

# Strategic Planning and Sustainable Innovation During the COVID-19 Pandemic: A Literature Review

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**Abstract:** The COVID-19 crisis posed an opportunity for entering new avenues and market segments for large and financially viable enterprises, whilst SMEs lacking resources for such manoeuvre required cost-effective and quick-fix solutions. In this literature review, we reflect on the drivers of sustainable development of SMEs compared to their larger counterparts during major disasters. We have analyzed prior studies drawing from the concept of "sustainability" during COVID-19, published between 2020-2021, as well as relevant studies from the domains of crisis management, sustainability, enterprise sustainability, digitisation effects on sustainability, sustainable business practices. Each research was screened to check for the content relevance to the subject matter. The paper suggests that radical sustaining innovation in service delivery combined with diversification could be fostered to mitigate risks and ensure SMEs survival in times of economic downturn. The paper adds to the existing body of organizational knowledge on entrepreneurial sustainability deriving from multiple perspectives on the subject. The review provides pragmatic recommendations for SME owners, entrepreneurs, managers and academicians. We find that there are grounds for SMEs to concentrate on innovating in the context of products and services that are considered revenue-generating for same-industry large enterprises, considering this strategy allows SMEs to align their interests and engage in cooperation with competition.

**Keywords:** SMEs sustainability; company survival during COVID-19 crisis; COVID-19 pandemic; entrepreneurship during COVID-19; strategic planning

## 1. Introduction

Last year was extremely unstable for businesses worldwide, as a noticeable paradigm shift in management and entrepreneurial business models occurred, more so perpetuated by a COVID-19 chaotic and volatile environment (Obrenovic et al. 2020; Guberina and Wang, 2021). We might go as far as to say it was a 'make it or break it' for thousands of organisations worldwide, and the speed with which market shocks came about tested strongholds and weak spots of public and private enterprises. In the case of ongoing pandemic, some organisations have modified, adapted and evolved, and many could not keep pace with rapid changes (Gourinchas et al. 2020). First and foremost, the entire situation was reduced to risk mitigation and emergent crisis management, as economic shocks and business disruptions called for rapid re-adaptation (Alsharif et al., 2021; Obrenovic et al. 2020). The substantial research has been carried out on the concept of organizational sustainability in firms of all sizes and across different industries to designate the most successful growth strategies. However, techniques yielded in times of stability were rendered inadequate by economists in the face of extensive financial and economic crisis. During global hazards, such as the ongoing pandemic, researchers are increasingly studying risk management and

are engaging in contingency planning. The COVID-19 preventive measures spurred the general uncertainty as businesses are faced with temporary or permanent shutdown under lockdown policy, and those remained operating that will prosper post-crisis have succeeded to lever the existing technology to transfer to novel environment with an unexplored market potential. To further support their effort, this paper provides an overview of the key organizational strategies and related theories that can be utilized to generate new frameworks and to devise alternative services in an online setting. The main objective of the study is to single out the most effective crisis management solutions and to reflect on their strongholds and shortcomings. We indicate the connection between radical innovation and product and service diversification and emphasize their juncture as main contingency methods. We expect this overview will aid business owners, managers and financial consultants establish a coordinated and efficient plan of action.

## **2. Review of the Key Concepts**

We have analyzed prior studies drawing from the concept of "sustainability" during COVID-19, published between 2020-2021, as well as relevant studies from the domains of crisis management, sustainability, enterprise sustainability, digitisation effects on sustainability, sustainable business practices. Each research was screened to check for the content relevance to the subject matter. We have identified research objectives and key questions to address the gaps of the current research. These were employed as a guidance mechanism in the preliminary selection process and in establishing a proper review protocol by which primary and secondary studies were singled out. Next, we based our study on the notion of sustainability in general and focused on the current context of COVID-19, more particularly on digital transformation during COVID-19, enterprise sustainability during COVID-19, organizational sustainability, innovation and the impact of COVID-19 on business. Research types included were exploratory, explanatory, empirical, conceptual and case studies. Research questions on how and when will diversification yield the most optimal outcome, and deciding on when to invest in innovation, when to pull out, and when to engage in collaboration remain unresolved.

