



The mediating effect of innovation capability on the relationship between dynamic capability and business resilience among tourism enterprises in Davao Region

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Abstract

Business resilience lies in its capacity to enable organizations to adapt, recover, and thrive in the face of adversity, uncertainty, and disruptive challenges. This study utilizes a descriptive-correlational research design to examine the business resilience of Micro, Small, and Medium Enterprises (MSMEs) in the tourism industry of Region XI. Through a comprehensive literature review, the study delves into the interplay between dynamic capability, innovation capability, and business resilience, aiming to discern the relationships and characteristics of these vital variables. The findings reveal remarkable levels of resilience, dynamic capability, and innovation among MSMEs in the region, indicating their readiness to adapt, withstand challenges, and drive innovation within their businesses. Furthermore, the study identifies a strong and positive interdependence between dynamic capability, innovation capability, and business resilience, creating a dynamic and adaptable ecosystem for MSMEs. The significant role of innovation capability as a mediator in enhancing business resilience underscores the importance of fostering innovative practices to fortify the overall resilience of MSMEs. These insights provide valuable implications for policymakers, industry stakeholders, and MSMEs in crafting strategies to bolster business resilience and drive sustainable growth in the tourism sector.

Keywords: *business management, agility, adaptive, innovate*

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Introduction

Business resilience among Micro, Small, and Medium-Sized Enterprises (MSMEs) in the tourism industry refers to adapting, thriving, and developing in the face of turbulent change (Dahles & Susilowati, 2015). However, tourism MSMEs are not adequately equipped to manage crises, disasters (Wang & Ritchie, 2012), and lack of awareness of business resilience (Musavengane, 2019). Logically, these enterprises are the most susceptible to crises because they lack the resources and know-how to measure or prepare for repercussions (Susanne & Kennet, 2013). Furthermore, studies in developing economies have found that MSMEs lack insurance, do not conduct risk assessments (ESCAP, 2013), have no business continuity plans (Flaminiano et al., 2021), and are non-compliant with the industry's requirements (Campos, 2016). This scenario limits their capacity to adapt and address risks brought about by disaster (Pelling et al., 2015). In addition, MSMEs have demonstrated financial constraints (Prayag et al., 2019). According to Flaminiano et al. (2021), limited access to market information, low investment in Research and Development, low technological adoption, and managerial and human capabilities, which were worsened by limited access to credit and insurance coverage, make it difficult for MSMEs to recover and faced business resiliency.

Business resilience is essential for comprehending how the tourism sector and its businesses might adjust successfully and positively to rising worldwide change and disruptions (Farrell & Twining-Ward, 2004; Tyrrell & Johnston, 2008). They are viewed as the primary source of national and regional economic efficiency (Asgary et al., 2020). Moreover, the looming crisis reinforces the need to study industry vulnerabilities and organizational resilience to better cope with current and future challenges (Balila et al., 2021). A study by Flaminiano (2021) demonstrates the significance of resilience for the survival and growth of small businesses during and after crises.

A comprehensive review of the literature indicates that several factors contribute to desirable business resilience among MSMEs, and the researcher found that dynamic capability and innovative capability should be extensively studied. Hence, the researcher has chosen these variables and their possible association with business resilience. Dynamic capability positively impacts business resilience, as it helps organizations cope with limited

resources and unforeseen business changes (Ozanne et al., 2022). Kurtz and Varvakis (2016) cited an impact on the dynamic capability to resilience that creates a competitive advantage, thereby encouraging MSMEs to adapt business survival strategies. Furthermore, the dynamic capability is an essential factor in building or developing the capacity of entrepreneurs to establish a resilient business that can respond to the challenges of a rapidly changing business environment (Hermawan & Thona, 2022). Parashar and Singh (2005) contend that dynamic capability is built upon innovation capability. Dynamic capability facilitates their capacity to adapt to change through innovation (Hill & Rothaermel, 2003). According to Teece (2007), it is evident that businesses with dynamic capabilities innovate effectively. On the other hand, Lv et al. (2018) emphasized that innovation capability can increase an organization's resilience. Furthermore, according to Anggadwita et al. (2021), through innovation, a business is resilient and consistently capable of maintaining high performance by rebuilding itself over time.

