

Explanatory Factors of Small-Medium Business Resilience: A Systematic Literature Review

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Abstract

This paper aims to systematically review and map research on the explanatory factors of business resilience in the SME sector. Articles were taken from several Google Scholar and Scopus databases, selected, reviewed from 2012–2020. There were 68 articles collected from Google Scholar and 68 from Scopus so that the number of articles with the keyword SME resilience was 136. There were 93 articles excluded because they were not relevant and 35 because of research duplication, so that the articles used in this research are 9. Based on the literature review there are 5 themes, namely: 1) Mastery of Digital Technology with the sub-themes of Information System Artifact, Big Data Analytical Capability, Government support, E-Commerce Adoption, Digital technology Adoption and Digital Marketing; 2) Business Capabilities with the sub-themes of sensing, seizing and reconfiguring; 3) Social Capitals with structural, relational and cognitive sub-themes; 4) Economic Disasters with the sub-themes of socio-economy, recovery and financial; and 5) Business Processes with sub-themes of planning, marketing and management. This paper contributes to the literature by offering a comprehensive research map on the explanatory factors of SME business resilience during the COVID-19 pandemic.

Keywords: *SME, Business Resilience, Covid-19.*

Introduction

Currently, business organizations face tremendous pressure in order to survive (Bianchini & Kwon, 2021). The causative factor is when companies operate in conditions of increasing volatility, uncertainty, complexity and ambiguity (VUCA) amidst an increasingly chaotic and uncertain business environment due to the COVID-19 pandemic (Liu, 2022). An important way for companies to survive and thrive is to become more resilient than before (Herbane, 2019). Companies need to develop resilience capacity in anticipation of uncertain (Lengnick-Hall *et al.*, 2011)

Because SMEs are one of the pillars of the national economy and contribute positively to the Gross Domestic Product (GDP) as well as providing jobs for 116.9 million people or 97% of the total employment (Thaha, 2020)(Yuliantari & Pramuki, 2021), then coaching and development of SMEs is important to do to overcome socio-economic problems such as unemployment and poverty (Page & Söderbom, 2015). The concern with investigating business continuity and the ability of SMEs to respond to critical scenarios is particularly relevant in the current global emergency. The various impacts and difficulties caused by various pressures are an important concern to examine how SME managers act in the face of possible losses and even bankruptcy if they do not have alternative plans to deal with them (Herbane, 2019). Therefore, a strategic plan is needed to ensure the organization's operational activities continue despite disruptions, to ensure business continuity in a pandemic scenario and post-pandemic recovery. This can help companies to identify opportunities and challenges in difficulties, get out of crises, and then be able to maintain sustainability.

In previous studies, most of the business resilience research was carried out in the context of large corporate organizations (Annarelli & Nonino, 2016) and could also be carried out in the SME sector

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(Fadzil & Rashid, 2022); (Saad *et al.*, 2021), but it was revealed that the business management model of the SME sector could differ significantly from large companies in terms of operation and level of vulnerability (Sullivan-Taylor & Branicki, 2011). That the business resilience of large companies is different and even more critical and complex for the SME sector, this is due to their vulnerability to various challenges caused by size and resource limitations (Tognazzo *et al.*, 2016) (Tognazzo *et al.*, 2016).

The resilience of the SME sector is very interesting to explore considering that this sector is usually more resilient when economic problems occur. This has been proven when the monetary crisis occurred in Indonesia in 1997–1998, SMEs had resilience and became heroes for the community, while large businesses could not be resilient. COVID-19 pandemic occurred, and again, SMEs were at the forefront of the crisis because many SME business activities were carried out at home while everyone was restricted to activities outside the home. The occurrence of economic problems has changed the strategic goals of many organizations from seeking profit to seeking resilience. Motivated by the phenomena and research gaps above, this research attempts to provide an overview or mapping of explanatory factors to increase business resilience in the SME sector. The analysis presented in this literature study will assist in developing a shared understanding of both practitioners, academics and policy makers (regulators) about the concept of SME business resilience and can then become a roadmap for researchers to develop knowledge related to current topics based on literature mapping. The purpose of this study was to determine the Explanatory Factors of small-to-medium business Resiliency.

Research Methods

The study designs chosen in this systematic review are research articles that use a phenomenological design. It was considered to explain the phenomenon of business resilience growth. Searching method focuses on the articles related to factors influencing the growth of business resilience. Articles published in 2012-2022 were the limited years on database search. Participants were not limited to the type of business. Others criteria was accessible articles in full-text in PDF. An article search focused on published articles and not including articles in press. Article searching focused on the Scencedirect, Proquest, and Directory Open Access Journal databases using a combination of the keywords “Business Resiliency” AND “Explanatory Factors” AND “Medium Business” AND “Small Business”.

