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Small and Medium-sized Enterprises, and Business Uncertainty

Just Surviving or Thriving?

Edited by Sujana Adapa · Tui McKeown · Miria Lazaris · Tanya Jurado

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Palgrave Studies in Global Entrepreneurship

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Tanya Jurado
Editors

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Preface

This edited book is titled 'Small and Medium-sized Enterprises, and Business Uncertainty'. Businesses live through uncertainties and unprecedented challenges. The extent of impact of uncertainties experienced by businesses varies by size. Large organisations revert back to pre-uncertainty environment relatively quickly in comparison with their counterparts small and medium-sized enterprises (SMEs). For SMEs, recovery from uncertainties takes a long time during which some businesses may decide to shut down which is not unheard off.

Business uncertainty intensified during COVID-19. Whilst all businesses irrespective of their size, nature and scope experienced severe losses due to lockdowns, SMEs are no exception. SMEs indeed suffered the most due to lack of consistent improvements in the policy space and also due to ad hoc measures implemented by the government. Some SMEs pivoted by actively embracing business transformation in a short period of time whereas for many implementation of such changes was not simply possible which resulted in the decision of shutdown and going out of business.

SMEs globally are important due to their absolute numbers and sheer volume in any country. In a vast majority of countries, SMEs contribute to key economic dimensions such as employment, growth and profits. Increasingly, SMEs are more sensitive of social factors and many have taken steps towards addressing issues such as gender equity, work-life balance and career progression to name a few. Further, SMEs also actively contribute to environmental dimensions by engaging in responsible practices, ethical decision-making and focus on the attainment of sustainable development goals (SDGs). SMEs highly value informality and, therefore, the contributions to the aforementioned dimensions are on a voluntary basis.

Chapter "MSMEs and SDGs—Narratives from India" by Professor Sujana Adapa and Associate Professor Subba Reddy Yarram presents the qualitative narratives shared by MSME (micro, small and medium-sized enterprises) owner-managers from India and their meaningful contributions towards the attainment of SDGs by 2030. The chapter highlights the nexus between business creation and the value chain model stages and further identification of the businesses as broad or narrow focused in their contributions to economic, social and environmental dimensions.

Chapter "SME Sustainability in Turbulent Times of COVID-19: A Review of Literature and Future Directions" by Dr. Vanita Yadav investigates the disruption within SMEs as a result of COVID-19 pandemic by carrying out a bibliometric analysis and progressing a systematic literature review process. The role of government intervention, risk management by SMEs, transitions by SMEs, business model innovation, knowledge management and digital learning were identified as some of the paths taken up by SMEs during the pandemic to overcome uncertainty and progress towards recovery.

Chapter "A Conceptual Framework for an Integrated One-Stop Portal to Support Indigenous Small Business Enterprises" by Dr. Tendai Chikweche, Dr. Francine Garlin, Dr. Aila Khan and Dr. Michael Lwin thoroughly examines various existing policies and programmes to support Indigenous Business Enterprises within Australia. Federal and State policies and programmes outline business support available alongside access to finance, training advice, skills and capacity building initiatives. The benchmarking of policies and programmes is carried in alignment with interventions carried out in the North American context that benefitted the indigenous businesses to flourish by way of overcoming business uncertainty.

Chapter "Is Knowledge Ambidexterity the Answer to Economic Sustainability for SMEs? Lessons Learned from Digitalisation Efforts During the COVID-19 Pandemic" by Dr. Minu Saratchandra & Dr. Anup Shrestha investigates the knowledge ambidexterity as an antecedent for the promotion of economic sustainability for SMEs. The relevance of digital technologies to increase market awareness, competitive advantage and innovation capacity within SMEs to overcome ever-changing business circumstances is investigated. SMEs from India and United Arab Emirates as contexts were thoroughly investigated to meaningfully understand knowledge exploration and knowledge exploitation. Findings indicate that digital tools support knowledge management processes within SMEs, improve firm level capabilities and contribute to economic sustainability.

Chapter "Insights from the Australian SMEs During the Pandemic" by Associate Professor Tui McKeown, Associate Professor Sean Way and Dr. Miria Lazaris examines the status of Australian SMEs during the pandemic. Main factors that contributed for SMEs to undertake innovative approaches during the pandemic to overcome business uncertainty were identified. SMEs in their dealing with COVID-19 exhibited coping type of behaviour through product and/or process innovation, strategy formulation and market dynamism. Some SMEs showcased increased financial performance whilst others struggled to breakeven and incurred losses.

Chapter "SME Sentiments, Access to Government Support, and Resilience During a Pandemic" by Dr. Tendai Chikweche, Dr. Anna Evangelista, Dr. Michelle Cull, Associate Professor Felicitas Evangelista, Associate Professor Ann Dadich and Dr. Sheree Gregory touches base on SMEs sentiments following pandemic experience. In particular, SMEs evaluation of access to government support in the form of grant funding is assessed to understand resilience building by SMEs to combat COVID-19-related business challenges and uncertainties. The effectiveness of government support to SMEs during difficult circumstances is analysed through descriptive and thematic measures.

Chapter "Entrepreneurial Ecosystem in India" by Professor Sujana Adapa and Associate Professor Subba Reddy Yarram outlines the enablers and barriers to entrepreneurial ecosystem in India. The creation of entrepreneurial ventures needs extensive support from several stakeholders which cannot be undermined. The role of government policies, processes and regulations and their influence or impact on entrepreneurial ecosystem is discussed in-depth. Further, the limitations imposed on the creation of effective and efficient entrepreneurial ecosystems in the Indian context due to competition, corruption and capital are further investigated.

Chapter "SMEs and Free Trade Agreements: Engagement and Policy Development" by Dr. Tanya Jurado discusses the views of SME exporters in New Zealand on free trade agreements (FTAs) which is crucial for engagement and policy development. The role of SMEs in internationalisation and diversification and most importantly their contribution to comprehensive and progressive agreement for trans-pacific partnership (CPTPP) agreement is highlighted. The relevance of global value chains as SMEs carry out key functions as suppliers or as exporters or as importers to increase innovation, productivity and well-being is thoroughly explored.

Chapter by "Pandemic Speed: Accelerating Innovation in Cyber Security" Dr. Ian Wiltshire, Professor Sujana Adapa and Dr. David Paul explores the relevance of cyber-security in accelerating innovation within SMEs in the Australian context. In the absence of well-defined cyber-security standards, and in the wake of increased cyber-attacks and associated threats, this chapter presents collaboration as a prospective mechanism to create inclusive pathways to improve cyber defence for everyone. Cyber threats at the personal and professional fronts were explored further to understand the dimensions of literacy, decision-making, protection and implementation.

Chapter "A Conceptual Framework for Restaurants to Recover from COVID-19 Pandemic" by Dr. Raja Kannusamy outlines a framework for restaurant businesses to overcome the uncertainties experienced by COVID-19. Strategic orientation and value co-creation are found to be highly critical for restaurants to grow and thrive as a recovery mechanism alongside other safety protocols. The overarching service delivery framework for restaurants is deeply investigated, and new propositions were formulated to effectively tackle the pandemic and post-pandemic stages in order to overcome business uncertainty.

Chapter "The Nexus Between Narrative Identity and Entrepreneurial Actions Among Rural Female Entrepreneurs in Australia" by Mr. Angelo Saavedra presents the compelling narratives of female rural entrepreneurs linking to the greater extent of business uncertainty they face coupled with external shocks. The relevance of identity construction and social embeddedness is discussed in detail in order to understand their influence on entrepreneurial actions and business venture outcomes. The differences between contextual and ontological narratives as shared by female entrepreneurs intercepted are further unpacked and their contributions to theoretical and practical implications are outlined.

Chapter "Small Business Owners Lament "Is that Really All My Business is Worth?"" by Ms Denise Hall is a small business practitioner and writes about SME owner-managers overall understanding of business exit. This chapter also presents the intersectionality of business exit and business value from an evidence-based perspective. Further, the types of business exits, owner-managers handling of exits and associated business exit timelines are discussed in detail. Main triggers leading to business exit considerations by SME owner-managers present a combination of factors that are beyond and those within the control of SME owner-managers.

We sincerely hope that this edited book presents not only the opportunities and the challenges faced by SMEs in the global context but also showcases their resilience in surviving the toughest conditions imposed by the macro environment. The content presented in the book chapters showcases that SMEs are community-oriented and value the place and space in which they operate. Further, findings in each of the book chapters included in this edited book send a strong message that SMEs operate in a volatile environment and of course undergo several changes during their life-cycle but also emerge stronger than before. For SMEs, it is the continuous innovation that they invest in that allows them to unlearn, upskill, reskill, retrain and relearn which contributes to their continued existence.

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Mr. Angelo Saavedra is a Qualitative Researcher in Entrepreneurship in the UNE Business School at the University of New England. As a Qualitative Researcher, he considers how individual subjectivities often obscure in entrepreneurship studies. His research has led to insights into how entrepreneurs use narratives to construe their identities, how identities influence entrepreneurial actions, and how to better promote disadvantaged groups in entrepreneurship.

Dr. Minu Saratchandra holds a PhD in Information Systems and is working as a Lecturer at the University of Southern Queensland, Australia. Her research concentrates on topics such as cloud computing, knowledge ambidexterity, knowledge management and information systems management. She has published articles in international journals such as the International Journal of Information Management and the Journal of Knowledge Management.

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Sujana Adapa and Subba Reddy Yarram

Introduction

In 2015, the United Nation (UN) developed 17 sustainable development goals (SDGs) that they hoped would be achieved by 2030. These SDGs focus on addressing critical areas such as poverty, health, peace and growth (United Nations, 2021). Discussion around achieving the UN's SDGs has been attracting greater attention than ever given the emphasis on key parameters such as quality of life, better education, economic growth, people's well-being, resilient infrastructure, sustainable industrialisation and sustained innovation, to name a few. All countries and several sectors in these countries are anticipated to actively contribute to the attainment of the SDGs, which are supported by 169 targets and 231 indicators (United Nations, 2021). The attainment of the SDGs by 2030 has been forecast to generate significant market opportunities with generation of around US$12 trillion (Elkington, 2018).

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The UN has explicitly highlighted the role of businesses in achieving these SDGs (United Nations, 2020). Entrepreneurship and business growth are specifically mentioned in SDG 4 (Target 4.4—skills, employment) and SDG 8 (Target 8.3—growth, finance, production). It is also envisaged that emerging transformational entrepreneurs and businesses will focus on new products/services/processes and/or new business models that embed relevant SDGs. However, barriers to creating this transformational impact in developing/transitional economies are linked to competitiveness, unreliability, digitalisation and financing, among others. Therefore, to date, the focus of emerging businesses has been on traditional business ventures and the actions of large multinational corporations (MNCs) that are being undertaken to achieve the SDGs by 2030.

In almost all countries, micro, small and medium-sized enterprises (MSMEs) play a vital role in employment creation, economic growth and business innovation (Rotar et al., 2019). There are large numbers of MSMEs globally, and the relative value of their contributions to the world's economies cannot be discounted (World Bank, 2018). However, there is a prevalent assumption that MSMEs are resource poor and, therefore, their contributions to the SDGs are limited. There is also lack of recognition of MSMEs' progress and implementation of best practice models, as many MSMEs lack formalised processes that document their actions, activities, processes and practices. Moreover, the rate of business failure reported by MSMEs is high, and this has occurred more so during the pandemic (Yusoff et al., 2018).

MSMEs in India drive the economy, employment and innovation (Reserve Bank of India, 2019). The Ministry of Micro, Small and Medium Enterprises (2018) report that over 600,000 MSMEs operate in India. They contribute over 20 per cent of GDP in the services sector and over 40 per cent in total exports (Confederation of Indian Industry, 2019). The classification of MSMEs in India is based on level of investment and number of employees. Within the manufacturing sector, those businesses with an investment limit of Rs (rupees) 25 lakhs are categorised as micro enterprises, Rs 25 lakhs–Rs 5 crores as small enterprises and Rs 5 crores–Rs 10 crores as medium enterprises. Within the services sector, those businesses with an investment limit of Rs 10 lakh are micro businesses, those with Rs 2 crores are small businesses and those with Rs 5 crores are medium enterprises (Ministry of Micro, Small and Medium Enterprises, 2018). In terms of number of employees, micro businesses have less than five employees, small businesses have five to nine employees and medium businesses have 10 to 199 employees.

The effective integration of responsibility and sustainability in business strategy, purpose and vision has fostered creative innovation, risk management (Schaltegger & Wagner, 2017) and competitive advantage (Cantele & Zardini, 2018) more generally for businesses. Therefore, more widely, it is believed that MSMEs take a proactive or reactive approach to embedding principles of sustainability for fear of losing competitive advantage and market share (Tate & Bals, 2018). Further, MSMEs tend to embrace responsible and/or sustainable business practices for long-term sustained benefit (Depken & Zeman, 2018). Much of the existing literature focuses on MSMEs in developed countries (OECD, 2019); therefore, given the lack of focus on MSMEs in developing countries and the absence of a well-documented process, the role played by MSMEs in the adoption of responsibility and/or sustainability measures in a developing context like India is not very clear.

The main focus of this book chapter is to address two research questions: (1) Do MSMEs contribute to the SDGs in India? and (2) What are the most important aspects that MSMEs focus on in the incorporation of SDGs? The next section of the chapter presents syntheses of the extant literature on MSMEs and SDGs, and this is followed by discussion of the methodological approach. Then, the results obtained from the exploratory qualitative analysis are presented in the form of macro and micro thematic categories of relative importance. The main findings from the study are then discussed, and the final section provides a conclusion and outlines the limitations of the study and avenues for further research.

Literature Review

The general misconception is that all MSMEs have emerged out of necessity, and this assumption is more prevalent in the developing country context. However, this view lacks adequate evidence. To provide meaningful responses to the stated research questions, the starting point for carrying out the literature review was identified as the need for a deeper understanding of the motivations for business creation process. In Maslow's hierarchy of needs, there are five types of needs, physiological, safety, social, ego and self-actualisation, and the motivations that trigger individuals' actions need to satisfy these needs (Maslow, 1954). The extant entrepreneurship literature broadly links business creation to either a necessity or opportunity (also referred to as push or pull factors) that triggers the individual's engagement with a specific type of entrepreneurial motivation (Fairlie & Fossen, 2018).

The push factors that trigger necessity-based entrepreneurship are those that satisfy the lower-level needs of Maslow's framework (Dencker et al., 2019), and include poverty, unemployment and recession (Amoros et al., 2017), while the pull factors of innovation, growth and profit allow for opportunity-based entrepreneurship (Cullen et al., 2014). There has been limited discussion about the possibility of businesses converting over a period of time to a combination of necessity and opportunity (or opportunity and necessity) as a result of unexpected opportunities presented to the entrepreneurs or business owner-managers or unforeseen external shocks like the global financial crisis, war or pandemic. Further, the role played by the institutional environment and various stakeholders in fostering the entrepreneurial climate cannot be discounted, and institutional theory can help to explain how the creation and establishment of entrepreneurial ventures are influenced by governance, policies, rules, norms and structure (Lok, 2019).

MSMEs lack formalised processes for their business processes, activities and practices, and this informal nature of MSMEs makes it difficult to recognise their contributions to the SDGs and their attempts to achieve the SDGs. Further, the prevailing assumption that MSMEs either do not focus on embedding any of the SDGs or expend targeted focus upon one or more SDGs is common (Littlewood & Holt, 2018). However, research that underpins this assumption is sparse. The features of some of the SDGs, like SDG8's focus on "decent work and economic growth", SDG9's targeting of "industry, innovation and infrastructure", SDG12's attainment of "responsible consumption and production" and SDG17's creation of "partnerships for goals", are embedded in MSMEs' day-to-day business models, as these features of day-to-day business activities and practices align with the key stages of the business (Littlewood & Holt, 2018). In simple terms, irrespective of the size of the business, many businesses, particularly in the developing country context, have the three key stages of inputs, process and outputs that link to the value chain framework (Kano et al., 2020).

Several value chain frameworks exist that range from simple to complex over a period of time (Knez et al., 2021). For example, Wang et al. (2017) conceive that upstream participation links to innovation, research and development and downstream participation aligns with the value chain, with connection to the key processes of marketing, branding and other services. The extant literature links upstream participation in the value chain to the Asian context (Wang et al., 2017). For MSMEs, it is envisaged that the simple input, process and output stages of the value chain are more relevant than the global value chain frameworks for readily realising their business outcomes, process efficiencies, competitive advantage and growth targets. To address the identified gaps in the literature, this study aims to make two contributions. First, the study aims to develop a model across the value chain framework that can capture all of the important elements of the business process. Second, the model is further investigated to identify the critical points in the business process where the SDGs can be effectively integrated into the MSMEs in the context of a developing country.

Methodology

The discussion pertaining to SDGs is relatively new in the Indian business context. Businesses in India are familiar with the concepts of corporate social responsibility and sustainability, more so the larger firms than the small and medium-sized firms. However, the incorporation of SDGs into day-to-day business practices is still in its infancy. Business enterprises in the Indian context operate in a market-based economy; therefore, businesses face ever-increasing stiff competition. To position themselves and gain a competitive advantage, businesses strive to create a niche through quality standards and efficient processes. Given that research pertaining to MSMEs and SDGs is emerging, this current study is an exploratory study. Also, a qualitative research approach is deemed to be appropriate as the subjective data collected is anticipated to provide answers to the stated research questions.

Within the qualitative research approach, in-depth interviews were identified as the most appropriate data collection technique. The researchers developed an interview questionnaire and obtained the university's ethics approval. Respondents were identified in the two South Indian metropolitan cities of Chennai and Hyderabad. The researchers initially contacted the respondents' businesses after randomly sourcing information that is publicly available in the business pages. The respondents were provided with an Information Sheet for Participants, which provided details of the research project, and a Consent Form. Only those respondents who consented were approached to participate in the research interview. The interviews that were completed with the interviewees resulted in further contacts through the snowball sampling approach.

A total of 15 respondents who are owner-managers of MSMEs were interviewed, as the scholarly academic literature suggests that data saturation occurs at this point (Miles et al., 2020). The interviews were conducted in the offices of the MSME owner-managers or at nearby cafes and audio recorded. They were one to one and a half hours long, which allowed the respondents to share as much information as possible. The interviews explored the motivation for creation of the firm, the MSME's business value chain process, whether or not the MSMEs focus on incorporating SDGs and, if so, to what extent and which SDGs. The recorded interviews were transcribed by a professional transcription service. The interview data were then organised by firm type, and qualitative analysis software NVivo 12 was used to code the interview data, progress the data reduction and arrive at the identification of macro and micro thematic categories that address the stated research questions.

Results and Findings

Table 1 presents the business type with which the interviewed start-up founders or business owner-managers aligned. Ten different business types were identified: businesses dealing with technology, pharmaceuticals, hatcheries, events, engineering, machinery, restaurants, manufacturing, IT solutions and organic food. The respondents outlined the complexity of the business operations on the basis of the business type. The businesses produce products, services and/or experiences.

The qualitative data analysis identified three macro thematic categories of relevance.

Macro Thematic Category 1—Business Creation

The first macro thematic category identified by the respondents was business creation. The respondents mainly elicited the motivations for starting and establishing the business. There were three micro categories of relevance: necessity, opportunity and a combination of both. When linking the motivations for the business creation with the business type, the founders and the owner-managers related the vision and purpose of the business to the economic, social and environmental dimensions.

Table 1 MSMEs SDGs focus in the business value chain

No	*Business Type*	*Business Creation*	*Value Chain*	*SDG Focus*
1	Technology (n = 2)	Opportunity (3 dimensions)	Input/Process/Output	SDGs—4, 6, 8, 9, 12, 17
2	Pharmaceuticals	Necessity (2 dimensions)	Process	SDGs—4, 8, 9
3	Hatcheries	Necessity/Opportunity (3 dimensions)	Input/Process/Output	SDGs—3, 4, 8, 9, 12
4	Events (n = 2)	Opportunity/Necessity (2 dimensions)	Process/Output	SDGs—8, 9, 12
5	Engineering	Opportunity (3 dimensions)	Input/Process/Output	SDGs—4, 6, 8, 9, 12, 17
6	Machinery	Opportunity (3 dimensions)	Input/Process/Output	SDGs—4, 6, 8, 9, 12, 17
7	Restaurant (n = 2)	Necessity/Opportunity (3 dimensions)	Input/Process/Output	SDGs—4, 6, 8, 9, 12
8	Manufacturing	Necessity (2 dimensions)	Output	SDGs—4, 8, 9
9	IT solutions (n = 2)	Opportunity (3 dimensions)	Process/Output	SDGs—4, 8, 9
10	Organic Food (n = 2)	Necessity (3 dimensions)	Input/Process/Output	SDGs—1, 3, 4, 8, 9,12

Necessity—the owner-managers of three business types outlined that necessity was the motivation for creating their business. The two owner-managers of the pharmaceuticals and manufacturing business types indicated that their businesses align with economic and social dimensions by creating profits and employment and by supporting social causes. The owner-manager of the pharmaceutical business shared that *'decent jobs available for pharmacy graduates are limited…to support family, I have started the business'* (Respondent # 3). The two founders of the organic food businesses shared that their businesses take into consideration economic, social and environmental dimensions by adherence to profit generation for a long-term sustained impact, supporting cause-related activities and reducing the environmental impact of human activity by using the available natural resources in an optimal manner. The founder of an organic food business noted that they *'graduated and had ideas but no job…decided not to wait and started the organic food business'* (Respondent # 14).

Opportunity—six respondents identified that having an opportunity presented to them was the main trigger for starting their business. Not surprisingly, these business types were the technology (n = 2), engineering, machinery and IT solutions (n = 2) business types. Technology integration and digital literacy have been identified as being integral to business types that have emerged from opportunity-based motivations. The founder of a technology start-up shared that *'I was working in a reputable software company…when I saw the opportunity to integrate software in this business, the idea was unique/innovative and the business took off from there'* (Respondent # 2). These business types seem to be proactive in addressing the economic (increase in profits or sales volume/market expansion/employment creation), social (donations to aged care/orphanages/women's groups/supporting sick children) and environmental impacts (installation of solar panels/efforts to control pollution/save water/waste reduction) of their business through their business activities.

Combination—five respondents, one with a hatchery business, two with an events business and another two with a restaurant business, reported that it was a combination of necessity and opportunity (or opportunity and necessity) that triggered their start-up or business creation. The hatchery and restaurant businesses started out of necessity and have since expanded and created market demand through identified opportunities (business expansion beyond a single location/expansion to other states in the country/technology-enabled delivery/enhanced process efficiency/cost reduction, etc.). The owner-managers of the hatchery and restaurant business types shared that their businesses meet the economic, social and environmental dimension through their business activities and practices. *'I am an agricultural graduate and started the business while waiting for the agricultural officer job to come through. As the business started to grow, I have focused on increasing processes with new technology which presented expansion opportunities'* (Respondent # 4).

The two start-up founders of the events businesses indicated that their businesses started from identification of niche opportunities to organise events in a unique manner; however, the businesses have been impacted by the pandemic. The founders shared that the businesses need to survive in the current environment. *'we (with spouse) saw the opportunity to create this business…started well and we grew…soon hit by the pandemic…lost business opportunities…barely break-even'* (Respondent # 5). The founders of the events businesses considered that their business type addresses economic (profits or break-even) and social (small donations to charities) dimensions but not so much the environmental dimension.

Macro Thematic Category 2—Value Chain

The second macro thematic category identified from the respondents' interviews was the value chain. Day-to-day business operations are linked to whether the business is simple or complex in nature and whether it is involved or liaises with a range of internal and external stakeholders to carry out the value chain functions. The three micro categories of importance identified were low, medium and high integration of SDGs, taking into account the input, process and output functionalities.

Low integration—business types that focus on incorporation of SDGs in one function of the value chain were categorised as low integration types. Only two business types in the sample have a low level of SDG integration into their business activities and practices. The pharmaceuticals business integrates SDGs only during the process stage of the value chain and the manufacturing business type incorporates SDGs only during the output stage of the value chain. For example, the owner-manager of the manufacturing business noted that *'investments during the input and process stages are high and we strive to manage resources in the output stage with focus on economic growth and infrastructure innovation'* (Respondent # 11).

Medium integration—businesses were classified as medium integration types if SDGs are incorporated across two value chain functions. The events (n = 2) and IT solutions (n = 2) business types place emphasis on the integration of SDGs during the process and output stages of the value chain. Both business types are service-oriented and, the IT solutions business founder shared that they *'strive to enhance efficiency in the process and aim for customer satisfaction…hence our business focus is on process and output stages'* (Respondent#13). Therefore, these businesses strive to attain process efficiency and client satisfaction with the service provider, which explains the importance of the process and output stages of the value chain.

High integration—businesses were categorised as high integration types if SDGs are incorporated across all three stages of the value chain. Nine businesses (technology (n = 2), hatcheries, engineering, machinery, restaurants (n = 2) and organic food (n = 2)) were identified to be a high integration type, with SDGs incorporated during the input, process and output stages of the value chain. The organic food business owner shared that *'Our business focuses on the principles of efficiency and effectiveness across all stages of the value chain…input/process/output'* (Respondent#15). The focus of these businesses is on a holistic incorporation of SDGs into the business activities and practices.

Macro Thematic Category 3—SDG Focus

SDG focus was the third macro category that emerged from the respondents' interviews. On the basis of SDG implementation in the business, the businesses were further categorised into two micro categories of narrow and broad.

Narrow—business types that have embrace at least three SDGs in the value chain are categorised as having a narrow SDG focus. Six businesses have incorporated three SDGs across the value chain functions. Four of these businesses (pharmaceuticals, manufacturing and IT solutions) have emphasised SDGs 4, 8 and 9, with a focus on quality education, decent work and infrastructure innovation. The founder of the IT solutions business noted that *'we offer support for social causes like education for all…better work environment to reduce stress on employees…and ongoing innovations in the business'* (Respondent#13). The two events businesses have embraced SDGs 8, 9 and 12, with a focus on economic growth, industry innovation and responsible production of service offerings.

Broad—business types that have incorporated more than three SDGs in the value chain are identified as having a broad SDG focus. Three businesses (hatcheries and restaurants) have incorporated five SDGs (hatcheries SDG 3, 4, 8, 9 & 12; restaurants SDG 4, 6, 8, 9 & 12), with a focus on health and well-being, sanitation, quality education, economic growth, innovation and responsible consumption and production. Six businesses (technology, engineering, machinery and organic food) have embraced six SDGs (organic food businesses SDG 1, 3, 4, 8, 9 & 12; other businesses SDG 4, 6, 8, 9, 12 & 17) across the value chain functions with a focus on quality education, clean environment, economic growth, infrastructure innovation, responsible consumption/production and sustainable partnerships. The organic food business type has also placed emphasis on SDG 1 to reduce poverty by offering extensive support to social causes and charities. The founder of the organic food business noted that *'my values and virtues align with zero food waste and meet the demands of the poor…I would like to see reduction in poverty…as reflected in my business model'* (Respondent#14).

The exploratory analysis conducted in the present study highlights that MSMEs in India contribute to SDGs despite any difficulties they face. The results obtained also indicate that the general perception that MSMEs limit their contribution to the attainment of the SDGs because of their size, scale of operations and funding constraints warrants more thorough investigation. The MSME owner-managers demonstrated an overall understanding of the importance of the SDGs, and they abide by the values, virtues and impact of the type of business. The integration of SDGs into the day-to-day operations of the MSMEs is on a voluntary basis and relies on the principles of responsible conduct of business. These MSMEs positively contribute to business goals and the SDGs, and the interaction of business type is evident in the analysis.

There are manifold implications of this study. From a theoretical perspective, the study findings led to the development of a preliminary conceptual framework (see Fig. 1).

From a practical perspective, the study findings may potentially help to develop SDG impact assessment tool/s that are tailored for MSMEs in the Indian context and aim for transferability of the developed tools to similar contexts. From a policy perspective, policymakers need to focus specifically on MSMEs and formulate strategies to recognise the voluntary contributions made by MSMEs in the SDG space. Therefore, policy

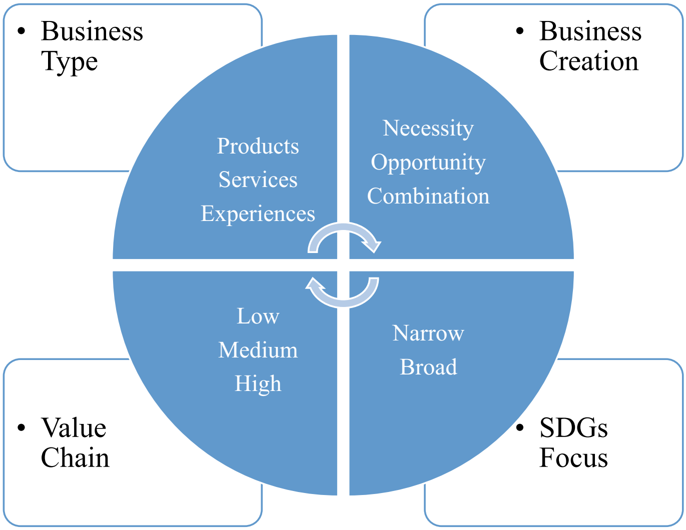

Fig. 1 Conceptual framework

focus should move beyond only recognising public/private/non-for-profit organisations' contributions to the SDGs. The study also presents important social implications, as MSME contributions to improving social conditions, employment, health, well-being, decent jobs, etc. align with the targets and sub-targets of the SDGs. Finally, the study's findings provide societal implications as MSMEs' contributions to economic, social and environmental dimensions align with the attainment of SDGs and the development of best practice MSME business models.

Conclusion

The study's findings reveal the contributions of MSMEs to the attainment of the SDGs by 2030. The results obtained from the study reject the existing assumptions that MSME contributions to achieving the SDGs are non-existent or negligible. MSMEs contribute to SDGs by way of alignment with the value chain stages. Given the large number of MSMEs, their contribution to achieving the SDGs by incorporating them into their day-to-day business activities and practices cannot be underestimated. Also, MSMEs embed SDGs on a voluntary basis, and if policymakers focus more attention on publicising and incentivising such activities, MSMEs would take a more formal approach to incorporating more SDGs into their operations. The development of the preliminary model allows MSMEs with a narrow focus on SDGs to potentially integrate the SDGs more broadly into their business activities and practices, which will result in better outcomes for the businesses, people and society.

The study findings are limited to the Indian context and to MSMEs. Therefore, generalisation of the findings to other contexts is limited. The findings obtained relied on a qualitative data analytical cross-sectional approach of in-depth interviews of the business founders and owner-managers. Future studies need to focus on collecting data from an expanded sample and may need to include various stakeholders' perspectives on the integration of SDGs into business activities and practices in the value chain. There is scope to expand the present study to other business contexts and progress comparative analysis. Longitudinal data collection will also result in meaningful findings. Further, application of mixed methods approaches by combining qualitative and quantitative data collection techniques will provide more robust findings.

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SME Sustainability in Turbulent Times of COVID-19: A Review of Literature and Future Directions

Vanita Yadav

Introduction

COVID-19 outbreak of 2020 has changed the stance on how small and large firms do business. Importantly, the pandemic is likely to have a greater influence on the survival and sustainability of small and medium enterprises (SMEs) worldwide. The objective of this chapter is to present a comprehensive review of the state of academic research currently available on COVID-19 and its impacts on SMEs. Specifically, this chapter presents a systematic review of academic literature using the Web of Science database and includes articles published from all years till 1 June 2021. The review findings reveal a total of 36 studies published on SMEs and COVID-19 from different SME sectors and geographic regions in 2020–2021. There were 13 articles published in 2020 and 23 articles (nearing double in six months) published by 1 June 2021. This clearly illustrates a growing urgency in the publications trend.

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Initial bibliographic analysis of the data reveals research emerging around two broad clusters. The first cluster includes papers around the perceived impact of the pandemic on SMEs including impact on owners, employees and economy. The second cluster included papers around the risk that SMEs are facing, crisis management, resilience and survival strategies for COVID-19. As a next step, in-depth qualitative analysis of the papers was undertaken, and this further revealed six themes emerging from the data. These themes included impact of COVID-19 on SMEs, role of government or state intervention, digital strategies adopted by SMEs for business model innovation, knowledge management and digital learning, work-from-home/hybrid work arrangements and risk management. The literature review findings presented in this chapter offer important implications for research, policy and practice by integrating the state of research on this topical area. Notably, there is a need for further empirical research in this area that can offer insights on SME sustainability.

Literature Review Methodology

A literature review is a valuable method of synthesising information and empirical findings of research published on a phenomenon of interest (Linnenluecke et al., 2020). The role of a literature review becomes even more relevant when the phenomenon of interest creates a very significant impact on the survival of organisations and individuals. COVID-19 outbreak has changed the way how small and large firms perceive survival, and it is likely to impact a firm's strategy for the future. There has been an increase in the number of empirical studies and publications in the past two years since the emergence of COVID-19 in 2020.

Bibliometric analysis has been widely adopted in literature search and many researchers suggest combining bibliometric analysis with the qualitative literature review to present in-depth findings (Linnenluecke et al., 2020; Vallaster et al., 2019). Therefore, this study adopts a two-step method for the literature review (Vallaster et al., 2019) to explore the emerging themes in the literature on COVID-19 and SMEs. As a first step, a quantitative approach using bibliometric analysis was adopted for the search using the Web of Science (WoS) Core Collection from all years till mid-2021. In title search was conducted in WoS database and the search query included the following search string: (SMEs AND COVID*) OR (SME AND COVID*) OR (Small Business* AND COVID*). The

Table 1 Systematic literature review method protocol

Parameter	*Value*
Research question	What research themes in the context of COVID-19 and SMEs emerge in existing literature?
Search keywords	In title or abstract
Database	Web of Science
Type of materials	Journal papers and conference papers
Year of publication	All years till June 2021
Selection criteria	1. Preference on peer-reviewed journals (refereed or scholarly), from management field of study 2. Search for keywords in title and abstract 3. English language
Analysis method	Content analysis and identification of themes
Total No. of articles analysed	36

inclusion criteria include language as 'English' and timespan as 'All years'. The literature review method protocol is present in Table 1.

The search findings reveal a total of 36 studies published on SMEs and COVID-19 from different SME sectors and geographic regions during 2020–2021. There were 13 articles published in 2020 and 23 articles published by 1 June 2021. This clearly illustrates a growing publications trend. The second step of the analysis included uncovering themes using thematic analysis. For this all the 36 papers were read and reread to uncover themes emerging from the literature. This stage was guided by the research question—*What research themes in the context of COVID-19 and SMEs emerge from the available literature?*

Review Findings and Research Themes

Table 2 summarises the papers that were included in this study including details on the research context, type of the study and type of data used in the papers. There were 32 empirical studies on SMEs from different countries across the globe including USA (3 papers), EU countries (10 papers with 3 papers examining Poland SMEs), China (4 papers), Africa (4 papers), Pakistan (2 papers), Indonesia (2 papers), UK (1 paper), Kuwait (1 paper), Saudi Arabia (1 paper), Brazil (1 paper), Malaysia (1 paper), Mauritius (1 paper) and New Zealand (1 paper). These empirical studies adopted quantitative and qualitative approaches. There were also

Table 2 Summary of papers reviewed

Year	*Journal*	*Authors*	*Research context*	*Type of study*	*Data*
2021	Small Business Economics	Y. Belghitar et al. (2021)	UK	Quantitative	Secondary datasets
		T. Zhang et al. (2021)	USA	Quantitative	Secondary datasets
		Y. Liu et al. (2021)	China	Quantitative	Secondary datasets
		L. Pedauga et al. (2022)	Spain	Quantitative	Secondary datasets
2021	Journal of Banking Regulation	P. F. di Corredera-Catalán Félix and A. Trujillo-Ponce (2021)	EU Spain	Quantitative	Secondary data
2021	International Journal of Disaster Risk Reduction	L. Lu et al. (2021)	China	Quantitative (main) and qualitative (supporting)	Online survey of SMEs and 10 follow-up interviews
2021	Academy of Marketing Studies Journal	R. Sannegadu (2021)	Mauritius Small island developing states	Conceptual	Based on literature and published data
2021	Knowledge and Process Management	V. B. Klein and J. L. Todesco (2021)	Brazil SMEs worldwide	Literature review	SLR (9 papers)
2021	Human Resource Development International	S. Nachmias and E. Hubschmid-Vierheilig, (2021)	Europe	Editorial	

Year	*Journal*	*Authors*	*Research context*	*Type of study*	*Data*
2021	World Development	N. Stoop et al. (2021)	Congo Central Africa	Quantitative parametric	Survey—Telephonic Survey of 1,000 respondents (637 households and 363 small businesses)
2021	Risks	Z. Grzegorz et al. (2021)	Poland	Quantitative non-parametric	Secondary data on 88 SMEs
2021	International Journal of Environmental Research and Public Health	K. Grondys et al. (2021)	Poland	Quantitative non-parametric	Survey—Online survey of 496 SMEs
2021	British Food Journal	E. Bivona and M. Cruz (2021)	Switzerland	Qualitative	Case study of a Swiss brewery in the food and beverage industry
2021	Entrepreneurship and Sustainability Issues	E. Župerkienė et al. (2021)	Lithuania	Quantitative	Survey
		G. Strakšienė et al. (2021)	Lithuania	Mixed method	Quantitative (survey) and qualitative (focus group)
2021	Business and Society Review	M. Anwar and T. Clauß (2021)	Pakistan	Quantitative	Survey
2021	Trends in Food Science & Technology	M. Ali et al. (2021)		Literature review	Narrative review
2021	Critical Perspectives on International Business	B. Fath et al. (2021)	New Zealand	Qualitative	Interviews with managers and stakeholders

(continued)

Table 2 (continued)

Year	*Journal*	*Authors*	*Research context*	*Type of study*	*Data*
2021	Journal of Chinese Economic and Foreign Trade Studies	R. Aftab et al. (2021)	Pakistan	Quantitative	Survey of SMEs Descriptive statistics
2021	Sustainability	Iva Gregurec et al. (2021)		Literature review	SLR (85 papers)
		Li et al. (2021)	Ghana	Quantitative PLS	Survey of 702 owners/managers in Ghanaian food processing industry
2021	Africa Journal of Management	S. Aidoo et al. (2021)	Africa	Quantitative	Survey. Multi source data from managers and owners of 249 SMEs
2021	Cogent Economics & Finance	M. Ssenyonga (2021)	Indonesia	Quantitative	Backcasting methodology for future scenarios
2021	Journal of Public Affairs	A. Ogunsanya (2021)	Nigeria	Conceptual	
2020	Emerging Markets Finance & Trade	Q. She et al. (2020)	China	Quantitative	Secondary data
2020	Sustainability	G. Zimon and R. Dankiewicz (2020)	Poland	Quantitative	Secondary data
2020	Entrepreneurship and Sustainability Issues	Ahmad Al-Fadly (2020)	Kuwait	Qualitative	Phenomenology. Interviews with SME owners
2020	Organizacija	M. Kukanja et al. (2020)	Slovenia (EU)	Quantitative	Survey of 574 managers in tourism industry

Year	*Journal*	*Authors*	*Research context*	*Type of study*	*Data*
2020	International Journal of Engineering Business Management	García-Vidal et al. (2020)	Equador	Literature review	Review of 100 McKinsey studies
2020	The Journal of Asian Finance, Economics, and Business	Effendi et al. (2020)	Indonesia	Quantitative	Survey of 250 SME managers/ owners
2020	Journal of Accounting & Organizational Change	M. Nurunnabi (2020)	Saudi Arabia	Qualitative	reflective essay on interviews with 111 SME lead managers
2020	Journal of Economics & Management Strategy	R. Fairlie (2020)	USA	Quantitative	Secondary data-Current Population Survey (CPS) microdata files
2020	Proceedings of the National Academy of Sciences	A. Bartik et al. (2020)	USA	Quantitative	Survey of 5,800 small businesses
2020	Environmental Hazards	Y. Lu et al. (2020)	China	Mixed method	Online questionnaire (4807 SMEs) and follow-up interviews (203 SMEs)
2020	Geografia Malaysian Journal of Society & Space	Omar et al. (2020)	Malaysia	Qualitative	Phone-based interviews with six SME owners

two mixed method studies adopting qualitative interviews and quantitative surveys. Further, there were conceptual papers including an editorial and literature reviews published.