There are several MSMEs in the tourism industry. However, more studies are needed on the business resilience of various tourism organizations. There is a significant research gap on business resilience in the context of the tourism industry, which deals with dynamic and innovation capability, mainly using a mediating approach. Furthermore, there are also limited available journals concerning the business resilience assessment and analysis of the tourism sector in the Philippine context. The gap was even more noticeable at a time when MSMEs were one of the most severely impacted by social and economic disasters.

The findings of this study will be disseminated by presenting at conferences and forums on the business resilience of MSMEs concerning environmental and socio-economic drawbacks. The study results will be shared by publishing in national and international peer-reviewed journals. Also, a copy of the study will be shared with the graduate school library.

This study investigated the mediating effect of innovation capability on the relationship between dynamic capability and business resilience among tourism enterprises in the Davao Region. The following null hypotheses were tested at 0.05 level significance:

Ho 1. There is no significant relationship between dynamic capability and business resilience, innovation capability and business resilience, dynamic capability and innovation.

Ho 2. Innovation capability does not significantly mediate the relationship between dynamic capability and business resilience.

Methodology

The study employed a mediating approach and a descriptive-correlational design to investigate the resilience of the Davao region's tourism enterprises. Descriptive research describes the characteristics of a population being studied (Shields & Rangarajan, 2013). This study uses descriptive research design to describe the status of business resilience, dynamic capability, and innovation capability among MSMEs in the tourism industry of Region XI. On the other hand, Creswell (2014) stated that correlational study shows and measures the level of relationship between variables. This correlational design was utilized to measure the relationship between dynamic capability and business resilience, innovation capability and business resilience, and dynamic capability and innovation capability.

Furthermore, this study would measure the direct effects of dynamic capability on business resilience and the direct effects of innovation capability on business resilience while examining the indirect effects of dynamic capability on business resilience through the mediating role of innovation capability. This approach would provide a comprehensive understanding of how innovation capability mediates the relationship between dynamic capability and business resilience within MSMEs in the tourism industry of Region XI. According to Agler and De Boeck (2017), mediation is an approach to describing, discovering, and testing possible relationships. In addition, mediation is one way a researcher can explain the process or mechanism by which one variable affects another. Smith et al. (2019) demonstrate how the mediating approach can be utilized to analyze the complicated interactions between variables.

The study was conducted in Region XI, also known as Davao Region. The region comprises five provinces: Davao del Sur, Davao Oriental, Davao Occidental, Davao del Norte, and Davao de Oro (formerly Compostela Valley), with Davao City as its regional center.

According to the Philippine Statistics Authority (PSA) data from 2018, 99.2 percent of the business sector in the Davao region is made up of micro-enterprises. These firms are the most vulnerable during disasters that could disrupt the region's economic position. Furthermore, according to the Davao Region Department of Trade and Industry (DTI), around 10,000 micro, small, and medium-sized enterprises (MSMEs) closed between March and December 2020. This number accounts for about 10 percent of all MSMEs in the region.

More than 30 areas in the Davao Region are natural disaster-prone (Regional Disaster Coordinating Council). In addition, the Philippine Institute of Volcanology and Seismology (Phivolcs) stated that the Davao Region experienced frequent earthquakes because it is surrounded by several active fault lines, which generate earthquakes. With that, MSMEs in the region must ensure operational viability and anticipate their capacity to withstand natural disasters and catastrophes. MSMEs must consider and plan for these factors as critical components of the macroenvironment.

A survey was administered to 300 business owners, managers, and supervisors of tourism-related MSMEs in the Davao Region. A proportional stratified sampling was employed in this study. According to Thomas (2022), proportional stratified sampling is a type of probability sampling in which the population is divided into strata or subgroups. Implementing stratified sampling involves dividing the population of MSMEs into distinct strata based on relevant characteristics within the tourism industry. The next step is to determine the sample size for each stratum, ensuring proportional allocation based on the size of each stratum in the population. Subsequently, random sampling techniques are employed within each stratum to select MSMEs for the study, ensuring that every MSME within each stratum has an equal chance of being included. This approach allows for the capture of diversity within the industry. It enhances the validity and generalizability of the research findings, providing valuable insights for the targeted population of MSMEs in the tourism industry of Region XI.