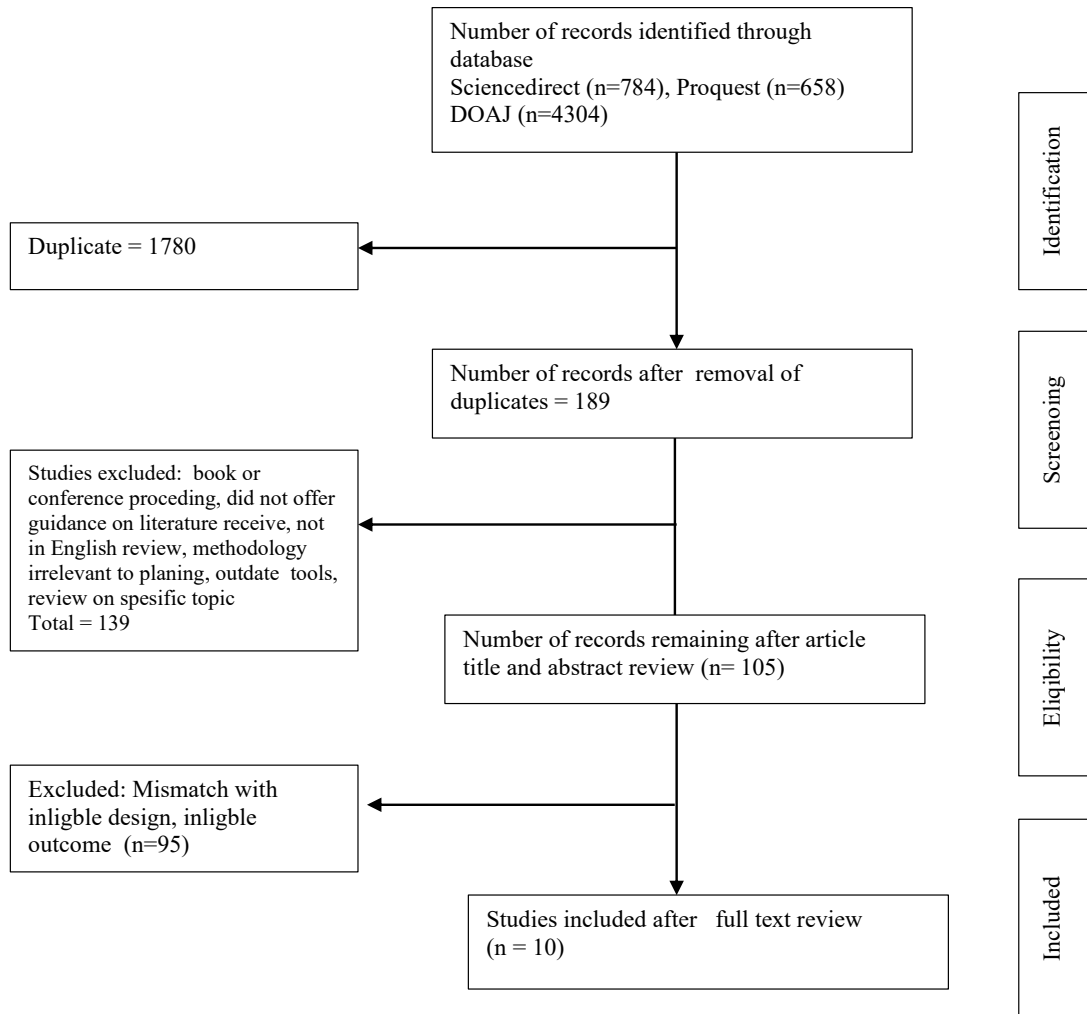


Figure 1 Preferred Reporting Items for Systematic Reviews Flow Diagram

Result and Discussion

This article focuses on the explanatory factors of business resilience in the SME sector. The systematic literature review has identified several research gaps. The author hopes that the arguments presented in this article and the research gaps discussed will provide interesting ideas for researchers and academics in future research. (Page & Söderbom, 2015) state that SMEs in developing countries generally face difficult conditions that lead to a level of failure compared to conditions in developed countries. SMEs in developing countries face recurring and diverse problems ranging from natural disasters, political turmoil and economic crises, market access challenges, institutional failures and infrastructure barriers (Abebrese, 2015) (Abebrese, 2015) and (Littlewood & Holt, 2018). Therefore, research on the resilience of SMEs in turbulent situations is of greater interest to researchers because it facilitates the application of concepts, theoretical and practical, regarding understanding resilience in the field of SMEs.

