

Reorienting the organisational strategy of SMEs during the COVID-19 crisis: can entrepreneurial orientation help?

Andy Susilo Lukito-Budi

Faculty of Economics and Business, Atma Jaya Catholic University of Indonesia, Jakarta, Indonesia

Hardo Firmana Given Grace Manik

Department of Management, Faculty of Business, Duta Wacana Christian University, Yogyakarta, Indonesia, and

Nurul Indarti

Department of Management, Faculty of Economics and Business, Universitas Gadjah Mada, Yogyakarta, Indonesia

Abstract

Purpose – This paper offers innovative strategies on how small- and medium-sized enterprises (SMEs) can respond to the COVID-19 crisis by incorporating an entrepreneurial orientation concept corresponding to the nature of the environmental shock.

Design/methodology/approach – This paper conceptualises a solution by elaborating three critical items, namely entrepreneurial orientation, adaptive process and strategy types as key factors to develop the framework solution. This paper outlines a strategy proposal for SMEs to respond to the crisis.

Findings – The environmental factor represents the crisis, which leads to a degree of innovation, i.e., radical and incremental, and can be approached using an adjusted adaptive consolidation process from Child. This paper identifies four strategy options from Miles and Snow to respond to the crisis; i.e. (1) defender–exploitative innovation; (2) analyser–organisational ambidexterity; (3) prospector–exploratory innovation and (4) reactor–abandon or shut down the business.

Originality/value – While most of the suggestions from previous COVID-19-related works are acknowledged, this paper brings more insight from an academic perspective, specifically organisational theory, to cope with the pandemic crisis. The steps and strategy to be chosen can guide policymakers to decide what is their best move to respond to this crisis. In addition, the proposed strategies call for future research to provide empirical evidence by exploring and examining various scenarios in different kinds of businesses.

Keywords Adaptive process, Entrepreneurial orientation, Environmental shock, COVID-19, SMEs, Innovation

Paper type Conceptual paper

Introduction

The COVID-19 crisis had greatly affected human social life, from limiting individual movement to affecting community and economic activities (Lozano and Barreiro-Gen, 2020). These effects have also impacted the performance of businesses, including that of small- and medium-sized enterprises (SMEs) around the globe (Csath, 2021). Some recent studies have explored the impact of COVID-19 on the performance of SMEs – particularly concerning decreased profits, reduced employee numbers and decreased trading or business transactions – for the lockdown period of the March 2020 till now. For example, a study by Garba (2020) reported a decline in profits for more than 20% of Nigerian SMEs. Beraha and Durin (2020) found that the majority of SMEs in



Serbia had to reduce their number of employees up to 20%. Another study by [Eggers \(2020\)](#) reported that a decline in trade amongst countries and local demand in the USA. Moreover, some recent studies revealed the strong effort of governments in providing financial assistance (e.g. soft loan scheme) to SMEs, such as in Scotland ([Brown, 2020](#)), Sweden ([Helgeson et al., 2020](#)) and Indonesia ([Ihsanuddin, 2020](#)).

Most of the abovementioned studies describe practical strategies used by SMEs to respond the crisis, such as digitalising and strengthening the business's information technology ([Papadopoulos et al., 2020](#); [Seetharaman, 2020](#)) and aligning the business with the new realities of COVID-19 (e.g. [Eggers, 2020](#); [Seetharaman, 2020](#)) and new customer behaviour ([Kirk and Rifkin, 2020](#); [Sheth, 2020](#)). However, to the best of our knowledge, a little attempt (e.g. [Wenzel et al., 2020](#)) has been paid to propose a conceptual framework that provides scientific arguments for both academics and policymakers to respond to the crisis.

This study stresses the importance of carrying out a turnaround strategy to ensure the sustainability of these SMEs. The development of the turnaround strategy can start from reviewing the critical points of SMEs that can trigger the turnaround strategy ([Shahri and Sarvestani, 2020](#)). For example, from external SMEs: key customers, key partners and key distribution channels, while from internal SMEs: the organisation's value proposition, key activities, and critical resources. The five indications from [Khalifa \(2021\)](#) provides the basis to establish a good turnaround strategy, i.e.: (1) aspirational: developing a survival strategy; (2) power creation: reclaiming lost markets; (3) directional: providing direction for the necessary actions; (4) systemic: establishing holistic action to achieve the desired impact; (5) intentional: compelling enough to ignite the engine.

As the COVID-19 pandemic continues, the current study intends to fulfil this gap by integrating the strategy model of [Miles and Snow's \(2003\)](#) as well as [Child's \(1997\)](#) adaptive consolidation process with environment together with the concept of entrepreneurial orientation (EO) as a point of departure in responding to the COVID-19 crisis. The environment factor from [Child \(1997\)](#) represents the key external elements, while the EO is the key internal element ([Shahri and Sarvestani, 2020](#)). The EO is used as a bridge between the selected theoretical framework and the current situation as well as a way for SMEs to deal with the crisis in a more systematic way.

The structure of the paper is as follows. The concept of EO as well as the adaptive process and consolidation approaches, including strategic choices, is elaborated in the second, third and fourth sections. Fifth section discusses the paper's main point concerning the type of strategy SMEs may use to mitigate the effects of the ongoing pandemic. Finally, the paper ends with summary of its major findings.

EO as a key element of SMEs' resilience

The report of Global Entrepreneurship Monitor ([GEM \(2020\)](#)) suggests that entrepreneurial ways of thinking and behaving are essential if SMEs want to be resilient in facing the COVID-19 crisis. The term "entrepreneurial ways of thinking and behaving" is manifested in the concept of EO, which has emerged as one of the established constructs in the entrepreneurship and strategic management literature ([Wales et al., 2013](#)). This variable is mainly studied from the dispositional point of view (i.e. the mindset or lasting direction of thought) (see [Voss et al., 2005](#); [Nofiani et al., 2021](#)) or from a behavioural point of view (i.e. as the outcome of the mindset or the observed action) (see [Pearce and Robbins, 1994](#); [Covin and Lumpkin, 2011](#); [Soininen et al., 2013](#)). Both perspectives emphasise that the EO consists of innovative, proactive and pro-risk ability to face business uncertainty and crises.