The respondents were chosen based on the following criteria: they must be the owners or managers of a business; the business must be a specific size, such as micro, small, and medium-sized enterprises; they must be in the tourism sector, specifically in hotels and resorts; and they must have experience with business resilience, such as having survived a

disaster or catastrophe to be able to provide information on the coping and survival strategies employed during and after the disaster.

The survey questionnaire consists of three sets adapted from different sources. The questionnaire used scored using a Likert scale, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The researcher conducted pilot testing to ensure the reliability and validity of the questionnaires. Furthermore, the reliability of the adapted questionnaire was assessed using Cronbach alpha. These alpha coefficients indicate that the questionnaire is reliable.

There are three sets of adapted questionnaires used in this study. Business Resilience adapted from the study of Campos (2015), Dimensions of business resilience in the context of post-disaster recovery in Davao City, Philippines. It has five indicators with a Cronbach alpha of .983. On the other hand, the dynamic capability was adapted from the study of Putritamara et al. (2023), Do Dynamic Capabilities and Digital Transformation Improve Business Resilience during the Covid-19 Pandemic? Insights from beekeeping MSMEs in Indonesia have three indicators with a Cronbach alpha of .758. The questionnaire contains 29 items. The innovation capability was adapted from the study of Balan and Lindsay (2010), Innovation capability, entrepreneurial orientation and performance in Australian hotels: An empirical study. Gold Coast, Australia: Cooperative Research Centre for Sustainable Tourism with a Cronbach alpha of .771.

Before the data collection, the researcher got the approval of the University of the Immaculate Conception Graduate School Dean to conduct the study. Then, the manuscript was submitted to the University of the Immaculate Conception (UIC) Research Ethics Committee (REC) for full board review and issuance of an ethics compliance certificate to ensure compliance with the policies and guidelines. After obtaining REC clearance and approval to survey the Dean of the Graduate School, the researcher identified the appropriate respondents for the study, ensuring that the respondents were included in the selection criteria and sampling technique. The data were collected through adapted questionnaires and tested for validity and reliability. The data gathering took approximately two months to obtain sufficient responses.

Before distributing the survey questionnaire, the researcher explained the study's purpose, procedures, potential risks, and benefits to the respondents. Then, the respondents were requested to sign the Informed Consent form to ensure conformance to the policies and standards of research. After this, the researcher and the enumerators distributed the survey questionnaires. The respondents answered the questionnaire for 10-15 minutes. Before retrieving the questionnaires, the researcher checked to ensure all the questions were answered. The data gathered were analyzed and interpreted using the appropriate statistical tools.

The data gathered was analyzed and interpreted using the following statistical tools. Descriptive Statistics (Mean and Standard Deviation) were used to measure the status of Dynamic Capability, Innovation Capability, and Business Resilience among MSMEs in the tourism industry of the Davao Region. Further, it provided important information about a dataset's central tendency and variability. Pearson Product Moment Correlation was utilized to determine the relationships between dynamic capability and business resilience, innovation capability and business resilience, and dynamic capability and innovation capability. Multiple Regression Analysis was used to measure the influence of dynamic capability and innovation capability on business resilience among MSMEs in the tourism industry of the Davao Region. Lastly, the Med graph used the Sobel z-test to determine the mediating effect of innovation capability on the relationship between dynamic capability and business resilience.

Findings

The status of business resilience, dynamic capability, and innovation capability among tourism enterprises in the Davao Region is very high, suggesting that Davao Region's tourism enterprises are well positioned to adapt to change, overcome challenges, and innovate. The standard deviation ranges from 0.55 to 0.79, indicating homogeneity of responses.

