionally challenging times.

Automation and digitalization BP during COVID-19: Throughout the COVID-19 period, Thanh Giong Computer Company faced trade bottlenecks and disruptions, prompting the management to invest in the production line to improve labor productivity and minimize human-to-human contact. As part of these efforts, the company decided to acquire additional overhead stands, which were used to test products. With the new setup, it became possible to test two products simultaneously at a single standing position without requiring additional employees. This adjustment allowed the company to maintain productivity while reducing close contact among workers, thus adhering to safety protocols during the pandemic.

Hybrid work/remote work BP during COVID-19: In the course of the COVID-19 pandemic, Thanh Giong Computer Company implemented a hybrid work model, combining remote work and on-site work at the factory. The sales team adopted a combination of online and offline work, following a predetermined schedule. Weekly briefings and meetings were conducted both online and offline using platforms like Google Meet and Zoom to ensure effective communication and coordination while maintaining production levels and ensuring safety.

To provide continued service to customers during the pandemic, the company established and promoted an online service channel for repair consultations. Each staff member acted as a call center representative, directly receiving customer inquiries and providing assistance. Consultation requests were categorized, with simpler issues addressed by the individuals themselves, and more complex problems forwarded to the technical department. This approach allowed for the collection of valuable customer data, enabling the company to continue nurturing customer relationships and increasing business engagement. Throughout the pandemic, the call center received over 500 calls, and 50 customers went on to engage in transactions (such as purchasing products or using services) after the COVID-19 period.

Moreover, Thanh Giong Computer Company prioritized staff capacity building during this challenging period. Weekly training sessions were conducted to enhance skills in customer management, cost optimization, lean principles (including *kaizen* and 5S), and other relevant areas. Employees also participated in online learning and consultation programs. The training content focused on optimizing costs by reducing waste and maximizing profitability. Methods for improving productivity and quality were introduced and directly applied to production processes and evaluations. Time optimization techniques were implemented to increase productivity, including reducing machine testing time during production line upgrades and eliminating unnecessary steps in the assembly process to streamline operations.

These efforts were crucial for Thanh Giong Computer Company to remain creative, productive, and resilient during and after the pandemic.

Talent acquisition BP during COVID-19: All through the pandemic, Thanh Giong Computer Company leveraged its network of associations to collaborate with experts in developing new product lines. The company took advantage of the increased online interactions and discussions on social networks to connect with these experts and seek their inputs. Through these expert communities, Thanh Giong Computer Company successfully developed and refined two new product lines:

- (1) Bamboo PC: This product line caters to customers who require compact and space-saving computers with basic configurations for online learning. The Bamboo PC features a built-in monitor, providing a convenient and efficient solution for users' learning needs.

- (2) Mini PC: Designed as small computer cases, these devices can be connected to televisions and webcams, enabling users to participate in online classes and meetings. The Mini PC line offers a practical and portable solution for remote learning and remote working.

These two product lines not only addressed the immediate needs of customers during the pandemic but also possessed long-term value beyond the post-COVID-19 period. Thanh Giong Computer Company's collaboration with experts and its focus on developing innovative and relevant products demonstrate its adaptability and commitment to meeting the evolving demands of its customers in a changing environment.

New market/customer BP during COVID-19: Thanh Giong Computer Company faced challenges in expanding its customer base through traditional methods of communication during COVID-19. As a result, the company's staff shifted their focus to leveraging digital marketing trends and online platforms such as Facebook, Zalo, and popular e-commerce platforms like Shopee, Lazada, and Tiki. They also tapped into online courses and business communities to reach potential customers.

With the introduction of its newly developed products, Bamboo PC and Mini PC, Thanh Giong Computer Company strategically positioned these offerings as solutions for online learning and remote working. The Bamboo PC all-in-one and Mini PC were specifically designed to be compatible with home TVs and were offered at affordable prices, targeting middle- and lower-class customer segments. To further optimize costs for customers during the pandemic, the company implemented a computer rental program at a cost of VND1 million per month. This program aimed to address the financial constraints that customers faced in acquiring new computer sets with stable configurations. The cost of purchasing a new computer set with a monitor typically ranged from VND7–10 million. In contrast, the Bamboo PC and Mini PC offered a much lower cost alternative, enabling customers to have reliable products for their online learning and work needs during the pandemic.