Innovativeness refers to the inclination of businesses to engage and support new ideas, experiments and creative processes to produce new products and services ([Lumpkin and Dess, 1996](#)). Proactiveness is a firm's propensity to take initiative by anticipating and

pursuing new business opportunities and by participating in emerging market trends (Walter *et al.*, 2006). And risk taking ability indicates a firm's proclivity to support projects in which the expected returns are uncertain (Lumpkin and Dess, 1996).

Moreover, the EO can reinforce effectual logic instead of causal logic (Laskovaia *et al.*, 2019). SME owners who use the effectuation approach think probabilistically; they prepare many impromptu plans to deal with various unprecedented events (Chandler *et al.*, 2011; Laskovaia *et al.*, 2019). In contrast, the causal approach focusses on rigidly planned strategies, and it is only suitable to use in a relatively stable environment (Chandler *et al.*, 2011).

The role of owners particularly in the context of SMEs becomes very crucial because they act as a business leader for the business over time. SMEs are widely characterised as personal or family ownership, and "one-man show" leaders (e.g. Koryak *et al.*, 2015). Organisations with strong leadership tend to be more successful, while poor leadership sometimes causes a business failure (e.g. Perry (2001); Beaver (2003); Naushad (2021)). Leadership is generally viewed as an interactive process that involves two parties i.e. ordinate (the business leader) and subordinate (members of the organisation) as a follower. According to Valdiserri and Wilson (2010), the success or failure of a business is mainly dependent upon the character of the leaders such as personality traits/behaviour including entrepreneurial orientation. A good business leader with a high entrepreneurial orientation will revitalise and facilitate adaptation to a changing environment, in this sense responding to the COVID-19 problem.

In sum, the conceptual relationship between entrepreneurial orientation as a mental model of SMEs leaders with adaptive processes and types of strategies can be discussed further. The adaptive and consolidation process explains how a firm responds to a significant external change by choosing a particular strategy according to the level of impact of perceived shock it experiences and the level of its internal resource and capability.

Responding to the COVID-19 crisis through an adaptive and consolidation process

As the EO is found to be the key element for SMEs' resilience, the next critical question is which appropriate strategy should be undertaken to face the COVID-19 crisis? The paper adopts Child's (1997) adaptive and consolidation process as well as Miles and Snow's (2003) strategy model to answer the question. The adaptive and consolidation process reflects the strategic choice of an organisation – that is, structure determines the environment, which is the opposite paradigm from what was being viewed at that moment. This framework also emphasises the role of leaders or other key personnel in the organisation (e.g. the owner or manager of SMEs) to determine what market choices they have based on their resources as well how the market's structure market will help their company gain an advantage (Blackmore and Nesbitt, 2012). The roles of leaders are in line with previous studies claimed that leadership is an essential factor for SMEs to succeed, such as in manufacturing SMEs (Achanga *et al.*, 2006) and start-up SMEs (Muijs, 2011).

Furthermore, when dealing the COVID-19 crisis, SMEs should carry out internal and external consolidation, which are dynamically interconnected. Internal consolidation starts first by empowering SMEs' internal resources, such as technology support and structures to respond to the environmental demands. Next, external consolidation is managed by determining the business domain and adopting a suitable entrepreneurial style to run the business. External consolidation may lead to another internal consolidation due to changes or adjustments (Child, 1997). The importance of external consolidation has also been expressed in population ecology theory, which emphasises how important it is for SMEs to have a good relationship with their selected markets, as it called "selection mechanism". The success of SMEs facing a turbulent environment will be determined by their selection mechanism – that is, their ability to align with the new environment and to respond with a suitable strategic

model that is reflected in the business structure (Ulrich and Barney, 1984; Hemmington and Neill, 2022), which include external and internal consolidations.

As the pandemic has forced changes in almost every aspect of SMEs, their adjustment to this new environment should come first. Some evidence, for example from the Indonesian Statistics Bureau (2020), supports the idea from Un and Asakawa (2015) about the need of SMEs to cultivate relationship with their external parties, such as customers, vendors and competitors to increase their endurance during the crisis. The GEM report (2020) notes that some SMEs have survived the pandemic due to their relationship with their external parties such as vendors and customers. Thus, the collaboration amongst business actors has become essential nowadays, and SMEs can benefit from this collaboration in order to support their business operations. SMEs can cultivate weak or strong relationships as a mitigation strategy during the crisis (Granovetter, 1973; Suarez, 2005; Vasudea and Anand, 2011; Manik *et al.*, 2021).

Based on the abovementioned arguments, this paper proposes the changed iterative process as depicted in Figure 1. The nature of change reflects a timeline from before the pandemic to during the pandemic (i.e. the new normal). The dotted line in the middle reflects a radical change, which represents the pandemic's shock, and the incremental changes happen along the curves, resulting in a continuous consolidation process. The adaptive process cycle, on the left side, starts with the internal consolidation (bigger circle, without dots) and is followed by the external consolidation (smaller circle, with dots). The next internal consolidation process anticipates continuous changes. The size of the circles for both external and internal consolidations get smaller, indicating a shortened learning curve process over time; the increasing curve indicates the growth of SMEs over time.