This literature review aims to understand the factors that influence the business resilience of the SME sector. (Fadzil & Rashid, 2022) and (Saad *et al.*, 2021) expressly state that it is very important and highly expected to conduct business resilience research in the SME sector which is very rarely done where it is revealed that the business management model of the SME sector can differ significantly from other big companies in terms of operability and degree of vulnerability (Sullivan-Taylor & Branicki, 2011).

Mastery of Digital Technology and SME Business Resilience

(Khalil & Bousselmi, 2022) unequivocally state that by mastering digital technology, SMEs can increase their agility and change their business model in a matter of weeks, if not days, not months. Another benefit of digital technology for SMEs is to help them change internal operations and procedures, improve performance efficiency and effectiveness, reengineer business models, mitigate risks, and ensure company survival. The adoption of digital technology increases the resilience of SMEs during disruptive situations in developing countries. Companies can use digital technology to help them increase their resilience capacities. In general, the limited capabilities of SMEs, such as finance and human resources, make them have little flexibility in difficult situations.

One of the adoptions of technology that is applied in order to improve business performance is the adoption of e-commerce. (Costa, 2021) states that e-commerce is not only an opportunity for big companies, but also provides the same potential benefits for SMEs and therefore can align competition. E-commerce provides broad access to information to customers to achieve higher market reach through the presence of a website. Therefore, e-commerce can be considered as a breakthrough framework to enhance global competitiveness and promote enterprise scale-up. In addition, it can help businesses bridge the distance to consumers, save time and costs, thereby increasing profits. As a result, e-commerce has developed into a universal marketplace for businesses.

(Bianchini & Kwon, 2021) also state that digitalization can be a powerful driver of SME resilience, increase their capacity to anticipate, and react and adapt to major shocks. The severe impact of the COVID-19 pandemic crisis on small businesses and entrepreneurs has put the digitization of SMEs high on the agenda of policy makers in various countries, representing many of the core dimensions of their recovery packages. Accelerating digital uptake by SMEs is seen as essential for the economy to bounce back from the pandemic, and build the foundation for future resilience. However, important questions arise about how the government can support the diverse SMEs to pursue digital transitions under challenging market conditions and limited resources, and how digital uptake can translate into increased resilience and competitiveness of SMEs in the long term.

With regard to government support, the OECD (2020) conducted a study in South Korea. The Korean government report highlighted the main role of using digital tools for the business continuity of most SMEs during the pandemic, that the flexibility of digital services and online platforms has enabled a large number of SMEs to digitize some of their business operations without requiring large initial investments. The great acceleration in digital technology uptake was facilitated by several policy programs introduced by the Korean government, despite at speed posing important challenges to the transition. The Korean government responded quickly to the crisis, strengthening established programs and introducing new policies to encourage business uptake of digital tools. In collaboration with other Ministries and institutions, the Ministry of SME and Startups, pioneered support for digitalization of SMEs, both in the form of horizontal policies and sectoral targeted measures, which leveraged some of the strengths of existing systems to achieve their goals (e.g. digital infrastructure that developed with well, strong networks between large and small companies, smart factory solutions, extensive digitization of government services). Key programs included support for digital cross-border sales, measures to enhance cyber security, automation of administrative processes and the establishment of digital convenience stores, and expansion of support for businesses to adopt remote working practices (Bianchini & Kwon, 2021).

Big Data in mastering digital technology also plays a role in the business resilience of the SME sector. (Ciasullo, 2022) states that Big Data Analytics and Co-Innovation Capabilities are managed through digital platforms and depend on how companies use technology to achieve greater value and long-term competitive advantages. Big Data Analytics Capabilities are also capable of enhancing the co-creation of knowledge that is applied for specific purposes. Enterprises can offer valuable information provided by big data as input for creating innovative solutions to problems or challenges stemming from uncertain scenarios. Within this premise, Big Data Analytics Capabilities enable people's participation in decision making and problem solving, as well as driving organizational resilience.