### **2.1 Sustainability**

The term sustainability derives from its understanding as a force necessary to maintain some entity, outcome or process over time, applicable to all human activities, without leading to self-destruction (Jenkis, 2009). The concept of sustainable development has undergone a lot of historical changes. Still, the main assumption underlying diverse definitions remains the same, pivoting on Tripple bottom line – the sensitive balance between environmental sustainability, social sustainability for attaining equality among peoples' life quality and economic sustainability for maintaining the capital required to raise the living standard.. As such it has been the focus of many empirical studies (Iovino, 2020; Asa and Prasad, 2014). According to Sterling (2010), sustainability represents the reconciliation of the economy and environment under the same goal of attaining long-term human development (Sterling, 2010). It provides a framework consisting of direct interaction between society, ecosystems and other living systems (Marin et al. 2015). The general objective of sustainable development is long-term economic and environmental stability from an alignment of economic, environmental and social concerns throughout the decision-making process (Emas, 2015). As such, it presents a potent global contradiction to the contemporary Western culture (Beck and Wilms, 2004). Measures of organizational sustainable growth stem from the organization's long-term objectives and missions. Therefore, the strategic success in achieving growth can be measured only through objective and quantitative enterprise and context-specific KPIs through which each organization can determine its progress. There is no generic 'suit all' formula for determining advancement. Some studies suggest that companies should analyse such indicators as technological readiness, digital transformation, market share, and market readiness, and organizational culture and links for nurturing open innovation (Povolna, 2019; Melo et al. 2020; Purnama et al. 2020; Roy, 2018; Liepin et al. 2013). Medne and

Lapina (2019) argue that when measuring the strategic KPIs, future-oriented thinking, management, long-term commitment, and continuous improvement should be accounted for.

## **2.2 Ansoff's Matrix**

Ansoff's Matrix best explains organisational development approaches. Ansoff's proposition encompasses the four most common strategies to expand organisational activity, namely, market penetration, product development, market development and diversification. Enterprises can either opt to increase their market share by selling more of their current assortment to existing consumers, or they can get creative and persuade their existing customers to try out new additions to their offer. Moreover, they can engage in 'out of the box' thinking and find ways to stimulate the demand for their products, leading to the creation of entirely new market segments. In times of emergency, fall in consumers' financial liquidity leads to a decrease in demand. When all generic strategies fail, organisations can take on a more ambitious approach by stepping out of the comfort zone and developing new products for new markets they aim to create. For instance, in what David Perrish refers to as the 'Adapted Ansoff's Matrix', during COVID-19 organisations can find many diversification opportunities in the form of digital products or services that are delivered through online channels and third-party apps and providers, to current or new consumers. Less extensive, concentrated diversification would consider selling digital versions of existing products to regular customers or new markets. Crises prompted entrepreneurs to follow new opportunities and draw new business practices (Kuckertz et al. 2020). Such diversification approaches encouraged a generation of valuable knowledge stock to drive business long after crisis (Bishop, 2019). Persson and Lindgren (2005) consider the product and market diversification to be a variation of the pure portfolio theory, whereby diversification strategy is used to decrease overall corporate risk (Persson and Lindgren, 2005). The Portfolio Theory explains how risk can be reduced by spreading the investments into a variety of securities, whereby investors are decreasing risk by spreading it over many assets (Eiteman et al. 2004). Generally, firms deploy diversification strategy to maximise profits, increase revenues, reduce risks, increase competitiveness and enhance performance.

## **2.3 Chaos Theory**

Chaos Theory emphasises the interrelation of manifold varied relationships between sociological, technological and natural systems, thus providing the justification for organisational disaster and crisis management (Piotrowski, 2020). Chaos theory is often used by economist to explain the inherent state of dynamic systems, i.e., high susceptibility to initial conditions whereby, notwithstanding the deterministic disposition, all long-term predictions on chaotic systems are rendered impossible. Theory clarifies how minuscule changes in initial conditions may yield large-scale divergent outcomes (Bracken, 2020). The Chaos Theory draws from few basic assumptions. Complex and dynamic ecosystems are all interconnected, and as such, they are prone to what is commonly referred to as a butterfly effect. Following the Chaos Theory, in each organisation, continuous counteracting convergence and divergence are present, and these forces are embedded in organisational management processes. Organisations can be framed as complex systems underlined by both unpredictability and order (Lartey, 2020). Therefore, organisations are considered nonlinear dynamic systems amenable to periods of stability and instability, leading to a chaotic state, making them more likely to portray chaotic characteristics. Such features include sensitivity to initial conditions, oscillations, discreteness of change, and invariance at diverse scales. The organisational path from stability to chaos occurs through a discrete process of change. When the enterprise reaches the chaotic state, minuscule changes can have an immense impact in the long-run. Following indicated antithesis, from chaos, new stabilities emerge and are adjusted to fit organisational configurations. Finally, across one organisation's life cycle or between two organisations, similar actions lead to diverse results (Thietart and Forgues, 1995). Accounting for the principles mentioned above, when reaching chaotic conditions, organisations will exhibit disarrayed patterns, and from the chaos through small interventions,

such as assortment extension and diversification or process innovation, in the aftermath, new stabilities shall arise.