The radical changes of the pandemic have forced SMEs to implement adaptive processes, as discussed earlier. SMEs should put in place a new adaptive process to synchronise with its changing environment. During the pandemic era, where everything becomes unsure, the environment will determine the strategy and structure. SMEs should match all resources in line with the new normal situation and find out how to become successful in this environment. As a result of these radical changes, the curve breakdowns and becomes closer to a new business cycle again because the necessity to redefine SMEs' business model.

The changing iterative process in Figure 1 suggests SMEs consolidate their external social network and find out how this network has changed its behaviour (Kirk and Rifkin, 2020; Sheth, 2020). The next external consolidation reflects a refining alignment process between SMEs and their new normal environment, and the iterative process becomes business as usual again afterwards. When SMEs know the changes, they should be able to anticipate and regroup their

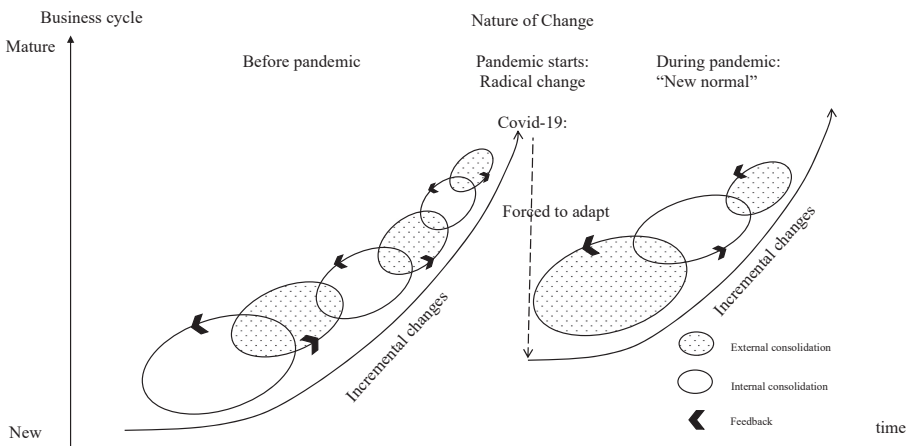


Figure 1.
Adaptive process of
SMEs: before and
during pandemic
(adjusted from Child,
1997, p. 71)

valuable and relevant available resources to cope with their changing environment, which marks the second consolidation (i.e. the internal one). Here, it is important for SMEs to use digital technology to support their physical operations and business transactions (Papadopoulos *et al.*, 2020; Seetharaman, 2020) that lead to better performance.

The OECD report (OECD, 2021) summarised several recent studies on digitalisation of SMEs and pointed out that 70% of SMEs have utilised the use of digital technologies in their business due to COVID 19. For example, a study by Riom and Valero (2020) claimed that 75% of the UK business have moved to remote working and around a third have invested in new digital capabilities. In Brazil, 55% of SMEs have implemented digital technology to improve process agility as well as customer relationship and customer acquisition (Zdnet, 2020). In the context of the ASEAN region, according to the ASEAN SME Transformation Survey by UOB, Accenture, and Dun and Badstree (2020) reported that ASEAN SMEs have recalibrated their strategies to focus on digitalisation as a top priority by adopting digital marketing strategy (e.g. Website, online channels, etc.) and improving customer experiences (e.g. ICT software and hardware).

Nevertheless, regarding digital technology, we argue the decision of SMEs to adopt and to choose which technology is appropriate should be based upon reliable and valid information from the external and internal consolidation processes. Lack of adequate information about their new normal environment could cause bad IT investments and force some SMEs to shut down their business as a result. In the context of SMEs, many of them are lagging behind in digital transition (OECD, 2017). Based on a report from Digital Innovation Hubs Working Group (2018), only 17% of SMEs have successfully integrated digital technologies into their businesses, compared to 54% of large companies.

Strategy choices for the COVID-19 crisis

In addition to the adaptive and consolidation process, we use a strategy model from Miles and Snow (2003) as a framework to align the process between a SME's structure and strategy. This process of alignment is considered complex and culminates in the adaptation of SMEs. In addition, our framework is inspired by the recent work of Wenzel *et al.* (2020), which used a similar point of departure, namely radical environmental change due to the pandemic and suggested four strategic responses—retrenchment, preserving, innovating and exiting from the business – focussing on the effect of their implementation on the company's condition. Furthermore, they argue that retrenchment is suitable for implementation in the short term, preserving as a medium-term strategy and innovating as the more superior sustainability strategy amongst them.

Miles and Snow (2003) established four types of structure strategy based on the characteristics of focus, demand type, technological backbone and management style to implement the strategy. These four types are defender, analyser, prospector and one exit strategy called reactor (see Table 1).

Dimension	Prospector	Defender	Types Analyser	Reactor
Focus on what	Specialisation	Generic	Mixed	Unknown
Demand type	Dynamic	Predicted	Various changes	More predicted
Technology	On demand, flexible	Core technology, standardised	Tailored system, combination of on demand and core technology	Unknown

Source(s): Miles and Snow (2003)

Table 1.
Strategy choices for SMEs and their characteristics

Prospector is a strategy focussing on new businesses, characterised by developing agile businesses and meeting market demands. It intends to place a position in the market, using a tailor-made technology suited to the dynamic demand. Many examples of SMEs and start-up businesses started from this model, including Gojek, the unicorn of digital transportation in Indonesia (gojek.com, 2022). It started as a prospector-oriented company. On the other hand, defender-adopted companies aim to maintain stability by preserving the quality of the goods/services produced without paying too much attention to developments outside their domain. The commonly used technology adopted in this strategy is back-end technology; robust architecture, yet inflexible. Some examples of businesses in this defender are generally companies/organisations that have been established and intend to maintain their captive markets, such as large multinational companies or government businesses. The defender and prospector's strategies are at opposite by nature. The defender-oriented SMEs, by nature, represent what we called "mechanistic SMEs" and operate with high certainty ([Hrebiniak and Joyce, 1985](#); [Sine et al., 2006](#)). They are efficient, big and stable. The prospector-oriented SMEs, in contrast, are often touted as agile yet resource hunger, and they always keep abreast of developments in their environment. They tend not to be able to operate within their economy of scale due to their dynamic shifting over time.