Another explanatory factor supporting the theme of digital technology mastery is information system artifacts. (Velu, 2019) in his study on Malaysian SMEs states that by using an activity theory approach, postulating that information system artifacts provide the activities and conditions needed to support the organization, used as tools that can assist employees in carrying out their tasks and activities more efficiently. An organizational information tool facilitates and enables better understanding of related activities for employees. Information system artifacts help generate and increase coherence

in the workplace environment, in addition to enabling collective work among employees where shared meaning and sharing of information become easier. Information system artifacts act like instruments that reinforce patterns of action thereby helping to create common sense about the objectivity of society at large. The result of this study confirms the phenomenon of the development of digital technology and the use of smartphones so that many marketplaces used by SMEs to market their products have emerged so that their market share has become quite large. This situation is very profitable for SMEs so that they can be resilient and even grow.

Business Dynamic Capability and SME Business Resilience

(Ozanne *et al.*, 2022) state that building business resilience capacity is important for economic, social and community recovery during the COVID-19 pandemic, but organizational resilience has received less attention in the marketing literature. Crises and disasters can have a significant impact on small and medium enterprises (SMEs), affecting their ability to mitigate, respond and recover. Social capital is a key resource that SMEs can mobilize to leverage resources embedded in internal and external relationships to respond to disruptions, but the mechanisms through which social capital facilitates organizational resilience are unclear. As a solution, (Ozanne *et al.*, 2022) propose dynamic capabilities as the main source of sensing, seizing and reconfiguring that transform social capital into organizational resilience. The results from a sample of 419 SMEs in Australia and New Zealand showed that internal social capital has a direct effect on organizational resilience. Dynamic capabilities partially and fully mediate the relationship between internal social capital and external social capital on organizational resilience. Dynamic capability is a strategic step to deal with high environmental uncertainty. SMEs are required to be anticipatory by making plans to deal with economic, social, health, political and other turbulence. In addition, when turbulence occurs, SMEs must immediately take steps to deal with this problem, so that SMEs remain resilient.

Social Capital and SME Business Resilience

(Ozanne *et al.*, 2022) state that the relationship between social capital and business resilience is still unclear, where social capital consists of three dimensions, namely structural social capital, relational social capital and cognitive social capital. Structural social capital represents the type and configuration of social bonds between actors in a network, depending on the existence of connections and how they are configured in the social structure. Connections, or social bonds, in networks create the potential for actors to gain access to valuable tangible and intangible resources. Relational social capital refers to mutual trust, norms of reciprocity, and identification among actors in a social system. In essence, it captures the quality of relationships between individuals in social networks that are developed through repeated interactions. High relational social capital encourages "open communication, transparency of behavior, mutual support and sharing of sensitive and important resources between partners," which can assist SMEs in creative problem solving after a crisis. Cognitive social capital is the degree to which actors in a social network share the same perspectives, narratives, ambitions, visions, and cultural values. In essence, it refers to language-based resources that provide "representations, interpretations, and systems of shared meaning between actors in a social network." Narratives and shared meanings provide shared understanding, help groups make sense of information, develop common goals, and work collectively to achieve efficiency, greater on cooperative tasks. Cognitive social capital also provides relationship value through access to competence, innovation, flexibility, and adaptability. The Indonesian context of social capital is very interesting to continue to study, considering that Indonesia has a philosophy of mutual cooperation and its people are known to be generous or have high social awareness in the world. Social capital in the form of *gotong royong* has been implemented by the Government of Indonesia to tackle the COVID-19 pandemic, where starting from the Central Government, the regions, the TNI, National Police, Customary Institutions and Communities have worked together to overcome the outbreak. As a result, Indonesia is recognized by the world for its success in overcoming the pandemic and at the same time overcoming the economy.

Economic Disaster and SM Business Resilience

Organizational resilience is conceptualized in various ways. Resilience activities occur based on the different phases of the disaster life cycle, namely preparedness, response and recovery. Pre-disturbance activities are generally referred to as the preparedness aspect and relate to external environmental assessment (situation awareness), and understanding both the likelihood and impact of potential disturbances to develop contingency plans and prevention capabilities (Bode & Macdonald, 2017). These aspects have been shown to have a positive influence on both the response and post-disaster recovery aspects (Jia *et al.*, 2020). The response and recovery aspects are exemplified by the

ability to gather and utilize information and knowledge (Lee *et al.*, 2013), the development of rapid actions to minimize disruption, and the ability to organize response teams quickly to deal with emergencies. situation (Bode & Macdonald, 2017); (Jia *et al.*, 2020). However, organizational resilience based on readiness, response, and recovery has been assessed especially in large companies (Bode & Macdonald, 2017); (Jia *et al.*, 2020); (Lee *et al.*, 2013).