Despite being recently launched, the products achieved remarkable sales volumes during the COVID-19 epidemic. The sales volume of these products doubled compared with the sales of traditional computers during the same period in 2019.

Additionally, Thanh Giong Computer Company successfully ran a technical support program through its call center, which allowed it to collect a significant amount of customer data. This data proved valuable for post-epidemic business support and customer retention efforts. Throughout the pandemic period, the call center received over 500 calls, and a total of 50 customers engaged in transactions after the COVID-19 pandemic for purchase of products and utilization of repair services.

Cost optimization BP during COVID-19: During the COVID-19 period, Thanh Giong Computer Company implemented a strategy to ensure that no employees were laid off. It maintained good remuneration for its staff. This strategy was in line with the company's long-term approach, considering the high cost of training new employees and the potential impact on work performance. By retaining experienced employees, the company aimed to optimize costs and maintain operational efficiency.

To achieve cost optimization and waste reduction, the company sought the assistance of consultants from the Vietnam Productivity Institute. They implemented various productivity and quality improvement tools such as Lean 6Sigma, 5S, and Total Productivity Maintenance (TPM). These methodologies helped identify and eliminate waste in processes, thereby leading to increased efficiency and improved quality.

Furthermore, Thanh Giong Computer addressed supply chain challenges that arose during the pandemic. The scarcity and high prices of electronic components, particularly PC panels, posed significant obstacles. To overcome these challenges, the company pursued two solutions. First, it purchased small-sized TVs and panels from local TV manufacturers like ASANZO, effectively reducing product costs by utilizing ASANZO's existing inventory. Second, when major suppliers were inactive or had limited activities, the company sought out small suppliers who could promptly deliver goods. This approach allowed it to build a flexible supply chain and minimize financial risks associated with order fulfillment.

Thanks to these strategies, Thanh Giong Computer Company successfully maintained uninterrupted production during the COVID-19 period.

Utilization of macro-level government policy during COVID-19: Thanh Giong Computer Company demonstrated a strong commitment to complying with government policies and prioritizing the health and safety of its employees and their families. The company's leadership had two primary goals: protecting the health of employees and ensuring their peace of mind in the workplace. To achieve this, Thanh Giong Computer Company proactively registered to participate in the city's task force for response to the pandemic, thereby receiving vaccinations for 100% of its employees and their family members. This approach not only prioritized the wellbeing of the staff but also contributed to the broader efforts of the community in combating the pandemic.

Being part of the task force also provided the company's employees with the opportunity to support the community by providing essential services. They were able to go out and travel to engage with the public, offering consultations, repairs, installations, and supplying IT equipment and computers for remote learning and work. This involvement allowed the company to make a positive impact and provide valuable assistance to individuals and families during a challenging time.

Thanh Giong Computer Company has a history of actively participating in community activities and supporting local wards and communes. During the COVID-19 period, the company extended its support further by engaging in fundraising campaigns and donating rice and essential items to the community. These efforts fostered strong relationships with local authorities, who recognized the company's contributions and facilitated their operations by granting necessary travel permits in accordance with state standards.

These two factors, i.e., prioritizing employee health and supporting the community, played a vital role in maintaining Thanh Giong Computer Company's production and services during the COVID-19 period.

TABLE 5

SUMMARY OF BEST PRACTICES.