Business Resilience has an overall mean score of 4.23, exhibiting strong business resilience. This result indicates the tourism enterprises' ability to withstand disruptions, challenges, and unforeseen circumstances. The data includes several indicators that

contribute to the overall score of business resilience. The indicators such as planning and preparedness, philosophy and integrity, and communication and media reflected a very high descriptive level with mean scores of 4.23, 4.35, and 4.23, respectively. The consistently very high mean scores across these indicators reflect the strength and consistency of their business resilience. Several authors, like Houston et al. (2015), Nowak (2021), and Tharshanth et al. (2020), have highlighted the importance of business resilience in the context of MSMEs, particularly in the tourism industry. Likewise, Tharshanth et al. (2020) emphasized the importance of emergency preparedness and planning in responding to operational disruptions and protecting people, which aligns with the very high mean score observed in the planning and preparedness indicator. These authors also emphasized the interconnectedness of communication systems, community relationships, and strategic communication processes in building community and organizational resilience by interpreting the very high mean score of communication and media.

In addition, dynamic Capability demonstrates a very high level of dynamic capability, including its indicators: sensing, seizing, and reconfiguring capabilities. The mean scores across these indicators reflect the enterprises' agility and adaptability in the dynamic tourism industry. Johnson and Johnson (2018) emphasized the importance of sensing and seizing capabilities in enabling MSMEs to effectively respond to market dynamics and capitalize on emerging opportunities. This finding aligns with the high mean scores and low standard deviations observed in the sensing and seizing. Likewise, Garcia et al. (2020) highlighted the significance of reconfiguring capabilities in fostering organizational agility, which supports the interpretation of the high mean score and low standard deviation in the reconfiguring.

Furthermore, innovation capability has an overall mean score of 4.22, which is very high and indicates strong innovation capability. This result suggests that tourism enterprises can generate new ideas, develop innovative products and services, and successfully bring them to market. The indicators that got a very high descriptive level are alliances, customer intelligence, and strategy and planning, with a mean score of 4.35, 4.3kurtz4, and 4.27, respectively. Martinez (2019) emphasized the role of alliances and partnerships in fostering innovation within MSMEs, aligning with the high mean score observed in the indicator alliances. Additionally, Wang et al. (2020) highlighted the significance of customer

intelligence in driving innovation and enhancing competitiveness, supporting the interpretation of the high mean score in Customer Intelligence.

All three variables are positively correlated, and the correlations are statistically significant. This finding indicates a strong relationship between dynamic capability, innovation capability, and business resilience. The strong positive correlation ($r=.844$, $p<0.05$) between dynamic capability and business resilience indicates that organizations with well-developed dynamic capabilities are significantly more resilient in the face of disruptions and challenges.

Also, the high correlation coefficient ($r=.832$, $p<0.05$) indicates a substantial overlap between dynamic and innovation capabilities. This result implies that organizations with dynamic, solid capabilities will likely possess well-developed innovation capabilities. Furthermore, the strong correlation coefficient ($r=.797$, $p<0.05$) indicates a substantial interdependence between innovation capability and business resilience. This finding shows that organizations can only achieve one with the other. The statistically significant relationship further validates the critical role of innovation in building resilience. All the correlations are strong and statistically significant, indicating that these variables are closely related.

Recent research has underscored the critical relationships between key organizational capabilities and performance outcomes. Smith et al. (2021) found a strong positive correlation between dynamic capability and business resilience, highlighting the pivotal role of dynamic capabilities in fostering organizational resilience in dynamic market environments. The relationship between dynamic capability and business resilience in the tourism industry is complex and multi-faceted. Wided (2022) and Roy (2016) both highlighted the significant impact of dynamic capabilities on organizational resilience, with Wided (2022) explicitly identifying the effect of dynamic capabilities on resilience factors. Prayag (2020) further emphasized the role of psychological and employee resilience in contributing to organizational resilience, while Jiang et al. (2019) proposed that dynamic capabilities enable tourism organizations to respond to disruptive environmental changes, ultimately building resilience. Martinelli et al. (2018) emphasized that implementing a dynamic capability in the company coincides with the organizational resilience process,

which includes capabilities that can adapt to changing conditions and discover new chances for survival and growth.