Bibliographic analysis results are illustrated in Fig. 1 which shows mainly two broad clusters emerging in the data. The first cluster had papers grouping around COVID-19 that included papers covering impact on business, management, performance, technology, environment and economy. The second cluster had papers grouping around SMEs including papers dealing with crisis management, risk, resilience, financial impact including trade credit, sector (like tourism) and geography (like China, Poland and others).

The second step of the literature review using thematic analysis uncovered six key themes in the data, namely impact of COVID-19, role of government or states, business model innovation, hybrid work arrangements, risk management and knowledge management. These themes provide useful insights for further research in this area and can help offer practical guidance for SMEs. Key findings on the themes are discussed

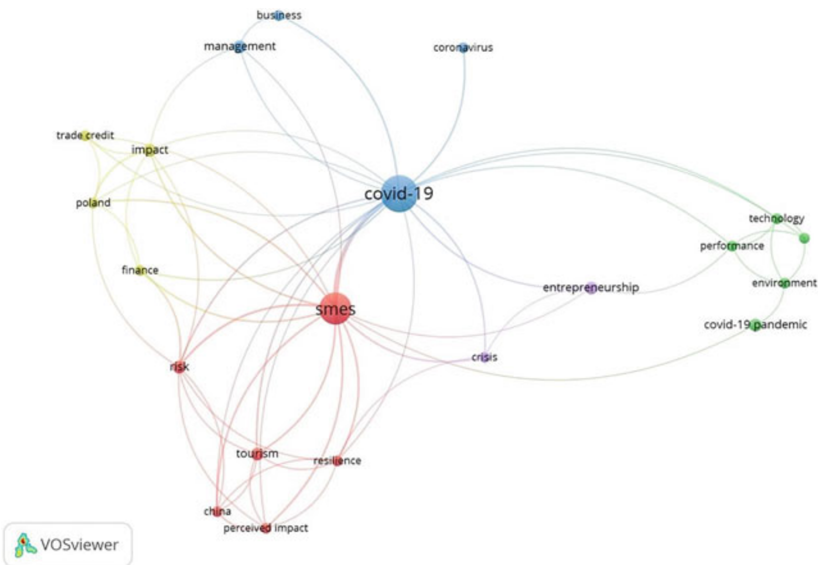

Fig. 1 Bibliometric analysis results

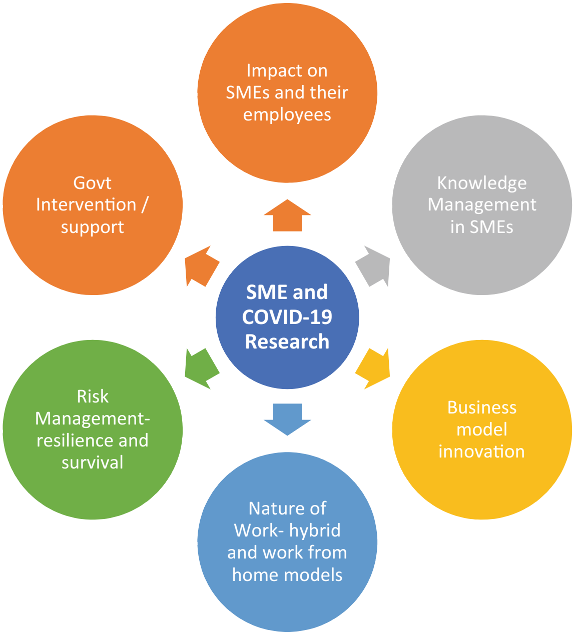

Fig. 2 SME sustainability in turbulent environments—conceptual framework and directions for research and practice

in the following sub-sections and illustrated in Fig. 2 as a conceptual framework for future directions.

Impact of COVID-19 on SMEs and Their Employees

Majority of the initial studies covered numerous impacts of the pandemic outbreak on SMEs (Belghitar et al., 2021; Grondys et al., 2021; Grzegorz et al., 2021). Markedly, SMEs started to experience the negative impacts of COVID-19 disruptions within few weeks of the onset itself like reduced market demand, disrupted supply chains, workforce interruption due to employees not being able to report to work, job losses and even firm closures. For example, Ssenyonga (2021) reveals surge in unemployment and under-employment. Al-Fadly (2020) reports plight and hardships of SME business owners. SMEs were also reported as 'financially fragile' in a pandemic situation with increased likelihood of firm closures as most SMEs are likely to run out of cash (Aftab et al., 2021; Liu et al., 2021; Lu et al., 2021).

Gregurec et al. (2021) report some industry sectors like travel, aviation, tourism, hospitality, sports, arts and entertainment being more vulnerable during the COVID-19 pandemic as compared to other industries like healthcare, IT and pharmaceuticals industry. Further, SMEs run by women and minority groups were impacted more. For instance, Fairlie (2020) reports a greater negative impact of COVID-19 for women business owners and for people from ethnic minorities in the USA. A study by Stoop et al. (2021) in Africa suggests that the impact of COVID-19 on SMEs and the economy was even higher than the previous virus outbreaks like Ebola Virus in Africa.

Role of Government/State Intervention

Studies from various countries suggest that SMEs did benefit from government support by the national or state governments. For instance, Belghitar et al. (2021) in their study from the UK report "*without governmental mitigation schemes, 59% of UK SMEs report negative earnings and that their residual life is reduced from 164 to 139 days*". They further suggest that the industries or sectors benefiting most from government support were not the industries that were impacted the most by COVID-19. This was due to the nature of the schemes that failed to distinguish between the firms requiring more support versus less support during the pandemic.

A study from China suggests government support policies should target non-state-owned enterprises because they rely on supply chains and do not have stable bank relationships as compared to the state-owned enterprises (Liu et al., 2021). Further, Liu et al. (2021) report access to credit for SMEs was severely impacted due to COVID-19 and government support through state-owned banks in China are less likely to be a complete remedy. A conceptual paper on SMEs in the context of Mauritius proposes enhancing collaborations between the government, SMEs and large private sector firms (Rajesh, 2021).

di Corredera-Catalán Félix and Trujillo-Ponce (2021) analyse the Spanish guarantee model and regional government measures for SMEs to mitigate the impact of the pandemic. They suggest that government guarantee schemes for SMEs can be used to enhance access to finance in pandemic situations and also during the post-COVID-19 era. Aftab et al. (2021) in their study on SMEs in Pakistan also recommend government assistance for SMEs like some form of financial aid to cover salaries of workers and working capital financing schemes to deal with cash shortages during the pandemic. However, they note only 42% SME businesses received any loans or grants to help small businesses in paying employee salaries. This reveals shortage of such support for small businesses in the context of developing countries like Pakistan. There is a need to further explore the role played by governments in supporting SMEs deal with the blow of COVID-19 in other developing countries like India, Bangladesh, Nepal and others.

Risk Management Strategy: Resilience and Survival of SMEs

The pandemic has uncovered lacunae in the risk management framework of SMEs. Review results from studies published in 2021–2020 report various risks like economic, financial and operational risks. In general, there is a lack of risk management strategies in SMEs. Grondys et al. (2021) surveyed SMEs in Poland and reported SMEs lacked experience or guidance on risk management while dealing with situations like a pandemic. They conclude risk management framework in Poland is not sufficiently developed, and many small enterprises were not aware of the forms of support available to them. In another study from Poland, Grzegorz et al. (2021) uncover inventory and supply chain management risks in 88 Polish enterprises.

Župerkienė et al. (2021) in their study on SMEs in Lithuania report only some SMEs had contingency funds and small businesses in general lacked preparedness and consistency in terms of dealing with the pandemic. As a result, the risk management strategy adopted was of 'risk avoidance' and SMEs were oriented towards mainly survival. They recommend SME owners and leaders must not only exhibit qualities like determination but also focus on future scenario planning for human resource, finance and risk management to deal with unforeseen conditions. Kukanja et al. (2020) examined crisis management practices in the tourism sector micro, small and medium enterprises in Slovenia during COVID-19. They explored four dimensions of crisis management practices, namely staff, cost control, organisational support and promotion/marketing practices. Kukanja et al. (2020) report significant differences in use of these crisis management practices across the different types of SMEs in the tourism industry.

Ali et al. (2021) undertook a review of literature on supply chain resilience in the context of food industry SMEs and suggest resilience is critical for food security. They advise supply chain resilience in food sector SMEs can be decomposed into four phases, namely readiness, response, recovery and growth. They further state that food industry SMEs can have two types of supply chain resilience strategies: proactive and reactive. Ali et al. (2021) suggest there is a need to cultivate resilience and risk management in SMEs dealing with COVID-19.

Fath et al. (2021) explored risk and resilience in international relationships of New Zealand SME exporters during the pandemic. They uncover changes in the network relationships during COVID-19 in terms of relationship strength and opportunity outlook. Fath et al. (2021) report weak relationship ties either remained weak or broke during the pandemic. However, strong relationship ties between network partners increased resilience and network partners supported each other through development of stronger or new ties during COVID-19. They conclude that a pandemic or a crisis situation is not the appropriate time to develop and nurture weak ties in international markets because the main focus of SME export firms is on survival in such conditions. As a result, SMEs focus on their main market and on strengthening existing strong ties.

Aidoo et al. (2021) studied adaptive resilience in 249 African SMEs from Ghana during COVID-19. They focused on adaptive resilience as it entails actions taken by firms during adverse and disruptive conditions. They describe adaptive resilience as a form of perseverance and retrenchment which influences performance of SMEs. Past research reports direct links between adaptive resilience and firm performance. But Aidoo et al. (2021) find adaptive resilience indirectly influencing firm performance through strategic renewal during pandemic conditions.

Evolving Nature of Work in SMEs

Onset of the pandemic witnessed changes in the nature of work in large as well as small and medium enterprises across the globe. Due to the mobility restrictions imposed by governments worldwide the transition to remote/work-from-home, online and hybrid work arrangements became a logical workforce disruption for survival. Župerkienė et al. (2021) recognise some SMEs in Lithuania were able to transition to the virtual space with their employees working remotely. Nachmias and Hubschmid-Vierheilig (2021) report European SMEs being 'forced to change' by moving their work and operations to remote environments. Zhang et al. (2021) examined the relationship between work-from-home and SME performance during COVID-19 in USA. They find small businesses performing better overall with industry variations in American states that had higher work-from-home rates. They further report increase in work-from-home rates even after the local mobility and travel restrictions were uplifted.

Strakšienė et al. (2021) report most SMEs in western Lithuania were successful in overcoming technical difficulties while transitioning their work online during the pandemic. They find many workers indicated their preference to work remotely in future also and some expressed their interest in hybrid work arrangements like mixing remote work and work-from-home. Strakšienė et al. (2021) report problems related to work-from-home fell under two groups. The first group of problems were around IT infrastructure which could occur due to equipment shortages, disrupted internet services and increased costs. The second group of problems were around human resources management factors like employee digital communication skills, employee attitude or emotion while working from remote locations and inadequate methods of organising/coordinating distributed remote work.

Business Model Innovation for SME Sustainability

Bivona and Cruz (2021) explored business model innovation in the Swiss food and beverage industry. They suggest three processes for implementing business model innovation in SMEs that can help deal with the COVID-19 crisis, namely the ability to leverage available resources, the ability to transform existing resources into new innovative products and the ability to mobilise network resources. They recommend collaboration and knowledge sharing amongst business partners as an essential criterion for business model innovation during a crisis like the COVID-19 pandemic. Strakšienė et al. (2021) suggest investment in technology and IT tools is likely to help SMEs enhance the value proposition of their business model and offer innovative products.

Gregurec et al. (2021) examined the impact of COVID-19 on sustainable business models in service sector SMEs. They report agility being critical for SMEs and suggest adaption of SME business models by incorporating digital technologies to ensure continuity of service. They recommend reliance on digital technologies as a transformation driver for SME business models. For example, SMEs shifted towards social media platforms and mobile technologies during the pandemic for the *communication channel* used to reach customers and the way SMEs *manage customer relationships* during the pandemic using social media and mobile technologies. This transformed two (channels and customer relationships) out of the nine building blocks in a firm's business model canvas (Osterwalder & Pigneur, 2010). There could be possibilities of further innovation in the remaining building blocks for SME business model innovation.

Knowledge Management and Digital Learning in SMEs

Nachmias and Hubschmid-Vierheilig (2021) report European SMEs adopted digital learning as a tool to afford normality in their business operations. They provide examples of online activities like working from home, use of digital communication tools, use of shared online work folders on the cloud and undertaking online learning remotely. Nachmias and Hubschmid-Vierheilig (2021) recommend using the knowledge gained during the pandemic to plan learning strategies for SME businesses of future. They emphasise the role of leadership in providing support for digital learning and employee wellbeing in SMEs.

Klein and Todesco (2021) reviewed the literature on SME response to COVID-19 pandemic and proposed knowledge management as a strategy to build organisational resilience. They submit competitive advantage through knowledge creation begins at the individual level and then expands through interactions at community levels like the department, division and organisational levels. They recommend the need for knowledge management using digital technologies to learn, adapt, monitor and anticipate new disruptions or challenges.

Discussion and Conclusion

This chapter presented insights from a systematic review of academic literature using the Web of Science database including articles published from all years till 1 June 2021. The review results reveal studies examining the impact of COVID-19 on SMEs and their coping strategies have more than doubled in number from 2020 to 2021. This clearly exemplifies a growing urgency of research in this area. Majority of the studies have examined varying impact of COVID-19 pandemic on SME businesses and how they survived the crisis. Going forward, there is a need to change the focus from examining impact to exploring strategies and guidelines for SME long-term substantiality post-pandemic. This chapter offers a framework of future directions to extend the body of knowledge in the area of sustainable SME strategies for turbulent environments like the pandemic. A narrative summary of findings grouped around key themes emerging from the review is presented in the chapter, and the conceptual model is illustrated in Fig. 2.

Results reveal varied attempts in identifying contingency factors in the context of SMEs like examining exporter's network relationships during COVID-19 (Fath et al., 2021). Future research can explore SME network relationships for building resilience in business relationships (Fath et al., 2021). Further, Aidoo et al. (2021) explored the indirect influence of adaptive resilience on firm performance through strategic renewal during COVID-19 in African manufacturing sector SMEs. They suggest the need to examine role played by strategic renewal for resilience in disruptive situations to enhance our understanding of risk and resilience.

Issues and challenges of distance or remote work are also under-researched (Strakšienė et al., 2021). Moreover, the concept requires development of a homogenous definition as its interpretations are varied. Zhang et al. (2021) posit remote working arrangements like work-from-home as a Schumpeterian '*creative destruction*' force which is likely to leapfrog remote work adoption and influence evolution of hybrid workplaces of the future SMEs. Nachmias and Hubschmid-Vierheilig (2021) suggest COVID-19 pandemic has induced a change in perception on how SME businesses perceive learning. They recommend introduction of 'human-centric' digital learning strategies for small businesses of future. Future studies are needed to develop a taxonomy of remote work and its implications for SME businesses.

To conclude, results reveal studies advocating risk management, digital adoption, knowledge management and financial strategies for SME survival and resilience. For example, having 'precautionary savings' especially in the case of SMEs for black swan events including pandemics can be potential risk management strategy. Some studies report positive influence of technology adoption in dealing with the pandemic crises. For example, a study from Indonesia reported the use of social media for digital marketing their products and connecting with customers during the pandemic lockdown. Studies from Poland and China explored financial strategies like moderate to highly conservative trade credits that some SMEs adopted during COVID-19. Another study reported having an international market base like 'being global' helped in firm survival and performance. Many studies emphasise the role of government support as an enabler in dealing with turbulent business environments. There is a need to further examine empirically what works in pandemic situations using scenarios and simulations for future preparedness.

There is also a need for further research on business model transformations using technologies like social media and mobile technologies that many SMEs adopted to tide through the crisis (Gregurec et al., 2021). Bivona and Cruz (2021) posit the ability to use internal resources, the ability to transform existing resources into innovative products and the critical ability to mobilise collaborations with network partners as the key to business model innovation in SMEs. They also highlight the need for further research to enhance our understanding of business model innovation and its relationship with SME performance during a turbulent environment.

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A Conceptual Framework for an Integrated One-Stop Portal to Support Indigenous Small Business Enterprises

Setting Foundations for/Enhanced Policy Use, Financial Inclusion and Networking

Tendai Chikweche, Francine Garlin, Aila Khan, and Michael Lwin

Introduction

Indigenous businesses play a crucial role in the economic and social empowerment of Australia's Indigenous Aboriginal and Torres Strait Islander people through the generation of wealth and reinforcement of the long history and pride of the nation's first people (Altman, 2007, 2009; Collins et al., 2016; Evans et al., 2021; Foley, 2000; Shirodkar

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et al., 2018). These enterprises are a vital source of employment and empowerment for Indigenous people, especially in regional and remote areas (Hunter, 2013, 2015; Indigenous Business Australia, 2018; Supply Nation, 2020). Various stakeholders primarily led by the Ministry of Indigenous Affairs in the Office of the Prime Minister and Cabinet, who are the custodians of the National Business Sector (NBS) strategy (Australian Government, 2017), have led interventions and support mechanisms for Indigenous Business Enterprises (IBE).

The National Business Sector strategy and other extant studies outline barriers such as 'historic economic marginalisation, low intergenerational wealth transfer, and the ongoing impact of poor education, employment and health outcomes' (Altman, 2007; Foley, 2004; Hunter, 2013, 2015). Historical and contextual challenges, including low education levels and general exposure to business mentoring, also influence the extant barriers. These challenges negatively affect Indigenous people's participation in entrepreneurial activities over generations (Jacobs, 2017). First Nations enterprises require additional business support, access to information and access to capital to establish and grow their businesses (Australian Government, 2017, p. 6). The impact of these barriers on enterprises is more eminent in regional rural areas than urban areas where the pressure for access to capital, basic infrastructure and business support services is high. Between 2006 and 2018, there was a 74% increase in the number of businesses operating in the First Nations business sector (Evans et al., 2021). This growth translated to an increase in the number of jobs created, totalling 22,000. Although data collection on jobs and new entrants is scarce, government reports noted that there are between 12,000 **and 16,000** businesses in the sector, with an estimated increase of 2200 (Department of Foreign Affairs and Trade, 2019). It is important to note that the relatively low numbers of Indigenous business enterprises relative to non-Indigenous ones are not exclusively an Australian phenomenon. However, it is common globally in countries with Indigenous populations worldwide (Dana & Anderson, 2007).

This book chapter examines the policies and programmes in place to support Indigenous Business Enterprises and whether there is an effective integration of technology platforms to enhance financial inclusion as set

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out in the National Business Sector strategy. The chapter draws insights from major extant work undertaken to achieve similar objectives, such as Charles Jacobs' 2017 Research Report, which evaluates the problems of Indigenous business policy. Hence, the chapter consolidates previous work in this evolving and dynamic study area.

Literature Review

The broader conversation of the participation of First Nations citizens in the economies of their lands is a long, ongoing one which is eminent across various First Nations and is beyond the scope of this chapter (Collins et al., 2016). Scholars such as Altman, Foley, O'Connor and many others have covered First Nations' participation in the Australian economy from various perspectives (Altman, 2001; Commonwealth of Australia, 2014; O'Connor, 2012). A crucial part of this conversation has been on the definition or characterisation of an Indigenous business enterprise. Various works have debated what constitutes an Indigenous business in Australia (Commonwealth of Australia, 2014; Forrest, 2014). A key definition source is the Indigenous Procurement Policy, which categorises Indigenous business enterprises as businesses that are 50% owned and controlled by Indigenous people. Others, such as Supply Nation, give official certification to businesses with 51% Indigenous ownership, whereas the Australian Bureau of Statistics (ABS) defines a business with at least one Indigenous owner as Indigenous. The ABS's definition has been criticised for undermining and not recognising business enterprises run by couples where there is an Indigenous and non-Indigenous spouse. This research relates to private micro, small and medium businesses that are private enterprises that operate for-profit like any other business and have a wide variety of definitions, including sole traders, 50% Indigenous ownership (e.g. between Indigenous and non-Indigenous spouses), 25% Indigenous ownership and employment of a particular percentage of Indigenous people (Forrest, 2014). These enterprises are subjected to harsher challenges and barriers.

It is essential to understand the historical and contextual challenges that IBEs operate under, potentially impacting their performance (Altman, 2005; Bodle et al., 2018). Extant studies on First Nations' economies have focused on various aspects of framing the Indigenous economy. Frameworks such as Jon Altman's hybrid economy framework have helped frame the economic development problem Indigenous people face (Altman, 2001, 2007). This has been useful in educating scholars about the importance of not using a generic performance evaluation approach for Indigenous business enterprises (Altman, 2005, 2007). Altman asserts that the ecosystem (including the policy framework) that supports Indigenous people does not have a sound understanding of the makeup of this economy, which comprises market, state and customary components that operate in linkage and interdependencies (Altman, 2001, 2009). Transdisciplinary research on First Nations from a discipline such as economics, business, humanities and law has identified diverse resource and economic factors or barriers that negatively impact the well-being and impact of ISBEs (Hunter, 2015; Russell-Mundine, 2007; Sanders, 2016). These include historical marginalisation, weak conducive policies and programmes, limited access to capital and general financial inclusion in the financial ecosystem (Collins et al., 2016).

The government is critical in enacting policies and implementing programmes to support IBEs. Other stakeholders in the ecosystem include non-governmental organisations and representative bodies such as chambers of commerce. Relationship building is a crucial aspect of life among First Nations (Collins et al., 2016; Russell-Mundine 2007). There is a need to examine this in the context of IBEs and to establish networking opportunities. Thus, understanding the policies, programmes, financial inclusion challenges and prospects for networking is an essential antecedent to reframing support systems for IBEs. This is the gap our research seeks to address as the foundation for having a conversation with the IBEs to establish whether there is justification for developing a framework to address the gap. This is depicted in Fig. 1 as a conceptual framework which assumes a similar three-dimensional approach used by Altman focusing on policies, programmes, financial inclusion and networking opportunities. Once this preliminary foundation has been established, an Indigenous approach to establishing IBEs' voice and evaluating these issues will be undertaken to develop a resource informed by the IBE's voice.

Methodology

In conducting this research, a secondary data-based exploratory approach was utilised to collect data. In summary, the overarching objectives outlined in Fig. 1 were to:

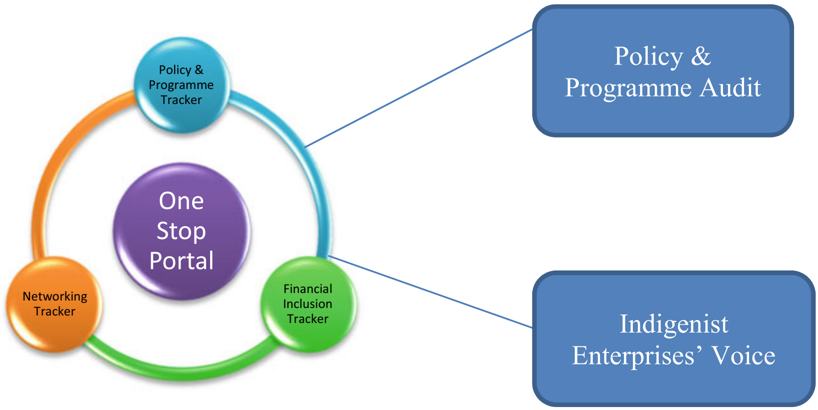

Fig. 1 Conceptual framework

- To identify and evaluate relevant broad government policies and programmes (and other white papers and research work) that deal with Indigenous people (Federal and State).
- To identify Institutional representative bodies that target Indigenous peoples' participation in business enterprises, specifically to identify, map and evaluate their programmes.
- To identify comparative international government policies and programmes that specifically target Indigenous peoples' participation in business enterprises to draw some lessons and benchmark practices.

This review was used to develop foundations for a potential one-stop integrated portal outlined as the conceptual framework.

Findings

Policy and Programme Review

The overarching Federal government policy that directs the government's commitment to developing the Indigenous business sector is the Indigenous Procurement Policy (IPP). This focus is replicated across different states and territories (Jacobs, 2017). A key output from the policy and programme review is evidence that the Commonwealth and state governments have various policies and programmes to support Indigenous business enterprises. In his Research Report, Jabobs (2017) identifies mainstream vital policies and programmes. Table 1 outlines policies and programmes not captured by Jacobs, which reflect the increase in focus on supporting the Indigenous business sector by the various Australian jurisdictions.

Federal Government Policy Focus

Indigenous Procurement Policy (IPP)

The anchor policy of IPP that the Federal government uses was introduced on 1 July 2015 to give Indigenous businesses enhanced opportunities to win Commonwealth contracts. Ideally, the IPP should leverage the Commonwealth's annual multi-billion procurement spend to drive demand for 'Indigenous goods and services, stimulate Indigenous economic development and grow the Indigenous business sector' (Australia Government, 2015; DIPMC, 2015). It is important to note that before the IPP, Indigenous business enterprises had a very insignificant share of Commonwealth Government contracts. For example, between 2012 and 2013, the value of contracts by IBEs from the government was worth $6.2 million or 0.02% of the total contracts (Jacobs, 2017). On the introduction of the IPP, this figure increased by a factor of 46%, translating to a total value of $284 million.

In principle, a vital advantage of the IPP lies in its emphasis on ensuring that IBEs are awarded contracts based on their capacity and ability to deliver products and services that meet the required standards stipulated in the government tenders. However, there are some questions as to whether procurement officers in government stick to the guidelines regarding ensuring the IBEs strictly meet the requirements.

a. **Foreign Affairs and Trade Economic Diplomacy Charter**

The Foreign Affairs and Trade portfolio released a Charter in 2015 that outlines the range of services available to Australian businesses pursuing opportunities overseas. There is a specific focus and provision for requirements of Indigenous Australian businesses. The Charter and economic diplomacy agenda provide support for Indigenous Australian

Table 1 Commonwealth, state and territory Indigenous intervention policies and programmes

Policy/programme	*Dominion*	*Key provisions to support to Indigenous business*
Foreign Affairs and Trade Charter (2015)	Commonwealth	• The range of services for Indigenous Australian businesses through economic diplomacy
Business Toolkit for Indigenous Women (2010) Department of Social Services	Commonwealth	• Aims to inform and inspire Aboriginal and Torres Strait Islander women in their aspirations to be successful businesswomen
Growing NSW's first economy (2015)	NSW	• Targets for Indigenous participation on all contracts over $1 million • Strengthened procurement targets beyond construction • Minimum of 5% of Indigenous businesses in NSW to be supported by small business and advisory services
Aboriginal and Torres Strait Islander Procurement Policy (ATSIPP) 2019	ACT	• Encourages Territory officers to seek quotes from relevant Aboriginal and Torres Strait Islander Enterprises wherever possible with set targets • Ongoing support for Indigenous enterprise development and establishing a pathway for achieving greater financial independence
Advancing Small Business Queensland Strategy 2016–2020	QLD	• Assist Indigenous small businesses to develop and grow, through a suite of programmes

(continued)

Table 1 (continued)

Policy/programme	*Dominion*	*Key provisions to support to Indigenous business*
Aboriginal Affairs Action Plan	SA	• Increase the number of Aboriginal-owned businesses
WA Aboriginal_Procurement_ Policy (WAAPP)	WA	• Agencies are required to award three per cent of the number of government contracts to registered Aboriginal businesses from July 2018 by the end of June 2021

Source Data audit

businesses by providing opportunities for tapping into overseas markets and providing general support services related to conducting business overseas (DFAT, 2019).

State and Territory Governments' Policy Focus

Multiple policy initiatives across all states focus on supporting Indigenous Business Enterprises. Jacobs (2017) notes the different levels of commitment by the different states, which creates a gap for a coherent one-stop portal that could harness all these initiatives. Whilst several efforts have been made by the Council of Australian Governments (COAG) to discuss this issue, there has yet to be a concrete finality. States and territories are committed to state-specific Indigenous procurement policy and business targets, and support services for ISBEs (COAG, 2016, p. 4).

New South Wales Government's Policy Focus

In line with the IPP, the NSW government aims for Indigenous-owned businesses to be awarded at least three per cent of the total number of domestic contracts for goods and services issued by NSW Government agencies by 2021 (NSW Chamber of Commerce, 2019). The NSW Procurement Board is given leeway to allocate specific targets to agencies or for different expenditure categories if it deems it necessary to enhance the accomplishment of the set targets.

Evaluation of Integration of Federal and State Policies

There is an overlap of policies among the state and federal policies, even though they are all primarily driven by the focus on an Indigenous procurement focus. The Commonwealth's policy has set parameters of targets to be accomplished by the states, but the states have factored in various elements of their components of the policies and targets. For example, in the thresholds of contracts and concentration on specific industry sectors, NSW's initiative in construction is not necessarily national (DFAT, 2019).

Policy Impact Assessment

Assessment of the impact of policies and programmes is a continuous ongoing challenge which must consider emerging variables that are changing the nature of implementing the policies and programmes. For example, in the case of the IPP, the various targets and thresholds across the different states make it difficult to assess the policies and programmes in place collectively. Moreover, focusing the impact assessment on the achievement of these targets alone needs to provide a detailed picture of the actual overall impact (if any) on the livelihoods of Indigenous communities from which these Indigenous businesses originate and operate. However, in principle, there has been an incremental improvement in the number of IBEs accessing Commonwealth contracts since the inception of the IPP. Regarding value between 2015 and 2017, IBEs had access to contracts worth $594 million. This was spread across 1000 IBEs and 4880 contracts. These contracts were also spread across diverse industry sectors ranging from clothing, information and communications technology, construction and recruitment to legal and financial services.

a. *Reflections on Validity of Measurement Indicators of IPP*

There is an ongoing debate on measuring the impact of the IPP policy since it is the overarching policy used by the Commonwealth government and state governments to enhance Indigenous businesses' participation in the economy. Jacob's (2017) white paper on policy strategy evaluation raises some fundamental issues regarding the impact assessment of the

IPP policy. He highlights the potential flow of using contract numbers as opposed to monetary value in measuring the impact of IPP policy. The critical gap with this approach is the possibility of creating an avenue for government departments to 'tick off targets by enabling figures to be boosted by vast numbers of small contracts' (Jacobs, 2017). This does not translate into any meaningful empowerment of the Indigenous enterprises. These potential inconsistencies are likely to create a situation where these overstated numbers of contracts inflate the actual level of economic activity by Indigenous business enterprises. Critics of the IPP drive argue that, in some ways, it represents some form of protectionism which might end up defeating its stated objective of economic development and empowerment (Piga & Tatrai, 2015). Other criticism relates to the restricted nature of government procurement, which can result in the IPP benefiting a limited scope of the Indigenous business sector. The construction industry is cited as an example of a sector that has developed a dependency on the IPP and has not helped IBEs develop appropriate business skills to survive in an open competitive market. For example, in 2015–2016, 60% of significant IPP contract spend (contracts over $10,000) was awarded to Indigenous businesses in the construction industry (Austender, 2017). Notwithstanding these different views, the IPP has been a critical enabler of empowerment for IBEs in Australia.

Government Programme Review

Federal Government Programme Focus

a. *Indigenous Business Sector Strategy*

The National Business Sector Strategy (NBS) was an initiative set out by the government and Indigenous stakeholders to develop a long-term roadmap for empowering First Nations. The strategy sets out a clear economic development framework with a focus on business support, access to finance, stronger connections and harnessing of knowledge (Australian Government, 2017). The NBS also reiterates the scope of challenges faced by ISBEs, for example, access to timely and, in the case of IBEs, culturally appropriate forms of business advisory services and information on new market opportunities. Of particular importance is the challenge of access to finance, which enhances the financial inclusion of

IBEs given the historical marginalisation of Indigenous people from mainstream financial services whose conditions of accessing financial products did not and still do not consider the complex nuances of the Indigenous people's context.

NSW Government Programme Focus

The NSW government has several programmes that are in place to support ISBEs. Two key examples are outlined below:

a. **Opportunity, Choice, Healing, Responsibility, Empowerment (OCHRE) Initiative**

Part of the NSW Government Plan for Aboriginal Affairs includes the OCHRE initiative. This programme aims to support an inclusive approach to supporting Indigenous communities to actively participate in their economic, social and cultural affairs. Economic empowerment through the promotion of ownership of business enterprises is one of the pillars of OCHRE.

b. **Small Business Advisory Services**

The NSW government provides targeted advisory services for Indigenous-owned businesses. The initiative aims to provide advisory services to at least 5% of Indigenous-owned small businesses annually.

Evaluation of Integration of Federal and State Programmes

The National Business Sector strategy provides direction on initiatives that can be designed and implemented to enhance the development and growth of Indigenous business-owned enterprises. However, individual states continue to develop and run their initiatives that focus on interventions in their states. Thus, whilst the objective of these initiatives might have a similar overarching objective, there is no deliberate integration of these interventions. For example, the initiatives by the various offices of small business commissioners across the states all have different approaches and targets for engaging Indigenous-owned businesses.

Representative Institutional Bodies and Programmes Review

Various critical representative institutional organisations are serving Indigenous-owned business enterprises. It was essential to review these bodies in conjunction with the policy and programme review because they are critical actors in the broad ecosystem of stakeholders supporting Indigenous enterprises. Summaries of these organisations are provided, followed by an assessment of their role in policy, financial inclusion and networking. The organisations covered have a national and state (NSW focus) profile and provide services to IBEs across Australia.

Indigenous Business Australia

Indigenous Business Australia (IBA) is a government organisation that provides workshops, advice, business support programmes and, in some cases, business finance to eligible Indigenous business owners. It is a statutory authority of the Australian government and is accountable to the Parliament and the Minister for Indigenous Affairs. IBA was created to assist and enhance the economic development opportunities of Aboriginal and Torres Strait Islander people across Australia. IBA serves, partners and invests with Aboriginal and Torres Strait Islander people who want to own their future (IBA, 2018).

Supply Nation

Supply Nation is a not-for-profit organisation funded by the Commonwealth Government. It aims to connect Indigenous suppliers (businesses) with government and private sector organisations to secure procurement opportunities through its comprehensive directory (Supply Nation, 2020). It is the only organisation that recognises two precise forms of ownership of Indigenous-owned enterprises, namely *Registered Members* made up of 50% or more Aboriginal or Torres Strait Islander ownership (caters for equal partnerships with non-Indigenous owners) and *Certified Members* made up of 51% or more Aboriginal and Torres Strait Islander owned, managed and controlled.

NSW Indigenous Chamber of Commerce

New South Wales Indigenous Chamber of Commerce (NSWICC) was the first Indigenous chamber of commerce in Australia, established in 2006 to support Aboriginal People to establish and operate their businesses and to provide a forum for business owners to come together to network, share and to learn from each other (NSWICC, 2019).

Discussion

a. *Policy and Programme Tracking—Opportunities for an Integrated One-Stop Technology Platform*

The multiplicity and, in some cases, the overlap of policies and programmes at national, state and territory potentially creates a challenge for IBEs to effectively access these policies and programmes without an integrated and accessible resource. The multiplicity of initiatives can result in information overload for IBEs, which could be eliminated by establishing a one-stop portal that harnesses these individual initiatives into a consolidated portal that IBEs can easily access. The NBS highlights the importance of harnessing the power of knowledge through better sharing of information about commercial opportunities and better collection and sharing of data about Indigenous businesses. The various national, state and territory initiatives outlined in the review have different levels of utilisation of technology in the delivery of their programmes. A consolidated platform can enhance the involvement of the IBEs in the design/formulation of appropriate policies and programmes that speak to the Indigenist Voice of these enterprises. By integrating the Indigenist Voice in policy and programme design, prospects for better utilisation and engagement of policies and programmes will likely improve.

b. *Case for Facilitation of Financial Inclusion*

The various policies and programmes in place through the government and other institutional players do not explicitly position their intervention as part of a broad agenda on financial inclusion. Although the IBA's model does represent components of financial inclusion, there is a need to evaluate how this model interacts with the rest of the financial services ecosystem in developing a broad-based financial inclusion system.

Both the Commonwealth government and state governments and territories have different programmes that focus on the provision of grants. This is aimed at addressing the traditional challenge Indigenous-owned businesses face in accessing finance due to several historical challenges. In regional and remote Australia, this is achieved through microfinance providers and the Indigenous Entrepreneurs Fund. However, the various initiatives in place do not explicitly position their intervention as part of a broad agenda on financial inclusion which also involves a structured involvement of the broad financial services ecosystem. There is a gap for a one-stop portal for tracking financial inclusion for IBEs which can be helpful in the design of grants and programmes that deal with the provision of finance for IBEs and in the design of policies used by financial service providers.

c. ***Networking Prospects of the Portal***

Findings from the review indicate that supporting institutions like IBA, Supply Nation and NSWIC play a pivotal role in facilitating networking among IBEs. However, there is an opportunity for harnessing these individual initiatives into a collective resource which can be accessed by the small enterprises whose voice and participation in these large-format organisations are often underrepresented. Thus, an expansion of this facilitation would be specific sector-focused networking facilitation via one-stop portal focusing on facilitating networking for IBES, which caters for the smaller enterprises that might be underrepresented in the more extensive scope of networking events and structures, such as the Business Hubs and Incubators provided by the IBA, Supply Nation or NSWICC. The idea is not to duplicate services but to ensure that the micro and small enterprises are catered for and, more importantly, are involved in designing this networking space.

Summary International Benchmarking

International benchmarking of policies, programmes and institutional support for Indigenous enterprises is a broad area of investigation beyond this paper's scope. Hence, we provide a succinct summary of interventions in Canada and the USA to demonstrate how Australia's overarching focus aligns with international practice. Canada and the USA are two jurisdictions with dedicated policies and programmes targeting Indigenous business enterprises.