Management practices	Adopted (yes/no)	Score (1-10)
1. Agile organization BP during COVID-19	Yes	10
2. Automation and digitalization during COVID-19	Yes	7

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Management practices	Adopted (yes/no)	Score (1–10)
3. Hybrid work/remote work BP during COVID-19	Yes	9
4. Talent acquisition BP during COVID-19	Yes	8
5. New market/customer BP during COVID-19	Yes	9
6. Cost optimization BP during COVID-19	Yes	8
7. Building new business model	No	0
8. Utilization of macro-level government policy during COVID-19	Yes	10
Total Score	7 out of 8	

Business Results

During the period from 2023 to 2025, Thanh Giong Computer Company made impressive progress and achieved remarkable milestones. The company demonstrated consistent growth in key financial indicators such as total assets, liabilities, revenue, and profit. This growth exemplifies the company's ability to maintain stable production activities and successfully navigate the challenges presented by the COVID-19 pandemic.

Notably, Thanh Giong Computer Company experienced a significant increase in revenue in 2022, surpassing VND50.8 billion, which was more than double the revenue generated in 2019. The company also achieved a substantial 60% growth in profit before tax compared with 2019, reaching VND0.24 billion. These impressive financial results highlight the company's resilience and effective implementation of strategies during the pandemic period.

In addition to its financial success, Thanh Giong Computer Company gained recognition and accolades for its contributions to Vietnam's information and communication industry. The company was awarded the Certificate of Merit by the Minister of Information and Communications for its outstanding achievements. Its products and services received high praise and were ranked among the top three in the "Vietnamese goods are loved by consumers" list for 2022. Furthermore, the company's products were designated as key industrial products of Hanoi city and received multiple awards from the Ha Noi People's Committee and professional associations based in Ha Noi.

The company's commitment to its employees was evident from its efforts to safeguard their livelihoods and provide job security during the pandemic. Thanh Giong Computer Company maintained a stable workforce and increased its number of employees from 20 in 2019 to 30 in 2022. Moreover, the average wage per employee showed consistent growth, reflecting the company's dedication to providing better compensation for its workforce.

In summary, Thanh Giong Computer Company's story between 2023 and 2025 showcases its resilience, growth, and recognition in the face of challenging circumstances. By prioritizing employees' wellbeing and implementing effective strategies, the company not only successfully navigated the pandemic but also thrived, achieving notable financial success and earning prestigious accolades within the industry.

TABLE 6

BUSINESS RESULTS OF THANH GIONG COMPUTER FOR THE PERIOD 2019–22.

No.	Indicator	Unit (VND)	Year 2019	Year 2020	Year 2021	Year 2022
1	Total assets	Billion	19.1	19.3	26.05	27.2
2	Liabilities	Billion	13.9	13.9	14.1	14.3
4	Revenue	Billion	23.01	23.05	32.2	50.8
5	Profit (before tax)	Billion	0.06	0.1	0.19	0.24
6	Profit (after tax)	Billion	0.05	0.08	0.16	0.19
10	Number of employees	People	20	20	23	30
11	Average wage/employee	Million	6.2	7	9	11

Lessons Learnt

That a small and medium-sized enterprise like Thanh Giong Computer overcame the COVID-19 period and continued to develop and grow sustainably was the result of the following lessons:

Flexible organization, combining face-to-face and online forms of work: A significant factor in the success of small and medium enterprises like Thanh Giong Computer is their lean structure, which enables them to adapt quickly to changing social situations. These enterprises have the advantage of being more agile and flexible compared with larger corporations. They can swiftly adjust their operations and strategies in response to evolving circumstances.

Moreover, Thanh Giong Computer effectively combined the benefits of both face-to-face and online work. This hybrid approach allowed the company to maintain productivity while ensuring the wellbeing of its employees. By embracing a flexible work arrangement, the company could adapt to various social situations and strike a balance between operational efficiency and collective welfare of its workforce.

Recruiting talents during COVID-19: In times of the COVID-19 crisis, businesses could greatly benefit by leveraging relationships and ecosystems within the business community, thereby gaining access to invaluable external resources. To achieve this, it is crucial for every business to establish robust and supportive social networks.

Automation/mechanization during COVID-19: The unfavorable market times are when manufacturers have time to slow down, look at themselves, innovate and mechanize in increasing productivity, thereby improving product quality and optimizing the production time.

Finding new customers and markets during COVID-19: During times of evolving social situations, businesses should adapt their customer profiles and modify their products to align with the changing needs and preferences of the target market.