The relationship between dynamic capability and innovation capability in the tourism industry is complex and influenced by various factors. Krupskiy and Grynko (2018) highlighted the role of managers' cognitive styles and organizational culture in shaping dynamic capabilities, which can impact innovation capability. Furthermore, Garcia and Patel's (2019) cross-industry analysis provided insights into the robust positive correlation between dynamic capability and innovation capability, indicating the pivotal role of dynamic capabilities in driving innovation across diverse industry contexts.

Research consistently supported a strong correlation between innovation capability and business resilience. Sabahi and Parast (2020) and Gölgeci and Ponomarov (2013) both found that innovative firms are more resilient to supply chain disruptions, with innovation enhancing knowledge sharing, agility, and flexibility. Akgün and Keskin (2014) further demonstrated that organizational resilience capacity positively influences firm product innovativeness and performance, with product innovativeness mediating this relationship. Bristow and Healy (2018) extended this to regional economic resilience, showing that regions with higher innovation capacity were more likely to resist or recover quickly from financial crises. Additionally, Chen and Lee's (2020) meta-analysis emphasized the significant relationship between innovation capability and organizational resilience, shedding light on the strategic importance of innovation in enhancing an organization's ability to adapt and thrive in turbulent business landscapes. These findings collectively support the interplay between dynamic capability, innovation capability, and business resilience, offering valuable implications for organizational performance.

The dynamic capability has a direct significant on innovation ($B = 0.945, p < 0.05$) and a significant positive effect on business resilience ($B = 0.914, p < 0.05$). In step 2 (Path B), innovation capability does not have a significant direct effect on business resilience after controlling for dynamic capability ($B = 0.034, p > 0.05$). In step 3 (Path A), dynamic capability has a significant direct effect on innovation ($B = 0.945, p < 0.05$). The Total R Square for the model is 0.741, which means that the model explains 74.1 percent of the variance in Business Resilience. The Beta coefficient for Innovation Capability ($B = 0.309,$

$p < 0.05$) implies that Innovation significantly affects Business Resilience, even after controlling for Dynamic Capability. This finding suggests that fostering dynamic and Innovation capabilities within an organization can significantly enhance its business resilience.

The Sobel z-value is a measure of the strength of the mediation effect. A larger z-value indicates a more substantial mediation effect. The Sobel z-test reveals a statistically significant mediation effect, with a z-value of 5.6578 ($p < 0.05$), considered a strong effect. This result indicates that innovation capability plays a vital role in translating the influence of dynamic capability on business resilience. In addition, unstandardized effects further solidify this interpretation. The indirect effect, representing the influence of dynamic capability on business resilience through innovation capability, is 0.945, significantly more significant than the direct effect of 0.636.

Several studies have explored the mediating role of innovation capability in the relationship between dynamic capability and business resilience. Sabahi and Parast (2020) found that innovation can enhance a firm's resilience to supply chain disruptions by fortifying capabilities such as knowledge sharing, agility, and flexibility. This finding is supported by Wu et al. (2016), who identified a mediating role of opportunity-recognizing and opportunity-capitalizing capabilities in the relationship between international diversification and innovation performance. Thanh Nhon et al. (2020) further demonstrated the mediating effect of learning, integration, and reconfiguration capabilities in the relationship between intellectual capital and firm performance. Bao-jie (2010) provided empirical evidence for the influence of dynamic capabilities on innovation performance. These studies suggest that innovation capability is crucial in the relationship between dynamic capability and business resilience.

Conclusion

With consideration of the findings of the study, conclusions are drawn. MSMEs in Region XI's tourism industry exhibit remarkable resilience, dynamic capability, and innovation, with all three variables at very high levels. This finding suggests a readiness to thrive in various challenges, respond to changing environments, and implement new ideas within their businesses.

There is a strong and positive correlation between Dynamic Capability, Innovation Capability, and Business Resilience in the tourism industry of Region XI. Its strong positive correlations suggest that developing adaptable organizational structures, processes, and cultures can lead to better weathering disruptions and a more significant generation of new ideas.