Canada

In Canada, there are currently more than 37,000 Aboriginal-owned businesses covering various economic sectors. The Procurement Strategy for Aboriginal Business is the overarching policy and programme that seeks to increase the number of Aboriginal firms participating in the federal procurement process. More than 100,000 contracts have been awarded to Aboriginal suppliers with a total value of $3.3 billion under the PASB policy, and lessons can be drawn from the minority procurement strategy.

USA

The Small Business Administration is the designated Federal government resource supporting all entrepreneurs, including minority-owned businesses. A minority-owned business is a business enterprise in which the minority business owner holds 51% or more of the company. Various programmes and agencies are in place to support Indigenous and minority enterprises. The main ones are the Minority Small Business and Capital Ownership Development Program, National Minority Supplier Development Council and Minority Business Development Agency.

Critical Insights from Canada and USA

The shared emerging insights from Canada and USA indicate the following:

- Federal or central government commitment to creating an environment that supports Indigenous-owned businesses. Regular review of programmes.
- Existence of multiple programmes with potential overlap and duplication of services.
- A similar focus on Indigenous procurement policy drives the approach to engaging Indigenous-owned businesses.
- Provision of various forms of financing support, forms of advisory and training programmes for Indigenous-owned businesses.

Conclusion and Future Direction

The second phase of this project involves engaging Indigenous small business enterprises to establish their evaluation of the support systems and relevance of the one-stop conceptual portal covering policy and programme, financial inclusion and networking tracking as outlined in the conceptual framework. In so doing, we are adopting an Indigenous approach which will draw an appropriate array of cultural knowledge, skills, abilities and insights from the enterprises, which should rightfully inform and shape any supporting framework that will be developed around the one-stop resource portal that has been developed from the review undertaken (Rigney, 1997). This is important in 'incorporating recognition of First Nation peoples' worldviews, knowledge and realities as distinctive and vital to the existence and survival of the First Nation communities' when they operate business enterprises (Martin & Mirraboopa, 2003). This will ensure that the research and its outcomes are theoretically and conceptually grounded in the authority of the traditional owner/custodians as local knowledge holders in these enterprises.

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Is Knowledge Ambidexterity the Answer to Economic Sustainability for SMEs? Lessons Learned from Digitalisation Efforts During the COVID-19 Pandemic

Minu Saratchandra and Anup Shrestha

Introduction

Businesses need to be agile to respond to changing business circumstances in order to leverage economic sustainability. The COVID-19 pandemic has induced a global economic slowdown. In challenging situations, knowledge ambidexterity (KA) can assist organisations in adapting to uncertain environments (Papadopoulos et al., 2020). Being ambidextrous while managing knowledge is about using extensive knowledge (Scuotto et al., 2019) to tackle such unprecedented challenges. KA is a generic strategy wherein organisations can simultaneously explore and exploit knowledge (Tushman & O'Reilly, 1996). *Knowledge exploitation* is about using firms' existing knowledge base to respond rapidly to the changing

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environment, whereas *knowledge exploration* focuses on searching for new knowledge to adjust to changing business conditions. With a simultaneous approach of using knowledge exploration and exploitation (i.e., KA), companies can utilise knowledge effectively to combat business challenges.

This chapter focuses on SMEs, as they are often the most vulnerable business sector in most countries. Over 90% of organisations in most countries belong to the SME category, and they play a pivotal role in instigating economic growth, providing employment and creating wealth (Lin, 2014). As per OECD (2020), more than 50% of SMEs fail in a span of ten years, mostly attributed to the lack of digital resources and knowledge capabilities. SMEs are considered as entities without strategy (Cerchione & Esposito, 2017), lacking the flexibility to adapt to economic uncertainty. The demand for latest knowledge will continuously occur because existing knowledge may not be sufficient for solving new problems for SMEs (Papadopoulos et al., 2020; Saratchandra & Shrestha, 2022). Likewise, knowledge is currently managed using ad hoc and traditional methods. These constraints have worsened the business situation for SMEs. Unfortunately, when faced with major economic disruptions such as the COVID-19 pandemic, many SMEs do not survive. Several studies have emphasised that the pandemic has caused massive shutdown of SMEs due to these limitations (Bartik et al., 2020).

Scholars have proposed a variety of solutions to resolve this crisis scenario in SMEs. One of the most important trends found in current literature involves readjusting business strategies by incorporating crisis scenarios and business continuity plans to enhance sustainable development (Viswanathan & Telukdarie, 2021). The literature also suggests that the newly chosen strategy should aid the organisation to immediately respond to any crisis (Mitręga & Choi, 2021). In this context, we suggest that SMEs follow a strategy of implementing KA to ensure their competitiveness in unpredictable environments (Hanifah et al., 2019; Shrestha & Chandra, 2020).

KA can be achieved with the support of digital technologies. Prior studies state that digital systems play a vital role in achieving organisational ambidexterity (Ardito et al., 2018) and acts as an enabler of organisational knowledge management (KM), irrespective of industry (Kapoor & Aggarwal, 2021). Digitalisation can play two key roles—it supports managing the generated knowledge, and it can facilitate KA in SMEs. However, various studies have emphasised that it is difficult for SMEs to become knowledge ambidextrous as compared to larger organisations (Dolz et al., 2019). A major hindering factor is knowledge availability. Since the knowledge acquired from external stakeholders, a major knowledge source, can be missed or mishandled in SMEs, this leads to knowledge unavailability (Al-Emran et al., 2018). Moreover, KA in SMEs is reported to be in a *compromised* state, showing a stronger inclination towards knowledge exploitation (Randall et al., 2017). Consequently, knowledge exploration processes are compromised due to high costs, uncertain business environments and operational risks. Therefore, SMEs have greater problems in balancing these competing constraints—that is, the lack of KA (de Araújo Lima et al., 2020). We can thus safely conclude that SMEs generally are unfavourably positioned to achieve KA.

Digitalisation entails a fundamental reinvention of doing things in an innovative way (S. M. Lee & Trimi, 2021). The widespread availability of digital infrastructure has enabled worldwide access to open knowledge in an easier and more convenient manner, facilitating knowledge exploration and exploitation processes simultaneously, thereby helping achieve KA. Digitisation efforts can reconfigure and manage SMEs' knowledge or competencies to be more agile in adapting to uncertain environments (Papadopoulos et al., 2020). Thus, we can say that digitalisation plays a vital role in achieving KA in SMEs. However, there are limited studies that show how to effectively utilise digital technologies for achieving KA for SMEs.

By focusing on the simultaneous execution of knowledge exploration and knowledge exploitation with the support of digital technologies, we aim to provide new insights into the literature on how SMEs may achieve KA in an efficient way to leverage economic sustainability. This paper is structured as follows: first, we discuss the theoretical background by reviewing current research in this area. We then outline our methodological approach and report the findings of our empirical case studies to present an optimal route for SMEs to become ambidextrous. Finally, we conclude with a discussion of our study implications.

Literature Review

Knowledge Ambidexterity (KA)

KA is the simultaneous process of knowledge exploration and knowledge exploitation that promotes organisational knowledge without changing organisational processes (March, 1991; Tushman & O'Reilly, 1996). *Knowledge exploration* is the process of searching and identifying new knowledge, thereby bringing *radical* innovation to the firm, leading to novel products, processes and innovative solutions to problems. Likewise, *knowledge exploitation* is the process of improving or refining existing knowledge, thereby bringing *incremental* innovation to any organisation by leveraging the application of pre-established knowledge, technologies and solutions. This implies that KA is an important source of knowledge for any organisation's innovation (Durcikova et al., 2011) and knowledge enhancement (Scuotto et al., 2019).

Role of KA Towards Economic Sustainability

Gro Harlem Brundtland's, 1985 report, created for the World Commission on Environment and Development (WCED), defined *sustainability* as the development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs (Brundtland, 1985). In our context, economic sustainability mainly supports managing development of communities, industry sectors and countries to ensure efficient resource use and creation of new businesses to strengthen economies (Presley et al., 2007). KA plays a vital role in leveraging economic sustainability in the SME sector during any crisis. Through KA, SMEs can reinvent their business for the future, leverage innovation and improve existing business processes. KA is a dynamic capability that aids SMEs to concentrate their efforts on knowledge exploration and knowledge exploitation activities. To sustain during crises such as the ones presented by COVID-19, organisations should identify relevant information about markets, business opportunities and threats in a timely manner. This implies that SMEs may be able to sustain their operations if they can acquire latest and relevant knowledge critical for their business. To elaborate, knowledge exploitation leverages firms' existing knowledge base and helps them outperform competitors by making effective changes in existing products/processes (Benitez et al., 2018), and knowledge exploration focuses on identifying and acquiring new knowledge and creates impactful innovations (Benitez et al., 2018). Hence, through the simultaneous application of knowledge exploration and exploitation, SMEs can sustain against the current and changing business environments.

Despite KA being a theoretically sound concept to leverage economic sustainability, it is very difficult to achieve KA in practice (Adler & Heckscher, 2013). This is particularly true for SMEs, as they seldom focus on both knowledge exploration and exploitation activities, and these activities always compete for the scarce resources available to SMEs. In reality, SMEs are more inclined to knowledge exploitation, owing to the constraints in the knowledge exploration process (Randall et al., 2017). Moreover, prior studies posit that managers play a vital role in achieving KA in SMEs (Berraies et al., 2020), as they allocate resources, make decisions and control vital processes in the firm. However, there are studies available that emphasise the difficulty of individuals in managing exploratory and exploitative tasks simultaneously (Shamim et al., 2019). Further, knowledge explored from external sources such as suppliers, customers and other stakeholders has become difficult for SMEs to utilise during the COVID-19 pandemic due to lockdown and shutdown of factories. Sinha (2019) posits that ambidexterity happens by serendipity, implying that conflict exists in understanding any managed pathways of achieving KA in SMEs.

Role of Digitalisation in Achieving KA

Digitalisation can be defined as the utilisation of digital opportunities to modify the structure of business processes (Matarazzo et al., 2021). SMEs lag behind digitalisation efforts because they do not have resources to procure digital services (Eller et al., 2020). This created a problem when the COVID-19 pandemic erupted, as SMEs were not utilising the available digital technologies to manage supply chain operations and business–client relationships (Caballero-Morales, 2021). SMEs have limited experience on how to utilise digital technologies effectively to achieve KA. Scuotto et al. (2019) posit that the ambidextrous approach is improved with the use of digital technologies. This implies that if an organisation utilises the right digitalisation strategies under the appropriate organisational and environmental conditions; KA can be achieved (Ardito et al., 2018). Soto-Acosta et al. (2018) empirically proved that digital technologies and KM are the two major pillars of KA, but they have not

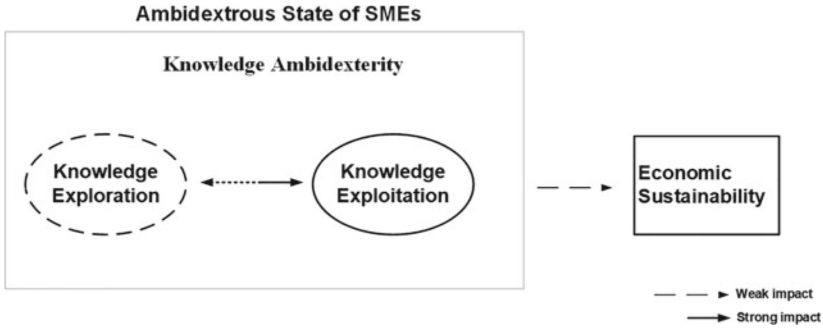

Fig. 1 Framework for knowledge ambidexterity for leveraging economic sustainability

provided a holistic approach for achieving KA by adopting digital technologies and KM. Moreover, intense competitive pressure poses greater challenges to SMEs, and hence, they require an appropriate environment in which innovative ideas can arise and grow for their economic sustainability (Niewöhner et al., 2019). As a result, there are limited studies demonstrating the effective utilisation of digitalisation for achieving KA in SMEs. Therefore, we pose our research question: *What is the role of digitalisation in knowledge ambidexterity towards achieving economic sustainability for SMEs?*

To summarise, it is analysed that SMEs follow a compromised mode of KA as they give more emphasis to knowledge exploitation with limited knowledge exploration. The stakeholders are the main source of knowledge, and knowledge exists in a tacit form. In SMEs, the impact of digital platforms for KA is also limited. Therefore, we argue that the prospect of retrieving the latest knowledge related to the industry seems limited for SMEs, which affects its economic sustainability (Fig. 1).

Methodology

A case study approach is followed in this study to understand the KA phenomenon in SMEs. Following a case study methodology provides tools for researchers to study complex phenomena within their contexts, and when the approach is applied correctly, it becomes a valuable method to develop theory, evaluate programmes and formulate interventions

Table 1 Case study details of selected SMEs

SME (Industry)	*Country*	*Annual Turnover*	*Participants—ID*
Company A (Structural Engineering)	India	< US$16 million	Senior Manager—P1 Manager—P2 Designer—P3 Detailer—P4
Company B (Transportation & Logistics)	India	< US$1 million	Manager—P1 Operations Head—P2 Logistics Officer—P3 Shipping Coordinator—P4
Company C (Shipping)	UAE	< US$1 million	Manager—P1 Logistics Officer—P2 Documentation-Head—P3 Line Manager—P4

(Hafiz, 2008), thereby providing useful insights (Yin, 2009). To gain a better understanding of the KA achievement within SMEs, this study follows an intervention-based multi-case-study approach.

Case Selection

The research sample group consisted of two SMEs based in India and one SME from the United Arab Emirates (UAE), as illustrated in Table 1.

According to the theory of ambidexterity, the success of KA largely depends on the participants in the organisation (Birkinshaw & Gibson, 2004). Therefore, we carefully identified employees from each SME who had digital proficiency. The participants were trained to use a digital tool to explore knowledge at their discretion and to exploit knowledge for organisational benefits. The digital tool was offered as a cloud KM service by IBM Watson (Watson, 2021).

Data Collection and Analysis

We introduced the digital tool to each participant in the case study SMEs. The digital tool codifies the newly identified, relevant and useful explored knowledge into explicit knowledge (called *knowledge articles*), which is also stored in the digital tool. The digital tool enables simultaneous access to knowledge articles for knowledge exploitation and exploration in SMEs.

We allowed all participants of the three SMEs to use the digital platform for the entire year of 2020 during the COVID-19 pandemic. An induction was offered to the participants on how to use the digital tool for achieving KA. On completion of the year 2020, semi-structured interviews were conducted, and video footage recorded to analyse the progress in their journey to be ambidextrous by using the digital tool. The interview data was then transcribed and uploaded to NVivo software for coding. Three rounds of coding were conducted, following the guidelines by Strauss (1987): open coding for identifying distinct themes for categorisation; axial coding for aligning the themes for identifying the relationship between categories and subcategories; and, finally, selective coding for integrating categories of organised data in cohesive expressions.

Findings

The findings are discussed in the three following subsections. The first subsection introduces the challenges faced by the three SMEs to achieve KA. The second subsection details, over the course of one year, how these SMEs successfully adopted the digital tool and co-developed coordination mechanisms for explorative and exploitative activities to achieve KA. The final subsection summarises the findings that portray how KA assisted in improving the economic sustainability of the SMEs during the prolonged crisis of the COVID-19 pandemic.

Challenges Faced by SMEs to Become Knowledge Ambidextrous

Our findings reveal that SMEs have the intention to become ambidextrous; however, the lack of knowledge regarding effective strategies/solutions, along with the wrong notion that IT is an expensive commodity, are the inhibiting factors. The exploration for external knowledge is found to be limited. SMEs continue to depend on vendors, suppliers and other stakeholders as sources of knowledge. Knowledge continues to remain in tacit form in SMEs, as they are generally not aware of the digital tools available to store different types of knowledge. There is hardly any common platform for interdisciplinary team coordination. SMEs largely rely on basic IT tools such as spreadsheets to store significant knowledge, which indicates that they see KM as part of content and document management. These challenges inhibit SMEs from becoming ambidextrous, thereby jeopardising their ability to be sustainable. This finding is in line with the framework developed in this study from the literature.

> *…I use an excel sheet, which i save in my laptop to update knowledge… [P3.Company A]*

> *…we get knowledge about new trends from managers, as they have direct contact with external stakeholders, or customers and suppliers [P2.Company B]*

In What Ways Can SMEs Achieve KA Using Digital Tools?

Knowledge exploitation and exploration are not mutually exclusive (March, 1991), and the combination of these activities promote effective knowledge generation (Scuotto et al., 2019). By understanding this key point, the *first step* was for the SMEs to engage in knowledge exploration using the digital tool—for example, searching for the latest knowledge and trends in the market. Every SME created a list of queries to aid in their search for external knowledge as per their organisational requirements. Simultaneously, SMEs were guided to focus on exploitation of the explored knowledge for refining the current knowledge, so that they could utilise the knowledge effectively. The digital tool played a vital role in both processes, enabling SMEs to simultaneously follow both exploitative and exploratory learning strategies, so that failure or competency trap would not occur due to overemphasis on any one KA process.

Top managers were the key drivers in exploring knowledge or taking decisions related to explored knowledge. Hence, the *second step* involved giving every participant equal opportunity to explore and exploit knowledge using the digital tool. Participants could share the acquired knowledge and discuss how best to implement the explored knowledge. This ensured that, as more knowledge was accumulated in the firm, the SMEs could combat conflict issues of the exploration and exploitation process.

> *Watson helped us in searching various knowledge articles in my field of design. … Watson helped us to go through the existing knowledge articles and understand the different processes adopted globally… [P1.Company A]*

> *…it is now centralised knowledge … everyone can access anytime from any location in this COVID period. We had new learnings altogether' [P1.Company B]*

From the findings, we can infer that the digital tool provides the SMEs with a foundation for knowledge exploration and exploitation. In fact, the digital tool provides every participant with equal opportunity to explore the KA processes and provides a robust knowledge base for leveraging KA. In this way, we can find validation in the notion that an effective digital tool can support the quest for achieving KA efficiently in SMEs.

Achieving KA to Improve Economic Sustainability of SMEs

To improve the economic sustainability of SMEs through KA, one of the main prerequisites that SMEs should fulfil involves acquiring an early understanding of market and technology changes in the heterogeneous knowledge context of the firm (Guo et al., 2020). Prior studies have proved that there is a direct link between the market orientation and economic sustainability of organisations (Crittenden et al., 2011). Hence, SMEs need to prepare for and find solutions to the problem and adapt to upcoming market changes. This is especially important in the context of the COVID-19 pandemic, where most of the participants were not prepared for the associated crises, such as disruptive markets, lockdown and continuous office shutdown. However, participants of Company A and Company C mentioned that they could explore market-related knowledge and new government policies/regulations through the digital tool to forecast changing demands.

> *During this coronavirus phase, which was new to all of us, we needed information and sufficient knowledge to sustain economically. … Watson assisted during this unprecedented situation. [P2.Company B]*

> *…Watson give us a tool to forecast … make decisions … form strategy to tackle the upcoming challenges in the most economical and time-bound manner. [P1.Company C]*

Organisations possessing a strong source of competitive advantage are more likely to survive and achieve superior performance (Edeh et al., 2020). As per prior studies, leveraging competitive advantage will improve the image of an organisation and provide better services to customers, leading to higher sales and profitability, thereby enhancing economic sustainability (Presley et al., 2007). In many sectors, firms have tried to find the best combination of internal and external resources in order to grasp new business opportunities and efficiently utilise them to provide better services to customers and increase their competitiveness (Scuotto et al., 2019). The digital tool facilitates SMEs to develop such a combination, which will improve their competitive advantage. For instance, Company A mentioned that they were able to acquire the latest knowledge using the digital tool, which they integrated in their designs.

> *…structural engineering is a very dynamic industry. … We as a company closely monitor industry activities. … Watson helped us acquire such dynamic knowledge. [P1.Company A]*

> *Watson gives us information regarding the market updates. [P2.company C]*

The ability of firms to innovate is imperative for economic sustainability. Prior studies state that, to retain economic sustainability, firms should advise employees to innovate their perceptions regarding the efficiency of the products, services and technologies employed in their processes (Batista & Francisco, 2018). Innovation is nourished by the application of new knowledge (Cabeza-Pullés et al., 2020). The combination of exploitation and exploration activities generates knowledge for the firm that aids innovation (Scuotto et al., 2019). Our study emphasised that the integration of KA processes using a digital tool generates knowledge that aids SMEs in improving the rate of innovation in the organisation. Participants of Company A reported that, using the digital tool, they were able to find a variety of innovative threads that were useful to them. The key knowledge acquired using the digital tool could enhance the performance of the SMEs. For instance, Company B posted that the digital tool assisted them in exploring knowledge related to niche areas of their business sector that can foster economic sustainability.

> *…this [digital tool] really is an innovative idea … the design details of timber-based construction … we have decided that this idea should be included in our future… [P2.Company A]*

> *…when we looked into the details of various new areas through Watson, we understood that we had many newer things to learn. [P2.Company B]*

Hence, from these findings, we can posit that practicing KA can help in improving the capabilities of SMEs through generating knowledge related to market awareness, innovation and competitive advantage, facilitating SMEs to leverage economic sustainability, especially during crisis periods such as COVID-19.

Discussion and Contributions

Discussion

We analysed three case studies and found that the integration of a digital tool that supports KA processes can help to achieve KA in SMEs, thereby leveraging its economic sustainability during the COVID-19 pandemic. The case study SMEs followed a KM strategy to execute knowledge exploration (both internal and external) and knowledge exploitation to manage knowledge with the support of digital technologies, thereby achieving KA and eradicating knowledge scarcity. This implies that the digital tool can be a very useful enabler for SMEs towards economic sustainability. The digital tool encourages teamwork by providing equal opportunity for every participant to implement KA in the organisation.

Given our focus on the achieving of KA through digital tool contexts to leverage economic sustainability, we discuss several key findings. First, implementing KA using digital tools helped organisations to explore the latest market opportunity, forecast future challenges and make critical decisions during the COVID-19 pandemic. These findings go in line with J. Lee and Kim (2019), who emphasise that, for *survival and growing sustainably*, firms must simultaneously compete in existing markets and prepare to adapt to emerging markets as the environment changes. Second, KA supports SMEs in searching for and exploring the latest knowledge in their industry, while also facilitating the storing of knowledge in explicit form using these digital tools. During the COVID-19 pandemic, industry-specific knowledge is rapidly changing; hence, to stay competitive, SMEs need to generate new knowledge specific to their sector, since existing knowledge may not be sufficient for solving new problems. SMEs can either exploit the latest explored knowledge for refining their product/process/internal knowledge or leverage the

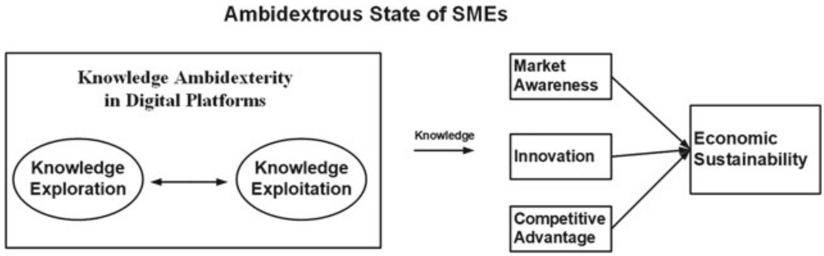

Fig. 2 Framework for economic sustainability through knowledge ambidexterity

personal knowledge of their employees to stay competitive. These knowledge sources can then prepare SMEs to face future challenges and leverage economic sustainability.

In a nutshell, our study implies that digital tools that support KM processes can achieve KA efficiently and leverage the economic sustainability of SMEs by improving capabilities in critical areas, such as identifying latest market-related knowledge and gaining competitive advantage. The themes that emerged from our findings aided us in updating our framework (see Fig. 2), emphasising that digital tools support the simultaneous execution of knowledge exploration and knowledge exploitation, generating relevant knowledge, which can be transferred and stored in explicit form. This generated knowledge facilitates market awareness, promotes innovation and provides competitive advantages to SMEs, thereby leveraging their economic sustainability.

Contributions

From a theoretical perspective, we contribute to economic sustainability and KA literature by overseeing and highlighting the perspectives of SMEs. For SMEs, sustainability is a bigger concern, especially during crises such as the COVID-19 pandemic. Our recommendation for SMEs to achieve economic sustainability is to implement KA with the support of digital tools. However, KA was unexplored and ambiguous in SMEs, and there are limited studies investigating how evidence-based research using digital tools aids KA in SMEs. The digital tool provides SMEs with a foundation for knowledge exploration and exploitation. Moreover, this study contributes to KA literature by following an intervention-based case study analysis and strengthens the empirical findings by providing a framework for economic sustainability through KA in the SME sector with the support of digital platforms. To enhance economic sustainability, we emphasise that exploring and exploiting knowledge using digital tools aids SMEs in identifying the market change, searching for new business opportunities, integrating with internal knowledge for changing product/processes and identifying knowledge in niche areas of the business sector—all of which helps foster economic sustainability and combating business uncertainty.

Conclusion

In this study, we investigated how SMEs could achieve KA with the support of digital technologies to leverage economic sustainability. This study found that digitalisation enables KA within the SMEs sector towards achieving economic sustainability. We adopted an exploratory multi-site case study approach in SMEs over India and UAE. We introduced a digital platform that enables KA processes in these SMEs and captured evaluation data after the use of the digital platform for a year. Our findings revealed that limited knowledge exploration, tacit knowledge, lack of common platform for interdisciplinary team coordination and dependence of outdated Information Systems are the major hindering factors for achieving KA in SMEs. We also found that digital tool provides the SMEs a foundation for knowledge exploration and knowledge exploitation. Moreover, practicing KA can help in improving the capabilities of SMEs by the generation of knowledge related to market awareness, innovation and competitive advantage, facilitating SMEs to leverage economic sustainability. As a theoretical implication, our analysis contributes to the KA literature by following an intervention-based case study analysis and strengthens the empirical findings by providing a framework for economic sustainability through KA in the SME sector with the support of digital platforms.

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Insights from the Australian SMEs During the Pandemic

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Introduction

The small business sector is among the hardest hit by the coronavirus pandemic, with 63% reporting a significant reduction in revenue and demand resulting from the country's lockdown measures (ABS, 2020). Furthermore, the impacts might be long-lasting, and it is anticipated many small businesses will be unable to return to business in the long-term (Fairlie, 2020). This is significant given the important role of SMEs to the economy. Small businesses (those with less than 20 employees) make up nearly 98% of all Australian businesses. The majority (62%) are nano businesses and operate as sole traders with no employees, while micro business (1–4 employees) account for 27% (ABS, 2022). Small

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businesses also contributes to 33 per cent of Australia's GDP, employ over 40 per cent of Australia's workforce and pay around 12 per cent of total company tax revenue.

Several factors determine an SME's ability to deal with the challenges of COVID-19, including organisational resources and capabilities, age, previous experience, competition, governance and the firm's ICT (Chit et al., 2022; Etemad, 2020). Regardless of these factors, success in a crisis often requires innovation (Thukral, 2021) and COVID-19 has prompted innovation as a primary response (Galanakis et al., 2021; Van Auken et al., 2021). Some small businesses have been able to pivot, thus maintaining profitability and customer loyalty (Curtisa & Slocum, 2022). However, this is not the case for all firms and COVID-19 has resulted in both winners and losers (Apostolopoulos et al., 2021). It is not yet clear which smaller firms have engaged in innovation and if so, whether innovation has resulted in improved performance. This study attempts to provide early evidence of the impact of COVID-19 on Australian SMEs by examining a range of factors that determine innovative behaviour and performance during this uncertainty. Our research project sets the following broad research objective: *to examine the innovative behaviours of Australian small businesses in responses to COVID-19 and the impact on performance*.

Considering the difference between states and territories on issues and responses to COVID-19, we utilise the context of Victoria, Australia, which was arguably one of worst affected in terms of COVID-19 cases and government-imposed lockdown measures during 2020. We set out to collect data at two time points during the early stages of the pandemic, thus capturing how SMEs responded to and were impacted by the unforeseen events. We start by reviewing the literature on innovation among SMEs in response to crises and COVID-19. We then provide an overview and justification of the chosen context of this study, explaining how the specific geographic and time boundaries inform the nascent yet growing body of research. This is followed by an outline of the research method. We then present findings and conclude with key takeaways and policy implications.

Literature Review

Some argue that smaller firms have the advantage of being agile and can better adapt to changes in their environments, including events such as the COVID-19 (Eggers, 2020). Correspondingly, there are reports of accelerated innovation by small businesses in response to COVID-19 (van Auken et al., 2021; Zutshi et al., 2021). Innovation is "the generation, acceptance and implementation of new ideas, processes, products or services" (Thompson, 1965, p. 2) and underpins adaption to change and progress towards the future (Hisrich & Ramadani, 2017). For those SMEs able to innovate, COVID-19 presented opportunities to expand into new markets, to offer new and higher quality products and services (Zutshi et al., 2021) and/or to integrate technology such as social media into their business processes (Kwon et al., 2021). However, it is optimistic to present innovation as the COVID-19 panacea; it cannot be presumed that all SMEs can and will respond to COVID-19 through a strategy of innovation.

Crises can have a negative influence on the willingness of SMEs to innovate (Disoska et al., 2020). Many SMEs simply lack the capabilities and slack resources (e.g., human and financial) required to predict and respond to the rapidly changing situations (Chan et al., 2019). The lack of time and information with which to respond are also significant factors (Etemad, 2020). Drawing on learnings from the GFC, Roper and Turner (2020) predicted that the financial constraints brought on by COVID-19 would result in a decline in R&D and innovation by resource-poor SMEs. Eggers (2020) explains by pointing to the interconnectedness between financial and strategic elements. A strategy of innovation requires access to financial resources; if limited, managers may question the risks of investing limited financial resources in innovation (Eggers, 2020). Additionally, the ability of an SME to pivot and innovate during crises might be influenced by entrepreneur traits, knowledge management, resources, age, size, strategy and government initiatives (Curtisa & Slocum, 2022; Gupta & Barua, 2018; Van Auken et al., 2021).

Additionally, a distinction can be made between radical and incremental innovation. Radical innovations are significant departures from the existing products or processes (McDermott & O'Connor, 2002), while incremental innovations represent improvements (Hullova et al., 2016). While a crisis can support radical innovation, providing the imperative to "reset" and develop new competencies and capabilities (Antonioli &

Montresor, 2021), it can also threaten a firm's survival when the firm lacks access to external supplementary resources (Freixanet et al., 2020). Under situations of crisis, such as during COVID-19, small business managers not only lack the necessary time to collect and analyse information but also deal with networks and suppliers that are responding to their own set of challenges (Etemad, 2020). Organisations face several tensions such as the need to exploit existing knowledge or create new knowledge and/or respond to short-term pressure without jeopardising performance in the long-term (Carmine et al., 2021). It is possible that companies will pivot too hastily to maintain short-term survival, without consider long-term implications.

Australia and the COVID-19 Context

The first domestic effects of COVID-19 in Australia were documented on 23 January 2020 with the screening of passengers on flights between Wuhan and Sydney. Within two days, Australia's first four cases were recorded, and border security measures began. While these included (what has come to be commonplace practice around the world now), restrictions on foreign nationals entering the country, there were also warnings and then restrictions about leaving the country for non-essential reasons.

The first recognised cases of community transmission in Australia were recorded on 2 March 2020 with the peak number of new cases recorded on 24 March 2020. It was a period marked by uncertainty and inconsistency with mixed messages from the various State and Territory governments, as well as from Federal government. While there was general confusion and lack of clarity about everything from the size of outdoor gatherings to physical distancing measures and whether schools should close, there was still relatively little effects on day-to-day business operations.

The difference between States and Territories emerged quickly on some of these issues. For instance, by 18 March 2020, school attendance in Victoria had fallen by up to 50 per cent. However, by 22 March 2020, all bars, clubs, cafes, restaurants, gymnasiums, indoor sporting and entertainment venues and cinemas throughout Australia were closed. On 27 March 2020, all returning permanent residents and citizens were required to enter 14 days of government funded hotel quarantine and Western Australia, the Northern Territory, Queensland, South Australia and Tasmania had placed border control restrictions for anyone wanting to enter from elsewhere in Australia.[1] With all but 'essential businesses' closed and only 'essential workers' able to work, concerns about the economic effects of the pandemic were seen as important as dealing with the medical issues.

Job Keeper and Job Seeker

Two major initiatives were put in place by the Australian Government to support both businesses and individuals through the COVID-19 crisis. While the Job Seeker Payments are a continuation of the existing income support payment to individuals looking for *work, Job Keeper* was a new initiative aimed at employers. It provided payment to businesses significantly affected by COVID-19 to help them continue to pay their employees' wages. The role of Job Keeper in helping small businesses survive the pandemic is likely to be a key issue and we, therefore, included a question about this in this survey. It is also important to note that the programme has changed a number of times. The Job Keeper payment was originally designed to end in September 2020. However, in July 2020, the Australian Government announced an extension of and changes to Job Keeper with new eligibility rules introduced on 3 August 2020 and the programme extended to 28 March 2021.

The Victorian Story

The extension of Job Keeper also reflects the rather different experience of COVID-19 in the State of Victoria in the second half of 2020. While the first wave of the COVID-19 Australian-wide state of emergency restrictions is generally seen as being between 03/2020 and 06/2020, Victoria experienced a second wave which saw Melbourne enter 'stage four lockdown' on the 2nd of August 2020. The lockdown measures imposed in Victoria were seen as some of the harshest in the world at the time. They included an 8:00 pm curfew, the closing of almost all shops and manufacturing as well as restrictions on individuals travelling more than 5 kilometres from their homes. These began to be eased with the

[1] We acknowledge *O'Sullivan, Rahamathulla and Pawar (2020) clear chronology on the unfolding of the pandemic in Australia provided as the basis for the overview presented here.*

Victorian government's roadmap for easing coronavirus lockdown restrictions (https://www.theguardian.com/australia-news/2020/sep/06/victorias-roadmap-for-easing-coronavirus-lockdown-restrictions-what-you-need-to-know) on Sunday 6 September 2020 and, on 8 November 2020, the lifting of the metropolitan-regional border and Melbourne's 25 km movement limit.

Some of the impact on business is already known. The ABS data (https://www.abs.gov.au/statistics/economy/business-indicators/business-indicators-business-impacts-covid-19/latest-release) confirms the greater economic effect that this has had on Victoria, finding that August 2020 saw small business revenue down by 3.8 per cent—this was a 5.3 percentage point gap compared to the rest of the nation. This research seeks to further our understanding of the impact of COVID-19 on small businesses, including why and how some businesses have been able to mitigate the negative effects. Insights can be used to better support small businesses to withstand and respond to future challenges and uncertainty.

Method

The project was undertaken by a consortium of researchers from Monash Business School (MBS), Small Business Mentoring Service and Small Enterprise Association of Australia and New Zealand (SEAANZ). The MBS team devised an online survey based on well proven and reliable scales investigating organisational innovative behaviour and financial performance. Details on how we measured innovative behaviour and organisation financial performance are included in Appendix 1. While we used proven scales, innovation is a complex notion in the academic literature, so we ensured that the measures used are ones that most small business operators would be intuitively aware of and understand. For example, a sample item was, '*at this organisation we create new ideas for difficult times*'. Additionally, we wanted to explore incremental (often slow and step wise), versus radical change at Time 2. We asked respondents to rate the extent to which innovation reinforced or fundamentally changed/made obsolete prevailing products/services, existing expertise and how they currently compete, versus. To measure organisational performance, respondents were asked to assess this compared to their closest competitors on issues such as profitability, return on assets as well as return on sales. To address the research objective outlined above and the following variables were measured as shown in Appendix 1: industry, innovation, organisational financial performance, organisation age, organisation size, female ownership, capital intensity, operating efficiency (cost leadership) strategy, quality-focused strategy, market dynamism, external independence and industry awareness.

Sampling and Procedures

The project was subject to Monash Ethics Committee clearance prior to commencement. Data was collected from member organisations of SBMS, all of whom are small or micro firms (i.e., with fewer than 20 employees) as per the ABS definition. The research team emailed SBMS members explaining the study's purpose and procedures and invited them to participate by completing the survey. Two separate phases of data collection were undertaken. The first phase (Time 1) was completed during June 2020. The purpose of the Time 1 survey was to establish a pre-COVID-19 benchmark and capture the immediate response during the first few months of impact. The Time 1 survey was divided into two sections so that we could establish both a benchmark (pre-COVID-19) measure in Sect. 1 as well as the immediate responses during the first few months of the COVID-19 shutdown in Sect. 2. The second phase (Time 2) was completed during December 2020. The purpose of the Time 2 survey was to assess the longer-term effects dealt by small businesses. Responses were obtained from 107 participants for the Time 1 survey. Of the 107 respondents who completed the survey at Time 1, 48 completed the survey for Time 2 (03/2020 to 06/2020). The items from Time 1 were repeated but now focused exclusively on the March to June 2020 period to allow a detailed comparison between the 2 sets of survey results in terms of organisation innovative behaviour and organisation financial performance.

Respondent Profile

The respondent profile is shown in Table 1. Respondents of the Time 1 survey were primarily middle aged (50–54 years of age), female owners or co-owners/partners (95%) of a nano to micro business (with between 0–4 employees). On average, respondents had owned/co-owned their organisation for 9.8 years and the majority identified as Australian. Most (60%) had a tertiary qualification and were from one of four industries (see Table 1). Over 90% of respondents are from Victoria and this explains our

Table 1 Respondent profile across the 2 sample periods

	Time 1/Pre-COVID-19 Benchmark	*Time 2/ 03/2020 to 06/ 2020*
Age	50–54	50–54
Gender	Female—60%	Female—58%
Ownership	Owners/co-owners/ partners—95%	Owners/co-owners/ partners—93%
Size	Nano & Micro (0–4 employees)—107	Nano and Micro (0–4 employees)—50
Owned	9.8 years	7.6 years
Ethnicity	Australian—81%	Australian—80%
Education	Postgraduate 22% /bachelors 21% /advanced diploma/ diploma 17% Secondary education—17%	Postgraduate 24% /bachelor 24%/ advanced diploma/ diploma 24% Secondary education—12%
Dominant Industry	Wholesale & retail—21% Manufacturing—17% Professional, scientific, technical—15% Accommodation & food services—13%	Wholesale & retail—24% Manufacturing—10% Professional, scientific, technical—19% Accommodation & food services—10%

special focus on this state. Almost half of the original sample responded to the Time 2 survey and provided data on the effects of the first wave of COVID-19 emergency restrictions (i.e., from 03/2020 to 06/2020). Table 1 shows this comparison and confirms that the sample of Time 2 largely replicates the profile of Time 1.

Results

The results presented are generally only those that were statistically significant. They are in table format and colour coded (as shown below), to clearly highlight the importance and direction of the relationships. Time 1 results are presented first, followed by the data analysis for Time 2. The data analysis for Time 2 used regression analysis as this allows us to confidently determine which factors matter most, which factors can be ignored and how these factors influence each other. Specifically, we report the following as they relate to innovation and performance: quality-focused strategy, industry awareness, external independence, operating efficiency, female ownership, Industry 1 (retail and wholesale trades), Industry 2 (accommodation and food services), Industry 3 (professional, scientific and technical services), Industry 4 (manufacturing), capital intensity, organisation size, organisation age and market dynamism. We also conducted relevant supplementary analysis at Time 2 to explore the incremental and radical innovation in response to COVID-19.