Cost optimization: Money is indeed crucial for enterprises, especially during difficult times. To navigate financial challenges, businesses could employ creative strategies, shift their mindsets, and adopt innovative thinking to mobilize capital.

Using government macro policies during COVID-19: The agility of leadership is essential in regularly updating and effectively utilizing government support policies, as these play a critical role in helping businesses thrive and survive in a volatile market.

Flexibility with suppliers: Through proactive diplomacy, Thanh Giong Computer successfully found solutions to support suppliers during the epidemic, transforming them from partners to customers, and expanding its customer base post the epidemic. This unexpected outcome highlights the company's effective relationship management strategies.

Conclusion

The COVID-19 pandemic has brought about rapid and unpredictable changes, akin to the volatility, uncertainty, complexity, and ambiguity (VUCA) concept used to describe the uncertainty of a business environment. In such a dynamic and uncertain context, it is imperative for business leaders to thoroughly comprehend the changes and their implications for their organizations. They must then develop strategies that could effectively manage and adapt to these evolving circumstances.

Facing the challenges presented by the coronavirus, companies like RALACO and Thanh Giong Computer were also confronted with unprecedented demands. They had to navigate various complex tasks, including redeploying talent, establishing remote workforces, bolstering fragile supply chains, contributing to humanitarian efforts, making difficult decisions regarding employee retention or furloughing, and planning for reopening amidst ongoing uncertainty. Moreover, they had to simultaneously maintain a focus on innovation, product and service development, employee skill enhancement, technology investments, and brand building to be prepared for any situation that may arise.

To successfully address the impacts of COVID-19 or operate within a VUCA world, business leaders must exemplify flexibility and agility. They need to reassess the competitive landscape, understand the evolving environmental forces, and be prepared to adjust their current strategies or adopt new ones to effectively achieve their organizational goals. Embracing change, adopting proactive approaches, and quickly adapting to new circumstances are critical in these challenging times.

Finally, organizations must prioritize resilience and sustainability by continuously investing in the development of their workforce, leveraging technology to drive efficiency and innovation, and building a strong brand reputation that engenders trust and confidence in uncertain times. By embracing these practices, businesses can navigate the complexities and uncertainties of a VUCA world, or the challenges presented by the COVID-19 pandemic.

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CONCLUSION

The growth and resilience displayed by SMEs from diverse developing APO member economies during the COVID-19 pandemic underscore the power of adaptability, innovation, and strategic management. This study serves as a valuable resource for policymakers, entrepreneurs, and stakeholders seeking insights into effective management practices for navigating crises and fostering sustainable growth.

The collaborative efforts between governments, SMEs, and the private sector have laid the foundation for economic recovery and progress. As these inspiring enterprises continue to pave the way for a better future, it is sincerely hoped that their stories will inspire others to build resilient and thriving economies worldwide.

Collaboration, research, and knowledge sharing will be key to driving positive change and shaping the future of developing economies. The findings from this study are a testament to the resilience of SMEs and the importance of embracing change and innovation in the face of adversity. By preparing for and embracing change, SMEs can not only mitigate disruption but also thrive in challenging times, leading the way toward sustainable growth and success. The lessons learned from this study will serve as a wake-up call, reminding us of the importance of anticipating potential risks and proactively addressing them to effectively manage crises.

As we continue to navigate a rapidly evolving world, the significance of collaboration and knowledge sharing cannot be overstated. Together, we can build a future where resilience, adaptability, and innovation are at the core of every successful enterprise. It is firmly believed that the insights gained from this study will contribute significantly to shaping a brighter and more prosperous future for all developing APO member economies.