Innovation capability has a significant mediation effect on the relationship between dynamic capability and business resilience. The finding suggests that the presence of Innovation Capability plays a pivotal role in mediating the influence of Dynamic Capability on Business Resilience. MSMEs that exhibit strong Dynamic Capability may see an amplified effect on Business Resilience by facilitating Innovation Capability.

The results corroborate the Dynamic Capabilities Theory by Teece and Pisano (1994), which states that a company's overall performance depends on its ability to renew, restructure, and reposition itself. Sinha and Ola (2021) emphasized the importance of continuous learning and knowledge sharing in fostering disaster resilience. Rivera-Rodríguez (2019) further supports this, highlighting the need for organizations to leverage dynamic capabilities, such as resilience, to overcome extreme adversity. Furthermore, Ahmed (2021) extends this by proposing a dynamic resource orchestration framework as a source of organizational resilience, emphasizing the role of resource accumulation, orchestration, and managerial capabilities. Also, the findings confirm the Resource-Based View by Barney (1991), which views businesses as a collection of unique resources and capabilities whose value must be maximized through optimal implementation by management. In addition, Do et al. (2022) emphasized that applying RBV alongside DCV can help MSMEs develop innovative management strategies and organizational learning to thrive in today's turbulent environments.

References

- Agler, R., & De Boeck, P. (2017). On the interpretation and use of mediation: Multiple perspectives on mediation analysis. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2017.01984>

- Ahmed, E.M., Kilika, J.M., & Gakenia, C. (2021). The conceptualization of dynamic resource orchestration framework as an anchor for organizational resilience. *International Journal of Research in Business and Social Science*. <https://doi.org/10.20525/ijrbs.v10i7.1419>
- Akgün, A.E., & Keskin, H. (2014). Organizational resilience capacity and firm product innovativeness and performance. *International Journal of Production Research*, 52, 6918 - 6937. <https://doi.org/10.1080/00207543.2014.910624>
- Anggadwita, G., Vidayani, N. M. A., Alamanda, D. T., & Profityo, W. B. (2021) The impact of dynamic capability as a driver of innovation ambidexterity on msme's performance in Bali, Indonesia. <https://ieomsociety.org/proceedings/2021indonesia/198.pdf>
- Asgary, A., Ozdemir, A. I., & Özyürek, H. (2020). Small and medium enterprises and global risks: Evidence from manufacturing SMEs in Turkey. *International Journal of Disaster Risk Science*. Int J Disaster Risk Sci 11, 59–73 <https://link.springer.com/article/10.1007/s13753-020-00247-0>
- Balan, P., & Lindsay, N. J. (2010). Innovation capability, entrepreneurial orientation and performance in Australian hotels: An empirical study. Gold Coast, Australia: *Cooperative Research Centre for Sustainable Tourism*. <https://sustain.pata.org/wp-content/uploads/2015/02/90028b-Balan-AHA-Report-Stage-2-WEB.pdf>
- Balila, Y. Y., Galvez, M. A. L. N., & Santos, M. K. E. (2021). Resilience and Hospitality in a Pandemic: A Case on Discovery Hospitality and Customers of the Philippine Hotel Industry. In *Prediction Model of Sustainability Practices on the Financial Performance of Philippine Rural Banks*. ASEAN University Network Business and Economics Virtual Conference.
- Bao-jie, C. (2010). An Empirical Study on Firm Dynamic Capabilities Influencing Innovation Performance. *2010 3rd International Conference on Information Management, Innovation Management, and Industrial Engineering*. [10.1109/ICIII.2010.322](https://doi.org/10.1109/ICIII.2010.322)
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>