Colour Code key Used in Presentation of Results

Negative		Positive	+
Highly negative	*	Highly positive	*
Very highly negative	**	Very highly positive	**

Time 1 Results: Pre-COVID-19 & Immediate Impacts

Innovative behaviour at T1

As shown in Column 1 of Table 2, organisational innovative behaviour was *positively correlated* with small businesses with the following characteristics: female ownership, Industry 3: Professional, scientific and technical services, a quality-focused strategy, industry awareness and operating efficiency strategy. However, and perhaps not surprisingly, innovative behaviour was negatively correlated with market dynamism.

Financial performance at T1

Table 2 shows that financial performance (shown in Column 2) and was more nuanced than innovation. Here, we see clear indications as to the industries particularly suffering from the first effects of COVID-19. Industry 1: wholesale and retail trade divisions, was significantly positively correlated with performance, whereas Industry 2: Accommodation and Food Services, was significantly negative correlated with performance. Most other factors were not significantly correlated with performance; the

Table 2 Time 1 innovative behaviour

Variables	Innovative behaviour	Financial performance
Quality focused strategy	**0.34***	
Industry awareness	**0.39***	
External independence	0.24	
Operating efficiency	**0.27***	-0.23
Female ownership	0.21	
Industry 1: retail and wholesale trades		0.22
Industry 2: accommodation and food services.		**-0.19**
Industry 3: professional, scientific, and technical services.	0.22	
Industry 4: manufacturing		
Capital intensity		
Organisation size		
Organisation age		
Market dynamism	**-0.24**	

exception being *operating efficiency*, which was negatively correlated with performance.

Time 2 Results: First Wave COVID-19 State of Emergency Restrictions

Innovative behaviour at T2

As shown in Table 3, the following Time 2 measures are positively associated with the ability to be innovative during the first round of COVID-19 shutdowns, as captured by the Time 2 survey: female ownership, Industry 3: Professional, scientific and technology services, organisation age, quality-focused business strategy and industry awareness.

Incremental versus radical innovation at T2

At Time 2, there was no evidence of radical innovation. Rather, the only significant results at Time 2 were negative and related to the age and size of the organisation (see Table 4). The older and larger the firm, the less likely they were to consider making incremental changes, indicating incremental innovation is more likely in younger and smaller firms.

Table 3 Time 2 Innovative Behaviour

Variables:	
Female ownership	0.30
Professional, scientific and technology services	0.43
Organisation age	0.11
Quality focused business strategy	**0.19***
Industry awareness	**0.29****

Table 4 Time 2 incremental innovation capability

Variables:	
Time 2 organisation size	**-1.98***
Time 2 organisation age	**-0.55****

Financial performance at T2

Table 5 shows that Industry 1: wholesale and retail trade divisions, as with Time 1, was positively related to performance in Time 2. Organisational size was also positively related to better financial performance at Time 2, with larger small businesses operating more successfully. Regarding strategy, operating efficiency (i.e., adopting a cost leadership approach where competitive advantage is achieved by having the lowest cost of operation in the industry) was significantly negatively related with financial performance at Time 2. Adopting this low-cost approach during a time of uncertainty seems to be counterproductive for financial wellbeing.

Table 5 Results for Time 2 organisation financial performance

Variables:	
Industry 1: Wholesale and retail trade	**0.72****
Organisation size	**0.20***
Operating efficiency (cost leadership) strategy	**-0.31***

Key Takeaways from Time 1 and Time 2 and Future Research

This study examines the innovative behaviours of Australian small businesses in responses to COVID-19 and the impact on performance. The two-phase data collection allows us to capture the very early responses and financial performance during the early stages of COVID-19, which were perhaps the most uncertain and challenging. In doing so, we contribute to the literature on crisis management generally, but more specifically to the emerging literature on SME behaviour during the COVID-19 pandemic. While innovation has been acknowledged as a key element in a small business's resilience (Thukral, 2021), not all small firms were able to engage in innovative behaviour during COVID-19. There are also important differences as regards financial performance.

The Time 1 survey results provided initial insight into understanding the impact of COVID-19 Australian state of emergency restrictions on small businesses in terms of organisation innovative behaviour and organisation financial performance. Gathered in June 2020, these pre and immediate dealing with COVID-19 responses from small businesses identified clear relationships. Factors such as strategy choice (quality focused and operating efficiency), industry awareness, external independence, female ownership and industry (professional, scientific and technical services) were positively related to innovative behaviour and presented the key areas of difference for small businesses being able to cope with the demands of the first few months of COVID-19. Interestingly, market dynamism was negatively related to innovative behaviour. We are also able to report that the following are negatively related to performance: operating efficiency and Industry 3: accommodation and food service. Industry 1: retail and wholesale trades were positively related to performance.

Some of the relationships seem right. It makes sense that organisations with an industry awareness and a focus on quality and efficiency strategy would embrace innovation. Innovation is embedded in and determined by the business strategy and small businesses who have a strategic and competitive focus and industry awareness are likely to be innovative and able to respond to change. That female ownership is positively related to innovative behaviour, while market dynamism is negatively related to innovative behaviour require additional research.

Similarly, it makes sense that COVID-19 produced favourable conditions for some firms and not others. People initially spending more on goods; stockpiling supports the financial performance of businesses in retail and wholesale trade, while government-imposed restrictions on travel will negatively impact the performance of those operating in the accommodation industry. However, the negative relationship between performance and operating efficiency is less sound and can be examine through future research.

The Time 2 survey results provided additional information on the early response of small businesses to COVID-19. The results were gathered December 2020 and reveal female ownership, industry (professional, scientific and technology services), organisation age, quality-focused business strategy and industry awareness were the key areas of difference among SMEs are regards innovative behaviour during the second wave of COVID-19. Interestingly, there were no relationships with radical innovation; the only significant results were negative and related to the age and size of the organisation. Contrary to popular press coverage and common stereotypes, younger and smaller businesses were those less likely to be considering making incremental changes. It is possible that small businesses were expecting to eventually return to a normal post-COVID-19 world, which has not yet happened.

Regarding performance, it is of little surprise that Industry 1: wholesale and retail trade divisions and organisational size were positively related to financial performance at Time 2. However, again, operating efficiency (i.e., adopting a cost leadership approach where competitive advantage is achieved by having the lowest cost of operation in the industry) was significantly negatively related with financial performance at Time 2 reinforces that adopting this low-cost approach during a time of uncertainty seems to be counterproductive for financial wellbeing and can be further investigated.

Policy Implications and Directions

These preliminary findings have policy implications, and also point to research opportunities. First, we echo previous calls for a considered approach by the government on developing ecosystems that support SMEs, especially during crises (Eggers, 2020; Thukral, 2021). This transitions into our second point and findings as to the differences in how SMEs respond and perform in the early stages of COVID-19. We believe that these can be used to determine the type of support provided and where it is most usefully channelled. For example, we present evidence of factors at the industry level that can be harnessed to better contribute to the small business ecosystems. This suggests that it may be possible for cross-industry partnerships and knowledge sharing. A third point we believe is a key one to showcase—our findings reveal that, contrary to some suggestions, entrepreneurial and small businesses are not necessarily likely to have the capacity or perhaps even the ability to recognise and respond to opportunities presented in a crisis (Beliava et al., 2018). Our findings around the lack of radical innovation suggests a more pragmatic and prudent approach in the face of crises can be addressed through initiatives that support partnerships and a change in mindset (Zutshi et al., 2021). These findings add support to earlier studies (Morgan et al., 2020; Williamson et al., 2021), where smaller firms face both limitations and opportunities when faced with events such as COVID-19; to respond to change, SMEs may need support to develop innovation capabilities, while addressing innate rigidities. What is exciting is our fourth point, the finding that innovative behaviour was more enduring among female-owned small businesses, and we see this as an area for future research. It also presents opportunities for knowledge sharing and support. There are several reports of responses to the COVID-19 crisis, and the findings of the present study point to directions for future research and support for SMEs in this context.

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SME Sentiments, Access to Government Support, and Resilience During a Pandemic

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Introduction

COVID-19 created a disruptive and uncertain economic environment for many small and medium-sized enterprises (SMEs) (Gregurec et al., 2021; Rodrigues et al., 2021). Whilst public health orders like prolonged lockdowns have been in place, SMEs offered goods and/or services that were no longer in demand; had difficulty accessing supplies; and many experienced a labour shortage. Consequently, the profitability of many SMEs

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struggled, causing them to cease operation, temporarily or permanently (Dai et al., 2021; Sun et al., 2021).

After managing one year of COVID-19 in 2020, New South Wales witnessed an outbreak of the Delta variant in June 16, 2021 (Cockburn, 2021). This compounded the challenges and disruption from the previous wave on the operations and viability of SMEs in the region. In Greater Western Sydney (GWS), SMEs account for most formal employment, with approximately 60% of all New South Wales small businesses in this region (ABS, 2021).

The sequelae that many SMEs experienced due to COVID-19 have had, and continue to have personal, social, and economic implications. At the personal level, many SME owners and their staff are now unemployed (if not bankrupt), potentially igniting a host of mental health issues (Belghitar et al., 2021; Berkowitz & Basu, 2021; Liu et al., 2021; Posel et al., 2021). At a social level, the demise of SMEs can compromise innovation and social wellbeing (OECD, 2017) because SMEs are typically flexible, agile, and responsive, seeding opportunities for creativity (Petzold et al., 2019; Torchia & Calabrò, 2019). Furthermore, when SMEs struggle to flourish, so too do economies (Gilfillan, 2020)—as the World Bank (2021) reported, 'SMEs account for the majority of businesses worldwide and are important contributors to job creation and global economic development. They represent about 90% of businesses and more than 50% of employment worldwide' (2021, para. 1).

To prevent, or at least mitigate, the aforesaid sequelae, many governments, worldwide, have extended a supportive hand to SMEs (Fatouh et al., 2020; TMF Group, 2021). Recognising the importance of SMEs and potential value of public funds (Dvouletý et al., 2021), governments around the world including Australia have offered schemes to SMEs to sustain them. Despite the potential benefit of government schemes, it is unclear whether and how SMEs in Greater Western Sydney harnessed these schemes and the associated effects. Accordingly, this chapter considers: how confident SMEs are to weather the storm that

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is, SME sentiment; whether and how they accessed government support, and the perceived effects; as well as how they built resilience to optimise sustainability. These lines of inquiry were examined via a survey of SME owners conducted in mid-2021.

This chapter is structured as follows. First, it commences with a review of relevant literature on business sentiment, government schemes—particularly those for SMEs, and resilience. After describing and justifying the research method and the associated findings, the chapter concludes by explicating the associated implications for owners of SMEs, policymakers, and scholars. The results are discussed under four key headings and themes: 'The Impact of COVID-19 on SMEs'; 'Grants and Support Measures Accessed by SMEs'; 'Business Sentiment on Future Outlook'; and 'Resilience during COVID-19'.

Literature Review

Business Sentiment and Decision-Making

Business sentiment surveys can helpfully gauge how SMEs manage and/ or will manage complex, if not an unpredictable business environment (Gholipour & Foroughi, 2020). They are a popular measure of firms' optimism and pessimism towards their near-future business performance. They represent self-reliant determinants of key macroeconomic variables that are useful to indicate the overall outlook of the economy (OECD, 2021). Business sentiment surveys have been used across different disciplines, but the focus has been on establishing relationships with various economic variables to facilitate strategic decision-making (Bachmann & Elstner, 2015). For instance, business sentiment and investment, business sentiment and consumer consumption trends (Khan & Upadhayaya, 2019). Business sentiment surveys therefore represent a key resource to guide decisions made by, or decisions that affect owners of SMEs, especially those that have the potential to support SMEs during major disruptions, like COVID-19 (Friesner et al., 2013). Business sentiments survey can also clarify what helps or hinders resilience amongst SMEs.

Policy Responses

Globally, governments have put in place various policy measures to support SMEs to mitigate the pandemic's impact (World Bank, 2020).

The OECD periodically surveyed SME policy responses by governments in more than thirty countries (including non-OECD countries) and identified a raft of policy response measures that governments implemented to support SMEs (OECD, 2020). These include direct lending, structural policies, loan guarantees, non-banking financial support, grants and subsidies. The World Bank further expanded these surveys to cover a larger global sample of more than sixty countries. They evaluated government support measures for SMEs in labour-related issues, deferrals, financial instruments, and structural policies (World Bank, 2020). According to the World Bank SME Support Measures dashboard, the most used measures by governments were income and profit tax deferrals, loan guarantees and direct lending, and wage subsidies (World Bank, 2020). In Australia, federal and state governments used a variety of these measures. Specific government initiatives targeting SMEs include the JobKeeper scheme to retain employees, instant asset write-offs, recovery loans, and grants and subsidies (Australian Government, 2021). Policy responses vary from country to country. The evolving nature of COVID-19 has resulted in new measures emerging in response to the changed circumstance, thereby impacting the evaluation of the effectiveness of the efforts (Gregurec et al., 2021; Rodrigues et al., 2021). This is a gap which can be addressed by research such as the current study.

Resilience

The meaning and concept of resilience are cross-disciplinary, with no agreed definition of the notion, particularly in the context of SMEs and access to support mechanisms during disruptive periods (Conzi et al., 2017; Herbane, 2019). Drawing on psychological research (Horne & Orr, 1998), organisational resilience is characterised by an organisation's ability to face reality; make sense of adversity, and ritualise ingenuity (Coutu, 2002). Research on SME resilience has increased but the topic remains under-investigated with inconclusive results that do not identify strategies or factors that positively or negatively influence the resilience of these enterprises (Conzi et al., 2017; Gunasekaran et al., 2011; Pal et al., 2014). This inadequacy has never been quite as prominent and essential as it has been in the aftermath of the COVID-19 crisis. There is a gap in studies examining the link between business sentiment, access to support mechanisms and resilience during disruptions such as that presented by the COVID-19 pandemic. Previous studies on resilience (e.g. Fang et al., 2020; Pal et al., 2014) have also tended to be qualitative with case studies as the commonly used research method. To address these gaps, the current study adopts a quantitative approach to answer the following research questions in the context of SMEs in GWS:

RQ1: What is the impact of COVID-19 on SMEs in Greater Western Sydney (GWS)?
RQ2: What are SMEs perceptions of the usefulness and accessibility of government support mechanisms available in response to the COVID-19 pandemic?
RQ3: What are the business sentiment and outlook of SMEs given their COVID-19 experience?
RQ4: How resilient are the SMEs, and what are the determinants of resilience in the GWS region?

The results of this study will inform public and private sector programs and policies, business education, and industry practice.

Theoretical Framework

In the current study, Organisational Resilience is defined as a firm's ability to cope with and absorb disturbances (Holling, 1973), recover from shocks, and adapt to disruptions (Roundy et al., 2017). In determining the factors that affect organisational resilience, it is vital to consider the capabilities and capacities of the business. The Resource-Based View emphasises the role of resources in determining a firm's performance and explaining why some outperform others. Companies with more resources in terms of financial, human capital, and other assets are less vulnerable and have fewer negative returns during a crisis (Cheema-Fox et al., 2020). Well-endowed firms deal with unexpected changes through anticipation and planning to reduce their vulnerability (Sullivan-Taylor & Branicki, 2011; Weick & Sutcliffe, 2007). They take advantage of their resources to adjust their operations, such as making quick shifts to e-commerce or increasing home delivery services during the pandemic. For smaller firms, resource constraints inhibit resilience, whilst the opposite is an enabler (Sullivan-Taylor & Branicki, 2011). The resources of a firm are not limited to its own. It can draw resources from its partners in the supply chain, business ecosystem, or social network. During a crisis such as

COVID-19, it can obtain resources made available through public policy in the form of government grants and other measures (OECD, 2020).

The sentiments of a firm or its leaders may be viewed as coping mechanisms in times of disruptions. Studies about individual resilience have reported that positive sentiments are a path to resilience (El-Masri et al., 2020). Researchers in social psychology (e.g. Segovia et al., 2012) found that optimists view a tragic event as temporary rather than permanent. They display superior adaptation to stressors and higher levels of resilience when facing challenging situations (Snyder et al., 2010).

From an organisational perspective, the assurance of optimism by a firm's leader contributes to a collectiveness that promotes cognitive resilience (Lengnick-Hall & Beck, 2009). In a qualitative study conducted by Pal et al. (2014), it was found that collectiveness has a strong to moderate influence on economic resilience. Researchers argue that in small enterprises, the entrepreneur's optimism plays a critical role in the recovery and, hence, the business's resilience. In a study of tourism business owners during the 2016 Kaikoura earthquake in New Zealand, for instance, it was found that the owners' optimism was instrumental in developing coping strategies that led to organisational resilience (Fang et al., 2020). The optimistic owners and managers were more likely to use positive and rational thinking, were more aware of the changing environment, and thus tended to be more resilient. The link between optimism at the individual and resilience at the organisational level hinges on the idea that resilience is multilevel, i.e. individual and group and that these levels interact to achieve organisational resilience (Lengnick-Hall & Beck, 2009). Thus, entrepreneurs who possess optimism at the individual level are more likely than not to influence the resilience of their businesses.

The central proposition of this study is that SME resilience during COVID-19 is determined by the firm's resources and sentiments, as shown in Fig. 1.

Research Setting

GWS is home to approximately one in every 11 Australians and has the third largest economy in Australia (Data sourced from Australian Bureau of Statistics 2016; Census Data, 2016). Encompassing 13 local government areas, it is a culturally rich and growing locale—residents represent over 170 nations and speak more than 100 different languages; approximately 35% of them were born overseas; the area is the largest

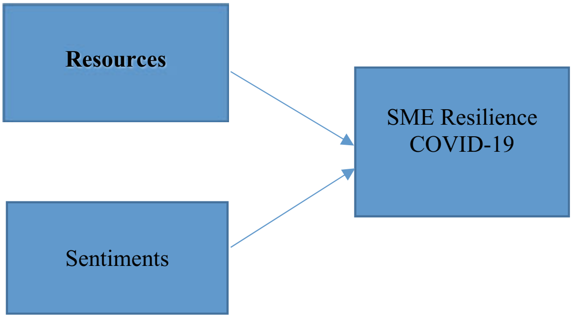

Fig. 1 Factors contributing to SME resilience during COVID-19

single Indigenous community in the country; and, by 2036, the region is expected to be one of the largest growing urban populations in Australia (ABS, 2021). In GWS, SMEs account for most formal employment, with approximately 60% of all NSW small businesses in this region (ABS, 2021). GWS, Australia, was purposely selected because of the high number of SMEs in the area and COVID-19 cases, which prompted a lockdown period of over 100 days (Hanrahan, 2021; NSW Health, 2021).

Methodology

Consistent with the research questions, an online survey was conducted targeting businesses located in the thirteen local government areas comprising the GWS region. The survey consisted of business issues and sentiments during the financial year 2020–2021, coinciding with the COVID-19 disruptions. The survey was administered online via Qualtrics and deployed through various links in collaboration with industry partners and a market research agency. Although the survey attracted more than 300 respondents, only 238 SMEs or businesses with less than 200 employees were considered for this study. The profile of the sample firms surveyed is shown in Table 1.

Table 1 Summary profile of respondents

Number of employees			*Position of survey respondents*	
**N238*	*Frequency*	*Percent*	**N238* *Role*	*Frequency*
Sole trader/ self-employed	44	18.5	Administration	12
0–1	61	25.6	CEO/President	25
1–5	35	14.7	Director	65
5–19	38	16	Finance/accounting	11
20–100	48	20.2	Manager	48*
101–199	12	5	Owner/proprietor	59
			Other	18
			*Includes functional managers	

Company size		
*N238	Frequency	Percent
Micro*	105	44.1
Small	73	30.7
Medium	60	25.2

Industry sector	*Percentage*	*Revenue levels*	*Percentage*
Agribusiness	1	\$0–\$4 million/annum	68
Education	8	\$5–\$10 million/annum	13
Health	7	\$10–\$14 million/annum	5
Hospitality/tourism	4	\$15–\$20 million/annum	3
Investment/financial services	5	\$21–\$50 million/annum	6
Manufacturing	11	\$51–\$100 million/annum	5
Professional services	18	\$101–\$200 million/annum	1
Property/construction	12	Total	100
Retail/wholesale	11		
Transport/distribution	6		
Technology	3		
Other	15		
Total	100		

Results and Discussion

The Impact of COVID-19 on SMEs

Just over half of the respondents (54.6%) indicated that, in the past 12 months, their business had experienced a decline in revenue—that is, the income generated from the sale of goods and services whilst under one-third (29.0%) indicated a rise.

COVID-19 affected the SMEs in myriad ways. For example, according to approximately one-third of the respondents (34.5%), COVID-19 had a positive effect on remote working arrangements. Furthermore, approximately one-quarter (25.2%) indicated that the pandemic positively affected the resilience of their SME. However, approximately half of the respondents indicated COVID-19 negatively impacted customer engagement (52.9%) and sales (52.1%). Despite the ways in which the pandemic influenced the SMEs, the largest proportion of respondents noted that it did not affect the skillset of their workforce (48.7%) or their capacity to retain talent (42.9%).

According to the highest proportion of respondents, uncertain government restrictions (23.0%) and driving sales (13.7%) were particularly difficult during the last 12 months. Conversely, excessive debt levels (1.3%) and new competitors in the market (1.2%) were least difficult.

The impact of COVID-19 on company revenue was highest amongst micro-enterprises. More than 70% experienced a decline compared to only 59% and less than 40% amongst small and medium-sized firms, respectively. The negative relationship between revenue change and firm size is statistically significant ($\chi^2(4, 217) = 16.87$, $p = 0.002$). A comparison of means also showed the change in revenue to be significant across the three groups, with micro registering an average of at least −20%, small −12%, and medium +0.96% ($F(2, 214) = 12.49$, $p < 0.001$). Of the 217 respondents who reported the level of change in their revenue, approximately 17% experienced a decline of at least 48%. In terms of the industry sector, only three, namely agribusiness, manufacturing, and retail/wholesale had more than 50% of firms reporting a rise or no change in revenue.

Grants and Support Measures Accessed by SMEs

Both the state and federal government's support for businesses during the COVID-19 pandemic was not rated highly by SMEs in the study.

SMEs were asked to rate the government's support for businesses during the COVID-19 pandemic on a continuous sliding scale from 0 to 10, with endpoints labelled 'very inadequate support' and 'excellent support'. SMEs provided a mean rating of 4.74 for state government support, suggesting that support was not adequate and 5.30 for federal government support suggesting that it was just adequate (yet more adequate than the state support).

Although not statistically significant, the findings suggested that the larger the business, the more adequate the government support tended to be, as shown by average mean ratings in Table 2. This finding may be due to smaller businesses unable to take full advantage of all types of government assistance available. For example, assistance such as JobKeeper, which was designed to assist with employee wages would not be appropriate for micro-enterprise and small businesses that do not employ many, if any, staff.

Close to 70% of SMEs in the study applied for government schemes to support them during COVID-19, which means more than 30% did not. Of the wide variety of schemes available, the JobKeeper subsidy was most popular, applied for by 45.4% of respondents, closely followed by COVID-19 Business Grants (34.9%), the Cashflow Boost program (27.3%), and JobSaver (24.4%). A range of programs that were applied for are shown in Table 3.

Although almost 70% of SMEs applied for COVID-19 specific government assistance, only 63.8% were successful in receiving assistance. JobKeeper was received by the highest proportion of SMEs (41.6%), followed by 23% receiving the Cashflow Boost, and another 23% receiving the COVID-19 Business Grants. A further 16% were successful in

Table 2 SME rating of state and federal government support

Company size	*N*	*Mean rating*	
		*Federal support**	*NSW support***
Micro	105	4.96	4.48
Small	73	5.41	4.56
Medium	60	5.75	5.40
Total	238	5.30	4.74

Note *F (2, 235) = 1.79, p = 0.17; **F (2, 235) = 2.67, p = 0.07

Table 3 Applications for COVID-19 government assistance schemes

	Responses		*Per cent of cases N = 238*
	N	*Per cent*	
Cashflow Boost Program	65	12.9	27.3
COVID-19 Business Grants	83	16.5	34.9
COVID-19 Disaster Payments	52	10.3	21.8
JobKeeper or salary subsidy	108	21.4	45.4
JobSaver	58	11.5	24.4
Land Tax Deferral or relief	9	1.8	3.8
Loan repayment moratorium	13	2.6	5.5
Power bill reduction	13	2.6	5.5
Rental waivers	24	4.8	10.1
Support to retain apprentices/trainees	5	1.0	2.1
None of these	74	14.7	31.1
Total	504	100.0	211.8

receiving COVID-19 disaster payments; 14.7% JobSaver; and 5.9% Rental Waivers. In addition, 22.7% of SMEs applied for other forms of support such as health, safety, and wellbeing initiatives (8.8%), vocational and university training (8.4%), and leadership programs (4.2%). Substantially less than half of these applications were successful.

SMEs that were successful in receiving government assistance reported the most useful assistance to be JobKeeper (29.4%), Cashflow Boost Program (16.6%), and COVID-19 Business Grants (15.4%). These was closely followed by COVID-19 Disaster Payments (9.8%) and JobSaver (9.5%). Free responses provided by respondents suggested that the 2020 support was more reasonable and appropriate than 2021 where tighter lockdown restrictions made it more difficult for SMEs.

Suggestions as to other government support that would be useful included tax relief, such as reducing company and personal tax, halting payroll tax, assistance with GST or deferment of taxes. In addition, there were mixed responses regarding the lockdown restrictions enforced by the state government across GWS, with some respondents suggesting that earlier, tighter lockdown restrictions would have assisted and others arguing that there should have been no lockdown restrictions.

Regarding the accessibility of government support mechanisms available in response to the COVID-19 pandemic, 10% of the respondents commented that they found it difficult and costly to apply for government assistance, with support taking too long to arrive. For example, one respondent commented ‘The NSW Govt support has not arrived yet despite promises it would be supplied over a week ago. We have no update on our applications status either’. Another respondent suggested that there should have been fewer programs and longer timeframes to apply for assistance:

> Fewer programs and longer time frames. The multiple number of programs with varying qualification/compliance requirements were confusing and a burden on human resources when those resources would have been better applied to business matters. So much time was spent on telephone hold trying to get better guidance on measures available, and information from call centre staff varied greatly. [Respondent 74]

Some businesses needed to pay their accountant to support and assist them in applying for grants which only added to the time and costs involved. Other comments regarding accessibility were related to eligibility, with respondents suggesting that there needed to be clearer eligibility requirements and more realistic support for micro-enterprises, particularly those with an annual turnover less than $75,000 who would have benefited greatly from even a small amount of assistance. The owners of these micro-enterprises also tended to be those who were the main income earner, with dependants and additional carer responsibilities, such as single parents. There were also instances where SMEs felt that they were unreasonably ruled ineligible for government support, such as new businesses who did not have previous years’ data available to demonstrate a loss in revenue.

There were 13 free responses from SMEs suggesting that government support for faster vaccination of the population would have been more helpful, as would support in allowing employers to require all employees be vaccinated so to be able to provide a safe workplace. Findings also suggested that small businesses with fully vaccinated staff should be able to remain open for trade.

Many SMEs continue to be challenged by the economic effects of the global COVID-19 pandemic. This is particularly evident in the open-ended responses to the survey that indicate the need for ongoing support beyond the duration of the pandemic and that an additional cashflow boost of some sort would be most useful. The uncertain nature of the duration of the COVID-19 pandemic and subsequent continued impact calls for a pro-active framework for continuous support for SMEs beyond the duration of this pandemic. Moreover, SMEs already operate in a difficult resource constrained environment and instability in the sector has repercussions for the overall economy, especially in NSW where SMEs are the major employers. Some respondents also highlighted the need for mental health support.

Business Sentiment on Future Outlook

To establish business sentiments, the survey asked respondents to indicate their investment plans followed by an evaluation of their business and industry outlook post-COVID-19. SME confidence in prospects is often reflected by their confidence in investing in various cross-functional areas. The sample firms exhibited positive outlook and confidence in planning to invest in a variety of areas as both a survival and growth strategy. The results showed a very close ranking in importance of General Marketing Expenditure (19%); New Products (17%); E-commerce Capabilities (17%), followed by Equipment (16%). The other core future investment areas were Property (11%); Research and Development (10%), and Human Resources (10%). The ranking of investment areas is important considering that traditionally marketing related expenses are the top cost centres SMEs aim to reduce during a disruption or in a resource-constrained environment such as post-COVID-19. The challenges faced by SMEs during COVID-19 reinforced the importance of e-commerce capabilities and product diversification to continue serving customers hence, their importance in the rankings. This reinforces the emergence of customer-centric innovations as a foundation for both growth and resilience for SMEs dealing with a post-crisis context as opposed to the traditional assumptions that SMEs tend to disinvest in marketing-related costs during and after a crisis.

Business sentiments were covered in the survey by way of two questions: How positive or negative are you about your business outlook in 2021–2022? and How do you feel about the future of your industry? The responses to both questions were recorded on a continuous scale from 1 to 7. A comparison of the mean ratings of these statements shows a statistically significant difference for business outlook and at a lower significance level for future industry outlook (Table 4).

Table 4 Business and industry outlook

Company size	*Business outlook 2021–2022**		*Future industry outlook***	
	N	*Mean*	*N*	*Mean*
Micro	104	3.87	102	4.35
Small	70	4.07	72	4.42
Medium	55	4.91	55	4.88
Total	229	4.18	232	4.50

Note *$F(2, 226) = 8.30$, $p < 0.001$; **$F(2, 229) = 2.37$, $p = 0.096$

The sentiments of the larger companies in the sample are more positive than their smaller counterparts. The future industry outlook appears to have a slightly higher rating than the short-term business outlook which is understandable considering the ongoing restrictions at the time the survey was conducted.

Resilience During COVID-19

SME resilience was measured using three items on a continuous scale from 1–5 with endpoints labelled strongly disagree and strongly agree.

> We have been able to cope with the changes in our business brought on by COVID-19.
> We have been able to adapt our business operations to the COVID-19 disruptions.
> We have been able to respond quickly to the adverse effects of the COVID-19 disruption on our business.

Scale reliability is indicated by a Cronbach alpha of 0.91. The scale items were adapted from Parker and Ameen (2018). The average rating of the three items represents the resilience score of each respondent. The scores were consistent with the revenue changes experienced by the sample firms during the pandemic. A simple correlation analysis would show a statistically significant relationship between firm resilience and change in revenue ($r(215) = 0.47$, $p < 0.001$).

The variation of resilience across company size and industry was tested, and the results showed a statistically significant difference in the former

Table 5 Resilience ratings by industry

Industry	*N*	*Resilience*
Agribusiness	3	4.19
Manufacturing	25	3.88
Investment/financial services	12	3.83
Health	17	3.68
Hospitality/tourism	9	3.57
Professional services	42	3.54
Education	20	3.40
Property/construction	28	3.33
Retail/wholesale	26	3.23
technology	7	3.15
Transport/distribution	13	3.18
Other	36	3.30

(F (2, 214), $p < 0.001$) but not the latter. Medium-sized firms have a higher average rating (3.98) compared to small (3.77) and micro (3.10), indicating a positive relationship between resilience and company size. Although the average resilience ratings are not significantly different across industry sectors ($p > 0.10$), Table 5 shows that agribusiness and manufacturing are the top two resilient sectors.

Factors affecting resilience. Following the framework presented earlier, a multiple regression model was estimated to determine the factors affecting resilience. The measures used are summarised in Table 6.

The descriptive statistics and correlation matrix for all variables are shown in Table 7.

Results and Discussion

Ordinary least squares regression was used to test the proposed model. The estimated regression coefficients (beta) and their statistical significance are shown in Table 8. The overall model fit as measured by the adjusted R^2 is 0.43 with an F value significant at less than 0.001.

The estimated model shows that SME resilience is significantly related to the number of COVID-19 grants received, federal government support, and the sentiment variables, namely, the business outlook for 2021–2022 and the future industry outlook. Annual revenue, a measure of the firm's resources, is significant only at the 10% level.

Table 6 Resilience model: constructs and measures

Constructs/variables	*Measures*
Resources	
Company size	Number of employees—six categorical scale
Revenue	Annual revenue—seven categorical scale
Govt support—COVID-19	Number of COVID-19 grants received
Govt support—Other grants	Number of other grants received
Fed govt support rating	How would you rate the federal govt support for business (0–10)?
NSW govt support rating	How would you rate the NSW govt support for business (0–10)?
Sentiments	
Business outlook for 2021–2022	How positive or negative are you about your business outlook (1–7)?
Future industry outlook	How do you feel about the future of your industry (1–7)?

All the significant variables have the expected positive sign except for the number of COVID-19 grants received, which is negative. This negative relationship indicates that those who rated high on resilience received fewer grants. Theoretically, it was assumed that these grants constitute a resource that enhances resilience. However, the OLS results show otherwise, implying that less resilient firms benefited from more COVID-19 grants (which is the intention of the government). The number of COVID-19 support grants received by firms experiencing a decline in revenue was found to be significantly greater than those with nil or positive change in revenue ($F(2, 214) = 6.83$, $p < 0.001$).

The positive impact of the rating given to federal government support confirms its expected positive relationship with company resilience, but the state government's rating is not significant. The firm's annual revenue, which reflects its financial position and ability to withstand disruptions, is positively related to resilience. Although not as highly significant as the other resource variables, the regression results confirm that it plays a role.

The role of sentiments is confirmed by the statistically significant effects of the two outlook variables. The larger beta coefficient and lower p-value of future industry outlook further imply that the long-term, broad industry prospects have a more significant influence on resilience than the short-term 2021–2022 business prognosis. This finding is meaningful

Table 7 Descriptive statistics and correlation matrix

Variables	*Mean*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1. Firm resilience	3.47	0.95	1.00								
2. Company size	3.09	1.55	0.26	1.00							
3. Annual revenue	1.83	1.51	0.27	0.63	1.00						
4. COVID-19 grants	1.37	1.39	−0.10	0.13	−0.004	1.00					
5. Other grants	0.11	0.34	0.08	−0.19	0.01	0.11	1.00				
6. Federal government support	5.30	2.67	0.51	0.16	0.15	0.20	0.07	1.00			
7. NSW government support	4.73	2.61	0.51	0.13	0.22	0.04	0.08	0.77	1.00		
8. Business outlook 2021–2022	4.18	1.60	0.53	0.24	0.18	0.01	0.06	0.47	0.47	1.00	
9. Industry outlook	4.50	1.56	0.49	0.14	0.05	−0.03	0.03	0.39	0.37	0.71	1.00

Table 8 OLS Regression analysis results (dependent variable: SME resilience ($N = 238$))

Independent variables	*Beta coefficient*
Company size	0.09
Annual revenue	0.11*
COVID-19 grants (No.)	−0.17***
Other grants (No.)	0.06
Federal government support rating	0.25***
NSW government support rating	0.13
Business outlook 2021–2022	0.16**
Future industry outlook	0.21***
R^2	0.453
Adj R^2	0.433
Overall model F(8, 218)	22.61****
VIF range	1.02–2.76

Note *p = 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001

because it confirms that optimists view the pandemic as temporary and that their business can cope, adapt, and respond to the disruptions.

Practical Implications

The demand for supportive mechanisms suggested by respondents such as reducing company and personal tax, halting payroll tax, assistance with GST or deferment of taxes provides an opportunity for the government to broaden the scope of their interventions. Support mechanisms should also consider other key areas, such as support for mental health programmes to assist SME owners in coping with the challenges they face. SMEs traditionally operate in a resource-constrained environment, which prioritises investment in marketing and e-commerce innovations. However, the current study demonstrates the transition to value these areas for survival, growth, and resilience. Through these practical insights, SMEs can revisit their investment priorities in a disrupted environment with different customer touchpoints for accessing products and diverse needs. This could be addressed by SMEs investing in and accessing free training programmes to enhance their capabilities through government initiatives such as the Business Connect programme. SME owners also need to acknowledge that a positive outlook is vital in achieving business resilience and should thus promote optimism amongst its employees.

Policy Implications

Policymakers should consider a balanced approach to developing supporting policies and programmes for SMEs that accommodate the importance of the collective business industry input as evident from the value that SMEs see in their business sector compared to their position as businesses. Since a proportion of the respondents indicated that they faced difficulties accessing government support schemes, the government should engage SMEs and their representative bodies to gather more data on these SMEs' experiences. Insights from this group can be important in framing the design of future support programmes in collaboration with various stakeholders. Although co-design processes require time and effort and thus can delay scheme development, they are likely to culminate with measures that SME owners deem favourably—this is because the co-design approach prizes and harnesses the expertise of those typically relegated to the sole role of end-user.

Conclusion, Limitations, and Future Research Directions

Understanding the predicament of contemporary SMEs in GWS during the COVID-19 pandemic and delta outbreak offers insights into designing better policies and initiatives that promote resilience and innovation within the workplace and GWS. For scholars, this chapter provides fertile ground for research that serves to build on the findings. Beyond the customary call for more research, what is required is the scholarship that clarifies SME owners' experiences, needs, and perspectives beyond GWS and nations whose governments offered different or no forms of support to SMEs. Also required is research that involves the development and evaluation of different interventions that aim to build resilience which might entail digital and policy interventions that bolster their capacity to be innovative and sustainable (Blanchard et al., 2020; Caballero-Morales, 2021). Evidence-based interventions are particularly important, given the likelihood of future pandemics and the associated consequences for SMEs and economies (Jordà et al., 2021; Lu et al., 2020).

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Entrepreneurial Ecosystem in India

Sujana Adapa and Subba Reddy Yarram

Introduction

Entrepreneurship is currently a commonly heard buzz word in many countries. Across the globe, many countries and national leaders understand the importance of promoting entrepreneurship for business initiation, growth, success and employment creation; therefore, it is vital that countries focus on creating a conducive entrepreneurial environment in order to foster an entrepreneurial mindset and venture creation capabilities. Many countries around the world are striving to create an enabling entrepreneurial ecosystem that not only includes the several stakeholders identified as the key actors but also highlights entrepreneurial processes, relevance of interactions and the importance of sustained long-term relationships (Mason & Brown, 2014).

International and national literature on the entrepreneurial ecosystem identifies the six domains of markets, finance, culture, people, policy

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and institutions (Isenberg, 2011) that contribute to creating a conducive and/or non-conducive environment. The entrepreneurial ecosystem also involves a mix of factors that are external and internal to the entrepreneur. The external factors are beyond the control of entrepreneurs and the internal factors can be within the control of entrepreneurs (Feld, 2012). Therefore, the context and geographic fabric that embraces the cultural, social and institutional aspects influences the growth and success of entrepreneurship (Jha, 2018).