LIST OF TABLES

INTRODUCTION

TABLE 1	Best practices with NPS scores of 9–10 adopted by case study companies	10
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INDIA

TABLE 1	Summary of three selected SMEs.....	17
TABLE 2	Categorization of MSMEs in India	25
TABLE 3	Overall growth trend of Design2Occupancy	33
TABLE 4	Management practices adopted by Design2Occupancy.....	36
TABLE 5	Net promoter score of Design2Occupancy	38
TABLE 6	Overall growth trend of Grannus Water	40
TABLE 7	Management practices adopted by Grannus Water	42
TABLE 8	Net promoter score of Grannus Water	45
TABLE 9	Overall growth trend of ICON India.....	46
TABLE 10	Management practices adopted by ICON India	48
TABLE 11	Net promoter score of ICON India.....	50
TABLE 12	Conclusion summary.....	51

INDONESIA

TABLE 1	Criteria for classification of MSMEs	59
TABLE 2	Development of MSMEs from 2018 to 2019.....	60
TABLE 3	Number of employees and average absorption of non-agriculture MSMEs	61
TABLE 4	Management practices implemented by Love Care	63
TABLE 5	Love Care’s revenue and employee growth amidst and post COVID-19	65
TABLE 6	Management practices implemented by Pacmann Company	71
TABLE 7	Pacmann’s revenue and employee growth amidst and post COVID-19.....	73

MALAYSIA

TABLE 1	TGSK management’s response to the pandemic	114
TABLE 2	Nonfinancial transformation and improvements at Talenta.....	121
TABLE 3	Talenta Management’s response to the pandemic	123

THE PHILIPPINES

TABLE 1	MSMEs by asset size in the Philippines	130
TABLE 2	MSMEs by employment size in the Philippines.....	130
TABLE 3	Performance indicators of the agricultural enterprise in 2020 and 2021.....	134
TABLE 4	Performance indicators of the biotechnology firm in 2020 and 2021	138
TABLE 5	Business resilience strategies adopted in relation to the management practice	142

THAILAND

TABLE 1	Economic projection, private consumption, and export indices	148
TABLE 2	Percent growth of SMEs’ GDP by business segment	150
TABLE 3	The new normal and its effect on businesses.....	154
TABLE 4	List of patents, trademarks, intellectual property, and rewards received by AWS.....	158

TABLE 5	Financial performance of AWS.....	159
TABLE 6	Management practices adopted by AWS in response to the COVID-19 pandemic	164
TABLE 7	Financial performance of AF	168
TABLE 8	Management practices adopted by AF in response to the COVID-19 pandemic.....	172
TABLE 9	Conclusion summary.....	172

TURKIYE

TABLE 1	Macroeconomic indicators and projections.....	175
TABLE 2	SMEs’ definition in Turkiye	176
TABLE 3	Share of SMEs in the economy.....	176
TABLE 4	Number and share of SMEs in total enterprises.....	176
TABLE 5	Management practices and initiatives taken by Abfen Farma during the COVID-19 pandemic	186
TABLE 6	Management practices and initiatives by Obilet taken during the COVID-19 pandemic	192
TABLE 7	Conclusion summary.....	193

VIETNAM

TABLE 1	Company information on RALACO	203
TABLE 2	Summary of best practices	210
TABLE 3	Business results of RALACO for the period 2019–22.....	211
TABLE 4	Company information on Thanh Giong Computer.....	213
TABLE 5	Summary of best practices	217
TABLE 6	Business results of Thanh Giong Computer for the period 2019–22	219

LIST OF FIGURES

INTRODUCTION

FIGURE 1	A Cause and Effect Relationship for the Research Framework.....	6
FIGURE 2	Hypothesis of Relationship for Business Resilience and Innovation	7
FIGURE 3	High NPS scores of 9–10 assigned by country experts for best practices.....	11