The analyser strategy exists between the two poles; it functions as a bridge between both domains ([Vasudea and Anand, 2011](#)). Analyser strategy combines the strengths of defender and prospector. Companies need to have agility while meeting efficiency when their scale of operations is increasing dramatically. During the digital business era, several cases had emerged, for example, in digital transportation, with Gojek shifting from prospector to analyser ([Lukito-Budi, 2021](#)). This ability to scale up becomes a key point of our proposed framework.

This paper provides a guiding framework on how SMEs choose the appropriate innovative action. It depicts the critical variables as an applicable guide to decision makers. However, as noted by [Miles and Snow \(2003\)](#), the adoption of the innovative strategy is more difficult even though this strategy is considered as the superior one ([Wenzel et al., 2020](#)). In the absence of the capability to perform innovation, they argue it would be impossible to choose this strategy. We argue that the choice of the strategies should consider three main challenges: entrepreneurial, technology and administrative challenges.

SMEs in the COVID-19 era: what strategy should they focus on?

As stated earlier, the unfolding COVID-19 pandemic has caused a crisis that is very different from any other crisis. The COVID-19 pandemic is a combination of health, socio-psychological and economic crises at the same time. As a result, the crisis or resilience management models for SMEs that have been applied so far by various SMEs in the world may be now irrelevant to use, such as cost efficiency, reducing expenses and investment (retrenchment); holding resources, and manipulating constraints (preserving) ([Wenzel et al., 2020](#); [Thorgen and Williams, 2020](#)). They also suggest innovation strategies such as reorienting the resources and recreating new products/services in response to pandemics (see [Thorgen and Williams, 2020](#)).

In particular, SMEs are most vulnerable to business failure because of their small size and resource-constrained nature ([Amankwah-Amoah et al., 2020](#)). The [GEM \(2020\)](#) reports the stress this pandemic has effect to SMEs all over the world. Several SMEs experienced significant changes and were forced to prepare to change or exit the market. The report indicates that SMEs operating with high social contacts are the most affected by the pandemic, for example, SMEs which developed the Jiu Jit Su community in Brazil, the fitness industry in Guatemala and therapy businesses in Spain ([GEM, 2020](#)). In Indonesia, SMEs in the retail trade, services and food and beverage sectors experienced the most severe impacts and took emergency actions, such as reducing the number of goods/services production, reducing working hours and labour ([KataData, 2020](#)).

However, based on the GEM report (2020), some SMEs were also reported to be able to transform their business model into a digital business. Those SMEs also experienced a little shock to their business and survived, particularly, those SMEs running food and beverage businesses as well as tailor-made clothing and toys businesses. These kinds of businesses, though initially involving much human-to-human contact, transformed into high-tech businesses. In these business models, they can communicate with their existing customers and even add new customers so that their customer base can grow. In addition, they used an adaptive process by changing their business model, although the process varied from one business to another, which supports [Child's \(1997\)](#) argument as well as the adjustment of steps proposed in this paper.

Regarding the environmental aspect, we define environmental shock as reflections of the business models impacted by the pandemic, which are categorised into two items: radical change which involves high social contacts (these businesses struggle to survive and operate mostly in high-touch sectors); and incremental change which covers low social contacts (these businesses experience a hit but survive because of available demand or because they operate in mostly low-touch or high-tech sectors). SMEs should re-assess their current situation, especially regarding the perceived environmental shock they experience and consider to cross position when necessary. Moreover, SMEs also have to synchronise their new normal situation with their own resources. This synchronisation effort reflects the need of having EO, i.e., innovativeness, proactiveness and risk taking, as an enabler factor. As our proposed conceptual framework merges the adaptive process and the strategy model, the EO can be integrated as a bridge between the classical model and the updated situation. Using this line of reasoning, the levels of EO are characterised by a high level of EO (that is, proactively looking for new opportunities and daring to take risks) and a low level of EO (that is, taking it as it comes or doing nothing). Within the framework diagram, the four strategy model from [Miles and Snow \(2003\)](#) is taken into account with the characteristics of each strategy (see [Table 1](#)), as depicted in [Figure 2](#).

The reactor strategy is demonstrated for SMEs that have been radically affected by the COVID-19 pandemic and the EO level of their owners is low. The low level of EO leaves SMEs no choice but to merge, be acquired, or even close their businesses. This reactor strategy is an end-game strategy or a residual strategy, unless SME owners are willing to struggle to increase their EO level. This strategy is a desperate one and does not have the energy to confront environmental changes ([Parnell and Wright, 1993](#)). At this stage, shutting down business is an option that must be considered.