The entrepreneurial ecosystem in India is identified as the third largest and fastest growing in the world (World Economic Forum, 2020). Every year, more than 10,000 companies emerge in India, and this vibrant start-up activity is partly attributed to deregulation in India in the 1990s and the entry and establishment of multinational companies (Krishnan, 2010). Over the past few decades, market competition has increased fiercely, which has required domestic companies to enhance their capabilities to meet the standards of foreign multinationals and to innovate for the international environment (Jha et al., 2016). More recently, the Government of India's (GOI) initiative known as Start-up India (Make in India/ Skill India/Digital India/Ease of Doing Business in India) (Mittal & Garg, 2018) has provided support for the entrepreneurial environment. Also, several state governments are actively promoting business creation through incubators and start-up hubs (Dutta, 2016). Therefore, in India, the support that is available to aspiring and existing entrepreneurs from the national, state and local government authorities has been pivotal in the promotion and creation of entrepreneurial ventures.

Generally, 'doing business' is not seen as a career option in India. The prevailing culture and the existing stereotypical beliefs in the Indian context posit that it is those who do business are either not well educated or is for the more experienced (for example, a family business or someone who has cherished business success for over a decade), and is a view that limits the progress of entrepreneurial ventures in India (Jha et al., 2016). 'Doing business' is also considered to reflect the lack of a regular job, lack of a monthly income and lack of regular workflow (Jha, 2018). Amongst youngsters, fear of failure also contributes to the lack of business acumen and an entrepreneurial mindset. However, the available 2019 data indicate that India has had a significant increase of up to US$1.4 billion from money raised from start-ups (David et al., 2020).

In particular, the growth of entrepreneurial ventures in cities like Bangalore and Hyderabad has gained more visibility in the last five years.

This is attributed to the affinity towards technology, the software boom and investment in incubator/accelerator programs in these cities (Jha, 2018). Further, the state governments have embraced a shift in the business culture to foster innovation and creativity, and have disseminated the success in businesses that had the opportunity to integrate technology into day to day business practices, and there has also been wider publicity of alternative funding sources to the traditional finance sources, which has attracted greater attention and interest in these metro cities (Jha, 2018). Therefore, the overall status of entrepreneurship in India has shown a positive trend over the past five years and is currently on the rise, with several innovations in the pipeline that can solve real-life problems (World Economic Forum, 2020).

The overarching aim of the present study is to understand the existing entrepreneurial ecosystem in India and provide answers to two research questions: (1) What are the enablers in the entrepreneurial ecosystem in India? and (2) What are the key barriers in the entrepreneurial ecosystem in India? The next section of this chapter presents a brief overview of the relevant literature, which is followed by the research methodology. The following section discusses the results obtained in the present study and presents the key findings that emerged. The last section presents the conclusions of this study and outlines the study limitations and avenues for further research.

Literature Review

An entrepreneurial ecosystem is an environment where there are interactions between and across several actors and key players that are both external and internal to a business that leads to effective networking between and across various stakeholders. The entrepreneurial ecosystem concept is relatively new, dating to the early 2000s, and has emerged from the fields of strategic management and regional development (Bate, 2021). The extant literature identifies the role played by the specific economic, socio-cultural and institutional environments of a context in exerting an impact on entrepreneurial groups (Audretsch & Belitski, 2016). Similarly, Xie et al. (2021) identify the relative importance of an entrepreneurial ecosystem in influencing policy formulation that has a direct impact on entrepreneurs. Most importantly, the recent literature also highlights the profound impact of an entrepreneurial ecosystem on enhancing the quality and quantity of entrepreneurial ventures (Acs et al., 2018; Alaassar et al., 2021).

Brown and Mason (2017) state that an entrepreneurial ecosystem consists of several actors, institutions and processes that influence the cultural, economic, institutional and socio-cultural environment of entrepreneurial ventures (Molina & Maya, 2017; Spigel, 2017). The actors in the ecosystem include various internal and external stakeholders that have a direct and/or indirect influence on entrepreneurs and their ventures. These actors further associate themselves with several organisations of relative importance, such as other firms, marketing intermediaries, financial firms, physical distribution agencies, venture capitalists and angel investors. Institutions may potentially include public and/or private sector bodies, university-affiliated research centres and government-supported incubators/accelerators (Audretsch et al., 2021). Processes will foster the interconnections and interplay of several external and internal factors that influence innovation and facilitate the creation of the entrepreneurial mindset and entrepreneurial ventures (Brown & Mason, 2017).

Entrepreneurship needs to thrive and survive in the local, national and international markets with adequate demand potential created for the products and/or services produced by the entrepreneurial ventures. In order for this to occur and be sustained on a long-term basis, an overarching policy framework that is supported by the government at various levels is assumed to be mandatory.

The existing literature on the entrepreneurial ecosystem in India is scant and warrants deeper investigation. For example, a study conducted by Narayan et al. (2019) finds no relationship between funding and the start-up business stage; however, angel investments in start-ups have increased since early 2000 (Rao & Kumar, 2016). Further, a study conducted by David et al. (2020) outlined the geographic disbursement of start-ups in India and found more clusters in the metropolitan areas. The start-up and entrepreneurial policies progressed by the Government of India have received mixed responses. Although the policies have been seen as a positive step in supporting the entrepreneurial activity in the country, the prevalence of technical difficulties has resulted in ongoing backlash, which raises questions about the scalability of the start-ups (Chillakuri et al., 2020). The knowledge economy of India and digital literacy also contribute to the thriving entrepreneurial culture in India (David et al., 2020).

However, the shift from start-up to scale-up and spin-off warrants further investigation, as this area appears to be underrepresented in the extant literature. The funding sources available in India tend to support more start-up ventures than other ventures (Kaira, 2019), and any support and programs available to businesses beyond the start-up phase lack wider publicity and direction. However, there seems to be the potential for the entrepreneurial ecosystem to embrace innovative businesses beyond the start-up phase so that they can realise their holistic business potential. There also exists unlimited potential to extend the entrepreneurial support beyond the metropolitan areas, as digital literacy levels amongst the population residing outside the metro areas in India are increasing slowly but steadily. It is also envisaged that the market-based economy in India can provide more opportunities when coupled with an enabling entrepreneurial ecosystem. Finally, if the regulatory, legal and knowledge frameworks of the institutional environment are strengthened further, they can positively contribute to the enhancing the entrepreneurial mindset and the growth of entrepreneurial ventures (Audretsch et al., 2021).

The anticipated interactions within an entrepreneurial ecosystem vary depending on the context; therefore, a single framework that encapsulates all of the identified domains and connections in an entrepreneurial ecosystem is rare to find and remains a challenge to date (Bate, 2021). The role of networks within an entrepreneurial ecosystem cannot be discounted, as many, such as mentors, role models, case studies and supporters, happen organically (Lafuente et al., 2021). Often, the interactions within the networks contribute to the success (or failure) of entrepreneurial ventures. The number, quality and type of entrepreneurship in any context is highly related to human capital (Lafuente et al., 2021). The entrepreneurial ecosystem is time (temporal) and space (spatial) bound with disruptions occurring when there are changes to various external and internal factors (Pankov et al., 2021). Therefore, the present study seeks to understand the existing entrepreneurial ecosystem in the Indian context and identify the enablers and barriers that enhance or limit the creation of entrepreneurial ventures.

Methodology

The concept of the entrepreneurial ecosystem is relatively new in the Indian context. Further, the ever-increasing competition in the country and the lack of confidence in the various actors restricts entrepreneurial ideas from being shared freely with others. Therefore, gaining knowledge of the context is critical for understanding the role of the various actors in an entrepreneurial ecosystem. The lack of adequate information on the formation and success of the entrepreneurial ecosystems in the Indian context means that this study needed to be exploratory in nature (Miles et al., 2014), and the researchers identified that in-depth interviews would be the most suitable strategy for gathering relevant information about entrepreneurs' lived experiences (Miles et al., 2014).

Following a random sampling approach, entrepreneurs were initially randomly identified through publicly available sources and recruited with cold calling. Then, a snowball sampling method was followed to reach out to more entrepreneurs. The entrepreneurs who were the respondents in this study were provided with information sheets that explained the overall purpose of the study. The respondents who consented to the interviews were asked to fill out the consent form for research integrity purposes. The in-depth interviews with these entrepreneurs were conducted in the respondents' business establishments or in nearby cafes. A total of 15 in-depth interviews were conducted. The interviews lasted for one to one and a half hours and the respondents were informed that they could choose not to participate in the interview process at any point in time if they felt uncomfortable.

The respondents were asked questions about the enablers and barriers in the entrepreneurial ecosystem, and the researchers followed a probing process to gather more information from the respondents. The data obtained through this qualitative in-depth interview process were transcribed by a professional transcription service provider, and the transcribed interview data were analysed using the qualitative data analysis software NVivo 12. Macro and micro themes of importance were identified on the basis of the conceptual coherence (Miles et al., 2014).

Results and Discussion

The respondents demonstrated considerable variability in their business type. Ten different business types were identified: technology, pharmaceuticals, hatcheries, events, engineering, machinery, restaurants, manufacturing, IT solutions and organic food. Table 1 presents the verbatim comments shared by the respondents that outline the various enablers and barriers to the formation, survival and thriving of the entrepreneurial ecosystem in India.

Entrepreneurial Ecosystem Enablers—The verbatim comments obtained from the respondents elicited the following five themes that primarily act as the key enablers for the success of an entrepreneurial ecosystem for businesses in the Indian context.

1. **Government Policies**—A number of the respondents interviewed supported the existing government policies for business creation and development. However, implementation of these policies in an effective and efficient manner was questioned. The respondents felt that strategic, policy-level support from government for the ideation process needs to be strengthened, and that government also needs to focus on targeted, specialist support according to business type. Therefore, the existing policy framework for supporting businesses (new/growing and established) at the national and state levels acts as an enabler in the entrepreneurial ecosystem.
2. **Taxation Processes**—The majority of the respondents shared positive perceptions about the existing taxation process. Paying taxes to the government is seen as an ethical practice and many respondents considered that this is consistent with their moral values and principles. Some respondents also mentioned that they consider paying taxes as being the right practice to follow. A few respondents aligned tax paying with giving back to the society and considered it to be a responsibility of the start-up founders and business owner-managers. Overall, the respondents demonstrated favourable attitudes towards the existing taxation practices within the Indian context.
3. **Business Regulations**—In general, a number of the respondents indicated that the existing regulations and maintenance of standards are critical for managing the quality of the product or service. The responses also demonstrated general appreciation for the streamlined processes; however, there was some focus on having the efficiency of

Table 1 Enablers and barriers in the ecosystem

No	*Business type*	*Enablers*	*Barriers*
1	Technology (n = 2)	Availability of staff with technology and technical competencies with better educational qualifications	High employee turnover…retaining skilled staff…investment in ongoing training of new employees
2	Pharmaceuticals	Brand generics and distribution are our business strengths. Government regulation is good and much needed in the sector	Intense competition and low margins in the business…as B2B and B2C tend to engage in negotiations…price sensitive market
3	Hatcheries	Unique brand name and certification standards. We plan business to meet the market demand and thus reduce risks if any. We incorporate technology in our business model	…unreliable supply of electricity, water etc. and the use of alternatives is resource intensive in terms of costs
4	Events (n = 2)	Networks and logistics in the current environment are good and the overall understanding of the business has improved	…time and quality delivery of the service to meet ever-changing customers' expectations is a challenge
5	Engineering	Highly specialised niche business that required specialist skills. Therefore, hard to imitate and access to specific niche markets is always possible.	As the IT sector is growing and the pay is good everyone wants to be there. Manpower with skills required for the business is hard to get
6	Machinery	Better environment for the business innovation…new ideas are encouraged and government support is available	Uncertainty in cash flows and sometimes we engage consultants and business advisors to help us with the way forward
7	Restaurant (n = 2)	Better and effective integration of technology presents more opportunities. Customer reach also increased substantially in the past few years	High turnover of employees and stiff competition from a variety of business models…like franchisee restaurants and online food delivery models

(continued)

Table 1 (continued)

No	*Business type*	*Enablers*	*Barriers*
8	Manufacturing	Government policies are good and some improvement lately in the handling of complaints. Taxation process is streamlined…	We are not able to find the skilled manpower…and even the regular manpower…need to depend on migrant labour
9	IT solutions (n = 2)	Opportunities to access funds from other sources increased…however, one needs to have a thorough understanding of these entities before borrowing	Funding is an issue…and not easy to get loans from the banks without any collaterals or properties for the paperwork
10	Organic food (n = 2)	All follow regulations…and police force, tax department, food inspection service etc. improved…good for the business	Regulations are fair but poorly implemented…needs more unpacking for common people and corruption is an issue

the processes enhanced. It was also noted that the regulatory frameworks and quality standards mitigate foreseen or unforeseen risks, if any, and create market demand, although they do not open up international market opportunities for businesses. Business regulations also increase consumer confidence, which allows for deep market penetration of products or services.

4. **Institutional Environment**—The existing institutional environment at the national and at state levels received accolades from the start-up founders and business owner-managers (Singh et al., 2019). Many respondents thought that the practices and plans at the national level mostly align with state government devised practices and plans in the start-up or entrepreneurship area. The respondents also were of the opinion that the various government departments involved in the ecosystem demonstrate synergies. However, a few of the respondents felt that enhanced coordination between the national and state government agencies and authorities could be extended to include the local government level agencies so that more targeted advice and value could be offered to the start-up founders and business owner-managers.

5. **Technology Integration**—The responses revealed two facets of technology: integration within the business and the self-efficacy of the founders/owner-managers and employees. Many of the respondents reported that digital literacy enhances the operational efficiency and reach of the product/service. Moreover, they identified that a social media presence is critical for maintaining customer engagement and stakeholder involvement. Features of the entrepreneurship ecosystem, such as network connections, interactions with various actors and relationship management also require effective technology integration and system solutions, which are enablers in the entrepreneurial ecosystem (Singh et al., 2019).

The previous study by Singh et al. (2019) identified that the overall institutional environment and integration of technology into businesses contribute to entrepreneurship and enhancement of entrepreneurial ventures in India; however, the other enablers of entrepreneurial ecosystem identified in this study emerged as new findings. The extant literature has identified government policies in the business context to be ambiguous, and thus they tend to limit the success of business growth. Similarly, taxation processes have been identified to be cumbersome, with too much emphasis on paperwork and lack of coherent understanding of taxation practices and processes in the business context, and the business regulatory framework was identified to be least understood by founders and business owner-managers.

However, the present study identified that government policies, taxation processes and business regulations are enablers in an entrepreneurial ecosystem, which shows a shift in the socio-cultural domain and the impact of the proactive role played by government in devising appropriate policies to support business initiation, creation and growth. Further, the authorities in India widely publicise the taxation processes to businesses and there is an overall understanding of how tax payments and deductions work. Another possible explanation for the shift in views could be that more educated individuals are entering the entrepreneurship space and acting in a responsible manner.

Entrepreneurial Ecosystem Barriers—The interviewees' responses reported the following five themes to be major barriers to the entrepreneurial ecosystem for businesses in the Indian context.

1. **Market Competition**—In the in-depth interviews, the respondents shared that competition is fierce and ever increasing, irrespective of the sector or type of business (Bate, 2021). Many entrepreneurs also highlighted that the margins that they can expect either in a business-to-business (B2B) or business-to-consumer (B2C) distribution model is low. Further, price sensitivity in the market affects the elastic and/or inelastic demand for the product or service in the consumer and business markets. In the market environment in India, price negotiations are common practice, and the traits and characteristics of the entrepreneurs play a role in setting the final price for the product or service.
2. **Human Capital**—The respondents identified that there are a limited number of staff available on a short-term basis who have the required educational qualifications, technical skills and digital competency to carry out the tasks at hand. Employee turnover has been reported to be high in many businesses across various sectors and retention of staff with qualifications, skills and abilities has been identified as an ongoing problem. This situation means that employers are forced to invest in training to upskill or reskill entry-level staff who are joining the business on a continued and frequent basis, which is a costly exercise that can affect the success of the business.
3. **Inadequate Funding**—Many respondents also stated that funding is one of the major barriers in the entrepreneurial ecosystem. Access to finance for entrepreneurial ventures is not straightforward. The majority of start-up founders and business owner-managers have invested their own capital; however, those respondents who reported that they had approached banks and other financial institutions to access loans had found lack of adequate funding available for business initiation (Jha, 2018). Further, the uncertainty around cash flows in the initial phase of the business and during shocks imposed by the external environment (for example COVID-19) required these entrepreneurs to grapple with additional funding constraints.
4. **Skills Shortage**—The respondents also indicated that in addition to problems with retention of skilled employees within businesses, shortage of skilled workers seems to be a common problem in the Indian context that impacts on the establishment of an enabling entrepreneurial system for businesses. For example, in the manufacturing, construction and engineering sectors, employers regularly

depend on migrant skilled manpower, which requires employers to accept a compromise in other skill areas (e.g., communication).

5. **Corrupt Practices**—Certain business founders and owner-managers indicated that corrupt practices are prevalent, and they also hinder the fostering of an enabling entrepreneurial ecosystem (Jha, 2018). For example, in restaurant businesses and businesses that are reliant on organic and/or sustainable methods of production, the founders and business owner-managers stated that implementation of existing government practices and regulations can be compromised. The respondents also indicated that such corrupt practices hinder quality service delivery and have a profound impact on stakeholder satisfaction.

In several contexts other than India, market competition and inadequate funding have been identified by academic scholars as barriers to fostering an entrepreneurial ecosystem (Bate, 2021; Jha, 2018). However, within the macro thematic categories identified in the respondents' responses, there were unique micro thematic categories of relative importance. For example, within the Indian context, market competition seems to be historically triggered by external forces such as deregulation, globalisation and privatisation. These external forces have enabled forced competition between domestic and foreign multinationals and created an invisible layer of quality and associated market demand. Both domestic and foreign firms compete to keep up with the standards in order to increase their market share.

The unique barriers in the entrepreneurial ecosystem that emerged in this study include retention of human capital, in spite of India being the second most populated country. The impact of this is twofold, as there is migration of educated and qualified people from India to other countries and migration of less qualified and low-skilled people from other countries to India to meet the demand for labour. The theme of human capital also closely aligns with skills shortages, whereby businesses are forced to manage with an available workforce that has lower skill levels, limited abilities and low levels of competence. Further, governments at all levels (national, state and local) need to take strict measures to address the corruption identified in the business environment. The inclusion of local-level public and private authorities that can actively engage with the national and state-level authorities is the way forward.

An entrepreneurial ecosystem will be vital for addressing these identified barriers in a coordinated approach that involves government bodies, business professionals and firm employees. This approach will make it possible to devise targeted strategies that have a focus on retention of human capital, ongoing upskilling of employees and addressing the identified corruption by turning the identified barriers into enablers of an entrepreneurial ecosystem.

Conclusion

This book chapter attempts to understand the existing entrepreneurial ecosystem in India, as the general perception is that developing countries may compromise on this important concept in the entrepreneurship space. Our study indicates that the entrepreneurial ecosystem does in fact exist within the Indian context and offers support to start-up founders and business owner-managers. The primary data gathered from the respondents identified the enablers and barriers to the entrepreneurial ecosystem in the Indian context. Overall, the existing government policies, taxation processes, business regulations, institutional environment and technology integration play a pivotal role in the entrepreneurial ecosystem, and the most common barriers to fostering an enabling entrepreneurial ecosystem are market competition, human capital, inadequate funding, skills shortages and corruption practices.

In order to enhance the effectiveness of the entrepreneurial ecosystem, it is important for key stakeholders to address the existing stereotypical beliefs in the country about 'doing business'. Business as a viable career option needs to be widely publicised through a range of formal and informal communications and through sharing business success stories. These strategies will not only enhance the retention of skilled labour but also facilitate an entrepreneurial mindset amongst aspiring entrepreneurs. From the practical perspective, government authorities may focus on formulation of effective strategies, policies and practices and include local government in the entrepreneurial ecosystem for better coordination and to offer more targeted advice to start-up founders and business owner-managers. Further, best practice business models need to be more widely publicised, and government incentives and programs need to target skilled and unskilled workers.

A methodological limitation identified in the present study was that the findings were obtained from an exploratory study in a specific context, which limits the generalisation and transferability of the study findings to other contexts. Therefore, future studies could increase the sample size, extend the study to various sectors, use the mixed method type of research and extend the context to cross-cultural contexts.

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SMEs and Free Trade Agreements: Engagement and Policy Development

Tanya Jurado

Introduction

At present, globalisation is under scrutiny as the world seeks to grapple with the economic consequences of the COVID-19 pandemic. Already before the pandemic erupted in early 2020, Brexit and the rise of protectionist policies from the Trump Administration in the USA were undermining the apparent consensus around the benefits of globalisation and free trade. COVID-19 therefore exacerbated and accelerated this emerging trend. Under this paradigm, well-functioning global value chains (GVCs) were key to the effective functioning of global economies. SMEs participate in these GVCs as exporters, suppliers to other larger exporting firms, and as importers. Arguably, this avenue of engagement by SMEs with internationalisation can be another driver of productivity, innovation and a contributor to prosperity and wellbeing. It is well known, for instance, that SMEs play an important role in generating employment (Birch, 1979; OECD, 2019) with studies on public policies to support SMEs to create jobs and develop enterprises that grow

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(Arshed et al., 2014), but there has been little research into how trade policy supports SMEs. This study examines how SMEs view FTAs in terms of their own internationalisation experience, and how trade policymakers have sought to take their needs and interests into account over time. This analysis provides insights into how trade agreements are increasingly being used in New Zealand to help facilitate and expand SME internationalisation rates.

Although SMEs are often the focus of government policy and are encouraged to export, there have been varying levels of success in enabling this. In New Zealand, SMEs generate 42% of economic value add (MBIE, 2022) and a quarter of all SMEs export (MFAT, 2018). One of the reasons that exporting rates remain relatively low is because of perceived barriers by SMEs towards exporting and their lack of awareness of trade facilitation policies implemented by governments around the world. Of these, the most common policy instrument is the free trade agreement. FTAs not only affect exports by facilitating market access (e.g. by improving access and even by providing preferences over competitors), but also can help develop and sustain GVCs over time. This is highly important to SME internationalisation as "digital technologies and global value chains offer new opportunities for SMEs to participate in the global economy, innovate and grow" (OECD, 2017). Despite having recognised the importance of SMEs at a domestic level in terms of economic growth, with a range of policies to support them, New Zealand policymakers have generally not considered SMEs sufficiently or specifically when negotiating FTAs, though this is beginning to change.

Background

The term SME typically refers to established enterprises that are owner-operated and are thought to be disadvantaged by information and market asymmetries, but it can also refer to businesses that are new (Bennett, 2012; Greene et al., 2008). When addressing these asymmetries and other perceived shortcomings, governments have developed assistance programmes that have been given various names, including enterprise assistance policy, small business policy, regional economic development policy, and SME policy (Arshed et al., 2014; Jurado & Battisti, 2019).

Small and medium-sized enterprises in New Zealand make up 99% of all enterprises. The bulk of this grouping is made up of micro (97%)—those who employ fewer than 10 employees—and small businesses

(99%), which are defined as those employing less than 20 employees. They generate 28% of all employment and 28% of gross domestic product (MBIE, 2019). Notwithstanding the prevalence of SMEs in New Zealand, over three quarters of all SMEs have never generated overseas income. Most of those who did internationalise did so in the value chain (business supplying other businesses who then export), making GVCs a significant aspect of SME engagement with the global economy (MBIE, 2014).

The low levels of internationalisation have puzzled policymakers as to why SMEs do not take up opportunities to internationalise offered by FTAs (Battisti et al., 2014) as there is evidence that international trade contributes to growth development and prosperity (Dana, 2004) and is considered an important driver of productivity, employment and incomes. In New Zealand, productivity per New Zealand worker is 36% greater if they are in a firm that is exporting, compared to one that isn't (MFAT, 2017) and that employment grows 7–12% faster when New Zealand firms start exporting (Fabling & Sanderson, 2010). International research also tells us that exporting firms pay higher wages—up to 6% more than non-exporters (Bernard et al., 2012). These three premises—productivity, employment generation and prosperity—underline trade policy in New Zealand.

Further, the underlying premise of globalisation is that individuals can trade globally, giving SMEs even more opportunities to engage in trade in a variety of markets and, thus, contribute to market diversification (Sangsuvan, 2015). This study examines the prominence given to MSMEs in New Zealand bilateral and plurilateral FTAs, as a way of understanding how the process of policy development can have an important impact on SME 'buy-in' to make the most of a particular policy outcome which in this case is FTAs. We interview SME exporters about their experiences with FTAs as well as an experienced trade negotiator.

New Zealand Trade Policy

Free trade agreements (FTAs) are a mechanism increasingly used by governments around the world to improve their connectivity, increase trade flows and boost domestic productivity, competition and economic growth (WTO, 2016). However FTAs do not tend to explicitly address trade barriers that may affect SMEs exporters, or other significant groups of society that may engage in trade such as women, indigenous peoples or minorities.[1] They typically include a preamble with aspirational language about the framework of the trade agreement is presented. This is followed by chapters that cover a range of trade aspects including a range of trade-related issues, such as goods and services, investment, intellectual property rights, technical barriers, sanitary and phytosanitary settings, dispute settlement and economic cooperation. Increasingly, recent trade agreements also contain specific regulatory cooperation chapters. For instance, the Small and Medium-sized Enterprise (SME) chapter of the CPTPP, relies on regulatory cooperation—i.e. to reduce 'red tape'—as a mechanism that would facilitate SMEs engagement in international trade and to take full advantage of the agreement (MFAT, 2021b). Part of the challenge in providing specific advantages for SMEs, rather than large businesses, is that a core principle of trade agreements is the concept of non-discrimination, i.e. a preference for one firm—regardless of size—is extended to all. Differentiation of trade benefits according to firm size is not possible under WTO rules and this principle is carried over into FTAs. Technological changes in the last twenty years, mainly the internet and the digital platforms that have emerged through it, have transformed business practices, making it easier to trade internationally, including for SMEs (López González & Sorescu, 2019). As policymakers become more aware of the further possibilities to enable SME internationalisation and the positive spill-overs for domestic economic growth, employment and so on there is growing interest in a more explicit consideration of SMEs when formulating trade policy to improve their participation in international trade (WTO, 2016).

A further aspect that is of relevance to the effectiveness of FTAs is the speed with which digital technology continues to advance, as we enter an era some call the Fourth Industrial Revolution (Schwab, 2016). This latest industrial revolution, driven by rapid unprecedented technological development, global value chains and digitalisation, offers SMEs new avenues to participate in the global economy. However, SMEs continue to face trade barriers that hinder their ability to trade and "are disproportionately affected by market failures, trade barriers, policy inefficiencies and the quality of institutions" including in the digital sphere (OECD, 2019). The reduction of trade barriers is an important requirement for SMEs to be able to engage in internationalisation activities, but the need

[1] In New Zealand the founding document, Treaty of Waitangi, has been included in FTAs since the Singapore CEP in 2001.

for international rules to support and facilitate digital trade has become an increasing focus for policymakers. In 2020, signalling a willingness to enter the 'digital' age the New Zealand government signed the Digital Economy Partnership Agreement (DEPA) with Chile and Singapore, the first digital FTA.

Although a strong supporter of the multilateral institutions such as the WTO and APEC, slow progress made by the Doha Round of trade negotiations meant that New Zealand developed a FTA network to complement and sustain the multilateral trading regime (WTO, 2016). At various points since 2001, the government pursued these FTAs to support the international competitiveness and productivity of New Zealand firms and guide public policy development relating to trade and SMEs. In terms of trade policy, the "first formal articulation of New Zealand's trade diplomacy" (Vitalis, 2017) was a 1993 policy publication (MFAT, 1993) that set the path, which continues today, of generating sustainable economic growth and prosperity through trade.

The first significant bilateral FTA was the Closer Economic Relationship (CER, 1983), signed with Australia at a time when the prevailing protectionist economic policy was coming under increasing criticism, with unprecedented levels of inflation and unemployment. Prior to CER, government policy had focused on protecting New Zealand firms from competition, the provision of financial assistance, regional development opportunities and a largely-indiscriminate programme of assistance to the limited number of export-oriented enterprises. However, the commencement of open trade with Australia catalysed a change in the way policymakers and firms thought about SMEs in terms of internationalisation and trade. Subsequent government approaches to SME business assistance were based on expectations that SMEs would become significant contributors to wider economic growth, yet not all SMEs were able to contribute to this objective. To this end, a multi-tiered SME policy was introduced, with 'high-growth' SMEs receiving more targeted funding than the bulk of SMEs with low growth ambitions (Massey 2006). This involved assistance for businesses where the high-growth, exporting SMEs were supported by Trade New Zealand with the remaining growth-oriented firms being supported by the Ministry of Commerce. This meant that government policy was increasingly focused on more growth-oriented firms and SMEs—and a component in the 'fast growth' firms was their internationalisation and engagement in international trade.

Today the Government continues to play an important role in aspects of SME policy including through the provision of business and management capability support to firms to facilitate increases in productivity, exporting and global competitiveness. The facilitation of an 'enabling environment' also continues with public policy centred on promoting awareness of good business practices, export assistance and encouraging R&D and innovation.

SMEs & FTAs: The Growth in Significance

Below is a summary of the way SMEs have featured in FTAs negotiated by New Zealand (see Table 1). One of the most important ways that FTAs can assist SMEs is to facilitate their ability to access the tariff preferences the FTA delivers. In order to do this, however, an SME needs to demonstrate whether their product meets the agreement's rules of origin (i.e. the proportion of a product that has to 'originate' in New Zealand). Many FTAs require a 'certificate of origin'. This is an additional step that an exporting firm then needs to complete in order to ensure that their product meets the requirements of the FTA and can get the tariff advantage. For SMEs, however, this can be an additional burden imposing both financial costs (i.e. the certificate has to be paid for) and an additional transaction cost in terms of filling out the requisite forms to qualify for the certificate). Some FTAs, however, use a 'self-declaration of origin' method which allows SMEs to complete the form themselves, without requiring a third party to approve and certify the documentation. This approach obviously is preferable for SMEs and is one which New Zealand has tried with mixed success to pursue in its FTAs. What follows is a discussion of the FTAs that had a particular impact, or took a particular consideration of SMEs.

2005 Thailand–New Zealand Economic Partnership Agreement

An important development in this agreement was the way in which 'rules of origin' were implemented. This was based on a change-of-tariff-classification approach that establishes whether a good has been 'substantially transformed' in Thailand or New Zealand and would therefore qualify for the tariff advantages that the Agreement provided. In addition, by allowing exporters to self-declare the origin of their products, SMEs, in particular, could utilise the FTA benefits (i.e. the lower tariff rates) without having to seek additional certificates of compliance. In

Table 1 SME representation in New Zealand FTAs (in force)

Year	*FTAs*	*SME reference in preamble*	*SME reference in operative paragraphs (e.g. Cooperation chapter)*	*Dedicated chapter to SMEs*
1983	CER			
2001	Singapore			
2009	Malaysia	✓		
2005	Thailand		✓	
2006	P4		✓	
2008	China		✓	
2010	Malaysia	✓		
2011	AANZFTA		✓	
2011	Hong Kong			
2015	Korea		✓	
2018	CPTPP	✓		✓
2020	DEPA	✓		✓

Source Compiled by author

this way, the FTA reduced transaction costs for exporting firms, including SMEs which are particularly sensitive to 'red tape' in a way that larger firms do not need to be (who can deploy staff to 'manage the red tape') (Ballingall, 2010).

2006 Pacific Four Agreement (P4)
P4 was made up of New Zealand, Singapore and Brunei and Chile, which eventually expanded to become what is known today as the CPTPP (see below). It was the first plurilateral agreement to link New Zealand with the Americas, as well as Asia. This agreement mentions SMEs in Article 16.4 on Economic Cooperation, and like the Agreement with Thailand provides for self-declaration of origin, thereby also ensuring that SMEs had minimal transaction costs in order to secure the benefits of this agreement.

2008 New Zealand–China FTA
In 2008, New Zealand became the first developed country to sign an FTA with China. The agreement is significant as it signalled the determination of New Zealand to follow markets that went beyond the

traditional historical ones, and willingness to trade with Asian countries. This trade agreement mentions SMEs in the Cooperation Chapter with the aim of promoting "a favourable trading environment for the development of SMEs [and to] build the capacity of SMEs to trade effectively" (China–NZ FTA, pp. 64, 101). This was to be achieved through cooperation between governments, business and industry associations; trade fairs; training; and information about markets and regulatory regimes. Unlike the P4 and agreement with Thailand, this FTA represented additional transaction costs for companies exporting to China. Rather than self-declare that their product complied with the rules of origin requirements of the FTA, exporting firms had to apply to the Chambers of Commerce for the relevant certification. The additional step to the process of exporting to China under the terms of the FTA was the way to secure the tariff advantages conveyed by the agreement.

2010 Malaysia–New Zealand Free Trade Agreement

There is no specific reference to SMEs beyond "promoting capacity building activities in areas of mutual interest, including, … small and medium scale industry" (Malaysia–New Zealand Free Trade Agreement, pp. 19, 101). However, the rules of origin applied were the same as those used in P4 and in the agreement with Thailand.

2011 ASEAN Australia New Zealand Free Trade Agreement (AANZFTA)

AANZFTA is a plurilateral agreement between twelve countries[2] and is also the first comprehensive FTA signed by the Association of South East Asian Nations (ASEAN). SMEs are specified in the chapter on cooperation on electronic commerce with pledges to assist SMEs in this area and support cooperation and research. As with the China FTA, this agreement required a certificate of origin to be issued by Chambers of Commerce in New Zealand for firms to qualify for the tariff advantages conferred by this new FTA.

2013 CPTPP

Because of the withdrawal of the United States from the TPP, this was renegotiated in late 2018 and became the Comprehensive and Progressive

[2] These were: New Zealand, Australia, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Viet Nam.

Agreement for Trans-Pacific Partnership (CPTPP). The CPTPP is significant in an SME context, not only because it provides for self-certification for determination of origin and accelerated customs procedures (i.e. within 48 hour customs clearance), but also because it is the first agreement that New Zealand has negotiated which includes a stand-alone chapter that supports SMEs largely through information sharing.

It is also worth noting that the CPTPP includes a chapter on regulatory coherence. This is significant for SMEs because of the way in which the parties to the agreement have agreed to work towards improving their regulatory processes (transparency, accessibility etc.). This chapter may help exporting SMEs through the improvements it makes in other CPTPP partners' regulatory regimes, thereby helping reduce transaction and financial costs (e.g. by ensuring a single set of documents for exporting) or at least ensure as many similar elements as possible across the documentation—that can apply across all eleven members, rather than individual certificates and documents for each individual CPTPP economy.

Alongside this agreement, New Zealand, Canada and Chile issued two stand-alone Joint Ministerial Declarations. The first agreed to "recognise the need to ensure that small and medium-sized enterprises (SMEs) are able to fully benefit from the protections of the investment chapter, and intend to promote rules that reduce the costs of dispute settlement for SMEs" (CPTPP-Joint Declaration on Investor State Dispute Settlement). The second statement notes that Chile, Canada and New Zealand will seek to ensure that CPTPP will "Improve the policy environment for SME innovation and promote SME growth through innovation, including to strengthen the digital competitiveness of SMEs in order to access the opportunities offered by the internet and the digital economy" (MFAT, 2021a).

Other Trade Policy Measures and SMEs

SME-related economic cooperation (particularly in e-commerce) was also set out through international organisations such as the Asia–Pacific Economic Cooperation (APEC), Small and Medium-Sized Enterprise Working Group on technology transfer and training for SMEs, as well as information exchange on regulations. Most recently, the New Zealand-hosted APEC year included for the first time a Ministerial meeting on SMEs. This addressed a number of issues facing SMEs arising from the pandemic and fostering MSMEs' participation in regional and global market (APEC, 2021).

In addition to FTAs, a series of multilateral WTO ministerials referenced SMEs directly, encouraging members to reduce transaction costs at the border by improving customs and other border procedures to facilitate access for exporters and importers (including SMEs). WTO attention on SMEs is a relatively recent phenomenon. The 2013 Bali trade facilitation agreement includes a reference to how trade facilitation procedures can assist the development of SMEs; whilst the 2015 Nairobi Ministerial declaration on agriculture export competition notes the negative effect of agricultural subsidies on the livelihoods of small and medium-sized farmers. The 2017 Buenos Aires Ministerial declaration on SMEs was the first stand-alone statement issued by the WTO membership on SMEs. Whilst it does not provide any specific SME-only outcomes, it does underline the importance of SMEs and the need to ensure that trade rules take into account the needs and interests of this sector of the economy. In this way, the statement seeks to help shape and inform the WTO membership's thinking on the evolution of international rules that govern trade.

In the New Zealand context, in 2018, the newly elected Labour government introduced what was a new progressive and inclusive trade agenda (NPITA) that included enhanced consultation with Māori, stakeholders and New Zealanders. This morphed into what became known as the *Trade for All* agenda. Trade policy was tasked with "maximising the opportunities and minimising the risks associated with global issues" (New Zealand Government, 2018), with the aim being "the creation of a genuine and enduring conversation with the public and stakeholders around the future direction of New Zealand's trade and investment policy" (p. 4). These issues include SME participation in international markets. The subsequent public consultation included a stand-alone SME-specific background document (MFAT, 2018) which further reinforced the importance of trade policy settings for SMEs. The Trade for All Advisory Board subsequently issued a set of recommendations to the Government which underlined the need to take into account the interests of SME exporters.

More recently, a Trade Recovery Strategy was launched aimed at helping business, including SMEs, through the current COVID-19 pandemic (MFAT, 2021b, https://www.mfat.govt.nz/nl/trade/trade-recovery-strategy/trade-recovery-strategy-overview/). A number of trade-related digital tools have been developed to assist exporters, New Zealand exporters, through the provision of bespoke advice and a range of practical web-based tools that help access new and existing markets (for instance, the Non-Tariff Barrier portal; or the Exporter hotline). This function will be a particular focus for the COVID-19 response strategy.

Research Design

The first phase of this study involved an examination of primary documents in the form of FTAs and ministerial declarations as well as Cabinet documents that related to trade policy and SMEs. These were accessed through the New Zealand Ministry of Foreign Affairs and Trade website. This allowed the researcher to become familiar with policy development and specific outputs relevant to SMEs and helped frame the interview schedule.

Participants were recruited with the proviso that they were already experienced exporters. They were accessed through media reports of their exporting success, and via websites from industry associations and media reports about their internationalisation. The researcher had a personal connection with the public policymaker. To mitigate the bias in the research process, I cross-checked any facts with the official policy documents available in the public domain.

The research followed the protocols of the Massey University Human Ethics Committee, guaranteeing anonymity and data protection. Interviews were completed before the outbreak of the COVID-19 pandemic, and lasted between 30 and 60 minutes. They were recorded and transcribed by the author. Participants were asked about their knowledge of FTAs, access to information and support around these, and whether they felt they were making it easier for them to export. These were transcribed by the researcher and analysed for common themes using an excel spreadsheet.