(Polyviou *et al.*, 2020) studied medium-size manufacturing companies and argue that more research is needed to determine whether SMEs exhibit different resilience-building resources or capabilities than mid-size companies. This gap is important to address because SMEs may be more vulnerable to disruption, due to resource constraints that are not usually faced by large companies such as liquidity, access to financial capital, and a more challenging policy environment (Hendricks & Singhal, 2003); (Polyviou *et al.*, 2020).

Business Process and Business Resilience

(Pedersen *et al.*, 2020) state that in marketing research also explores how business organizations develop resilience to respond to crises, but many questions remain unanswered. Contribution to the discussion of emerging marketing concepts in order to explore dynamic capabilities as a mechanism by which social capital translates the resilience of SME organizations in dealing with disruptions caused by the COVID-19 pandemic.

It is clear that SMEs have difficulty in anticipating and planning for disruptive events (Sullivan-Taylor & Branicki, 2011); (Weick & Sutcliffe, 2015), but those who were able to do so in our sample through network-based knowledge and information were able to change the market, perceive, exploit and reconfiguring capabilities into their resilient capacities to deal with turbulent times. In dealing with disruptions, such strategic capabilities are more important for SMEs than standard operating capabilities (Manfield & Newey, 2018), which enable them to explore and exploit opportunities. Another explanatory variable that researchers need to investigate is business processes, because SMEs that are capable of resilience when turbulence or environmental changes occur or anticipate uncertainty are adaptive to these conditions. For example, when there is intense competition, SMEs must change their business processes by eliminating non-value-added business processes and creating value-added business processes. Likewise, when there is a massive development of digital and information technology, SMEs should adapt conventional business processes to a technology-based direction. SMEs in order to be resilient and continue to grow must create business processes that are dynamic, adaptive, efficient and effective and different from their competitors. SMEs, which are mostly home industries, have the advantage of being more dynamic and adaptive to environmental changes.

Conclusion and Recommendation

Based on the article review, there are several explanatory factors of SME business resilience in 5 major themes, namely: Digital Technology Adoption; Business Capability; Social Capital; Economic Disasters; and Business Process. The researcher's review also found that only a few publications discussed the explanatory factors of business resilience in the context of SMEs. This is possible because most of the research focuses on the resilience of SMEs during a pandemic, considering that research discussing the business resilience of the SME sector is still very rare. The implication is that the number of articles is still limited, where the big theme almost leads to mastery of digital technology. Without considering this contextual variability, it can lead to biased research results when the SME context is still unable to adopt digital technology. More survey-based research is needed to validate the theoretical basis for the explanatory factors of SME business resilience in developing countries. Based on the results of the article review, most of the SME research uses survey methods and secondary data, and still rarely uses experimental designs. More publications are needed with longitudinal and experimental and exploratory research design approaches to explore the explanatory factors for SME resilience throughout the time. Based on the study of the pre-research literature, the author desires to explore SME resilience and focuses on this big theme. The five major themes are based on a literature review that the adoption of digital technology has a positive impact on the resilience of SMEs, so this is an interesting matter to continue to explore. The adoption of digital technology is increasingly interesting to study in accordance with the phenomenon that SMEs have adapted their business processes to the development of digital technology. Future research on data also needs to examine the theme of social capital, because Indonesia has uniqueness such as mutual cooperation, a high level of generosity or social care to study the resilience of SMEs. Considering that research on SME resilience rarely uses experimental designs, future research should use this design as a comparison material to overcome research gaps regarding SME resilience.