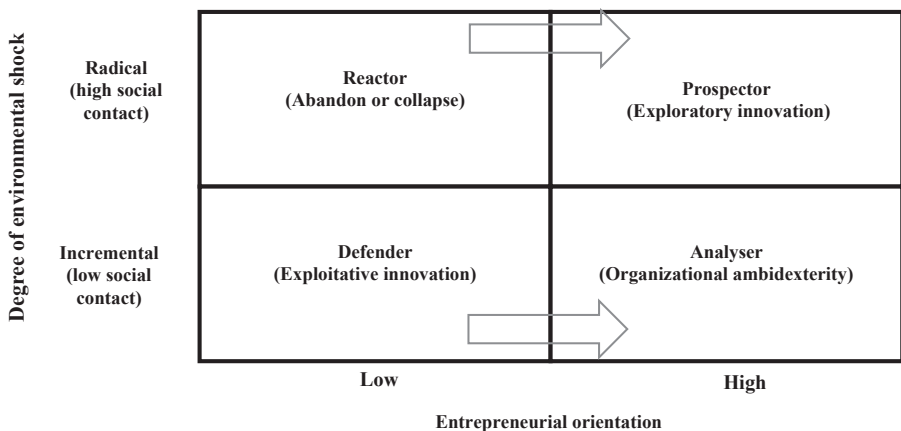


Figure 2.
Strategy options
for SMEs

In contrast, the defender strategy is mainly recommended for SMEs who face the impact of the COVID-19 incrementally, and their owners have a low level of EO. The low level of EO is still considered sufficient to sustain existing businesses. Adopting this strategy also allows SME owners to sort out high-demand goods or services and secure this niche in the market (Desarbo *et al.*, 2005). The defender strategy makes the SME owners orient internally to gain efficiency and avoid risk; in other words, these owners perform very conservative operational moves (O'Regan and Ghobadian, 2006).

The analyser strategy can be recommended for SMEs that have a high EO level and experience incremental environmental impacts due to COVID-19. Under these conditions, SMEs can work efficiently in their existing businesses and can innovate to deal with market dynamics, for example by changing their business models or adopting digital technology (Papadopoulos *et al.*, 2020; Seetharaman, 2020). In other words, the analyser strategy occupies a mid-position between the prospector and the defender strategies (Lin *et al.*, 2014). This strategy is also known as organisational ambidexterity (Papadopoulos *et al.*, 2020).

However, in the execution of this strategy, SME owners must be careful because if they pay too much attention to increasing efficiency by undertaking incremental innovations (doing the process better), long-term survival or sustainability may be difficult to achieve. Conversely, if the SME owners experiment with many radical innovations (doing the better process), short-term profitability goals will be difficult to obtain. Having an appropriate level of the EO can help overcome these problems. A high level of EO enables the SME owners to manage the tensions that arise from trying to balance these two contradictory yet interrelated activities (Nofiani *et al.*, 2021). Furthermore, organisational ambidexterity strategies may not be an option for SMEs operating in the high-touch sectors due to the massive bankruptcies in this sector, caused by the pandemic (Donthu and Gustafsson, 2020). Instead, liquidity assistance funds from the government (e.g. grants or subsidies, credit or deferral of payments) can be a quick solution to mitigate this bankruptcy, at least as proven in European SMEs (see OECD, 2020).

Therefore, an alternative strategy is the prospector strategy, which involves focussing on exploratory innovation by scanning for emerging business trends, establishing new businesses and networking aggressively with various partners to seek new resources and opportunities (Thorgren and Williams, 2020). This strategy is challenging because the SME owners must learn new competencies and face the risk of failure due to trial and error. Thus, we propose a community resilience approach as a source of protection against these risks. Family networks, indigenous and ethnic communities, religious communities and other cohesive communities can be used as social capital to access financial assistance and information to start new businesses that are more in line with the demands of the new normal situation (Manik *et al.*, 2021). The proposal for community enhancement in which the SME owners can depend on and help one another is also in accordance with the recommendation of some scholars (Sanfelici, 2020; Yip *et al.*, 2021). This will help to create a community-based crisis management model that focusses on social connectedness and collaborative knowledge creation amongst SMEs (Al-Omouh *et al.*, 2020).

In sum, we conclude that the prospector and analyses strategies can aid SMEs the most amidst the COVID-19 crisis because these two strategies and the external liquidity funds enable SMEs to cope with the crisis in both situations (radical and incremental) and result better in the longer period. To pursue the adoption of the two strategies, we should look at the two determination factors: environmental factors and EO. The environmental factor is a given risk that cannot be influenced or changed by SMEs, so no effort can be undertaken to shift from radical to incremental and vice versa. However, the EO factor is more dynamic and can be changed by SMEs (Nofiani *et al.*, 2021). However, SMEs must be able to realistically evaluate the impact of COVID-19 crisis and apply the relevant strategy. At this point, we urge SMEs to increase their EO that makes them able to cross the quadrant, either from the reactor

to the prospector strategy or from the defender to the analyser strategy. One critical element for enabling SMEs to this crossing action is the dynamic capability (Nofiani *et al.*, 2021). The three elements of EO, i.e. innovativeness, risk-taking and pro-activeness can be operationalised through a dynamic capability perspective (Eisenhardt and Martin, 2000; Teece, 2012), which also improves the innovation capability of SMEs. As a result, the factor becomes critical in the adaptability of SMEs to the COVID-19 crisis.

Summary

This paper attempts to break new ground by offering a theoretical discourse concerning the strategic choices made by SMEs in responding to environmental changes, such as COVID-19, with a special emphasise on the role of the EO. The crisis is a battleground for a true entrepreneur to act more dynamically and innovatively to survive and innovate. Implementing an appropriate strategy with an adaptation and a consolidation process is essential to ensure business sustainability.

The proposed conceptual framework offers a future research agenda for scholars particularly in the field of SMEs, entrepreneurship and strategic management. Our proposed framework is a basic, general and thought-provoking one for SMEs, which can be tested empirically in a specific business sector. As the nature of the business sector differs from low-touch to high-tech sectors or from manufacturing to service business or from low knowledge-intensive firms to non-knowledge intensive firms, possible future topics include examining various strategic choices for different types of SMEs operating in different types of industries. Some relevant questions can be addressed, such as “Does the strategy perfectly connect to the real action?”, “Should there be additional factors to be considered or does the model fit into organisations with zero social contacts as well?”. Those kinds of research questions can open new research avenues, exploring and digging further to understand and deal with the pandemic phenomenon in a more scientific way. In addition to that, the framework can be used for policymakers to undertake necessary actions. For example, a government office or business association can design training curricula, modules/learning materials, supporting facilities, etc., to increase SMEs’ capabilities to develop appropriate strategic choices that meet the SMEs’ needs.