Findings

Having outlined the development of approach to SMEs in New Zealand's trade agreements, we now turn to presenting the findings of the views of owner-managers of SMEs who are currently exporting and of a senior New Zealand trade negotiator.

Perceptions of SME Owner-Managers About FTAs

SME owner-managers were asked to identify the benefits of FTAs. For them, FTAs were one more policy measure in place for them to benefit from if the market opportunity presents itself:

> We have just received interest from…someone on whom we've done some validation on already. I'm not sure if we have an FTA with the EU… but [it] would have some relevance. (Firm 13)

The relevance of FTAs to their current situation was a factor in not seeking further information. For instance, firms in the high-tech industry were not confident that an FTA could do anything to improve their market opportunities due to the digital nature of their operations where cloud technology was perceived to override traditional barriers to internationalisation:

> Cloud technology breaks through any barriers that FTAs are designed to break down and open up those markets. (Firm 9)

Other participants, also in the high-tech industry had concerns over data management laws in different jurisdictions and double taxation issues, implying that FTAs were not a relevant policy tool for this industry, despite the existence of the Digital Economy Partnership Agreement and the CPTPP which both establish rules on a range of areas regarding data management:

> If we export Australian data to NZ and process it in NZ is that something that should be built in to a FTA, the ability to take government data from another country and process it in Australia?... Right at the minute I literally have to put servers into every country. (Firm 11)

FTAs were not perceived to be helpful to firms to overcome more immediate barriers to trade, such as overcoming the so-called 'tyranny of distance' due to New Zealand's geographical location:

> FTAs don't have an impact... I think it's the biases of the countries themselves more than any formal trade barrier that would stop us. Or a commercial thing like you're NZ… you're a million miles away. (Firm 6)

Barriers that were identified tended to be around building trust, something FTAs don't explicitly do:

> The barriers…that stop us trading with some customers in certain jurisdictions…are around credibility. So FTAs don't tend to do that. (Firm 9)

FTAs were also criticised for not building trust in the market itself. This criticism was built on the perception that a FTA would generate a level playing field where exporters would be given fair market treatment, something that is not always evident due to tensions between local social and economic interests:

> There is a FTA between Australia and NZ *[but]* in reality there is an attitude of buy local… even though according to their own trade agreement they should consider a NZ option equally with an Australian option, but the reality is they don't. (Firm 10)

This lack of trust towards the exporter by local customers acts as a barrier for successful business, and is due to the expectation SME owner-managers have regarding the reach of an FTA. In this case, the participant comes to the realisation that establishing trust through relationships is key regardless of there being an FTA or not:

> Can we leverage it? The reality is quite often not… There's definitely more of an attitude actually we need to find the best solution for our community, but then that in itself is a driver for you buying local, because if you support the local business that improves the local community as well, so we are being hit on both sides. (Firm 11)

When it came to seeking assistance, the Government agency NZTE was the first port of call for information on FTAs, followed by industry associations such as Export NZ, but participants were mindful that this was only one aspect of the preparation that they needed to do:

> From a theoretical level absolutely. From a practical level I'd be talking to companies exporting out there as well. And I'd want to know what's your experience. (Firm 13)

In contrast to the views of SME owner-managers, the trade negotiator interviewed was concerned with the reach of the FTAs negotiated. This was underpinned by the assumption that FTAs are about setting a 'level playing field' and creating advantages and opportunities for economic growth. These is also an acknowledgement of the challenge presented by SMEs and how to encourage a focus on exporting with the attendant benefits of productivity, employment and income improvements.

NZ Trade Negotiator

The trade negotiator was candid about the fact that until recently there was no specific focus on SMEs by policymakers around the world, working on the premise that any trade liberalisation would benefit SMEs as well:

> We didn't really reflect on whether the agreements we were negotiating were helping SMEs drive production, employment, incomes and so on. We assumed this was happening - but we didn't have any data to tell us we were right (or wrong). And we were not alone - no other economy was thinking about SMEs in a trade policy context at that time. (Trade Negotiator)

One of the obstacles that hindered trade negotiators in considering SMEs as deserving considered attention in order for them to increase their participation in international trade, was the nature of trade rules which inhibit any preferential measures:

> In NZ we have been thinking - and worrying - about SMEs and trade policy for more than a decade…it's a challenging question. Under trade rules, it is not possible to favour - or provide preferences for particular companies, based on their size. Any preferences or special arrangements negotiated apply equally to all NZ firms - large or small. (Trade Negotiator)

All efforts were directed at explaining how the trade agreement benefits businesses through a series of initiatives to reach all businesses, rather than SMEs in particular.

> A big push was made to improve the kind of FTA-related information Government agencies put on their website to try and ensure businesses

> could find out about a trade agreement and how it affected them. We also tried seminars and a 'road show' to promote FTAs and to raise their profile and in this way explain why the trade agreement mattered.

This resulted in lessons on how to engage better with companies, and cross-agency collaboration. "We learnt a lot about how to do these seminars - especially when we worked with NZTE".

The realisation that the technicalities of the FTA world needed to be explained in 'plain English' was an important step for negotiators to understand that they were out of step with what exporters wanted to know:

> We had to sharpen up how we presented the FTAs - it was often not ideal to have the negotiators present the FTA to companies - there was too much jargon and we didn't really understand what... companies really needed to know.

Improvements were made to how businesses could access information, simplifying modes of access through a variety of ways, including a 'tariff finder' portal:

> This was introduced around the time of the China and ASEAN-Australia-NZ FTA and was a way for companies to find out what level of tariff they would face in a particular market, and whether an FTA provided them a tariff advantage.

Cross-agency collaboration resulted in efforts to explain key terms and concepts around FTAs:

> This instrument was followed by a focused attempt both by Customs and MFAT to improve understanding of trade agreements, with increasingly user-friendly and even inter-active websites explaining core trade agreement principles (MFN, National Treatment etc). Efforts were also made to 'translate' the contents of trade agreements into the kind of 'plain English' that most companies could understand and use.

NZ trade policymakers have also worked to facilitate business travel in the Asia–Pacific through the development of trade visas.

> One of the more challenging issues many NZ firms have is securing business visas to travel across the Asia-Pacific to meet their clients (or future clients) or to build relationships - with many NZ business people investing significantly in travel as a way to ensure their connectivity with key business partners (supermarket owners, factory managers and so on). We were hearing that one of the issues they had was getting… visas in a timely manner… We found that business visas are difficult to get, *[and]* there became an increasing focus in trade agreements to try to improve and facilitate visa procedures.

Specific consideration to SMEs only eventuated with the CPTPP agreement which was the first to be explicit about FTAs and their capacity to help SMEs export by making tenders an important part, or by streamlining regulations, where possible:

> CPTPP was our first agreement that contained a specific chapter on SMEs and we worked hard to present this part of the agreement as being responsive… to SME needs. There is even a specific web link [that] lists the various areas where the agreement seeks to help SMEs, including on tender documents *[which]* Governments have to make… accessible electronically and specifically consider subcontracting through SMEs. This means that a large firm bidding for a contract may be able to offer better terms for the bid because of the identification of SME subcontractors as part of the bid.

However, widespread opposition to FTAs was so high that political bipartisanship on all trade agreements broke down for the first time:

> There was a sense that these FTAs weren't delivering for all New Zealanders… A sign of how fractured the social licence for NZ trade policy was, for the first time… the main opposition party had voted against a trade agreement (TPP) *[the previous version of the CPTPP].*

A change in government in 2017 shifted New Zealand's trade policy towards more inclusive policies. These are reflected in the Ministerial declaration with Chile and Canada during the signing of the CPTPP where they pledged to examine the effectiveness of the agreement to sustainable development, gender, indigenous peoples, domestic regional economic development, SMEs, labour rights, the environment and climate change. SMEs were also singled out through calls to limit barriers and to improve the environment for SMEs to innovate and operate in the digital world.

As SMEs were increasingly on the radar of policymakers the focus shifted to providing direct communication channels for businesses to report trade barriers (such as a dedicated website), and to communicate the type of work they were doing to make trade easier for them.

> the trade barrier portal is a system where any company - large or small - could contact us (through *[any agency]* - there was no 'wrong door') and register a trade barrier… This involved a cross-agency effort… and…the use of our diplomatic MFAT/NZTE/Customs/MPI network to check the barrier *[and]* to assess whether other close partners had a similar problem and if possible work with them to break down the barrier… We would also consider what mechanisms we had to address the barrier - including FTA institutional provisions.

Finally, there were efforts around COVID-19 to facilitate the continuation of international connectivity through virtual trade missions and market intelligence reporting. These measures were part of the Trade Recovery Strategy developed in response to the epidemic.

Discussion

Throughout this chapter, we have compared the needs of SMEs regarding trade policy to the views of trade policymakers on what SMEs need. We found that policymakers remained concerned that despite a considerable number of policy initiatives were in place to encourage SMEs to grow, become more productive and export, there had been no discernible change in the numbers who actually exported. Policymakers were driven by ambitious objectives to increase exporting, for instance setting a goal of 40 per cent of GDP (New Zealand Government, 2014), but there was little evidence of consideration being given to how this could be achieved, including through expanded SME exporting. On the other hand, SME exporters were ambivalent about the benefits they had reaped from trade policy initiatives in the form of FTAs. This research highlighted four themes: the poor representation of SMEs in trade policy (which has improved slightly in recent FTAs); the evolution of trade policy world-wide and; the emergence of a better understanding of the role that SMEs play in trade. Further, it confirmed the ongoing disconnect between SMEs and trade policy, where opportunities presented by FTAs were not always taken up. Table 2 outlines the NZ FTAs that had some sort of SME focus. These four themes are discussed below.

SMEs have been poorly represented in trade policy given their prominence in the New Zealand economy, however, for the last ten years there is increasing evidence that there was some attempt by trade policy to take SMEs into account in trade agreements. This trend was also mirrored in the WTO and in APEC. A key reason, perhaps, for the lack of meaningful engagement by trade agreements with SMEs beyond sharing information and cooperation activities is there has been very little change in trade policy development until recently, with the launch of the *Trade for All* initiative which may provide the first concrete evidence of such policy engagement (MFAT, 2021b).

This analysis of SMEs and trade agreements shed light on how government policy has evolved over time to increasingly—if imperfectly—take into account SMEs through trade agreements. So, despite all the domestic economic policy developments for SMEs, with initiatives such as the Small Business Council to help government develop strategy in areas

Table 2 Key FTAs with an SME focus and other trade measures

Year	*FTA title*	*SME Focus*
2005	Thailand New Zealand	Self-declaration for origin
2006	Pacific Four Agreement	Self-declaration for origin Economic cooperation
2008	NZ China FTA	Economic cooperation
2010	Malaysia New Zealand	Self-declaration for origin SME scale industries
2011	AANZFTA	Economic cooperation and research
2018	CPTPP	Dedicated chapter on SMEs Self-declaration for origin Regulatory coherence
Other trade policy measures impacting on SMEs		
2013	Bali Trade Facilitation Agreement	Lower transaction costs
2015	Nairobi Ministerial Declaration	Agricultural export subsidies
2017	Buenos Aires Ministerial Declaration on SMEs	SME support
2021	APEC Ministerial Declaration	SME support

Source Compiled by author

including the global trading environment (Nash, 2018), and the rising engagement by NZ in trade agreements, between 2001 and 2008 trade agreements largely ignored SMEs until the 2008 China FTA when SMEs were directly referenced albeit only as part of a wider cooperation-focused approach. In parallel, New Zealand was involved in the WTO negotiations on the Trade Facilitation Agreement (Bali 2013) and a Ministerial Declaration on SMEs (Argentina 2017). These outcomes did incorporate to some extent SME interests, including to lower the transaction costs of trading and to share information on best practice for SME traders. The peak for SME focus is reached in 2018 with the conclusion, signature and ratification of the CPTPP. For New Zealand, this includes the first stand-alone chapter dedicated to SMEs in an international treaty. Despite this increasing level of focus on SMEs in NZ trade agreements, actual substantive outcomes for SMEs over that period since 1983 to CPTPP are difficult to discern. Part of the challenge is that trade rules do not distinguish between SMEs and larger firms that are also exporting. Nevertheless, the significance of this study is that it reveals and emphasises the challenge that SME policymakers face in seeking to embed their interests and concerns in trade agreements. Despite numerous efforts since 2009, progress in this regard is difficult to identify in substantive government policy terms. At the same time, the Trade for All Agenda suggests that a more formal attempt is being made to incorporate the concerns of SMEs into trade policy in general and trade agreements in particular. Forthcoming New Zealand trade agreements with the UK and the EU may indicate further developments in this area.

One of the questions that arises from this enquiry is the role of SMEs in the economy, especially today where the tenets of neoliberalism are being questioned with calls to consider more than economic indicators when formulating public policy. The acknowledgement that policy outcomes have a number of repercussions is well understood by government. For instance, the New Zealand Treasury, once considered the New Zealand embodiment of the neo-liberal Chicago School of thought, has been shifting towards a more holistic approach with the gradual adoption of Treasury's Living Standards Framework (New Zealand Treasury, 2021). This framework follows the OECD's framework which consists of four capitals: human, financial/physical, natural and social (OECD, 2017) and has recently been developed further based on a Māori worldview. It is in the social capital that the dual role of SMEs, both as economic actors and enablers of social cohesion, could gain more prominence in terms of policy formulation. Trade policy too is moving towards a more 'holistic' approach, where the themes of inclusivity, participation and consultation were given prominence through the Government's endorsement of the *Trade for All* Advisory Board's recommendations (MFAT, 2021b).

Conclusion

This study has shown that as time has progressed the perception of policymakers of the role of SMEs has changed. Likewise, whilst trade used to be highly regulated, there are fewer restrictions on it than ever before, and it is expected that SMEs will increasingly be able to take advantage of relative easy access to a range of markets. The assumption that trade will enhance and enable wellbeing and prosperity is playing an increasingly important part in how governments formulate trade policy but this is increasingly being called into question.

Despite having recognised the importance of SMEs at a domestic level in terms of economic growth, with a range of policies to support them, New Zealand policymakers have not considered SMEs sufficiently when negotiating FTAs. In the context of the COVID-19 pandemic, the risk that the low rates of exporting by SMEs diminish further is very high and any insights into developing trade mechanisms that could help avert this are welcome to weather the current economic crisis.

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Pandemic Speed: Accelerating Innovation in Cyber Security

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Introduction and Background

It would be difficult to miss the multitude of cybercrime reports that have appeared in general news over the past few years. In May 2021, the US oil delivery network run by Colonia Pipeline (Turton & Mehotra, 2021), suffered a cyberattack that caused operations to cease for several days. In June 2021, meat supplier JBS was effectively shut down for five days following a cyberattack which disabled its processing operations (Claughton & Beilharz, 2021). In July 2021, Microsoft's Exchange Server software was found to be compromised and NSW Department of Education was forced to take internal systems offline (NSW Government, 2021). Modern day cyberattacks now have the ability to cause substantial

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damage to industry with their destruction and damage of data, process and physical hardware. Overall, cybercrime appears to be increasing in both the variety of victims and the number of attacks.

Distributed Denial of Service (DDoS) attacks as an attack method have also seen a drastic rise in prominence over the last few years (Bhattacharyya & Kalita, 2016; Cook, 2021; Nicholson, 2021), highlighted by the recent large and impactful attacks such as Google in 2017 (Nicholson, 2021), Git Hub in 2018 (Chadd, 2018; Newman, 2018) and AWS in 2020 (Crane, 2020).

These attacks were notable due to their large volume but DDoS does not just rely on flooding internet pipes with high bandwidth attacks to succeed. Sophisticated DDoS attack methods can also target internal server resources, aimed at depleting functional capabilities by using methods such as amplification and malformed requests (Alyas et al., 2017; Ismail et al., 2021). The goal is the same but, whilst volumetric attacks can be easily discovered by a sudden tidal wave of data flooding in, sophisticated attacks may use a slow trickle of requests to services that take some time to complete. This way, sophisticated attacks can cause system bottlenecks and slowly strangle the service until it eventually fails (Alyas et al., 2017).

Along with their scale, the three DDoS attacks noted above were also notable due to the target being well-known organisations, however, data from sources such as Akamai suggests that target sectors are now much more evenly spread (Akamai, 2020) when compared to attacks between 2016 and 2018 (Akamai, 2016), where vandalism and gaming were the primary target (Arbor, 2018). All industry sectors may now present an equally valid target for attacker at any scale.

DDoS attacks operate differently to other forms of cyberattack as the attacker does not need to find a back door or system vulnerability to gain access to its target. DDoS leverages the insecurity of other online devices. It assumes control and directs these compromised machines to target the legitimate entry points of target services that the attacker seeks to incapacitate. This reliance of compromisable connected devices such as CCTV cameras, advertising boards and a plethora of other Internet of Things (IoT) devices could be seen as a limiting (for the attacker), but the COVID-19 inspired, rapid move to home working in combination with the rise of smart cities has inadvertently inflated the quantity of potential resources available for use by DDoS (Cvitic et al., 2021).

As employees hurried to work from home, organisational IT equipment moved from inside the quality assured and monitored organisational security boundary, to networks shared with low grade and cheap IoT devices. And worse, these networks were often connected through home grade routers which incorporate rudimentary cyber security, many of which were configured by inexperienced home owners.

The move to smart cities involves the use of an ever-increasing supply of internet connected real-time data devices (Hammi et al., 2018). Through increased understanding of infrastructure patterns, residents could be provided with improved living experiences. However, as society becomes more reliant on this new technology, it may itself become an attractive target, and these devices may also form the resources needed for future larger-scale DDoS attacks.

Given that the majority of organisations in Australia rely on internet connectivity to conduct their business, they inadvertently expose themselves to a DDoS type cyberattack. It is therefore important to understand how organisations and their employees consider the threat and its associated consequences.

This paper aims to examine discovered gaps in knowledge of DDoS and brings together new learning to create a fuller picture of DDoS threats, motivations and the potential of future collaboration. The first research question asks “How high do Australian organisations rate DDoS as a threat, when compared to other cyber security events?” In particular, this research seeks to discover how employees and organisations perceive the threat, their ownership of the issues and consequences, and how they believe a future state should look. With this knowledge uncovered, a second research question asks “Where should effort be focused to ensure Australian organisations are more prepared for a DDoS event?”, and if the ‘where’ is understood, the logical progression would be ‘by who?’ The overarching aim for this study is to demystify organisations’ perceptions of the risk and threat of DDoS within the cyber security context and to uncover ways to improve the use of existing and future technologies.

The remainder of this paper is structured as follows. Firstly, a brief review of the literature is presented to set a clear understanding of the current knowledge in this area. Then, following an explanation of the methodology used, including a discussion on the reasons certain choices were made, the results of the research analysis are presented. Finally, the results are discussed and a conclusion approached so that a path is identified for future studies.

Literature Review

Practitioner Review

Cyber incidents appear to be placing an increased threat on society. Whilst DDoS has its beginnings at Illinios University's Computer-Based Education Research Laboratory (CERL) in 1974 (Dennis, 2010; Radware, 2017), cyberattacks including DDoS have increased in all forms such as scale, frequency and cost. In 2016 DYN, an Internet Domain registrar who helps the name resolution for many large, well-known, global firms including Twitter, Reddit, GitHub, Amazon.com, Netflix and Spotify (Krebs, 2016), suffered what was at the time, the largest DDoS attack, now known to be caused by the Mirai botnet. The attack at 1.2Tbps (Novinson, 2018) involved tens of millions of IP addresses (York, 2016) and was made possible by low security, poorly configured IoT (Internet of Things) devices such as security cameras (Cloudflare, 2019; Woolf, 2016; York, 2016).

In contrast to previous botnets constructed from infected PC's, Miria malware seeks to infect IoT devices such as security cameras, digital video recorders and baby monitors which have low security due to users installing with the default passwords in place (Cloudflare, 2019). Once installed, the malware deletes itself from the disk, but remains active in memory until the unit is restarted. The Mirai botnet source code was made available through 'Hackforums' (an Internet-based hacking community) in September 2016 (Manuel, 2018) shortly before the attack on DYN.

Then, in 2018, larger attacks occurred. In February, GitHub was attacked with a 1.3Tbs DDoS and, two months later, Netscout reported a 1.7Tbs attack against an unnamed target.

It was not a one-sided conflict though as, early in 2019, several successful prosecutions occurred:

1. The US Department of Justice seized 15 Internet domains, which they claim had been used to perform DDoS attacks on government systems, universities, gaming platforms, financial organisations and ISPs across the world (Kupreev et al., DDoS attacks in Q1 2019, 2019a).
2. A US court jailed a 34-year-old Massachusetts hacker (Martin Gottesfield) (Cimpanu, 2019; Wolff, 2019) for 10 years, for

launching the DDoS attacks on two medical facilities including the Boston Children's Hospital as he protested the psychiatric detention of Justina Pelletier (Wolff, 2019).

3. British police arrested 32-year-old Daniel Kaye who built a Miria botnet from hacked Dahua security cameras and other devices that he rented from other hackers (Daws, 2019). Kaye had been hired to ruin the reputation of Lonestar by a senior official at competitor Cellcom (a Liberian telco) (Daws, 2019).
4. 250 cybercriminals were arrested in Britain and the Netherlands by Europol (the European Union's law enforcement agency), following the 2018 shutdown of Webstresser.org (Krebs, 2019).

Despite these convictions, the scale, frequency and notoriety of these types of events have continued to increase such as:

- April 2019—Ecuadorian facilities became the target and very large number of cyberattacks including DDoS (Dan, 2019). Ecuador sought assistance from Israel (Kupreev et al., 2019b).
- 2019 September—Wikipedia was attacked with a DDoS volume of over 1Tbps over the three-day duration (Kupreev et al., 2019c).
- 2020 February—AWS reported an attack on its Connectionless Lightweight Directory Access Protocol (CLDAP) at a volume of 2.3Tbps.

In mid to late 2021, three DDoS attacks brought further increases in scale. The first, Cloudflare, which is a content delivery service, announced details of an attack on their infrastructure at a rate of 17.2 million bogus requests per second (rps) (Yoachimik, 2021). To put this in perspective, Cloudflare's average legitimate load is in the order of 25 million rps, so this attack occupied near 70% of its average capacity. Shortly after, a Russian tech company, Yandex reported an attack which started at 5.7 million rps in early August but peaked at 22 million rps one month later (Marrow & Stolyarov, 2021). Cyber security author Brian Krebs was also a target, announcing an attack in September 2021 which was delivered by the same botnet responsible for the attacks on Cloudflare and Yandex. This new botnet, called Meris, was first seen in June 2021 and was facilitated by approximately 250,000 compromised MikroTik routers (Krebs, 2021).

The incredible scale of these attacks is worrying, but more so is the fact that they have started to break away from the virtual world. For example, in 2005, Iran's nuclear development was impacted as an attack (Stuxnet) targeted supervisory control and data acquisition (SCADA) systems leading to destruction of physical centrifuge devices (Fruhlinger, 2017). In September 2007, the Israeli Airforce acquired control of Syria's air defence systems just prior to their military bombers targeting and destroying a Syrian nuclear installation (Holmes, 2018). Then, in March 2019, a DDoS focused on an electricity regulation computer system causing difficulties for various districts of Los Angeles and Salt Lake City. As a consequence, California and Wyoming also experienced power supply problems (Fazzini & DiChristopher, 2019).

More recently, in September 2020, a group mistakenly targeted the Dusseldorf University hospital and the disruption led to the death of a person who needed immediate and acute medical care (Tidy, 2020).

Trends are moving from small extortion-driven groups towards politically-motivated occurrences and, in addition, larger groups that use increased complexity and sophistication are becoming more prominent (Mansfield-Devine, 2015; Nazario, 2008). For example, secondary outcomes such as the insertion of malware or the theft of financial/personal data during an attack, highlight that DDoS is starting to be used as a cover for other nefarious activities (Pitlik, 2019; Wueest, 2014). In its study period, research company Neustar reported that 36% of responders had found malware installed during the event and 43% of finance sector responders also found malware further supporting that, DDoS attacks could be used as a diversion, masking the true purpose of theft (Sooraj, 2012). However, whilst geopolitical-motivated activism (hacktivism) has used this theft distraction method, they also use DDoS to show support or opposition over an issue.

Overall, the practitioner literature indicates that the DDoS phenomenon is growing, not just in scale, but also in its reach as it expands outside of the digital realm and begins to seriously impact the daily lives of ordinary people. However, this view, whilst supported by many independent sources (Chigada & Madzinga, 2021; De Donno et al., 2018; Snehi & Bhandari, 2021), is largely conveyed by technology vendors and authors who sit outside of the organisations directly impacted by these reported attacks. As such, the literature is unable to provide any supporting evidence to answer the first research question

"How high do Australian organisations rate DDoS as a threat, when compared to other cyber security events?".

In addition, the second research question "Where should effort be focused to ensure Australian organisations are more prepared for a DDoS event?" becomes equally difficult to answer using practitioner literature as most information is written by technology experts and focuses on technology mitigation options as opposed to a holistic view that also considers people and process.

Academic Review

Overall, several motivators for DDoS use have been noted (Anstee et al., 2017; Bienkowski, 2016) including Vandalism, State/activism, Extortion and Distraction, and although gaming related motivations appear high, criminal motivations are on the rise (Arbor, 2018; Bienkowski, 2016; Mansfield-Devine, 2015, 2016).

Criminals are learning to exploit the vulnerabilities that exist through the human interpretation of technology applications. The human factor often facilitates a weak link in cyber security (Wiederhold, 2014). As technology becomes 'smarter', it is moved from simple automation of repetitive tasks to assisting where decision-making is required and this advancement of technology has led to infrastructure and systems often being operated by individuals with little computer expertise (Ghafir et al., 2018). These individuals perceive their own level of threat, but as their experience of cyber threats varies greatly, threat perceptions amongst operators can be wide ranging and therefore, the actions they take in response may be equally diverse. In addition, individuals that consider the protection of their online identity a low priority may carry over this perception to the workplace, exposing organisations to cyber threats (Huang et al., 2010). The way individuals react to the discovery of an attack can be influenced by their own internal needs (McClelland, 2010) and these influences can stem from the community and culture in which they developed (Nisbett et al., 2001). As such, despite the agnostic nature of technology, its application by individuals and groups may differ and this may affect how cyber defence operations are conducted. Similar technology could be in place, but ultimate vulnerability may be highly variable.

However, organisational durability is demonstrated by robustness. That is to say, even those who have sustained significant attacks often continue to operate and address their vulnerabilities. They learn from experience and protect against human error with process, and against 'shadow IT' with policy. Learning from experience can kick start reactive innovation which helps to advance and develop organisational improvements but, with a lack of public transparency and knowledge sharing, this appears to occur in isolation.

The continued development of attack vectors shows attacking groups have also advanced, sharing vulnerability information and methods with other groups (Biros et al., 2008). Each side shows similarities in scale as there are small firms protecting their business and countries protecting their sovereignty, just as there are individuals aiming to infiltrate systems and countries aiming to gain advantage over their adversaries, but cyber security events are not weight-matched fights.

Despite this, generally, the balance of power has always sat with the defensive team. Organisations recover and continue to operate, even when affected by business-crippling attacks. However, COVID-19, may have adjusted that power balance (Lallie et al., 2021; Pranggono & Arabo, 2020). Rather than move slowly and iterate new cyber security developments, organisations had to respond rapidly to a dispersed workforce (Ostiguy, 2021; Pranggono & Arabo, 2020). COVID-19 brought organisational staff's equipment out from under the protective wing of IT systems administrators and placed the burden of remote connectivity on to home grade un-tested infrastructure (Lewis, 2020), which often resembled the very same untrained-configured shadow IT that policies and processes aimed to eradicate. In this rapid environmental change, organisations that were comfortable with a minority of remote workers suddenly found themselves with the task of migrating hundreds or thousands of employees to home-based offices with little time to prepare and less time to test their solutions (Lewis, 2020). This increase in remote staff and the associated increase of IoT devices creates an environment where the attack vectors and entry points for cyberattacks have expanded exponentially (Khan et al., 2020; Pranggono & Arabo, 2020).

Whilst academic sources tend to agree that the threat of cyberattacks is increasing, the majority of the information used to express this view has been collated from literature provided by practitioner sources. It is therefore difficult to state the level of threat as perceived by Australian organisations, as there is little data to support any accretion. Thus, a gap in knowledge was identified, and whilst an answer to the first research question is proposed, it remains non-validated.

Similarly, for our second research question regarding the focus of effort, academic sources show collaboration, knowledge sharing, and training of a diverse workforce is likely to improve capabilities, but direct information from organisations is lacking. Therefore, a second gap in knowledge has been uncovered and the research in this area has merit.

Methodology

This study investigates from three perspectives: existing literature; published organisational information; and personal perspectives of those who work in industries.

As information was scarce, causal research, which is used to investigate causal relationships between dependant variables, would not suit the study's needs (Oppewal, 2010). So exploratory research, which is often used to develop research objectives, combined with an element of descriptive research, which is useful when objects require descriptive investigation, was chosen as the preferable initial approach. However, the majority of the study was qualitative in nature, supported by descriptive analysis that quantified the gathered data when required to help develop meaningful interpretations.

Examination of exiting literature used sources from both academic and practitioner sources to form a more complete and balanced view. Literature from professional and technical sources helped inform what was currently known about DDoS and the scale of threat, as perceived by industry and the methods of mitigation. Academic literature was examined so that previous research knowledge could be understood and compared to current and historical industry knowledge. In both cases, literature was gathered from books (physical libraries and book shops) and electronic sources such as: digital searches made through UNE's online library and their affiliates; Google Scholar; and ResearchGate, which led to information sources including websites, interviews (video and transcribed), white papers and commercial cyber security reports.

These wide range of sources were combined to develop a baseline of knowledge from which to build new understanding of the perceptions of individuals in Australian Organisations related to the DDoS cyber threat. The information gathered led to the discovery of several gaps in existing knowledge and this helped develop the research questions set the basis for deeper research.

As the literature review neared completion, 30 employees from small and medium Australian organisations were interviewed to gain their perspectives on the DDoS subject. In addition, websites from 47 Australian organisations were analysed with a mix of interviewed organisational staff and those that were approached but declined to participate. These participants and websites were sourced from a wide range of industry sectors including education, mining, construction and information media & technology. This method was used so that the results would have a mix of those organisations with employees who were willing to share insights and those who were not, with the potential that this may expose, differences between the two groups.

Data gathered during the website analysis was recorded in Microsoft Excel. This facilitated high level observations and simplified calculations during readability examination. The low quantity of academic and practitioner information fuelled the need for more targeted research into organisational perspectives of DDoS. The research began with broad observations of cyber security subject matter before drilling down to more specific DDoS-related information. However, due to the lack of DDoS-specific and Cyber Security information in general, primary data collection via interviews became a necessity.

Interviews were conducted via a mix of videoconference and face-to-face meetings, with audio recorded for later transcription. Once transcribed, transcriptions were imported into NVivo12. The move from face-to-face meetings to videoconference occurred as a result of COVID-19 restrictions that limited personal contact.

Excel and NVivo12 were then used to explore the data and produce analysis aligned with macro and micro themes. Macro themes were listed initially before being examined more deeply to uncover micro themes derived from the collected website information and the perceptions and opinions of the interviewed individuals. These new insights were considered along with the analysis of existing literature to bring new understanding of DDoS and the perceptions of Australian organisations.

Results and Discussion

The exploratory research began with the analysis of 48 industry websites, made up of organisations whose employees had been interviewed (19) and organisations that had not (29).

For the initial observation of whether the organisations shared security information on their website, the results showed that 48% of the websites analysed, publically shared some security information. Further examination showed that whilst the near half shared security information, most of those who did not also declined to be interviewed. This could be indicative of a fear of sharing sensitive information, a competition-driven reluctance to collaborate or priority-based decisions.

Participant response statistics may partially support a reluctance to share. Of the 110 participants approached, whilst only 2% formally declined, 61% did not respond and a further 10% who initially agreed ceased contact when interview arrangements were attempted (Fig. 1).

However, as shown in Fig. 2, whilst a greater number of male invitees were approached, proportionally more female respondents agreed to participate. This supports the Hofstead et al. (2010) view that feminine cultures show traits of nurturing, collaboration and protection.

The information that was shared covered a variety of categories. In some cases, organisations limited their information to policies and procedures that more applied to employees than customers. This occurred even when the organisations business permitted use of its technology and systems. In other cases, especially with vendor organisations, technology and product related information was made available. However, in many cases, and in contrast to 'privacy statements' and 'terms and conditions' information, cyber security information was not easily located. Often,

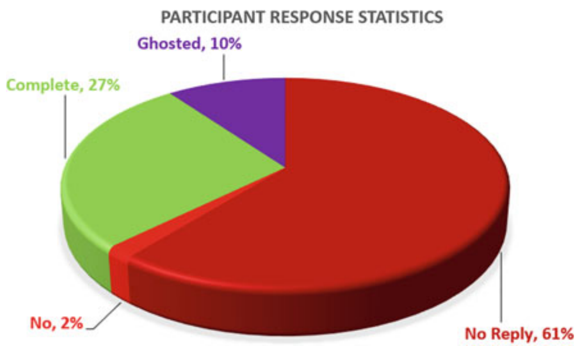

Fig. 1 Response statistics

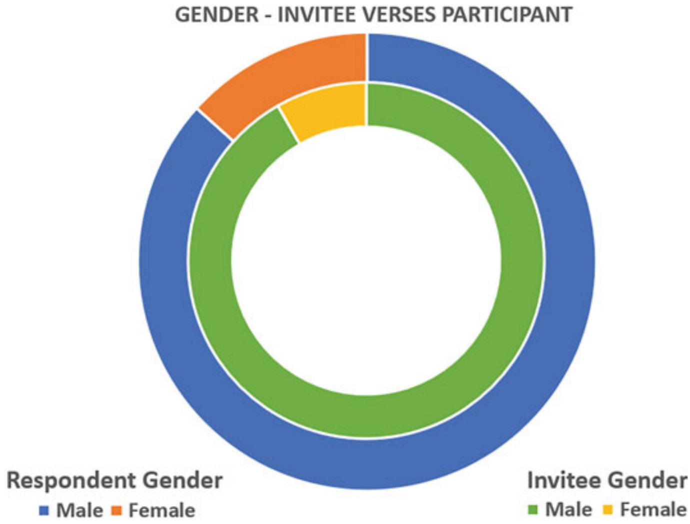

Fig. 2 Invitee versus respondent (Gender)

the information required a site search or the reader to follow a convoluted path to locate this type of information. Under Australian consumer law, all Australian websites are required to display terms and conditions for organisations that collect any customer or visitor information, privacy statements become a mandatory inclusion (OAIC, 2021). This is not the case for cyber security information as there are no current legal requirements to include this type of information. Any information shared is done so voluntarily and any organisation which does so is likely driven by organisational objectives.

Further website examination sought to uncover information related to strategic cyber security partnerships. This was included as notification of a partnership may indicate a preferred method of protection and an informal endorsement of a provider's capability. In the websites analysed, listed, partnerships were rare and only one website linked to the Australian Government's 'Scamwatch' program. Where as, others included links to vendors, who are often treated as partners and essentially did not operate in the security sector. Information about security partnerships were practically non-existent. Overall, very few mentioned any of their partners and, where they did, security partnerships were not included.

With little information publically presented, customers and consumers may be left to their own assumptions and understanding to invoke safe practices whilst using online resources. This initiates two considerations:

- Is the technology being used cyber secure by design?
- Is the technology being used configured for optimal cyber security?

As of October 2021, in Australia, minimum standards of cyber security for internet connected devices do not exist. Any network-compatible product purchased may or may not have cyber security features such as firewalls, encryption or access control lists. In fact, some devices, such as security cameras, may still operate with simple, well-known passwords (Shadman, 2017), despite this type of device's inclusion in the 2016 Mirai DDoS attack (Vlajic & Zhou, 2018).

In interviews, respondents raised the issue with product standards. Whilst Australian Consumer law directs minimum levels of safety and consumer satisfaction for all products available in Australia, it has no information directly related to the cyber security level of these products (The Australian Consumer Law, 2016). Products must be safe to use and function as advertised, but there is no legislation to ensure that they prevent unauthorised access or control. Similarly, whilst the ACCC has powers to govern compliance with legislation, it has no powers with respect to cyber security. Insecure products are still available in Australia and bad actors remain keen to exploit the vulnerabilities. It seems, only when consumers become aware of the risks, do they provoke change through purchasing preference (Blythe, 2020). Therefore, the pressure for manufacturers to develop safe and secure computer, network and IoT devices is driven by sector competition and consumer preference and, unfortunately, this comes at a cost (Blythe, 2020). As such, whilst the introduction of minimum levels of cyber security defence or standards for internet connected products and software could be one way to raise the level of protection for Australia's public and private infrastructure, it must be done jointly with methods of governance and auditing compliance.

Access to 'secure by design' technology is only one aspect of a secure implementation. Network connectable devices are often highly configurable and within the many options are choices that increase or decrease the level of security offered as a default by manufactures. As individuals may be influenced by their own threat perceptions, they have the ability to adjust the level of device protection so it is important that those configuring network devices have threat perceptions that are compatible with organisational decision-makers. In our interviews, most participants (20 of 30 interviewed) considered their perception of the threat of DDoS to be in line with their organisations. However, seven said that their organisation was less concerned than they were, with the remaining three stating their organisation was more concerned than themselves. This level of perception had an effect on cyber security budget approvals. Participants commented that justification for cyber security budget was more easily accepted if the organisation had experienced an attack, whereas those that possessed only theoretical knowledge were less keen to invest in prevention.

Information on attacks is scarce. Only one of the websites analysed listed details of a publicly-reported data breach, despite details of public data breaches being available for a further three organisations, from alternate public sources.

This lack of transparency could indicate a lack of trust between organisations and a lack of trust can prevent inter-organisational collaboration, as trust between people is an essential component of collaboration (Mitchell et al., 2011; Olson, 2019). Further, as cyber security relies on people as well as processes and technology (Herath & Rao, 2009), individuals carrying their own perception of online risk into the workplace (Huang et al., 2010) may support beliefs that the human factor remains the weakest link for cyber security (Kolenko, 2019; Wiederhold, 2014) and this can bring a significant effect on organisational vulnerability (Kolenko, 2019; Wiederhold, 2014). The human ability to assess threats relies heavily on human sensory detection (Blanchard et al., 2011), of which much is hidden when threats occur through digital methods. It is therefore necessary to provide training to improve human reasoning and behaviour. However, as psychological processes are susceptible to community and cultural influence, training and processes between groups may vary (Nisbett et al., 2001). It is therefore likely that outcomes can be different when technologies are implemented by differing groups and cultures and these differences may shift advantage to the defence. If cyber defence groups were able to collaborate more, they may be able to take advantage of differing perspectives and we may see more effective defence concepts being implemented even when using the same technology. This is a view supported by many respondents who, whilst claiming that more subject specific training was needed, also expressed a desire to see more real-world experience sharing between industries, countries, cultures, genders and ages, as a whole.