INDIA

FIGURE 1	Methodology adopted for the research assignment.....	20
FIGURE 2	A snapshot of the Indian economy.....	22
FIGURE 3	Sector-wise GDP of India.....	23
FIGURE 4	Growth of India's services sector.....	23
FIGURE 5	GDP growth trend.....	24
FIGURE 6	Sector-wise growth trend	25
FIGURE 7	Classification of registered MSMEs in India.....	26
FIGURE 8	Distribution of SMEs by nature of activity	27
FIGURE 9	Share of MSMEs in India's GDP.....	27
FIGURE 10	Share of MSMEs in India's exports.....	28
FIGURE 11	Share of MSMEs in India's manufacturing.....	28
FIGURE 12	Contribution of MSMEs to employment in India	28
FIGURE 13	Highest growing SME sectors in India in recent years.....	29
FIGURE 14	SME sectors that boomed in India during the pandemic.....	30
FIGURE 15	Contribution of MSMEs to India's GDP.....	31
FIGURE 16	Services portfolio of Design2Occupancy.....	32
FIGURE 17	Clientele of Design2Occupancy	33
FIGURE 18	Turnover growth of Design2Occupancy	34
FIGURE 19	Employee growth of Design2Occupancy	34
FIGURE 20	Clientele growth of Design2Occupancy	34
FIGURE 21	Growth in Design2Occupancy's beneficiaries	35
FIGURE 22	National outreach of Design2Occupancy.....	35
FIGURE 23	International outreach of Design2Occupancy	35
FIGURE 24	Increase in profit margin of Design2Occupancy	37
FIGURE 25	Product portfolio of Grannus Water and Environmental Solutions	39
FIGURE 26	Clientele of Grannus Water and Environmental Solutions	40
FIGURE 27	Turnover growth of Grannus Water	40
FIGURE 28	Employee growth of Grannus Water	41
FIGURE 29	Clientele growth of Grannus Water	41
FIGURE 30	Beneficiaries growth of Grannus Water	41
FIGURE 31	National outreach of Grannus Water.....	42
FIGURE 32	International outreach of Grannus Water	42
FIGURE 33	Increase in profit margin of Grannus Water	44
FIGURE 34	Product portfolio of ICON India.....	46
FIGURE 35	Turnover growth of ICON India.....	47
FIGURE 36	Employee growth of ICON India.....	47
FIGURE 37	Clientele growth of ICON India.....	47
FIGURE 38	Growth in ICON India's national outreach	48

FIGURE 39 Increase in profit of ICON India	49
---	----

INDONESIA

FIGURE 1 Indonesia's GDP growth rate for 2019–22 (%)	53
FIGURE 2 GDP growth rate by industrial origin (%).....	55
FIGURE 3 Unemployment rate, 2019–22 (%)	56
FIGURE 4 Reorganization of the workforce distribution (%).....	57
FIGURE 5 Labor productivity in ASEAN.....	58
FIGURE 6 Love Care's budget composition.....	70

MALAYSIA

FIGURE 1 A snapshot of Malaysia's economy in 2020	90
FIGURE 2 Overall GDP performance of Malaysia, 2016–22.....	91
FIGURE 3 GDP performances of services, manufacturing, and agriculture sectors, 2016–22	91
FIGURE 4 GDP performances of mining and quarrying, and construction sectors, 2016–22.....	92
FIGURE 5 Classification of MSMEs by sector in Malaysia.....	93
FIGURE 6 SME establishments in Malaysia.....	93
FIGURE 7 Percentage change in GDP of Malaysia, MSMEs, and non-MSMEs, 2001–21 at constant prices.....	94
FIGURE 8 Malaysia's GDP and contribution of MSMEs during 2001–21 at constant prices.....	95
FIGURE 9 MSMEs' growth in value added by sector during 2019–21 at constant 2015 prices.....	95
FIGURE 10 Contribution of sectors in Malaysia's GDP and MSMEs' GDP in 2021 at constant 2015 prices..	96
FIGURE 11 Contribution of MSMEs in Malaysia's GDP in 2021 at constant 2015 prices	97
FIGURE 12 Percentage change in MSMEs' exports by sector for 2017–21	98
FIGURE 13 Employment and annual percentage change, 2016–21	99
FIGURE 14 MSMEs' employment by type of economic activity.....	100
FIGURE 15 Malaysia's labor productivity and growth.....	101
FIGURE 16 MSMEs' labor productivity by kind of economic activity.....	102
FIGURE 17 Incentives given to MSMEs by the government.....	102
FIGURE 18 TGSK's signature menu	104
FIGURE 19 Founder and cofounders of TGSK	105
FIGURE 20 Timeline of TGSK.....	106
FIGURE 21 TGSK's Revenue growth during the period 2020–22	106
FIGURE 22 TGSK's sales for the period January–April 2023	107
FIGURE 23 Global food inflation and oil prices	108
FIGURE 24 Organic views and growth in TGSK's followers on social media	112
FIGURE 25 TGSK's reviews on Google and other platforms	113
FIGURE 26 TGSK featured in local television cooking program	113
FIGURE 27 Talenta's positioning and goals	115
FIGURE 28 A snapshot of Talenta's clientele	115
FIGURE 29 Products and services offered by Talenta	116
FIGURE 30 Revenue growth of Talenta.....	118
FIGURE 31 Gross profit growth of Talenta	119
FIGURE 32 EBITDA growth of Talenta	119
FIGURE 33 Growth in number of employees at Talenta.....	120
FIGURE 34 Shared Prosperity Organization Award for Talenta	120
FIGURE 35 Initiatives supporting Talenta's FY2023 strategy to strengthen financial standing.....	122
FIGURE 36 Acknowledgement letter for Talenta from Petronas Dropee.....	122