References

- Achanga, P., Shehab, E., Roy, R. and Nelder, G. (2006), “Critical success factors for lean implementation within SMEs”, *Journal of Manufacturing Technology Management*, Vol. 17 No. 4, pp. 460-471.
- Al-Omoush, K.S., Orero-Blat, M. and Ribeiro-Soriano, D. (2020), “The role of sense of community in harnessing the wisdom of crowds and creating collaborative knowledge during the COVID-19 pandemic”, *Journal of Business Research*, August, Vol. 132, pp. 765-774.
- Amankwah-Amoah, J., Khan, Z. and Wood, G. (2020), “COVID-19 and business failures: the paradoxes of experience, scale, and scope for theory and practice”, *European Management Journal*, Vol. 39 No. 2, pp. 179-184.
- Beaver, G. (2003), “Small business: success and failure”, *Strategic Change*, Vol. 12 No. 3, pp. 115-122.
- Beraha, I. and Đuričin, S. (2020), “The impact of COVID-19 crisis on medium-sized enterprises in Serbia”, *Economic Analysis*, Vol. 53 No. 1, pp. 14-27.
- Blackmore, K. and Nesbitt, K. (2012), “Verifying the miles and snow strategy types in Australian small- and medium-size enterprises”, *Australian Journal of Management*, Vol. 38 No. 1, pp. 171-190.
- Brown, R. (2020), “The impact of Covid-19 on Scottish small and medium-sized enterprises (SMEs): prognosis and policy prescription”, *Economic Commentary*, Vol. 44, June, pp. 1-15, available at: www.arjhss.com.

- Chandler, G.N., DeTienne, D.R., McKelvie, A. and Mumford, T.V. (2011), "Causation and effectuation processes: a validation study", *Journal of Business Venturing*, Vol. 26 No. 3, pp. 375-390.
- Child, J. (1997), "Strategic choice in the analysis of action, structure, organizations and environment: retrospect and prospect", *Organization Studies*, Vol. 18 No. 1, pp. 43-76.
- Covin, J.G. and Lumpkin, G.T. (2011), "Entrepreneurial orientation theory and research: reflections on a needed construct", *Entrepreneurship: Theory and Practice*, Vol. 35 No. 5, pp. 855-872.
- Csath, M. (2021), "Crisis situations: how should micro, small and medium enterprises handle them with a long term view?", *Development and Learning in Organizations*, Vol. 35 No. 3, pp. 10-12.
- Desarbo, W.S., Benedetto, C.A.D., Song, M. and Sinha, I. (2005), "Revisiting the miles and snow strategic framework: uncovering interrelationships between strategic types, capabilities, environmental uncertainty, and firm performance", *Strategic Management Journal*, Vol. 26 No. 1, pp. 47-74.
- Digital Innovation Hubs Working Group (2018), "Report from the working Group meeting on access to finance", February 2018. Brussels, available at: https://ec.europa.eu/futurium/en/system/files/ged/dihs_access_to_finance_report_final.pdf (accessed January 2022).
- Donthu, N. and Gustafsson, A. (2020), "Effects of COVID-19 on business and research", *Journal of Business Research*, Vol. 117, June, pp. 284-289.
- Eggers, F. (2020), "Masters of disasters? Challenges and opportunities for SMEs in times of crisis", *Journal of Business Research*, Vol. 116, May, pp. 199-208.
- Eisenhardt, K.M. and Martin, J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, Vol. 21 Nos 10-11, pp. 1105-1121.
- Garba, A. (2020), "Effect of COVID 19 on small and medium scale enterprise performance in Makurdi Metropolis, Benue State, Nigeria", *GRA's Multidisciplinary International (GRAM i) Journal*, Vol. 4 No. 6, pp. 1-11.
- GEM (2020), *Diagnosing COVID-19 Impacts on Entrepreneurship*, *Global Entrepreneurship Monitor*, GERA London Business School, London, available at: <https://www.gemconsortium.org/reports/covid-impact-report>.
- Granovetter, M.S. (1973), "The strength of weak ties", *American Journal of Sociology*, Vol. 78 No. 6, pp. 1360-1380.
- Helgeson, J.F., Fung, J.F., Zhang, Y., Henriquez, A.R.R., Zycherman, A., Nierenberg, C., Butry, D.T. and Ramkissoon, D.H. (2020), "Eliciting lessons from small- and medium-sized enterprises (SMEs) for natural disaster resilience planning and recovery during the COVID-19 pandemic", available at: <https://nvlpubs.nist.gov/nistpubs/dci/NIST.DCI.002.pdf>.
- Hemmington, N. and Neill, L. (2022), "Hospitality business longevity under COVID-19: the impact of COVID-19 on New Zealand's hospitality industry", *Tourism and Hospitality Research*, Vol. 22 No. 1, pp. 102-114.
- Hrebiniak, L.G. and Joyce, W.F. (1985), "Organizational adaptation: strategic choice and environmental determinism", *Administrative Science Quarterly*, Vol. 30, pp. 336-349, available at: <https://www.gojek.com/id-id/https://www.uob.com.vn/web-resources/business/pdf/business/en/sme-study/asean-sme-transformation-report-en.pdf>, <https://www.zdnet.com/article/brazilian-smbs-accelerate-tech-adoption-amid-pandemic/> (accessed January 2022).
- Ihsanuddin (2020), *Ada 7 Bantuan Pemerintah Selama Pandemi Covid-19, Berikut Rinciannya*, *kompas.com*, available at: <https://nasional.kompas.com/read/2020/08/26/09222471/ada-7-bantuan-pemerintah-selama-pandemi-covid-19-berikut-rinciannya?page=all> (accessed 13 November 2020).
- Indonesian Statistics Bureau (2020), "Analisis hasil survei dampak covid-19 terhadap pelaku usaha", available at: <https://www.bps.go.id>.
- KataData (2020), "Digitalisasi UMKM di tengah Pandemi Covid-19", available at: <https://katadata.co.id/umkm> (accessed January 2022).