Conclusions

The field of cyber security is an interesting and fast paced place to be in the early 2020s. The explosion of IoT devices, greater than ever interconnectivity and organisational hunger for personal analytical data of life has further entangled continually innovated technology into our daily lives. Whilst this is partially driven by the need to efficiently reduce workloads and gain ever more understanding of our environments, it comes at a cost, as not all users of the data we generate, manipulate and share, have good intentions. Such is the rate of change, it can prove difficult to keep pace with daily new and evolving cyber threats that are continually discovered.

This study aimed to demystify some of the perceptions and assumptions of people and organisations and how they consider cyber threats against their personal and professional environments. This was a difficult task as little is written about the subject, but the exploratory research and qualitative analysis of the semi-structured interviews revealed some interesting new knowledge.

Firstly, despite the increase in network connected devices (including IoT), no product standards exist for cyber security products sold in Australia. This leaves consumers, including those with lower levels of computer literacy, holding the decision-making power without the protection of any consumer guarantees as to the products suitability for secure implementation. The introduction of an Australian standard would be one way to encourage manufacturers to design beyond a minimum requirement and, if policies are implemented intelligently, they could cover device configuration methods as, currently, consumers without adequate training face the task of configuring highly complex equipment in a way that protects their valuable digital resources.

The setup of standards may be one way to encourage greater collaboration. This study found little evidence of existing inter-organisational collaboration and very minimal transparency regarding each organisation's own cyber security defences. The difficulty in attracting participants further highlighted the reluctance of organisational staff to share knowledge that may help their peers. However, the study statistics showed that more female respondents agreed to participate than their male counterparts, which may further support the need for greater diversity in this area.

This study was undertaken during the COVID-19 pandemic and this had some effects on the cyber security landscape and the process of the study itself. During the pandemic, many staff needed to work from home and this placed a great load on organisation remote infrastructure. In many cases, urgency was focused on a rapid workable solution with security being a second consideration. For example, whilst company-owned laptops may have policy-driven security configurations, little to no audit would be performed on the home-based infrastructure to which it was connected. Therefore, COVID-19 rapidly changed the field of study and, with that, may have influenced the thoughts of the interview participants. This may also have had an effect on their willingness to participate but, at the very least, the interview process needed to adjust. Without the capability to perform face-to-face interviews, videoconferencing was used, altering the dynamic of the planned semi-structured conversations.

The implications of this study are broad. In one area, practitioners should aim for greater collaboration, as knowledge sharing and the opportunity to incorporate greater diversity of ideas and methods, may fuel development of more comprehensive implementations. In another, it is clear that, to date, greater academic focus has been placed on the technology and understanding how attacks are propagated and this has left the human side of cyber security under-researched. In a third area, more needs to be done regarding the way technology is designed along with attention to how adopters will configure the vast array of parameters available. Whilst manufacturers may begin to establish quality levels, policies may be required to ensure minimum standard are met.

This study was limited in scale due to the difficulty in obtaining enough participants to interview, but for future research, a deeper understanding of the motivation of people as they seek to protect their digital assets and further understanding of how they measure threat and risk when cyber security events cannot be seen or heard would be interesting to pursue and this may overlap into other areas of risk assessment where physical indicators are less obvious.

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A Conceptual Framework for Restaurants to Recover from COVID-19 Pandemic

Raja Kannusamy

Review on Restaurant study

COVID-19 pandemic has affected all businesses worldwide, and hospitality businesses have been the worst affected sector, specifically restaurants are facing the hardship in recovering from the pandemic. The study made by Lasek et al. (2016) report that to understand the effects in restaurants; it is very important for the managers to predict the trend and analyse the characteristics that influence demand in restaurant businesses and for helping with this they have presented two classifications, micro-level factors and macro-level factors. Later Phung et al. (2019) have included menu design, food authenticity, advertising and promotion, branding and consumer demographics in their study. Although many researchers (Lee & Ha, 2012, 2014; Reynolds et al., 2013; Bujisic et al., 2017; Lasek et al. 2016) have presented the macro-factors such as economic conditions, gross domestic product, unemployment rate and population earlier, few researchers have addressed the impacts of crisis

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on restaurants. Though terrorist events were addressed earlier by Green et al. (2004) and financial economic crisis were addressed by Lee and Ha (2012) and Lee and Ha (2014), the impact of epidemic crisis on restaurant demand has been addressed very limitedly. Chuo (2014) has addressed the consumer's responses to crisis and Seo et al. (2018) and Kim et al. (2020) have addressed the financial performance; study on the impact of epidemic crisis on restaurant demands has not been analysed by many researchers.

The high risks involved in the COVID-19 crisis brings in the necessity to study and evaluate the effects on restaurants to help the restaurant industry understand and plan for recovery. Gössling et al. (2020) have reported that the restaurant businesses were badly affected by the COVID-19 pandemic; they further state that in USA the restaurant businesses were estimated to reach $899 billion in sales revenue, $110 billion and $50 billion in Canada and Australia, respectively (National Restaurant Association, 2020). They have also presented that the restaurant businesses in Germany have been estimated around €210 billion and in Britain around £99 billion. However, by the time the World Health Organisation declared COVID-19 a pandemic on 11 March 2020, all restaurants were operating at between −10% and −20% compared to their normal operations. In many regions expect in Australia, Mexico and Germany, there were decrease in dine-in customers. Many regions have recorded decline in customers by the end of March 2020, and many regions had seen decrease in dine-in restaurants to about 90%.

The National Restaurant Association of America estimated in 2020 that there would be more closure of restaurants and due to this there would be more job losses. Sector Job Quality Index (JQI, 2020) had estimated that around 11 million employees in restaurants will be losing their jobs (JQI, 2020). The researchers have also predicted that the effects due to COVID-19 will not be leaving soon and this has emphasised the importance of having new policies and procedures in place. Bartik et al. (2020) have reported that the stringent measures such as social distancing, work from home flexibility, travel restrictions have ended up in many restaurant businesses closing and this has also impacted the demand of restaurants that were operating. Gössling et al. (2020) argue that all restaurant businesses need to make considerable changes in the way they are operating the businesses in the COVID-19 pandemic time since the health and safety of the employees and customers are very important.

However, Gursoy et al. (2020) suggests that opening the restaurant businesses and relaxing the travel restrictions would not increase the demand immediately.

The researchers argue the reason for this is that only a quarter of the potential customers are dining in and only a third prefer to travel and stay in hotels. Gursoy et al. (2020) also points out that when a vaccine becomes available; there, always, is around 14% to 16% customer demand which prefers to dine-in and around 17% to 18% which prefer to travel and stay in hotels. The researcher also suggests that most of these customers are ready to pay a premium price for additional safety measures and suggests hotels and restaurants to practice a clear safety and cleaning procedures. Most interestingly the researcher reports in their survey that around 65% of the restaurant customers and around 71% of the hotel customers have informed that it is very important to use various technologies in the service delivery process to decrease the human contacts.

The researchers report that different technologies that could be used are, using of robots for most part of the service delivery process, contactless payment, digital menus, QR codes, keyless entries and touchless walking space and steps. Yang et al. (2020) have identified a restaurant resilience index based on the moderators for regional areas, from their analysis on the impacts due to COVID-19 and it is understood that this index could identify those COVID-19 vulnerable areas. As suggested by Yang et al. (2020), distributing vouchers for consumption at local businesses could be a possible relief policy. It is important for the restaurant businesses for planning and developing contingency plans. Further based on the results presented by Yang et al. (2020), restaurants are to provide more attention in developing the off-premises market. The researchers have also suggested to use different technologies such as digital transactions, robot applications and ordering kiosks with digital menu. The researchers have also developed a model that could help the industry from an analytic perspective and have reported that their models could be used as simulator to identify the effects of the changes.

Dube et al. (2021) agree in providing measures such as concessions and grants. They argue that restaurants should rethink and redesign safe seating arrangements to the customers and have suggested to include contactless service and digital payment systems and to regularly sanitise the tables and chairs. They have also urged the governments to provide relief packages to keep the restaurant industry alive. In support of this, they have reported that United Nations has provided extensive relief package with the aim of providing relief to the restaurant industry and have argued that those businesses that take care of the employers and customers, thrives. The report also includes that in addition to government support, private funding and shareholders are of greater help and have stressed the importance of the local and national certification programmes for restaurants.

The restaurants need to consider strategies to co-create value with stakeholders and involve local communities in the businesses. Gursoy and Chi (2020) have reported that only a small proportion of customers would encourage dine-in restaurants, when the testing, tracing and isolation of COVID-19 cases have improved. Also there always is a group of customers who feel comfortable to dine-in, only when vaccines are available for COVID-19. Their findings also report that implicit sanitising procedures, social distancing, regular and proper cleaning of high touch surfaces, customer limits, health and safety protocols and employee training are the important aspects expected by a customer from a restaurant business (Gursoy & Chi, 2020). The researchers also report that almost 50% of the customers are even ready to pay more when hygiene practices are followed. However more research is required on the measures which are influencing customer behaviour and on how much would customers be willing to pay more. All the researchers do agree that most of the customers are in favour of using technologies in reducing the human-to-human contacts. The researchers also highlight that the recent developments in artificial intelligence and robot technologies have made possible the use of artificial intelligence in the restaurant delivery process.

Hence, it is very important for the researchers to identify the impact of using artificial intelligence on the processes, employees and customers. Hemmington and Neill (2021) report that the wage subsidies and small loans as government recovery policies were very much helpful to the business; however, most of the restaurant owners feel it might take three years for them to return to normal and feel that governments need to bring in measures for employees to returning to office, rather than working from home. It has also been reported that few landlords were greedy to expect 100% rent during this time.

Methodology

The research is carried out in 4 steps. The first step is to analyse the service delivery process during COVID-19. The second step is to identify the most important challenges faced by restaurant industry. The third step is to analyse the post-COVID-19 framework practiced in restaurants and the fourth step is to propose a new framework for the restaurant industry. The four steps have been presented in Fig. 1.

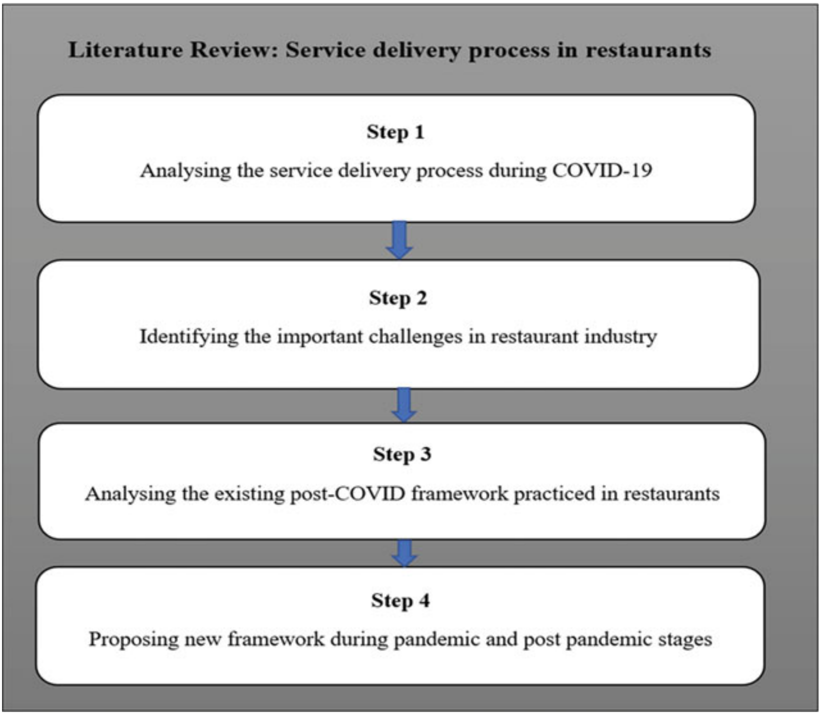

Fig. 1 Research methodology

Step 1 and Step 2: Analysing the Service Delivery Process and the Challenges during COVID-19

Qiu et al. (2021) have investigated whether corporate social responsibility (CSR) could protect firm value during the COVID-19 pandemic. However, it is not very clear about the increase in performance due to practicing CSR during a crisis. But the study has highlighted that involving in CSR-related actions could increase the stock returns and bring in the stakeholder attention during the crisis. The study has revealed that CSR relating to the community has a more positive and immediate effect on stock returns than the CSR related to the customers and employees. The researchers have also reported that those firms who performed better during a pandemic have already invested in CSR, and if they invest more to protect the communities, they could still further attract stakeholder attraction. The study has also identified that CSR for communities relates to providing relief to disaster, giving to charities, volunteering and donations; CSR for employees relates to providing workplace safety and protecting employee health and rights and CSR for customers relates to regular supply of the necessities during restrictions and preventing the transmission among customers. The researchers have reported that the positive impacts of CSR on the stock returns could be expected to happen starting from 5 days until 50 days. The results indicate that the CSR related to communities had the greatest returns on stock returns during the crisis and CSR related to customers performed next, followed by CSR related to employees.

Hao et al. (2020) have recommended hospitality industries to follow the principles in the different stages of the crisis management. During pre-event phase the researchers suggests, it is important to evaluate the devastating effects of the crisis and to identify the probability that it would happen. During emergency phase, they have suggested that restaurants need to focus on the safety of the customers, employees and the restaurant. During the intermediate stage when the fear is less, restaurants need to move from anti-pandemic to self-save mode and during the recovery stage; restaurants need to focus on optimising the operations and increasing the investments. The researchers report that the major anti-pandemic strategies adopted by the hospitality industries are leadership and communication strategies, human resource strategies, service provision strategies, CSR strategies, finance management strategies and finally the strategies in preparing the disaster management operating procedure. The researchers further present that the pandemic has acted as a catalyst for bringing in a more adaptable restaurant business. The fours aspects highlighted by the researchers are the multi-business and multichannel platforms, product design and investment preference, digital and intelligent transformation and market reshuffle.

Hu et al. (2021) have analysed the extent to which COVID-19 safety procedures could be implemented and practiced in the hospitality industry by using a case study approach. They have presented their findings in three divisions. First is the compliance of employees, second is the COVID-19 safety practices by the management and third is the organisational strategies responding to COVID-19. The researchers have shown that the engagement in compliance starts with health awareness and these prompts perceived utility which in turn motivates behavioural motivation. This again prompts the integration of the measures in the workplace, and this is influenced by the management level safety practices such as protection of health and safety, promotion of the importance of health and safety and participation in the safety activities. Breier et al. (2021) have conducted case study analysis of hospitality industries to understand how the organisations recover successfully by business model innovation (BMI). The researchers have reported that BMI has been applied in organisations in creating money inflow during and after the crisis and the results indicate that the crisis has changed the value creation in an organisation. The organisation delivered takeaway foods and gifts rather than dine-in service and there were changes in the value proposition while in few organisations the BMI's were evolutionary.

Le and Phi (2021) have addressed on how to respond strategically to COVID-19. The researchers addressed this relating to hotel sector. They have addressed seven areas regarding pandemic practices such as transformation during emergency, change in services, business innovation, safer practices, negative effects, external policies and recovery strategies. The researchers have reported that in the early phase; prevention strategy is commonly practiced. When there is apparently an increase in the pandemic, defensive strategy has been practiced. Some of the defensive strategies are reducing working hours, increasing unpaid leave and reducing outsourcing services. Health and safety procedures and guidelines were then followed. During the crisis period, most of the businesses were under lockdown. Hibernation and service transformation were the two options for the managers. Hibernation strategy refers to having minimum activities by temporarily closing few of them and reducing staff. In few regions' loans, subsidy in wages and tax reductions were provided. Many restaurants were offering takeaway services to local communities, pay now and party later deals were used in some countries and CSR programmes were given importance. The researchers continue to report that when the number of cases decreases, restrictions were relaxed and the customers were slowly back, and recovery strategies mainly focus on regular local customers. Also, Business innovations have resulted in digital menus, online service ordering and contactless service. The researchers report that after the pandemic; the entire systems may not return to normal, and that the restaurant industry has started to adapt strategically to an uncertain pandemic environment.

Yost et al. (2021) have presented financial recovery strategies for restaurants during COVID-19. The first strategy is for the operational stability. Strategies for online/takeaway orders to reduce dine-ins were suggested; further suggestions were to simplify the menu and limit the advertising. The second strategy focuses on the financial re-emergence and one way is to save cash by slowing down the capital investments and reducing the spending. The third strategy is to generate revenue by enhancing and revamping dining rooms, considering the social distancing factor. The fourth strategy is to provide coping mechanisms for the affected workers such as providing sick pay for casual employees for few days. These help in building employee loyalty and reduce the challenges in bringing back employees when returning to normal. The fifth strategy is to continue advertising, allowing options and continue alcohol sales. Norris et al. (2021) have analysed how the restaurant industry has adapted during COVID-19 crisis. This analysis resulted in 3 major themes; first theme is expanding the taking out operations. The major features followed are employee schedules and roles being adjusted, dining re-imagined, limited and innovative menu, delivering through third party, effective communication and collaboration. The second theme is innovative practices, and this includes partnership between markets and grocery shops, redesigned dining rooms with new and innovative menu items, alcohols and other revenue streams. The third theme is the community support which includes outreaching employee/community, making availability of hand sanitisers and donations, grants and funds. Gkoumas (2021) have developed a model for maintaining the restaurant viability during the COVID-19 pandemic.

While previous studies have focused on general models following deductive approaches in crisis management, the researchers have developed an inductive model designed specifically for restaurant businesses. Speed, strategy, sharing, support and surveillance are the important factors identified for viability during COVID-19 pandemic. Specifically, the 7 S model proposed for restaurant viability provides an action plan for the restaurant professionals to survive a pandemic. Madeira et al. (2021) have also studied the impact of the crisis on restaurants and their reporting were same as that of Gkoumas (2021).

Step 3: Analysing the Post-COVID-19 Framework Practiced in Restaurants

Hao et al. (2020) have reported that COVID-19 has affected the four major factors of hospitality businesses such as multi-business, new design, investment preference and moving to other markets. The researchers have stated that the threat within an organisation starts externally and COVID-19 is such an external threat that has placed threats on the employees and the organisation. The other major threat is the economic impact on the restaurant industry. Safety first strategy is implemented by the organisations during these threats ensuring safety of employees and customers and the researchers suggest that CSR need also to be extended to internal stakeholders. Qiu et al. (2021) have recommended the businesses to invest in CSR to protect their firm value during pandemic. The researchers argue that the CSR-related actions protecting society health can generate more stakeholder priority. Most importantly the researchers argue that CSR-related activities should be implemented regularly and not during the pandemic only. It is also reported that the different CSR-related actions have different effects on stock returns. The researchers have recommended to be attentive related to CSR press releases while looking for stock exchange opportunities. Hao et al. (2020) have proposed COVID-19 management framework in five phases. The first phase focuses on the disaster management. The second phase focuses on the firms as main actors. The third phase focuses on the main events that have affected the restaurant industry. The fourth phase focuses on the guiding principles during the disaster phases. The fifth phase focuses on the major strategies to be implemented by the firms to reduce the effects of COVID-19. Breier et al. (2021) have proven that BMI is a good strategy for hospitality sectors to overcome the COVID-19 pandemic effects. They have highlighted the driving factors as time availability, pressure to change and the role of stammgasts during BMI. Based on the results, the researchers have proposed a BMI relationship model for the hospitality industry. The presented model states that such crisis could trigger BMI and help the sector.

Kim et al. (2021) have analysed the uncertainty risks and strategic reaction of restaurant firms. They have presented four recommendations for reacting to the pandemic. The first recommendation is to share the information related to the organisation's efforts in implementing strategies during COVID-19 pandemic. The second recommendation is to provide clear instructions on social distancing and sanitation protocols. During the crisis, restaurants should ensure in-store cleanliness and prepare to address the long-term risks associated with the business. The third recommendation is that restaurants need to build a competitive brand image in building community engagement and corporate social responsibility measures. Restaurants could also involve in sustainable operations supported by networked customers. The fourth recommendation is related to customer participation. Guidelines and a safe culture are important so that customers understand and reflect the best practices for safety. These strategies help to build customer relationship and improve the brand image in the market. Smart et al. (2021) have presented the coping strategies due to the impact of COVID-19. They have presented three recommendations based on their findings. The first recommendation is to maintain the financial stability and they have pointed out that this is important when the restaurant has low occupancies. The second recommendation is to give priority for the health and safety of employees and customers; technology plays a major role for this. The third recommendation is for restaurants to develop the operational procedures for surviving extreme crisis. The researchers have suggested that this needs to include strategic plans to cope with similar crisis in future. The researchers have also suggested that it is important for the restaurants to evaluate the advantages and disadvantages of each market segment, have an appropriate mix of market segments and venture into collaboration and new service delivery process.

Step 4: Proposed post-Pandemic Recovery Framework for Restaurants

Hao et al. (2020) in their post-pandemic agenda research have presented that the first step is to form an efficient disaster management team. Further, Hu et al. (2021) have presented a framework for deep compliance with COVID-19 measures. The framework suggests that once the threat is eminent physically and economically; safety first strategy is to be followed to drive safe measures and to protect employees. Simultaneously Survival as a Social Responsibility is to be followed by extending the CSR to employees by trying to keep the jobs. The researchers state that together these form the Organisational Crisis Strategy, and this is then linked to the employee deep compliance process. Based on this finding, the author has given importance to efficient disaster management and has introduced this concept in the proposed framework as the main theme. Under the leadership and communication, the author has highlighted establishing a disaster management plan, creating online communication system, communicating the disaster management strategy and committing to activation protocols. This ensures the restaurant management commitment to safety. Also, the researchers Breier et al. (2021) in their research have analysed the role and the importance of a BMI during the COVID-19 pandemic. The researchers have adopted a multi case study method and their study reports that BMI has been very useful for firms to restart/establish after a crisis since enhancers and inhibitors play a major role in BMI. Based on the reports by the researchers, the author has included the BMI concept in the proposed framework along with the enhancers and the inhibitors.

Further based on the recommendations presented by Le and Phi (2021) the author has elaborated on the concepts presented by Hu et al. (2021) related to health and risk awareness, perceived utility, behavioural adaptation and integration. Health and risk awareness is proposed to include ensuring physical and psychological wellbeing, position and income of frontline staff, using annual leave, and reducing working days. Perceived utility is proposed to include sharing labour through service socialisation, replacing labours with process automation and cutting down low performance staff. Behavioural adaptation is proposed to include disinfecting whole service procedure, providing contactless service and

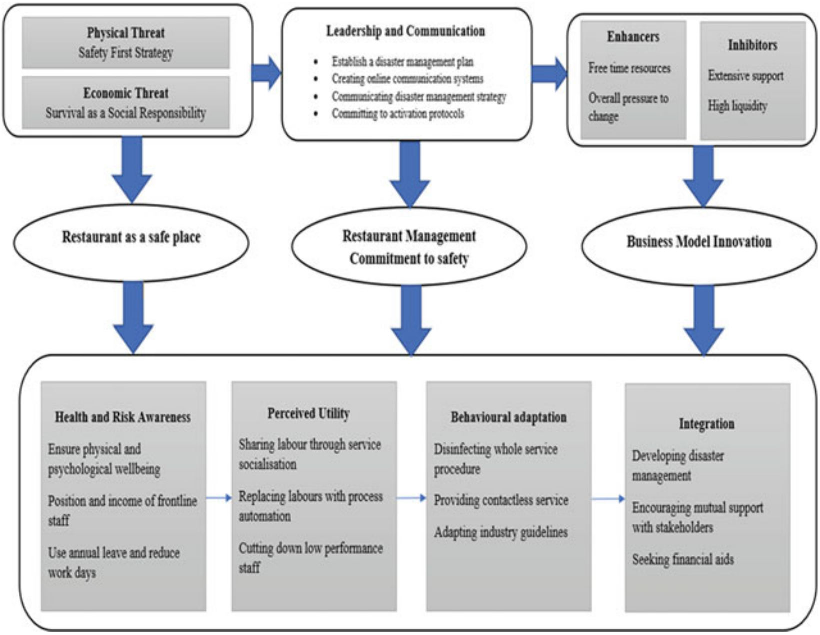

Fig. 2 Pandemic recovery framework for restaurants

adapting industry guidelines. Integration is proposed to include developing disaster management, encouraging mutual support with stakeholders and seeking financial aids. The proposed framework has been presented in Fig. 2.

Conclusion

Based on the literature review and findings, a new framework has been proposed for restaurants to recover quickly and safely from a pandemic crisis. The new aspects such as leadership and communication and the enhancers and inhibitors for the BMI proves that the framework if practiced will be an effective strategy for restaurants to quickly recover from the pandemic crisis. In addition, as suggested by Kim et al. (2021) sharing information on the restaurant's present activities such as mobile delivery and curb-side pick-up options will also be effective techniques. Additionally, providing preventive manuals including details of social distancing, employee training and communicating sanitation protocols to the customers are very essential. It is also recommended to build a brand image and encourage activities such as community involvement and CSR. Last but most, it is highly recommended to involve customer participation in building a safety culture.

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The Nexus Between Narrative Identity and Entrepreneurial Actions Among Rural Female Entrepreneurs in Australia

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Introduction

There are many problems that female entrepreneurs need to overcome to move their entrepreneurial pursuits forward. Often these problems are internal to the firm, such as firm capabilities (e.g., skills, knowledge and experience of managers and employees), whereas others are external and related to the barriers and inefficiencies in the business environment and policy sphere (Schaper & Weber, 2014; Fritsch & Schindele, 2011). In regional and rural Australia (from now on, referred to as rural), the problems faced by female entrepreneurs may be more dramatic as they face a higher degree of uncertainty, have greater barriers to access resources and have not fully recovered from previous catastrophic events in their environment (e.g., drought, fires and the recent COVID-19 pandemic).

The Australian Government has responded to these challenges with policy reforms and deployed resources to support the recovery of female-led businesses. The overarching goal of this recovery plan was to facilitate

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new business creation through entrepreneurial education and to cultivate a nurturing environment with fewer impediments for new and existing female entrepreneurs. However, other equally important but less apparent barriers need attention if the Government aims to increase women's participation in entrepreneurship. These barriers are those associated with how female entrepreneurs perceive themselves and their socio-cultural environment and interpret their lived experiences as rural female entrepreneurs. Through a comprehensive analysis of their narratives, this chapter offers a profound understanding of the complex interplay between identity and entrepreneurial actions, encompassing a spectrum of behaviours, strategic decisions, and venture otcomes. Indeed, in line with Knox et al. (2021), identity aligns with the quest to explain the antecedents of entrepreneurial actions (Knox et al., 2021).

The subsequent sections of this chapter are structured as follows: It begins by explaining the narrative constitution of identity (Somers, 1994) as a theoretical framework, followed by the methodological approach that provides information about the research setting and approach to data analysis. Afterwards, the empirical analysis is presented with representative quotes from participants. The chapter culminates by discussing the findings and how identity influences entrepreneurial actions and conclusions.

Theoretical Framework

The narrative constitution of identity is a social identity perspective that posits that it is through narratives that individuals come to know, understand and make sense of the social world (Somers, 1994). Individuals construct their identities by locating themselves or being located within a repertoire of available social, public and cultural narratives. These identities are accompanied with a set of beliefs, feelings and emotions that reinforce self-perceptions and therefore guide entrepreneurial actions. Expectedly, entrepreneurial actions that align with as opposed to the ones that threaten identity are more likely to be pursued.

To understand and explain rural female entrepreneurs' actions, we must first recognise the place of ontological narratives—the stories through which they form their identities in their social lives. These ontological narratives are socially embedded and thereby influenced by contextual narratives. Notably, the messages embedded in narratives may create the reality that the message embodies (Bruner, 1986). Ontological and contextual narratives are explained next.

Ontological and Contextual Narratives

Ontological Narratives

Ontological narratives are the stories these rural female entrepreneurs use to make sense of their lived experiences. These narratives define who they are and preconditioned them to act in specific ways or even not to act, according to how they understand and position themselves in any given narrative (Somers, 1994). For example, a rural female entrepreneur from an aboriginal background, explained that when she had a disagreement and was disrespected by another member of the business network she belong to, she was brave enough to express her feelings and then walked away because this is how people act in her culture.

Continuously acting in the present produces new narratives that might reinforce or challenge the individual's current understanding Hence, it provides the basis for existing actions to continue (if understandings are reinforced) and new actions to emerge (if understandings are challenged). In other words, ontological narratives affect the activities they pursue, their consciousness and their beliefs, which in turn, affect them (Somers, 1994). Ontological narratives are, above all, social and interpersonal. Accordingly, rural female entrepreneurs adjust their stories to fit their identities and tailor reality to fit their stories (Somers, 1994).

Contextual Narratives

Contextual narratives refer to public narratives ascribed to the social, institutional and spatial context. These narratives range from one's own family stories, to those of the workplace, government and nation (Somers, 1994). For example, the CEO of a multi-billion-dollar company recognised that her family narrative was anchored in 'survival' and 'staying above the water' and explained that for her to achieve success; a shift in these narratives was necessary (Gervais, 2020). Contextual narratives are resonant stories, usually with emotional connotation that is remembered and constantly repeated. They reflect and perpetuate collective identities and commonly accepted interpretations of actions and events. For example, the narratives about rural areas as 'second class' town and cities are taken for granted, negatively affecting the mobilisation of people as moving to rural areas may be detrimental to their careers and lifestyle

(Parliament of the Commonwealth of Australia, 2018). A critical characteristic of contextual narratives is that they have been maintained through history and, must be explored over time and space (Somers, 1994).

Methodological Approach

An inductive single case study was utilised to explore how ontological and contextual narratives interact and shape one another. The investigation began as part of a larger research project to assess the performance of a virtual business incubator (VBI) that supports rural female entrepreneurs in Australia. To this end, additional data was gathered to investigate how these female entrepreneurs' self perceptions, perceptions of how others perceive them and perceptions of the context in which they live and work influence the development and delivery of entrepreneurial programs and services. During this investigation, distinctive features of the VBI became apparent, such as common challenges engrained in their identities, shared values and the desire to act genuinely and be accepted for who they are. Therefore, the VBI represented a distinct social setting in which rural female entrepreneurs interacted and was purposefully used to achieve the objectives of this chapter.

This investigation relies on the female entrepreneurs' perception of themselves and their social reality (i.e., interpretivism epistemology), where identity and social reality are seen as a constantly shifting outcome of perception (i.e., constructionism ontology). As such, it follows an approach in tune with these rural female entrepreneurs' lived experiences (Guba & Lincoln, 1994), and therefore, a qualitative research strategy is utilised to elicit rich detail. As argued by Gartner and Birley (2002), many important questions in entrepreneurship can only be examined through qualitative methods and approaches.

The Virtual Business Incubator

The setting is a for-profit VBI with headquarters in the opal mining town of Lightning Ridge in New South Wales. The VBI provides business support services and networking opportunities via the Internet to nascent and established female entrepreneurs in rural Australia. At the time of data collection (July–August 2020), it had 160 members across a wide geographical area, stretching from Darwin in the Northern Territory to Horsham and Mirboo North in Victoria and to Myaree in Western Australia. The VBI aims to build entrepreneurial capacity and community resilience through education and diversification of rural economies.

Participants

Participants included three past members and twenty-one current members of the VBI who voluntarily agreed to participate. Past members undertook one or more services from the VBI but decided to discontinue their membership at some stage. Current members were either in the process of starting a business (nascent female entrepreneurs) or wanting to grow their business (established female entrepreneurs). Most participants already in business operate as sole traders with a few operating via a partnership, company or trust structure. Their businesses cover various industry sectors including agriculture, manufacturing, information technology, professional services, retail trade, accommodation and food services, education and training, health care, tourism and hospitality and arts and recreation. Participants were located in New South Wales, Queensland, Victoria and Western Australia and were aged between 21 and 68 at the time of the interview. Table 1 presents the demographic characteristics of participants.

Data Collection

Participants' subjective viewpoints of their entrepreneurial experiences were gathered using semi-structured interviews. This allowed in-depth exploration of their entrepreneurial narratives and subsequent analysis of how these were used to construe identity and derive meaning from interactions (Zozimo et al., 2017). During the interviews, participants were asked to recount their entrepreneurial journey, describe their motivations and challenges and reflect upon their experiences within the VBI. Participants recalled selected memories that they found particularly meaningful for their learning and development (Knox et al., 2021; Mills et al., 2010).

Questions evolved as each interview progressed, allowing participants greater flexibility to discuss issues and topics pertinent to them (Choak, 2012). In this way, their narratives displayed their identities and simultaneously report and reproduce their lived experiences as being rural, female and entrepreneurs (Minichiello et al., 2008). These twenty-four interviews allowed us to obtain interesting insights and valuable findings. As Walter (2010) pointed out, the key issue is not the number of interviews but what is done with the interview material collected. Interviews were conducted via Zoom (N = 18) or phone call (N = 6), lasted between

Table 1 Demographic characteristics of participants

Female Entrepreneur	*Age group*	*Education*	*Location*	*Industry sector*	*Business Structure*	*Membership*
FE1	46–50	Bachelor	NSW	Agriculture	Partnership	Current member
FE2	46–50	Master	NSW	Health	Sole trader	Past member
FE3	46–50	Bachelor (Honours)	NSW	Information technology	Sole trader	Current member
FE4	66–70	Bachelor	NSW	Accommodation	Sole trader	Current member
FE5	51–55	Advanced Diploma	NSW	Education and training	Sole trader	Current member
FE6	51–55	Bachelor	NSW	Information technology	Sole trader	Current member
FE7	56–60	Master	NSW	Manufacturing (clothing)	Sole trader	Current member
FE8	46–50	Certificate IV	NSW	Transport	Partnership	Current member
FE9	46–50	Bachelor	NSW	Tourism	Trust	Past member
FE10	41–45	Bachelor	NSW	Professional services	Partnership	Current member
FE11	41–45	Bachelor	NSW	Food services	Sole trader	Current member
FE12	46–50	Bachelor	VIC	Retail	Company	Current member
FE13	56–60	Bachelor	VIC	Agriculture	Sole trader	Past member
FE14	46–50	PhD	NSW	Agriculture	Partnership	Current member
FE15	46–50	Diploma	QLD	Retail	Sole trader	Current member
FE16	51–55	PhD (in progress)	NSW	Information technology	Sole trader	Current member
FE17	36–40	Master	VIC	Health	Sole trader	Current member
FE18	46–50	Bachelor	VIC	Professional services	Company	Current member
FE19	21–25	Bachelor	NSW	Professional services	Sole trader	Current member
FE20	36–40	Associate degree	VIC	Manufacturing (upholstery)	Sole trader	Current member

(continued)

Table 1 (continued)

Female Entrepreneur	*Age group*	*Education*	*Location*	*Industry sector*	*Business Structure*	*Membership*
FE21	56–60	Bachelor	NSW	Arts	Sole trader	Current member
FE22	46–50	Bachelor	NSW	Recreational services	Sole trader	Current member
FE23	36–40	Graduate Certificate	WA	Health	Sole trader	Current member
FE24	51–55	Bachelor	NSW	Retail	Sole trader	Current member

Legend New South Wales (NSW), Queensland (QLD), Victoria (VIC), Western Australia (WA)

40 and 110 minutes and all twenty-four interviews were transcribed for subsequent coding and data analysis.

Data Analysis

The data was systematically organised and analysed using an inductive thematic analysis in combination with narrative analysis. Thematic analysis identified patterns in the data set. This method provided a foundational understanding of the broader trends and commonalities within the data. The narrative analysis allowed us to unearth the subtleties and intricacies of these female entrepreneurs' journeys in a rural setting. Inspired by the insights from Larty & Hamilton (2011), narrative analysis enabled us to explore how ontological and contextual narratives interplay in shaping the actions of these female entrepreneurs. This exploration extended to encompass their behaviours, strategic decisions and venture outcomes. NVivo software was utilised to facilitate the data analysis direct quotes from the participants were used judiciously, serving as illustrative anchors for the concepts or ideas under discussion. It is important to note that some participants were more expressive than others, leading to an over-representation of their words in our analysis. This, however, reflected the richness of their contributions and the depth of insights they provided. We used narratives as our primary way of communicating our findings. Narratives can capture the complex nature of social realities and reveal different viewpoints that may be hidden in individual experiences. Focusing on narratives gives voice to these hidden dimensions and contributes to the discussion on women's entrepreneurship in rural settings.

Empirical Analysis

Nine narratives emerged in the analysis of the stories used by these participants to interpret their lived experiences as being rural, female and entrepreneurs. These narratives were categorised as 'perceptions of context' and 'perception of self' (see Table 2).

Contextual Narratives

Social Isolation and Loneliness

Many participants mentioned social isolation and expressed a desire to be more socially connected in the setting in which they lived. For example, FE7 commented:

> I was facing, you know, isolation and I just wanted more connection and support with people, like other women in similar positions.

Likewise, FE20 said:

> I run my business from home, so I sometimes feel quite isolated.

FE22:

Table 2 Organisation of narratives

Contextual narratives	*Ontological narratives*
• Social isolation and loneliness	• Women as supporters, not providers
• Lack of Privacy	• Holistic beings
• Unreliable digital connectivity	• Lack of self-confidence and self-worth
• Limited access to quality and specialised services	• Need for support, guidance, encouragement and accountability
• Underrepresentation of female entrepreneurs in rural networks	

> When you're a sole trader you don't often…I mean, I see other colleagues twice a week, but otherwise you work on your own.

FE16 commented about her loneliness:

> The worst thing about having a business in a rural area is that you often feel alone.

It was also recognised that being socially isolated led to close minds, particularly the lack of exposure to other peoples' ideas. FE18:

> If you are pretty isolated or involved in doing your own business and there's not much other interaction, I think it's really easy to get very close-minded-and only know what you know and keep doing things the same way.

Lack of Privacy

Another common issue identified by participants was lack of privacy in rural communities, where everybody knows everybody's businesses and also many aspects of their personal lives. It was important for some participants to maintain their reputation and/or to be perceived in certain ways. Hence, they carefully considered who they would relate with in their local town and what personal and business information they shared. FE24:

> You hope they will keep things confidential, but no one is confidential in the Bush.

The interregional aspect of the VBI opened up avenues to have discussions (on both business and non-business topics) with other female entrepreneurs who were not local because, as FE9 noted:

> In a small country town, your choices are pretty limited …because sometimes [what you are talking about] it's confidential and in a small place everyone knows everyone, so it was just the opportunity to broaden that reach of women to talk to.

Unreliable Digital Connectivity

Telecommunication and digital infrastructure, such as mobile phone coverage and broadband internet, facilitate social and economic opportunities. Digital connectivity is an issue in rural areas where the standard service is significantly below that of well-connected urban areas. FE21expressed this:

> The biggest issues for remote women trying to set up another form of income is that we don't have reliable services ... no Internet access and no phone access ... so most of the time, I had no access to any of it.

The consequences of COVID-19 have been disruptive, with a dramatic and sudden loss of demand and revenue for most small businesses. With social distancing and without reliable digital connectivity, many rural female entrepreneurs felt even more isolated. In this regard, FE7 pinpointed:

> We were doubly isolated now because we've lost all our outlets for, you know, maybe social outlets that most people, you know, rely on.