THE PHILIPPINES

FIGURE 1	Research framework.....	126
FIGURE 2	Strategic location of the Philippines.....	127
FIGURE 3	SMEs' share of GDP and employment in selected Asia–Pacific economies (%).....	128
FIGURE 4	GDP of the Philippines at constant 2018 prices.....	129
FIGURE 5	Business conditions in the Philippines during the pandemic.....	131
FIGURE 6	Employment by SMEs in March 2020.....	132
FIGURE 7	Change in the SME working environment due to the pandemic.....	133

THAILAND

FIGURE 1	Economic projection, key business segments, and financial infrastructure.....	147
FIGURE 2	GDP share of SME businesses.....	149
FIGURE 3	SMEs' GDP contribution by business segment.....	150
FIGURE 4	SME Entrepreneur Sentiment Index.....	152
FIGURE 5	Percentage change in SME Entrepreneur Confidence Index.....	152
FIGURE 6	SME Entrepreneur Sentiment Index.....	153
FIGURE 7	Three main services provided by AWS.....	157
FIGURE 8	Continuation of AWS's product development over the past 15 years.....	159
FIGURE 9	Aromatic Farm in Rachaburi province, Thailand.....	164
FIGURE 10	Extension of new business segments of AF over the past five years.....	165
FIGURE 11	Types of AFC's coconut products.....	166
FIGURE 12	AFC's customer segment.....	166
FIGURE 13	AF's Business model with sustainability concept.....	167
FIGURE 14	Internal operations of AFB.....	169

TURKIYE

FIGURE 1	Growth rates of Turkiye through the pandemic.....	174
FIGURE 2	Production value by economic activities, 2018–21.....	175
FIGURE 3	Productivity Indices.....	177
FIGURE 4	Growth rates for employment, value added, and productivity by sector.....	178
FIGURE 5	Labor productivity per employee in Turkiye.....	179
FIGURE 6	Productivity trends in Turkiye.....	179
FIGURE 7	Exterior view of Abfen Farma's facilities.....	180
FIGURE 8	Ezel Taskiran Oguz, General Manager at Abfen Farma.....	181
FIGURE 9	An interior view of Abfen Farma's facility.....	181
FIGURE 10	Examples of Abfen Farma's products.....	183
FIGURE 11	Obilet branding.....	187
FIGURE 12	Obilet cofounders Ali Yılmaz and Yiğit Gürocak.....	188
FIGURE 13	Obilet's revenue growth.....	190
FIGURE 14	Increase in the number of Obilet's employees.....	191

VIETNAM

FIGURE 1	Vietnam's growth in 2020 in Asia, in percent.....	196
FIGURE 2	GDP growth of selected countries in 2020–21.....	197
FIGURE 3	Vietnam's GDP growth for the period 2005–22.....	198
FIGURE 4	Annual labor productivity growth of Vietnam in percent.....	203

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