- Khalifa, A.S. (2021), "Strategy, nonstrategy and no strategy", *Journal of Strategy and Management*, Vol. 14 No. 1, pp. 35-49.
- Kirk, C.P. and Rifkin, L.S. (2020), "I'll trade you diamonds for toilet paper: consumer reacting, coping and adapting behaviors in the COVID-19 pandemic", *Journal of Business Research*, Vol. 117, pp. 124-131.
- Koryak, O., Mole, K.F., Lockett, A., Hayton, J.C., Ucbasaran, D. and Hodgkinson, G.P. (2015), "Entrepreneurial leadership, capabilities and firm growth", *International Small Business Journal: Researching Entrepreneurship*, Vol. 33 No. 1, pp. 89-105.
- Laskovaia, A., Marino, L., Shirokova, G. and Wales, W. (2019), "Expect the unexpected: examining the shaping role of entrepreneurial orientation on causal and effectual decision-making logic during economic crisis", *Entrepreneurship and Regional Development*, Vol. 31 Nos 5-6, pp. 456-475.
- Lin, C., Tsai, H.L. and Wu, J.C. (2014), "Collaboration strategy decision-making using the miles and snow typology", *Journal of Business Research*, Vol. 67 No. 9, pp. 1979-1990.
- Lozano, R. and Barreiro-Gen, M. (2020), "Disrupting the brave new world: COVID-19 effects on organisations' sustainability efforts", *Journal of Organizational Change Management*, Vol. 34 No. 5, pp. 613-628.
- Lukito-Budi, A.S. (2021), *Memilih Menjadi Besar Atau Lincuh? Book Chapter 11 in Case Study Book Terampil Dalam Menghadapi Persaingan Bisnis*, 1st ed., UPT Penerbit Atma Jaya, Jakarta.
- Lumpkin, G.T. and Dess, G.G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", *Academy of Management Review*, Vol. 21 No. 1, pp. 135-172.
- Miles, R.E. and Snow, C.C. (2003), *Organizational Strategy, Structure, and Process*, Stanford University Press, California.
- Manik, H.F.G.G., Indarti, N. and Lukito-Budi, A.S. (2021), "Examining network characteristics dynamics of kinship-based families on performance within Indonesian SMEs", *Journal of Enterprising Communities: People and Places in the Global Economy*, ahead-of-print.
- Muijs, D. (2011), "Leadership and organisational performance: from research to prescription?", *International Journal of Educational Management*, Vol. 25 No. 1, pp. 45-60.
- Naushad, M. (2021), "Investigating determinants of entrepreneurial leadership among SMEs and their role in sustainable economic development of Saudi Arabia", *Journal of Asian Finance, Economics and Business*, Vol. 8 No. 4, pp. 225-237.
- Nofiani, D., Indarti, N., Lukito-Budi, A.S. and Manik, H.F.G.G. (2021), "The dynamics between balanced and combined ambidextrous strategies: a paradoxical affair about the effect of entrepreneurial orientation on SMEs' performance", *Journal of Entrepreneurship in Emerging Economies*, Vol. 13 No. 5, pp. 1262-1286.
- OECD (2017), "Going digital: making the transformation work for growth and well-being", *Meeting of the OECD Council at Ministerial Level*, Paris, June (accessed January 2022).
- OECD (2020), *OECD Economic Outlook 2020 Single-Hit Scenario* (accessed January 2022).
- OECD (2021), *OECD SME and Entrepreneurship Outlook 2021 Country Profiles*, available at: <https://www.oecd.org/industry/smes/SME-Outlook-2021-Country-profiles.pdf> (accessed January 2022).
- O'Regan, N. and Ghobadian, A. (2006), "Perceptions of generic strategies of small and medium sized engineering and electronics manufacturers in the UK: the applicability of the miles and snow typology", *Journal of Manufacturing Technology Management*, Vol. 17 No. 5, pp. 603-620.
- Papadopoulos, T., Baltas, K.N. and Balta, M.E. (2020), "The use of digital technologies by small and medium enterprises during COVID-19: implications for theory and practice", *International Journal of Information Management*, Vol. 55, December, pp. 1-4.
- Parnell, J.A. and Wright, P. (1993), "Generic strategy and performance: an empirical test of the miles and snow typology", *British Journal of Management*, Vol. 4 No. 1, pp. 29-36.
- Pearce, J.A. and Robbins, D.K. (1994), "Retrenchment remains the foundation of business turnaround", *Strategic Management Journal*, Vol. 15, pp. 407-417.