References

- [1] Abebrese, A. (2015). Understanding entrepreneurial resilience development within institutional constraints: A case of Ghana.
- [2] Annarelli, A., & Nonino, F. (2016). Strategic and operational management of organizational resilience: Current state of research and future directions. In *Omega* (United Kingdom (Vol. 62)). <https://doi.org/10.1016/j.omega.2015.08.004>
- [3] Bianchini, M., & Kwon, I. (2021). Enhancing Smes' Resilience Through Digitalisation: The Case Of Korea. oecd-ilibrary.org.
- [4] Bode, C., & Macdonald, J. R. (2017). Stages of supply chain disruption response: Direct, constraining, and mediating factors for impact mitigation. *Decision Sciences*, 48(5), 836–874.
- [5] Ciasullo, M. V. (2022). SMEs resilience , big data analytics capability and coinnovation. *Transforming Government: People, Process and Policy*, 16(2), 203–217. <https://doi.org/10.1108/TG-07-2021-0120>
- [6] Costa, J. (2021). SMEs Must Go Online E-Commerce as an Escape Hatch for Resilience and Survivability. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(7), 3043–3062. <https://doi.org/10.3390/jtaer16070166>
- [7] Fadzil, S. M., & Rashid, M. F. (2022). A design framework for SMEs resilience in Malaysia. *IOP Conference Series: Earth And*. <https://doi.org/10.1088/1755->
- [8] Hendricks, K. B., & Singhal, V. R. (2003). The effect of supply chain glitches on shareholder wealth. *Journal of Operations Management*, 21(5), 501–522.
- [9] Herbane, B. (2019). Rethinking organizational resilience and strategic renewal in MEs. *Entrepreneurship & Regional Development*. <https://doi.org/10.080/08985>
- [10] Jia, X., Chowdhury, M., Prayag, G., & Chowdhury, M. M. H. (2020). The role of social capital on proactive and reactive resilience of organizations post- disaster. *International Journal of Disaster Risk Reduction*, 48.
- [11] Khalil, A., & Bousselmi, H. e. W. (2022). Do Digital Technologies Influence the Relationship between the COVID-19 Crisis and SMEs. In *Resilience in Developing Countries? ... Technology in the*. <https://doi.org/10.1108/S1877->
- [12] Lee, A. V., Vargo, J., & Seville, E. (2013). Developing a tool to measure and compare organizations' resilience. *Natural Hazards Review*, 14(1), 29–41.
- [13] Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243–255.
- [14] Littlewood, D., & Holt, D. (2018). Social enterprise resilience in sub-Saharan Africa.
- [15] Liu, X. (2022). SMEs Resilience, entrepreneurial mindfulness and entrepreneurial.
- [16] Manfield, R. C., & Newey, L. R. (2018). Resilience as an entrepreneurial capability: Integrating insights from a cross-disciplinary comparison. *International Journal of Entrepreneurial Behavior & Research*, 24(7), 1155–1180.
- [17] Ozanne, L. K., Chowdhury, M., & Prayag, G. (2022). SMEs navigating COVID-19: The influence of social capital and dynamic capabilities on organizational resilience. *Industrial Marketing*. <https://www.sciencedirect.com/>
- [18] Page, J., & Söderbom, M. (2015). Is Small Beautiful? Small Enterprise, Aid and Employment in Africa. *African Development Review*, 27. <https://doi.org/>
- [19] Pedersen, C. L., Ritter, T., & Benedetto, C. A. (2020). Managing through a crisis: Managerial implications for business-to-business firms. *Industrial Marketing Management*, 88, 314.
- [20] Polyviou, M., Croxton, K. L., & Knemeyer, A. M. (2020). Resilience of medium-sized firms to supply chain disruptions: The role of internal social capital. *International Journal of Operations & Production Management*, 40(1), 68–91.
- [21] Saad, M. H., Hagelaar, G., & Velde, G. va. der. (2021). Conceptualization of SMEs'business resilience: A systematic literature review. *Cogent Business &*. <https://doi.org/10.1080/23311975.2021.1938347>
- [22] Sullivan-Taylor, B., & Branicki, L. (2011). Creating resilient SMEs: Why one size might not fit all. *International Journal of Production Research*, 49(18), 5565–5579.
- [23] Thaha, A. F. (2020). Dampak Covid-19 Terhadap UMKM di Indonesia. *JURNAL BRAND*, 2(1).
- [24] Tognazzo, A., Gubitta, P., & Favaron, S. D. (2016). Does slack always affect resilience? A study of quasi-medium-sized Italian firms. *Entrepreneurship and Regional Development*, 28(9–10). <https://doi.org/>
- [25] Velu, S. R. (2019). Effect of Information System Artifacts on Organizational Resilience: A Study among Malaysian SMEs. *Sustainability (Switzerland)*, 11(11). <https://doi.org/10.3390/su11113177>
- [26] Weick, K. E., & Sutcliffe, K. M. (2015). *Managing the unexpected: Sustained performance in a complex world* (3rd ed.). John Wiley & Sons.
- [27] Yuliantari, N. P. Y., & Pramuki, N. M. W. A. (2021). The Role of Digital Transformation and Digital Innovation to SMEs Performance in. *International Journal of Science and Management Studies*, 4(6), 8–16. <https://doi.org/10.51386/25815946/ijsms-v4i6p102>.