Limited Access to Quality and Specialised Services

Limited access to quality and specialised services was an issue in general and more prominent in remote areas. As FE16 commented:

> There's not a lot of stuff around, you don't have the facilities for networking … there is a lack of services.

Underrepresentation of Female Entrepreneurs in Existing Regional Networks

The participants noted that institutions and organisations that promote formal networking opportunities among entrepreneurs (e.g., Business Chambers and Business Enterprise Centres) have primarily male members. These female entrepreneurs felt more comfortable participating in these institutions if the ratio of male to female was more balanced. As FE16 explained:

> Even our business chamber, we only have 20 members, and only two are female.

Ontological Narratives

Woman as Supporters, Not Providers

Traditional gender roles persist. For example, women are expected to play specific roles in the family and at work. The view that women's role is to support their families and communities rather than be primary breadwinners was suggested by statements from the participants. FE17 stated:

> As a woman, it's very rare ... it's not in our DNA to be the providers.

Moreover, FE18 commented:

> Women are the backbone that keeps everybody else smiling; they keep their communities, schools and little sporting clubs going.

In another passage, she added:

> …they had drought for years; they're trying to stay happy, to keep husband and kids and everybody else, you know, from going out with a gun [referring to committing suicide].

Holistic Beings

Participants saw their personal and business world as intertwined. It was necessary for successful business operation that they resolve issues at both personal and business levels. In this regard, FE4 mentioned:

> The underlying issues of why a business may not be progressing the way it potentially could be...often those barriers are personal.

Similarly, drawing upon her own business experiences and those of others, FE22 noted:

> It comes down to who you are because it helps you to work through those barriers that may stop you from succeeding in business. We often don't know why we self-sabotage.

Self-development is important for improving one's perception of oneself, and how others perceive them is as important as business development. FE16:

> The whole business is holistic because people are whole people, so the self-development is just as important as business stuff.

Personal and business aspects of their lives were interwoven and acted upon each other. They could not be separated or viewed independently. FE22 stated:

> I could not think of the business side until I could address the personal side of what I was going through…I've been able to look at my business, and go, well, I can now see that this wasn't a structural block, it was a personal… we use that word holistic.

This was important to nascent female entrepreneurs:

> [FE4] I think the emotional support and learning about self are essential arms of a business.
>
> [FE16] If you can feel more positive in yourself, that's good for you and your business.

Lack of Self-Confidence/Self-Worth

Many participants experienced low self-confidence despite their tertiary qualifications (e.g., bachelor's or master's degrees) and relevant professional work experience. With a bachelor's degree and 15 years of experience running her business, FE1 responded:

> I didn't have a much self-confidence, and living on a family farm with two small boys... I had a successful career before I moved on to the farm, and I just was struggling to find my place.

In addition to lack of self-confidence, lack of self-worth was also expressed. FE24 stated:

> I don't have a business brain, so neurons are still building; I have no idea [about] marketing … I think of myself very bloody lucky that I'm getting customers.

This was also the case for FE3, who reflected:

> After having met and spoken with some of these women, I realised that [pause] I was undervaluing myself; I was undervaluing the other women that I knew.

Need for Support, Guidance, Encouragement and Accountability
Many participants recognised the need for 'handholding' or an accountability buddy from their peers, despite being qualified with relevant professional experience. The role of the accountability buddy was to ensure they were applying what they learned to their personal lives and businesses and to encourage them to stay the course. FE22 stated:

> I think the mentors in the VBI makes you accountable, which is good, because some of us need that sense of accountability.

This is corroborated with the following excerpts, one from FE17, who joined the VBI to learn:

> I think when you sign up for a program, there needs to be some sort of accountability associated with it.

And also, from FE21:

> I'm somebody who operates really well with an accountability partner. I need that. It's been like going out to exercise every day; if I've got somebody knocking on my door in saying come on let's go it's time to go, I'll get up and go, if I don't have that, I don't go.

Discussion of Findings

Participants delineated their individual and collective identities through their shared narratives, revealing the importance of recognising that entrepreneurs who share specific attributes, such as being rural women in business, do not necessarily share similar experiences unless their narrated identities align (Somers, 1994). It is imperative to understand that we cannot attribute social action solely to group identification; instead, it emerges within the context of shared life stories and experiences. Therefore, we anticipate these female entrepreneurs will build social ties with others with comparable experiences.

Women's preference to relate to other women has been acknowledged in previous studies (Buttner, 2001; McAdam et al., 2019). Our findings corroborates this preference among participants, their choice of connections with other rural female entrepreneurs. This preference is rooted in the belief that collective identities facilitate conflict-free social interactions and reinforce shared values, thus creating a safe environment and a sense of belonging. However, the downside of shared identities lies in the reinforcement of limiting narratives when everyone within the VBI holds similar viewpoints. Consequently, the emergence of narratives that could lead to novel perspectives and more constructive attitudes becomes highly unlikely.

This study brings to light the implicit gender bias entrenched within the mindset of rural female entrepreneurs in Australia. For instance, participants often conform to traditional roles, primarily embracing their nurturing and supporting roles within their families and communities rather than considering entrepreneurship. This mindset suggests a perception that starting a business may not be their prerogative or may pose significant challenges. Paradoxically, while they occupy pivotal roles as the pillars of their families and communities, they also bear the weight of overwhelming responsibilities, attempting to meet the expectations of their personal and communal roles. These narratives are inextricably linked to unspoken cultural discourses surrounding women's roles in their communities, including the prevailing belief that women are primarily responsible for caregiving and household management (Harvey, 2007; Dempsey, 1987). Consequently, they often prioritise marriage and motherhood over career aspirations (Dempsey, 1987; Jones, 1984) and entrepreneurship.The challenges articulated by participants regarding the constraints imposed by their rural context offer insights into the broader economic disparities that charaterise certain regions (Korsgaard et al., 2015). Additionally, these challenges contribute to the perception of rural areas as 'second class' towns (Parliament of the Commonwealth of Australia, 2018). The remoteness of the context in which they operate also tends to produce strong feelings of social isolation and loneliness. It is worth mentioning that loneliness has been associated with feeling worthless and having low self-confidence, feeling unable to cope with problems, having few and poor-quality relationships and poor quality of life (Australian Psychological Society, 2018). These emotional and practical burdens motivated them to join the VBI to alleviate these feelings and perceived disadvantages.

Low self-confidence in entrepreneurial abilities is a significant barrier to women's propensity to start new ventures or advance established businesses (Kirkwood, 2009; Wilson et al., 2007; Fielden et al., 2003). In this study, we argued that this lack of self-confidence influences their interpersonal relationships, the types of connections formed, and the benefits of these relationships. Hence, low self-confidence constitutes a relevant motive for these female entrepreneurs to seek and join networks such as the VBI, perceived as safe environments where they can genuinely be themselves, express their vulnerabilities freely (without being judged) and connect with like-minded female entrepreneurs. Participants perceive the world holistically, viewing business, family, community and society as in components of a singular sphere (Sorenson et al., 2008). This comprehensive perspective underscores the widespread acknowledgment that personal barriers impede business progress, even when entrepreneurs possess significant business acumen and professional experience. Many participants believe they must gain more knowledge and skills to pursue entrepreneurial endeavours effectively and that a mentor or an accountability partner who provides support, guidance and encouragement is required to be successful. Hence, they prefer connecting and learning from other more established or successful rural female entrepreneurs to have them as mentors or role models.

Influence of Narratives on Entrepreneurial Actions

Through narratives, these rural female entrepreneurs exposed how they perceived their world and the stance made toward what they view. Inevitably, some of these narratives may limit the availability of options for actions and made specific actions more willing to be pursued, even when these actions do not favour positive outcome for their ventures. An intrinsic feature of narrative identities is that they are accompanied with a set of beliefs, feelings and emotions that determines how the current reality is perceived and experienced and therefore serve as antecedents for entrepreneurial actions, shaping behaviours, strategic decisions and ultimately, their venture outcomes. The ontological narratives, rooted in individuals' perceptions of their self-identities, play a pivotal role in determining their entrepreneurial behaviours. In the context of rural female entrepreneurs, these narratives often revolve around traditional roles and societal expectations. Many participants accepted their roles as nurturers and supporters, aligning their behaviours with these roles, which may include prioritising caregiving and community support over entrepreneurial pursuits. These narratives lead to behaviours characterised by a hesitancy to embrace entrepreneurship, which may conflict with their perceived roles within their families and communities. Consequently, their behaviours may manifest as a reluctance to initiate or scale business ventures.On the other hand, contextual narratives, informed by the unique challenges of the rural environment, also shape behaviours. The challenges stemming from economic disparities and the remote nature of rural areas influence how entrepreneurs in these settings respond. Rural entrepreneurs often exhibit resilience and adaptability in their behaviours, seeking ways to navigate the challenges posed by their environment. These behaviours may involve resourcefulness in resource acquisition or innovative approaches to business management in remote locations. The interplay of ontological and contextual narratives significantly impacts strategic decision-making in entrepreneurship. Ontological narratives rooted in traditional gender roles and societal expectations may lead to conservative and risk-averse decision-making. Participants may opt for safer, more conventional business strategies aligned with their perceived roles, potentially missing out on opportunities for growth and innovation.Contextual narratives, reflecting the unique challenges of rural settings, influence the strategic decisions of these female entrepreneurs. The narratives of economic disparities and limited access to resources may drive strategic choices toward resource optimisation, cost-efficiency, and sustainable practices. Female entrepreneurs may devise strategies tailored to the remote context, such as leveraging digital platforms for market access or developing collaborative networks to overcome geographic isolation. The culmination of ontological and contextual narratives is most evident in the outcomes of entrepreneurial ventures. For rural female entrepreneurs, the alignment or dissonance between their self-identities (ontological narratives) and the challenges they face in their environment (contextual narratives) significantly shapes these outcomes. When ontological narratives strongly align with societal expectations, entrepreneurial outcomes may include ventures that mirror traditional roles and provide community support services. While these ventures may contribute positively to their communities, they may also limit financial success and business growth. Conversely, when rural female entrepreneurs reconcile or challenge traditional narratives and adapt to their challenging environment, their ventures may yield more diversified outcomes. These outcomes include innovative business models, expanded market reach through digitalisation, and enhanced economic resilience. By embracing a broader narrative encompassing their identity and the context in which they operate, they are more likely to achieve diverse and sustainable entrepreneurial outcomes.

Conclusion

In conclusion, the interplay of ontological and contextual narratives in the lives of rural female entrepreneurs in Australia demonstrates how deeply ingrained selfidentities and the unique challenges of their environment can influence entrepreneurial actions. Recognising and understanding this interplay is critical for policymakers, support organisations, and academics seeking to empower and promote the success of female entrepreneurs in rural settings. By addressing the complexities of these narratives, we can foster a more inclusive and supportive entrepreneurial ecosystem that allows nascent and established female entrepreneurs to thrive and contribute meaningfully to their businesses and communities.

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Small Business Owners Lament "Is that Really All My Business is Worth?"

Denise Hall

Introduction

"SME's and COVID-19, Just Surviving or Thriving" can be interpreted in many ways. In the case of a Small Business Owner, as part of their personal and their business' future, being able to successfully exit, or transfer, definitively fits into this description, recognising it as a positive step into the next stage of growth for both themselves and the business.

At the 2018 Small Business Ministerial Conference—Parallel Session 2, the OECD recognised "Business Transfer as an Engine for SME Growth", identifying the need for this to happen more successfully and "to improve the evidence base on business transfer trends" (OECD, 2018).

This book chapter attempts to bring these two conditions together, by providing real-life examples of considerations for business exit, and the impact of the pandemic on this decision for SME Business Owners. "Revitalisation" by a new owner, therefore, makes perfect sense.

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Objectives

Based on personal experience as a Business Broker for 12 years, in conjunction with time spent at *Xcllusive Business Sales*, one of Australia's largest established national Business Brokerages (2023), what follows steps out:

- Triggers leading to the consideration of Business Owners to exit.
- The right time to take a business to market.
- Different ways to exit.
- Impact of COVID-19 on Business Sales (transfers).
- Analysis of the health of the business and its saleability potential.
- Determining indicative asking price via a Business Appraisal.
- What else needs to be considered, and why.
- What help is required.

Methodology

Triggers Leading to the Consideration of Business Owners to Exit

To be able to get to the point of exit, Business Owners have to weigh up many options, personally, financially and operationally, before ultimately deciding that exiting their business is what they really want to do. Typically, there is some sort of trigger for the Business Owners to contemplate an exit, and the pandemic has provided one. Running a business through the pandemic has put a strain on all Business Owners, regardless of size, industry or sentiment, whether due to their age, the depletion of energy levels, being opportunistic because the bottom line looks the best it has looked in ages, but nonetheless, at some point, exit is a decision that has to be made.

Understanding what the trigger is for the Business Owner to sell is vital and will inform what help they need to achieve this most important outcome. The "why" trigger can come in many forms:

- Pandemic related?
- Finally looking to balance life with work, as opposed to the usual way around?
- A tap on the shoulder with the dream offer being received?
- The realisation that the business is no longer making enough money?

- Partnership split (albeit life or business or both)?
- Ill health?
- No longer gleaning enjoyment?
- Reaping the upside for many years of working hard?
- To cash in and use the money elsewhere?
- Warding off insolvency?
- Paying off personal debt?
- Limited potential left in the business?
- Moving onto another project? Another location perhaps?
- Retirement?
- A combination of any number of these, plus some? (Hall, 2021a, b)

With some of these triggers driven by external forces, and others more internally, it is always a deeply personal decision for the Business Owner.

Early on in the pandemic in June 2020, Zoran Sarabaca of Xcllusive Business Sales (quoted in Lovie, 2020) stated:

> For the past 10 years, we've been told that a tsunami of businesses for sale will hit the market as Baby Boomers reach retirement age. But the suggestion that we will experience the largest transfer of business ownership ever in Australia over the next few years, hitting a peak in 2028, is questionable. When we look at the reasons why people sell businesses, retirement comes in under 40%. That means 60% of sellers are selling for other reasons. So, even when you factor in the increase in Baby Boomers retiring, the best case you're looking at is an 8% increase between now and 2028. At just 1% growth per year, that's definitely not a tsunami!

With the assumption that retirement is the most popular trigger for Business Owners not supported, how are they to know when it is the right time to sell the business?

The Right Time to Take a Business to Market

What the Business Owner can have some influence over is as good a place to start as any. By beginning with a future end date and working forwards to the current indicates a likely timeline for the entire exit process (Hall, 2021a, b). When a Business Owner has time on their side, this can be at a more leisurely pace, and however, what pandemic lockdowns and

Fig. 1 Business exit timeline (*Note* From Denise Hall, 2021a, b [https://denisehall.com.au/]. Copyright Denise Hall

restrictions has highlighted is that for many, the "Getting Ready to SELL" part may have accelerated (Fig. 1).

Do What's Next! (evolution)—Here, the trigger is obvious, all the pre-work is completed, and the Business Owner knows exactly what their longer-term plan is, resulting in an ultimate date (Hall, 2021a, b). For the sake of this exercise, let's assume it is 5 years from now, not driven by pandemic constraints or ill-health as a more pressing trigger, therefore, if it is mid-pandemic now in 2021, that would mean 2026.

Handover (execution)—Handover and Transition will look different for each business and owner. From a sale process perceptive, this means that the business is sold, contract is signed and the business moves from one owner to the next (Hall, 2021a, b). There is difference between Handover and Transition: Handover is more of the operational aspects of the business; handing over the keys, passwords, being shown around the IT systems, getting into the nuts and bolts of the day-to-day operations, typically, taking 2-4 weeks (Hall, 2021a, b). For some industries and smaller sized businesses, this may be where the relationship concludes. However, for many others, especially at the current COVID-19 moment, purchasers have an expectation for an agreed, ongoing continuance with the vendor, to share the risk. This can range anywhere from 12 weeks to 12 months and longer, depending on the comfort level of the buyer (Hall, 2021a, b). Each of these will be influenced by the industry, the experience of the purchaser and the reliance on the owner, who has the important relationships in the business and what will need to happen for this to be as smooth as possible (Hall, 2021a, b).

So, let's make it one year, bringing this part of the timeline back to 2025.

Sale Process Begins (engagement)—For this purpose, let's assume this is when the agreement is signed with the Business Broker to commence the sale process. Allowing 2-4 weeks for the creation of the Information Memorandum and the advertising, the business will go "live" to market (Hall, 2021a, b). Then, depending on the market feedback, and the ability to identify and nurture the one buyer who will purchase the business, a marketing campaign can last anywhere from 6 weeks to 6 months (Hall, 2021a, b). This, however, only represents about a third of the process. The additional two-thirds are spent with the purchaser verifying through due diligence, and developing and agreeing to the contract of sale, whereby both parties are sign a binding agreement (Hall, 2021a, b). This is also the time where the reliance on the Accountant and the Solicitor can amplify and can often be where delay takes place.

This can be concluded as quickly as 6 weeks, however, allowing 12 months for this process, brings the timeline back to 2024.

Getting Ready to Sell (exploration)—This leaves three-years to do all the pre-work and can obviously by brought forward if there is no reason to delay. Three years is also the usual time period for analysis of financial statements (Xcllusive Business Sales, 2021). Therefore, if there is work to be done to present the business in its best light, clean and clear of personal expenses and muddiness of numbers, then this timeframe allows for this. Remembering that from a saleability point of view, the higher the profitability the better.

This brings us to now, 2021.

Going through this exercise helps inform immediate next steps for the Business Owner, especially through the lens of the pandemic: will the business survive and even thrive in its current form over the next year(s)? Is the Business Owner in good health, and have the necessary energy, vim and vigour to go again? If the answer is no, then the above timeline can be condensed considerably.

Different Ways to Exit

Following the decision to exit, and the possible timeline, Business Owners are then faced with exploring the different ways to facilitate this exit. Options to be considered include closing, selling to employees, partnering with a competitor or putting the business on the open market, see Fig. 2. This decision-making process is highly complex for Business Owners and is frequently clouded by conflicting opinions from family, employees, friends and casual acquaintances. This process alone can take many years. Some finally decide to sell the business by taking it to market,

Fig. 2 Value of the transaction vs the complexity of the execution (*Note* From Xcllusive Business Sales, 2021 [xcllusive.com.au]. Copyright Xcllusive Business Sales)

trade sale, and are then faced with finding the right support to facilitate this sale on their behalf, with their best interests at heart.

As noted in Fig. 2, there are many different ways to exit a business. The options range from a very personal decision by the Business Owner to stop altogether and shut it down, all the way through to listing it on the stock exchange, meaning it is a lot bigger than an individual Business Owner decision.

From this point on, the “Trade Sale – B2B” option (circled in red) will be the basis of the commentary.

Impact of COVID-19 on Business Sales (Transfers)

What also impacts the decision to exit is what has been happening in the marketplace itself.

Based on actual Business Seller and Buyer inquiries in 2020-21, initially both dropped in March 2020, but have slowly but surely returned to pre-pandemic levels, plus some (Figs. 3 and 4).

What these graphs illustrate is that whilst there was an initial downturn in the level of inquiries for both business sellers and buyers, this has not continued. So, from a Business Owners perspective, going to market is still a viable option, depending on industry.

So, if the Business Sales marketplace continues to be buoyant, what else might prohibit a Business Owner from proceeding down an exit path?

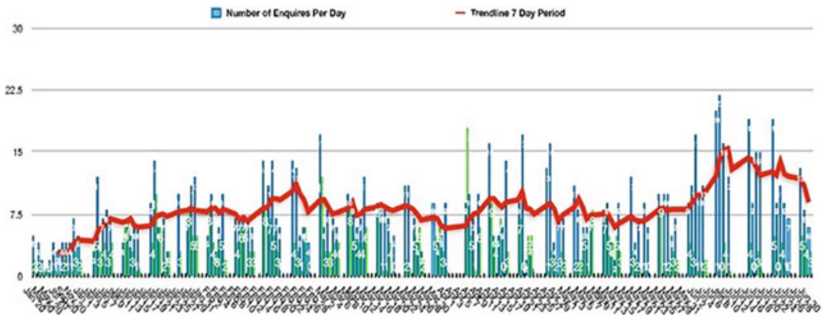

Fig. 3 Number of seller inquiries from 1 Jan 2020 to 30 June 2021 (*Note* From Xcllusive Business Sales, 2021 [xcllusive.com.au]. Copyright Xcllusive Business Sales)

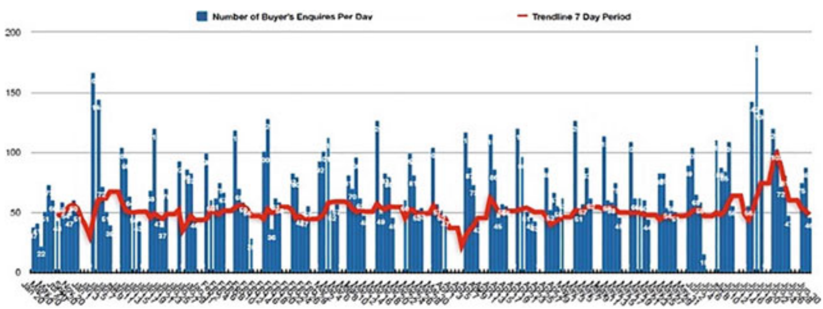

Fig. 4 Number of buyer inquiries from 1 Jan 2020 to 30 June 2021 (*Note* From Xcllusive Business Sales, 2021 [xcllusive.com.au]. Copyright Xcllusive Business Sales)

One reason may be that there is no one place where the Business Owner can go to, to learn how to exit their business. Yes, there are articles that can be found via internet searching, but there is no one, accredited course specifically for Business Owners on the subject of exit. But there is good reason for this. Xcllusive Business Sales have run "how to sell your business" workshops to address this, in conjunction with a local Accountant and a Solicitor, to lacklustre response. Anecdotally, due to the confidentiality concern, many Business Owners have advised that they do not want to publicly show their interest in selling by sitting in a room when they do not know who might also be sitting there (Xcllusive Business Sales, 2021). Business Owners then look to business coaches, hiring them to assist with the exit strategy mapping and ideally execution. Unfortunately, the majority of these do not have the knowledge, skills, and experience of exit either (Hall, 2021a, b).

So, once the answers to the Trigger questions, the timing, how the business is to be sold, and the state of the market is established, guiding the eventual decision, has most of the Business Owners doing this deliberation work on their own, or at least with their nearest and dearest, who again may not have experience (Hall, 2021a, b).

Let's face it, all Business Owners want the sale of their business to be the equivalent of a golden ticket win, offering legendary status amongst family, friends and foes, big-dollars and advancing storytelling rights over time. Sadly, many Business Owners do not get the happy-ever-after ending they desire because they do not know what they do not know until it is too far down the track towards their end date to be able to right any wrongs. What they often don't know is the health of the business and saleability potential to be able to actually sell it.

Analysis of the Health of the Business and its Saleability Potential

Firstly, the health of the business, profitability is certainly one indicator. The other is that of value.

'Profit' is a standard business accounting term meaning "money that is earned in trade or business after paying the costs of producing and selling goods and services" (Cambridge Dictionary, 2021a, b).

Value is "the importance or worth of something for someone" (Cambridge Dictionary, 2021a, b) when bearing in mind quality and risk, which can often be diverse when considering the same thing, depending on who is looking and why.

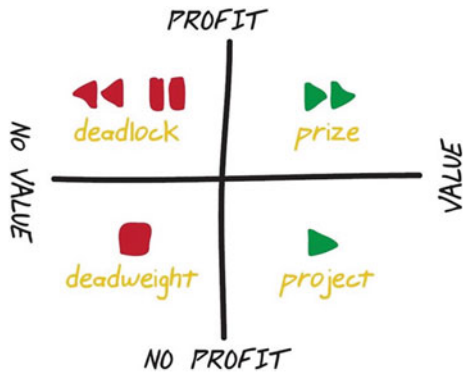

Fig. 5 Profit vs value quadrant (*Note* From Denise Hall, 2021a, b [https://denisehall.com.au/]. Copyright Denise Hall)

Selling, and buying, a business is no different. Profitability provides a tangible, "provable" answer based on Accountant-prepared financials, tax returns and business activity statements. Value on the other hand is often in the eyes of the beholder. The following outlines a correlation between Profit and value (Fig. 5).

When comparing the two, where there is:

No Value | No Profit = Deadweight—Should this business continue? If it cannot improve in the foreseeable future, a timely decision should be to made (Hall, 2021a, b).
No Value | Profit = Deadlock—Many Business Owners can get stuck here. They like the money but the business is a noose around their neck because they cannot seem to be able to replace themselves or grow the business any larger (Hall, 2021a, b).
No Profit | Value = Project—Other Business Owners can get stuck here. They have put so much time, money and effort into establishing the business that they do not want to let it go regardless of whether it is actually making money (Hall, 2021a, b).
Profit | Value = Prize—Profitable and Valuable. This is where the business wants to be. Making money with high perceived value. It is ready to sell for the highest likely price (Hall, 2021a, b).

As for the others, businesses with these attributes may be saleable but will not be able to command a price at the higher end of the scale.

The key consideration at this point for the Business Owner is if they think they can move the business from where it is now to where they want it to be in the timeline they have set themselves? Will it be worth the effort? With the ultimate question being would they buy their own business in the shape it is currently in, for they price they want?

Determining Indicative Asking Price via a Business Appraisal

To be able to arrive at an indicative asking price when selling the business, a Business Appraisal is a tool used for this purpose. There are other ways of determining a price, but the following is the most common for SME's (Hall, 2021a, b) (Fig. 6).

Going through the process of conducting an appraisal means reviewing the business through three lenses:

1. Profitability.
2. Quality & Risk (Value).
3. Market Feedback (Xcllusive Business Sales, 2021).

"**PROFITS**"—There can be different types of Profit and are not all the same. EBITDA and PEBITDA, discussed below, are the two most common (Xcllusive Business Brokers, 2021) when used to calculate pricing. Determining which one makes the most sense is usually swayed by how the revenue, and therefore, Profit is generated.

"**QUALITY & RISK**"—A review of how the Business showcases today, and not the potential!"Buyers buy Profit, and the reason they buy

Fig. 6 Profits/quality-risk/market diagram (*Note* From Xcllusive Business Sales, 2021 [xcllusive.com.au]. Copyright Xcllusive Business Sales)

is Potential" (Xcllusive Business Sales, 2021). What is valuable? What are the assets? What risk is inherent in the business? What additional value lays dormant? Does the business rely heavily on the Owner? Is there goodwill? This is represented as a "multiple", discussed below.

"**MARKET**"—What is happening in the world? What is happening in the local economy? What is happening in the industry of the business? Whilst no one business is exactly the same as another, Business Sales evidence for comparable sized businesses in today's market provides clues (Chen, 2020). This is particularly significant because Business Sales are mostly conducted under the cloak of confidentiality, meaning the information is not readily available and cannot be found via search engines.

What's important here is that only those who facilitate Business Sale transactions regularly, namely Business Brokers, have access to this intel by collecting their own, as Xcllusive Business Sales does by completing 500+ Appraisals annually and facilitating 100 Business Sales per year across Australia (Xcllusive Business Sales, 2021) or by accessing third information via industry associations, for example, Australia Institute of Business Brokers (AIBB) "Bizstats" (AIBB, n.d.). The importance of this market analysis contributes significantly to helping inform the saleability work.

Which is why, in the 2018 Small Business Ministerial Conference—Parallel Session 2, "Business Transfer as an Engine for SME Growth" paper, this critical point was made:

> There is a need to improve the evidence base on business transfer trends; raise entrepreneurs' awareness of the importance of early succession planning and acquisition opportunities for new entrepreneurs; support the development of business transfer markets; tackle administrative burdens and regulatory complexities; consider tax consequences on sale or disposal of SMEs; and ensure an appropriate financing offer to ease transfer. (OECD, 2018)

The standard *EBITDA* calculation, being one of the ways to determine Profit, stands for Earnings Before Interest, Taxes, Depreciation and Amortisation and "is a measure of company profitability used by investors [and buyers]. It is helpful for comparison of one company to another in the same line of business. In some cases, it also can provide a more accurate view of the company's real performance over time" (Chen, 2021).

One additional consideration the pandemic has directly contributed to from a profitability perspective is loosely termed "EBITDAC".

The "C" relates to "Coronavirus" and its direct impact, in regard to both the industry the business is in, as outlined in Fig. 7—*Australia industry EBITDA movement 2019–20* for example, and to the Profit + Loss statements trading peaks and troughs, and the inclusion of government subsidies and grants. So, when making such adjustments to arrive at EBITDA/C, additional deliberation has to go to how much "C" has been a factor, and how likely is it that the impact is sustainable, and whether this be good or not so?

EDITDA/C is not the only form of Profit there is to use either. The other most common one used is *PEBITDA*/C. Following the same EBITDA definition but adding Proprietor at the start, defines it as Proprietors Earnings (or SDE or Profit) to one working owner, consequently

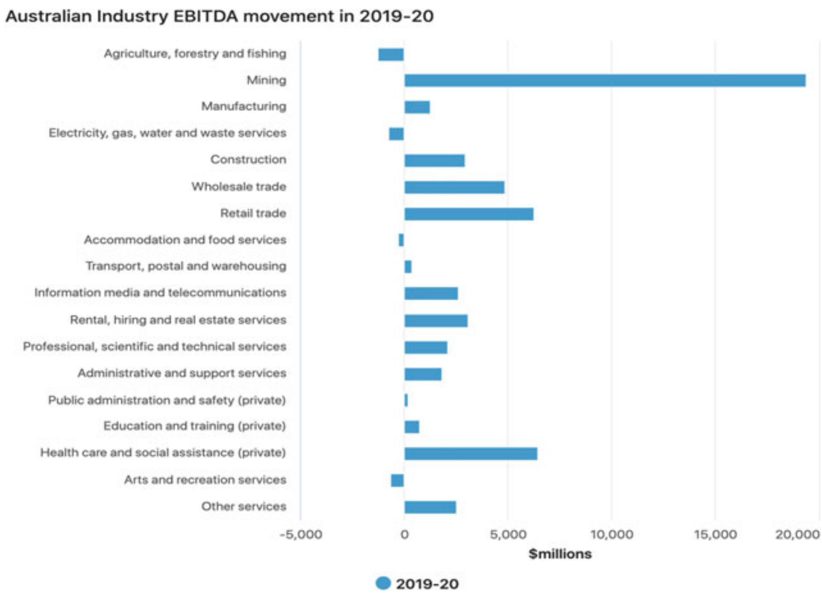

Fig. 7 *Note* From Australian Bureau of Statistics, 2021a, b (https://www.abs.gov.au/statistics/industry/industry-overview/australian-industry/latest-release). Copyright Australian Bureau of Statistics

not accounting for a wage to the owner as an expense (Xcllusive Business Brokers, 2021).

The Profit used in turn informs which *Multiple* to use (Xcllusive Business Brokers, 2021). For example, EBITDA multiples, coupled with the size of the Profit, are typically higher than for PEBITDA (Xcllusive Business Brokers, 2021).

Profits represent the reported financial health of the business. Multiples reflect all the other attributes of the business, namely the quality and risk factors, for example:

- On-trend industry.
- How old is the business?
- Is it in a good location? Does location matter?
- What is the reliability on owner?
- Is it under management?
- Are there client/supplier/employee agreements in place?
- Is there a large concentration of business with one customer?
- Is the business dependent on a particular skill set or qualification?
- What opportunities have been identified but not yet leveraged?
- What is the likelihood customers would stay with the business regardless of ownership?
- What is the reputation in the marketplace and across social media? Both for the business and the owner?
- Is it difficult to copy the business model?
- What are the levels of stock? Do they need to be at this level?
- Are there favourable Lease terms (no demolition clause)?
- What are the Landlord expectations?
- Is there a recurring revenue model? If not, could there be?
- What impact will restraint of trade have?
- Have the fundamentals of the business model been taken into account? (Xcllusive Business Sales, 2021).

Conducting an Appraisal takes all this into account, thinking of the Profit and the Multiple as mathematical levers, to land on a realistic likely asking price to assist the Business Owner in making a decision.

What else Needs to be Considered, and Why

Whilst price, *PayDay*, is a central determining factor, what the Appraisal cannot do is assist the Business Owner in determining "when is the right time to sell MY business?"

Other factors outside of the Business Sale scope may influence this decision in relation to how personally ready the Business Owner is to move on. These are often the tipping point of which no monetary value can be attributed, summarised as "*Freedom*" to do other things and "*Legacy*" so the business continues, just not by the current owner (Hall, 2021a, b).

In other words, how badly does the Business Owner want the:

- *PayDay* to do set themselves up financially?
- *Freedom* to do other things, the next add-venture?
- *Legacy* of the business to continue, without being at the helm?

To ask such questions outright of a Business Owner may not result in the depth of answer required. Instead, there are a number of less targeted ones to ask, which can decipher the clues of readiness. Depending on the depth of relationship of the questioner with the Business Owner will dictate which of these is more appropriate to use (Fig. 8).

PayDay:

- Are you in a good place? Is the business?
- Is the worst behind you? The business?
- Can you afford to sell?

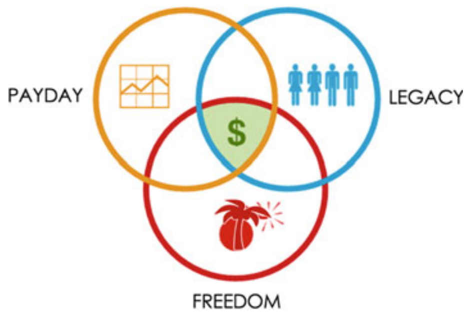

Fig. 8 PayDay/Freedom/Legacy consideration (*Note* From Denise Hall, 2021a, b [https://denisehall.com.au/]. Copyright Denise Hall)

- How are you replacing the cashflow you're about to sell?
- Are you personally well-structured financially?
- How much money is enough?
- Is the business profitable?
- Is the Tax man coming?
- What is the asset, that is your Business, worth?
- What is this value based on?
- Are the business financial statements clean and clear? (Hall, 2021a, b).

Freedom:

- Are you excited about something else? The next thing?
- Is your luck going to continue?
- Do you have Freedom now?
- Can the business operate without you?
- What is the longest holiday you have been able to take?
- What happened to the business?
- Are you prepared to stay on for a period of time post sale? How long?
- How will perceived risks be mitigated?
- What are your non-negotiables? (Hall, 2021a, b).

Legacy:

- Are you becoming less interested in fighting on?
- Do you want the business to continue?
- Does the business need to continue?
- Does the business have staff, suppliers and customers to look after?
- Will customers care?
- Is there a steady flow of new customers? How is this happening?
- Do you need to be there?
- Is the business sustainable?
- Is the business unique or positioned favourably enough to survive?
- Lots of stock? Old or new? (Hall, 2021a, b).

Or, if there was one question to ask to get the conversation started would be "what will you do if you don't sell?" (Hall, 2021a, b).

Amidst the pandemic with some time left to play out, this type of personal reflection is well-timed given how for some Business Owners this prolonged uncertainty may have taken its toll…

What Help is Required

To support a typical Business Sale process for SME's generally requires three professional services: a Business Broker to facilitate the sale process, an Accountant to concentrate on the financials and tax position and a Solicitor to outline and mitigate against risk (Hall, 2021a, b). Others that can play a role in the overall result, both before and after the transaction, are Financial Planners, Financiers and Friends and Family.

The Business Broker is in the best place to start the sale process when determining the most likely asking price for the sale of the business via the Appraisal. They achieve this by critiquing the Business Sale-Readiness, wrapping it in market reality, and at the same time, outlining what is involved in taking the business to market and finalising the Business Sale transaction itself. Experience shows that the Accountant and the Solicitor may have an opinion of what the business should be worth, yet their assessments lack the rigour and up to date market knowledge that is fundamental to the work of the Business Broker.

Results

What the pandemic is not affecting, if the transaction makes sense for both seller and buyer, is the likelihood of the transaction finalising. Negotiations are being facilitated via Zoom and email, with terms being agreed and settlements taking place. For example: a micro, niche consulting business sold to a larger consultancy for a six-figure amount whereby the seller and buyer never met in person, one in VIC and the other in NSW, all conducted over Zoom. This price paid was well above expectations (Xcllusive Business Sales, 2021).

However, like with any Business Sale, there is no guarantee as to the final outcome. Until a business goes to market and tests this hypothesis, it is a pre-sale estimate only. Not all the clues and analysis mirror what may actually happen, whether this be in a positive or negative manner, despite all the best intentions and logic.

For example, having recently assisted a Liquidator acting on a court order (due to a partnership split) to sell a business at the small end of the market, the likely asking price was expected somewhere around $50,000–$100,000 (Xcllusive Business Sales, 2021). However, due to the nature of the business in a specialised bookkeeping and compliance niche, over a 14-day period, 88 inquiries were received, resulting in 11 offers, 3 of which were over $100,000 (Xcllusive Business Sales, 2021).

The final market price of a business is always established between a willing buyer and a willing seller

This is why working up close and personal with Business Sellers, Buyers and Advisers ensures both the exploratory saleability work and the actual Sale transaction process is set up to run as smoothly and as timely as possible. This baseline understanding is critical in being able to make informed decisions to ultimately reach a favourable outcome for all concerned.

Discussion and Conclusion

Only a select few businesses, and often by self-selection, that go through all as outlined will eventually finalise into Business Sale transactions. Industries of most interest represented in the market right now in the midst of the pandemic are across the spectrum of SMEs; for example, professional/services, online/digital/web, manufacturing, import/export, wholesale, distribution, transport, landscaping/maintenance, medical and allied health practices, events/party hire, pet grooming, niche commercial cleaning, of all shapes and sizes (Xcllusive Business Sales, 2021). Buyer inquiries are at record highs (Xcllusive Business Sales, 2021). Many of them, however, are looking for the perfect business. What is being highlighted however indicates that there is no such thing.

At the very least, by regarding all that is noted, the Business Owners decision on whether to sell or not, and when, will always be based on what is actually happening for them personally, for their business and in the greater market, and not on hearsay as to what it could or should be, especially if such opinion revolves around pre-COVID-19 generalities.

At least, by having a continued, steady stream of businesses go through the Appraisal process, and importantly into the Business Sale transaction process, ensures the baseline data at Xcllusive Business Sales is updating consistently.

The option of exit for Business Owners needs to be viewed as a positive one. That is, not one only thought of as a possibility when times are tough, but as an alternative when the timing is right for the Owner, and/or the business. The best time to sell is when the business is on the rise in the business lifecycle. Timing of this, however, is always tricky, but there are clues, so by being informed of a business' particular saleability likelihood and the Business Owners intent means that when steps need to be taken in a timely manner, they can be, from an informed position. This also provides some level of comfort for the next custodian of the business, enabling them to layer their revitalisation plans on a robust foundation. **Therefore, a nation-wide, fully subsidised study to be conducted into Business Owners of SME's, to ascertain their understanding of business value and possible exit options is required**.

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