- Perry, S.C. (2001), "The relationship between written business plans and the failure of small businesses in the U.S", *Journal of Small Business Management*, Vol. 39 No. 3, pp. 201-208.
- Riom, C. and Valero, E.A. (2020), *The Business Response to Covid-19: The CEP-CBI Survey on Technology Adoption*, London School of Economics, Centre for Economic Performance, Covid-19 analysis paper No. 9, available at: <https://cep.lse.ac.uk/pubs/download/cepcovid-19-009.pdf> (accessed January 2022).
- Sanfelici, M. (2020), "The Italian response to the COVID-19 crisis: lessons learned and future direction in social development", *The International Journal of Community and Social Development*, Vol. 2 No. 2, pp. 191-210.
- Seetharaman, P. (2020), "Business models shifts: impact of Covid-19", *International Journal of Information Management*, Vol. 54 June, pp. 1-4.
- Shahri, M.H. and Sarvestani, N.M. (2020), "Business model innovation as a turnaround strategy", *Journal of Strategy and Management*, Vol. 13 No. 2, pp. 241-253.
- Sheth, J. (2020), "Impact of Covid-19 on consumer behavior: will the old habits return or die?", *Journal of Business Research*, Vol. 117, September, pp. 280-283.
- Sine, W., Mitsunashi, H. and Kirsch, D. (2006), "Revisiting Burns and Stalker: formal structure and new venture performance in emerging economic sector", *Academy of Management Journal*, Vol. 49 No. 1, pp. 121-132.
- Soininen, J.S., Puumalainen, K., Sjögrén, H., Syrjä, P. and Durst, S. (2013), "Entrepreneurial orientation in small firms-values-attitudes-behavior approach", *International Journal of Entrepreneurial Behaviour and Research*, Vol. 19 No. 6, pp. 611-632.
- Suarez, F.F. (2005), "Network effects revisited: the role of strong ties in technology selection", *Academy of Management Journal*, Vol. 48 No. 4, pp. 710-720.
- Teece, D.J. (2012), "Dynamic capabilities: routines versus entrepreneurial action", *Journal of Management Studies*, Vol. 49 No. 8, pp. 1-7.
- Thorgren, S. and Williams, T.A. (2020), "Staying alive during an unfolding crisis: how SMEs ward off impending disaster", *Journal of Business Venturing Insights*, Vol. 14 May, p. e00187.
- Ulrich, D. and Barney, J.B. (1984), "Perspectives in organizations: resource dependence, efficiency, and population", *Academy of Management Journal*, Vol. 9 No. 3, pp. 471-481.
- Un, C.A. and Asakawa, K. (2015), "Types of R&D collaborations and process innovation: the benefit of collaborating upstream in the knowledge chain", *Journal of Production and Innovation Management*, Vol. 32 No. 1, pp. 138-153.
- UOB, Accenture, and Dun and Badstreet (2020), "ASEAN SME Transformation Study 2020", available at: https://www.uob.com.sg/web-resources/business/pdf/ASEAN-SME-Transformation-Study-2020.pdf?adobe_mc=MCMID%3D14041792738594377362180589120160791850%7CMCORGID%3D116168F454E6DA2A0A4C98A6%2540AdobeOrg%7CTS%3D1643587080 (accessed January 2022).
- Valdiserri, G.A. and Wilson, J. (2010), "The study of leadership in small business organizations: impact on profitability and organizational success", *Entrepreneurial Executive*, Vol. 15, pp. 47-71.
- Vasudea, G. and Anand, J. (2011), "Unpacking absorptive capacity: a study of knowledge utilization from alliance portfolios", *Academy of Management Journal*, Vol. 54 No. 3, pp. 611-623.
- Voss, Z.G., Voss, G.B. and Moorman, C. (2005), "An empirical examination of the complex relationships between entrepreneurial orientation and stakeholder support", *European Journal of Marketing*, Vol. 39 Nos 9-10, pp. 1132-1150.
- Wales, W.J., Gupta, V.K. and Mousa, F.T. (2013), "Empirical research on entrepreneurial orientation: an assessment and suggestions for future research", *International Small Business Journal*, Vol. 31 No. 4, pp. 357-383.
- Walter, A., Auer, M. and Ritter, T. (2006), "The impact of network capabilities and entrepreneurial orientation on university spin-off performance", *Journal of Business Venturing*, Vol. 21, pp. 541-567.

- Wenzel, M., Stanske, S. and Lieberman, M.B. (2020), "Strategic responses to crisis", *Strategic Management Journal*, Vol. 42 No. 2, pp. 16-27.
- Yip, W., Ge, L., Ho, A.H.Y., Heng, B.H. and Tan, W.S. (2021), "Building community resilience beyond COVID-19: the Singapore way", *The Lancet Regional Health. Western Pacific*, Vol. 7, pp. 1-9.
- Zdnet (2020), "Brazilian SMBs accelerate tech adoption amid pandemic", available at: <https://www.zdnet.com/article/brazilian-smb-accelerate-tech-adoption-amid-pandemic/> (accessed January 2022).

Further reading

- Teece, D.J., Peteratd, M. and Leih, S. (2016), "Dynamic capabilities and organizational agility", *California Management Review*, Vol. 58 No. 4, pp. 13-35.

About the authors

Andy Susilo Lukito-Budi is an academicien from the Atma Jaya Catholic University of Indonesia, Faculty of Economics and Business. He holds Master degree from the University of Queensland, Australia, and PhD degree in Management from Universitas Gadjah Mada, Yogyakarta, Indonesia. His research interest areas are knowledge and innovation management, organisational learning, entrepreneurship and information systems.

Hardo Firmana Given Grace Manik is an academicien from the Faculty of Business, Duta Wacana Christian University. He holds master's degree in Science in Management Programme from Department of Management, Faculty of Business and Economics, Universitas Gadjah Mada. His research interests focus on knowledge management, organisational wisdom, entrepreneurship and strategic management.

Nurul Indarti is a Professor from the Department of Management, Faculty of Business and Economics, Universitas Gadjah Mada. She holds master's degrees from the University of Agder, Kristiansand, Norway and Norwegian School of Economics and Business, Bergen, Norway and PhD degree the Faculty of Economics and Business, University of Groningen, the Netherlands. Her research interests include knowledge and innovation management, entrepreneurship, small- and medium-sized business. Nurul Indarti is the corresponding author and can be contacted at: nurulindarti@ugm.ac.id