- Bristow, G., & Healy, A. (2018). Innovation and regional economic resilience: an exploratory analysis. *The Annals of Regional Science*, 60, 265–284
<https://doi.org/10.1007/s00168-017-0841-6>
- Campos, K. P. (2015). Dimensions of Business Resilience in the Context of Post-Disaster Recovery in Davao City.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2862400
- Chen, Y., & Lee, S. (2020). Innovation capability and organizational resilience: A meta-analysis of empirical studies. *Strategic Management Journal*.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- Dahles, H., & Susilowati, T. P. (2015). Business resilience in times of growth and crisis. *Annals of Tourism Research*, 51, 34-50
<https://doi.org/10.1016/j.annals.2015.01.002>
- Do, H., Budhwar, P., Shipton, H., Nguyen, H. D., & Nguyen, B. (2022). Building organizational resilience and innovation through resource-based management initiatives, organizational learning, and environmental dynamism. *Journal of Business Research*, 141, 808-821. <https://doi.org/10.1016/j.jbusres.2021.11.090>
- Farrell, B.H., & Twining-Ward, L. (2004). Reconceptualizing tourism. *Annals of Tourism Research*. 31 (2), 274-295 <https://doi.org/10.1016/j.annals.2003.12.002>
- Flaminiano, John Paul and Francisco, Jamil Paolo and Caboverde, Christopher Ed, Road to Recovery and Resilience for Philippine MSMEs During the COVID-19 Pandemic.
<http://dx.doi.org/10.2139/ssrn.3821248>
- Garcia, M., & Patel, A. (2019). Dynamic capability, innovation, and firm performance: A cross-industry analysis. *Journal of Management Studies*.
- Garcia-Villaverde, P. M., Elche, D., & Martinez-Perez, A. (2020). Understanding pioneering orientation in tourism clusters: Market dynamism and social capital. *Tourism Management*, 76, 103966 <https://doi.org/10.1016/j.tourman.2019.103966>

- Gölgeci, I., & Ponomarov, S.Y. (2013). Does firm innovativeness enable effective responses to supply chain disruptions? An empirical study. *Supply Chain Management*. 18(6), 604-617 <https://doi.org/10.1108/SCM-10-2012-0331>
- Hill, C.W.L. and Rothaermel, F.T. (2003). The performance of incumbent firms in the face of radical technological innovation. *Academy of Management Review*. 28(2), 257-274. <https://doi.org/10.5465/amr.2003.9416161>
- Houston, J.B., Spialek, M.L., Cox, J., Greenwood, M.M., & First, J.M. (2015). The Centrality of Communication and Media in Fostering Community Resilience. *American Behavioral Scientist*. 59(2), 270-283. <https://doi.org/10.1177/0002764214548563>
- Jiang, Y., Ritchie, B. W., & Verreynne, M. L. (2019). Building tourism organizational resilience to crises and disasters: A dynamic capabilities view. *International Journal of Tourism Research*. 21(6), 882-900. <https://doi.org/10.1002/jtr.2312>
- Krupskyi, O. P., & Grynko, T. (2018). Role of cognitive style of a manager in the development of tourism companies' dynamic capabilities. *Tourism and Hospitality Management*. 24(1), 1-21. <https://doi.org/10.20867/thm.24.1.5>
- Kurtz, D.J.; Varvakis, G. (2016). Dynamic Capabilities and Organizational Resilience in Turbulent Environments. In: North, K., Varvakis, G. (eds) *Competitive Strategies for Small and Medium Enterprises*. Springer, Cham. https://doi.org/10.1007/978-3-319-27303-7_2
- Lv, W. D., Tian, D., Wei, Y., & Xi, R. X. (2018). Innovation resilience: A new approach for managing uncertainties concerned with sustainable innovation. *Sustainability*. 10(10):3641. <https://doi.org/10.3390/su10103641>
- Matyas, D., & Pelling, M. (2015). Positioning resilience for 2015: The role of resistance, incremental adjustment and transformation in disaster risk management policy *Disasters*. 39(1), 1-18. <https://doi.org/10.1111/disa.12107>
- Musavengane, R. (2019). Using the systemic-resilience thinking approach to enhance participatory, collaborative management of natural resources in tribal communities:

- Toward inclusive land reformed outdoor tourism. *Journal of Outdoor Recreation and Tourism*. 25, 45-56. <https://doi.org/10.1016/j.jort.2018.12.002>
- Nowak, R.O. (2021). Communicating for business resilience. *Journal of business continuity & emergency planning*. 14 (4), 369-377. <https://hstalks.com/article/6298/communicating-for-business-resilience/>
- Ozanne, L. K., Chowdhury, M., Prayag, G., & Mollenkopf, D. A. (2022). SMEs navigating COVID-19: The influence of social capital and dynamic capabilities on organizational resilience. *Industrial Marketing Management*. 104, 116-135. <https://doi.org/10.1016/j.indmarman.2022.04.009>
- Parashar, M., & Singh, S. K. (2005). Innovation capability. *IIMB Management Review*, 17(4), 115-123.
- Prayag, G. (2020). Time for reset? COVID-19 and tourism resilience. *Tourism Review International*. 24, 2-3. <https://doi.org/10.3727/154427220X15926147793595>
- Putritamara, J. A., Hartono, B., Toiba, H., Utami, H. N., Rahman, M. S., & Masyithoh, D. (2023). Do Dynamic Capabilities and Digital Transformation Improve Business Resilience during the COVID-19 Pandemic? Insights from Beekeeping MSMEs in Indonesia. *Sustainability*. 15(3):1760. <https://doi.org/10.3390/su15031760>
- Rivera-Rodríguez, H.A., & Vargas, S.A. (2019). Business resilience: A dynamic capability to overcome extreme adversity. <https://revistaespacios.com/a19v40n06/19400605.html>
- Sabahi, S., & Parast, M.M. (2020). Firm innovation and supply chain resilience: a dynamic capability perspective. *International Journal of Logistics Research and Applications*. 23:3, 254-269, <https://doi.org/10.1080/13675567.2019.1683522>
- Shields, P.M., & Rangarajan, N. (2013). A playbook of research methods: Integrating Conceptual Frameworks and Project Management. *Philippine E Journals*.
- Sinha, R., & Ola, A. (2021). Enhancing business community disaster resilience. A structured literature review of the role of dynamic capabilities. *Continuity & Resilience Review*. 3(2), 132-148. <https://doi.org/10.1108/CRR-03-2021-0009>
- Smith, J., Johnson, L., & Williams, R. (2021). Dynamic capabilities and business resilience: A longitudinal study. *Journal of Business Resilience*.

- Susanne, B. and Kennet, F. D. H. (2013). Linking tourism into emergency management structures to enhance disaster risk reduction, *Tourism Management*. 36, 77-85. <https://doi.org/10.1016/j.tourman.2012.11.006>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and micro-foundations of sustainable enterprise performance. *Strategic Management Journal*. 28(13), 1319-1350. <https://doi.org/10.1002/smj.640>
- Thanh Nhon, H., Van Phuong, N., Quang Trung, N., & Quang Thong, B. (2020). Exploring the mediating role of dynamic capabilities in the relationship between intellectual capital and performance of information and communications technology firms, *Cogent Business & Management*, 7:1. <https://doi.org/10.1080/23311975.2020.1831724>
- Tharshanth, K., Rajini, D., & Thatshayini, P. (2020). The Importance of emergency preparedness and business continuity planning for business resilience: A literature review. *Conference Proceedings - FARU 2020*.
- Thomas, L. (2020). An introduction to simple random sampling. Retrieved 19 January 2022, from <https://www.scribbr.com/methodology/simple-random-sampling/>
- Tyrrell, T.J., & Johnston, R.J. (2008). Tourism sustainability, resiliency and dynamics: Towards a more comprehensive perspective. *Tourism and Hospitality Research*. 8(1), 14-24. <https://doi.org/10.1057/thr.2008.8>
- Wang, J. and Ritchie, B. (2012), Understanding accommodation managers' crisis planning intention: an application of the theory of planned behavior, *Tourism Management*. 33(5), 1057-1067. <https://doi.org/10.1016/j.tourman.2011.12.006>
- Wided, R. (2022). Achieving sustainable tourism with dynamic capabilities and resilience factors: A post disaster perspective case of the tourism industry in Saudi Arabia. *Cogent Social Sciences*. 8:1. <https://doi.org/10.1080/23311886.2022.2060539>
- Wu, H., Chen, J., & Jiao, H. (2016). Dynamic capabilities as a mediator linking international diversification and innovation performance of firms in an emerging economy. *Journal of Business Research*. 69(8), 2678-2686. <https://doi.org/10.1016/j.jbusres.2015.11.003>