#### **2.4 Crisis Planning and Innovation**

The aim is to consider how such manoeuvring during major disasters can be utilized as a methodical move within a more comprehensive competitive strategy. Scholars previously devoted special attention to key success factors during different crisis stages, including planning, diagnostics and response (Bundy et al. 2017; Herbane, 2013; Muñoz et al. 2019). Less attention was given to SMEs, yet they have many advantages to carry out emergency planning and transform their business and thrive post-crisis, such as responsiveness, agility, dynamic adaptation, creativity, closer and more intimate customer and stakeholder relations, and due to their limited size, the networked structure that allows stronger bonding and facilitates idea generation and knowledge sharing (Kurschus et al. 2015; Herbane, 2013). SMEs that consider contingency planning during stability to be of critical value, as it may mitigate financial and non-monetary risks and enable quick response in times of adversity, were found to have higher recovery rates after major disasters (Muñoz et al. 2019, Kurschus et al. 2015).

The notion of sustainability is closely related and often examined in relation to organizational innovation (Faulks et al., 2021; Medne and Lapina, 2019). Innovation is a key concept in sustainable strategic management, embodied in product and service diversification, service delivery processes, and development of brand new markets. Innovation refers to products and services, and it involves processes and manners through which market segments are served, i.e., the slightly adapted version of the existing service can now be delivered in an unconventional manner, such as streaming the online 'home version of the fitness course', or providing takeaway services by partnering with delivery providers and third-party vendors. New business branches can arise from devising such plans to keep business running and serving consumers even when they themselves are prevented from shopping in person. Some examples include remote monitoring, rapid testing, telemedicine application, online healthcare support, robotics and surgical hands. These are bound to become the future in the aftermath of the current crisis, as robotics system that allows surgeons to operate remotely in the same way as telemedicine allows a healthcare specialist to interact with patients virtually is cost-effective due to reduction of the operational, infrastructural and labour expenses.

The existing studies on the effects of organizational diversification yielded opposing results (Baptista et al. 2020). While there are many reasons why firms choose to engage in diversification, such as expansion, profitability, leveraging on investment opportunities and market positioning, not all of them use this strategy successfully. For instance, there is evidence that diversification can fail to improve performance or even harm enterprise profitability (Baptista et al. 2020; Su and Tsang, 2013; Karimi, 2013; Hasby et al. 2017; Krivopic et al. 2017; Manyuru et al. 2017; Shao et al. 2020). If handled right, the radical sustaining innovation in service delivery combined with diversification could be fostered to mitigate risks and ensure SMEs survival in times of economic downturn.

#### **2.5 Diversification**

One of the best examples of diversification stems from the computing industry. Hewlett-Packard (HP) company, initially conceptualised as an audio equipment manufacturer took a massive leap of fate in the 1960s and diversified by extending to the computing market. The company utilised existing resources and expertise in engineering to create desktop printers. This step was most definitely risk worthy, as the company is now a leading personal computer vendor, selling full range ICT equipment, ranked at 58 according to 2018 Fortune 500 list of the largest American company by revenue. Furthermore, when discussing the organizational growth and progress, scholars and executives often take the diversification capability to be one of the key sustainability indicators. Although the Resource-Based Theory (RBT) implies that product scope diversification and geographic diversification decisions are interconnected,

especially with regard to firms' performance, the empirical research has largely failed to account for these linkages (Wiersema and Bowen, 2009; Schommer et al. 2019; Ugwuanyi and Ugwu, 2012). Such an oversight in organizational and strategic management studies precipitated serious confusion and mixed findings on diversification and sustainability relationship. It compromised the statistical validity and reliability of previous studies and, in yielding dubious conclusions, lead to misinformed SMEs' managerial decision-making. Debatable and far-fetched reasoning has implications for future strategic management.

Some studies found the adverse effect of diversifying strategies on organizational performance (Schommer et al. 2019; Ugwuanyi and Ugwu, 2012). Certain scholars believed that by further diversifying into unrelated business lines, benefits would decrease while the costs will increase, and relationship will turn negative (Le, 2019; Lee et al. 2008). This is to attest that managing diversification is heterogeneous among enterprises (Mackey et al. 2017). Why some enterprises profit from diversification strategy while others fail is still unclear, but the plausible reason may be that those following the investment into related products and services have more chance at success than organizations pursuing unrelated diversification technique. As resulting outcomes vary among enterprises and may have adverse effects, we contend that sole diversification is not enough to ensure sustainability. It should be pursued combined with other actions that were previously identified as beneficial for the company's success, such as sustaining innovation and inter-organizational cooperation. Furthermore, we will argue that potentially the best strategy for SMEs is to engage in related diversification during adversity to avoid the risk of bankruptcy.

### **3. Discussion**

Coronavirus flared-up crisis shed light on smart business strategies for extending product portfolio and processes, from research and development programs to entrepreneurial opportunities encouraging options and various solutions to healthcare pandemic-driven needs. SMEs are generally able to mitigate losses thanks to the limited inventory, lower fixed operating costs, labour costs and rental burdens, and less bureaucracy, which facilitates the adaption of resource reallocation and product diversification as acceptable resilience strategies (Lindström, 2005; Alves et al. 2020). This literature review pointed to strongholds of strategic innovation and diversification practices. We have enhanced the organizational knowledge on entrepreneurial sustainability deriving from multiple perspectives on the subject. The aim is to emphasize for the entrepreneurs and business owners prospect strategies by shedding the light on the drivers of sustainable development of SMEs compared to their larger counterparts. Organisational sustainability extensively relies on creating, handling and rectifying new knowledge on innovative products and practices that can boost sales and expand the business. Crisis management, as well as a sustainable business during stability, relies on effective utilisation of Enterprise Resource Planning (ERP), as the knowledge management and data extracted through ERP systems serve as a base and key intelligence for considering and planning diversification (Salloum et al. 2018). Our paper addressed methodological and theoretical shortcomings identified in the existing literature and offers a theoretical insight that explains the previously obtained results' divergence. Our assumption is that studies were limited only to certain enterprise types, mainly large corporations or markets, such as emerging economies, and different strategies are to be applied for SMEs. This article provides a valuable contribution to SMEs' sustainable development research field. It adds to organizational strategy literature by developing an integrative framework stipulating a synergistic approach combining several factors, namely, product diversification, sustaining radical innovation in service delivery and open collaboration with market leaders. Managerial considerations concerning convenient market segment and product scope constitute the core of the overall organizational long-term sustainable strategy. We explored the potential of SMEs sustainability model drawing from Crisis Management Theory, the Chaos Theory and modified Ansoff's Matrix growth strategy by focusing on key business aspects – service portfolio, restoration of disrupted activities beyond physical environment and consumer

demand generation. Our framework hinges on the main pillars of assortment diversification, innovation in service delivery and partnering with complementary providers and competitors to penetrate novel market segments and create demand for brand new services.

## 4. Conclusion

Accounting for advantages inherent to SMEs, in this paper, we take the agility in innovation and diversification to be an attribute of success and critical component for maintaining sustainability. In doing so, we reflected on the benefits of employing it as a defence strategy and buffer against economic shocks. We add to the existing body of organizational knowledge on entrepreneurial sustainability deriving from multiple perspectives on the subject. The literature review performed in this article was designed to provide theoretical and practical recommendations for SME owners, entrepreneurs, managers and academicians. The basis for refraining from focusing exclusively on bringing about novelty and neglecting the core activity is provided, as pursuing this goal can lead to overinvestment of already scarce resources. We find that there are reasonable grounds for SMEs to concentrate on innovating those products and services that are considered revenue-generating for same-industry large enterprises, considering this strategy allows SMEs to align their interests and engage in cooperation with competition. Meaning, companies joined in the global supply networks have higher innovation capabilities and performance. This is deemed the most cost-effective strategy, as instead of challenging competitors, SMEs can freely focus on production. SMEs can generate innovation by transforming their business model, e.g. by rethinking the existing processes and engaging in experimenting with core activity and latest technology to create new value helps to ensure long-term survival.

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