



# INTERNATIONAL JOURNAL OF INNOVATION AND INDUSTRIAL REVOLUTION (IJIREV) www.ijirev.com



# DYNAMIC CAPABILITY, TECHNOLOGICAL ABILITY, INNOVATION AMBIDEXTERITY, AND AGILE LEADERSHIP: A HYPOTHESIZED RESILIENCY MODEL FOR PET CARE SERVICE MSME PROPRIETORS OF THE PHILIPPINES

Sandra Ma. Lourdes Santos – Lu<sup>1\*</sup>, Mary Caroline N. Castaño, Ph.D.<sup>2</sup>

- <sup>1</sup> The Graduate School, University of Santo Tomas, Manila, Philippines Email: sandralu800@gmail.com
- <sup>2</sup> The Graduate School, University of Santo Tomas, Manila, Philippines Email: mncastano@ust.edu.ph
- \* Corresponding Author

### Article Info:

#### Article history:

Received date: 27.03.2023 Revised date: 20.04.2023 Accepted date: 31.05.2023 Published date: 06.06.2023

#### To cite this document:

Santos – Lu, S. M. L., & Castano. M. C. N. (2023). Dynamic Capability, Innovation Ambidexterity, and Agile Leadership: A Hypothesized Resiliency Model for Pet Care Service MSME Proprietors in the Philippines. *International Journal of Innovation and Industrial Revolution*, 5 (13), 13-19.

DOI: 10.35631/ IJIREV.513002

This work is licensed under <u>CC BY 4.0</u>

### Abstract:

The COVID-19 pandemic has severely affected businesses, particularly micro, small, and medium enterprises. In the Philippines, over 70% of MSMEs have experienced cash flow problems which resulted in layoffs, temporary shutdowns, or worst, permanent closure. This experience served as an eye-opener for entrepreneurs engaged even policymakers to make business pandemic-proof or resilient. One sector that is affected severely is pet care services. During the early months of the pandemic, pet care services temporarily closed in compliance with Philippine government regulations. While some managed to resume their operations gradually, around 70% failed to recover and decided to close their business pet care shops indefinitely. This study aims to propose a hypothesized model that shows the different factors that affect business resiliency using a systematic literature review. The results of this exploratory study will be used as a basis for a quantitative study that will measure the relationship between the variables identified in the literature review.

### **Keywords:**

Dynamic Capability, Technological Ability, Agile Leadership, Business Resilience, MSME, Pet Care Services



# Introduction

The role of entrepreneurship in social and economic development is of interest to both academics and policymakers. Entrepreneurship is widely regarded as the most important source of economic growth and flexibility, as well as job creation, innovation, wealth creation, and personal development (Mortan et al., 2014). It is also seen as a method for eradicating poverty (Botha & Taljaard, 2021).

However due to globalization and most recently the COVID-19 pandemic, business complexity and competitiveness have become increasingly difficult. MSMEs are the backbone of the economy, yet they are nonetheless exposed to external shocks like financial crises, natural disasters, and forced changes in the business environment, such as the COVID-19 pandemic response.

In the Philippines, Micro, Small, and Medium Enterprises (MSMEs) account for 99.5 percent of all commercial establishments in the Philippines, employing around 63 percent of the country's workforce according to the Philippine Department of Trade and Industry (DTI). The COVID-19 pandemic has had a significant impact on businesses, particularly micro, small, and medium-sized businesses. According to a survey done by Shinozaki & Rao (2021) of the Asian Development Bank (ADB), over 70% of MSMEs in the Philippines have faced cash flow issues, resulting in layoffs, temporary shutdowns, or, in the worst-case scenario, permanent closure.

The pet care services industry is one of the most significantly impacted by the COVID-19 pandemic. Pet-care businesses temporarily shut down in accordance with Philippine government rules in the early months of the outbreak. While some pet care businesses were able to gradually restart operations, some business owners were unable to do so. Using a thorough literature analysis, this study seeks to provide a hypothesized model that illustrates the many elements that influence corporate resilience. Quantitative research that measures the association between the factors found in the literature review will be built on the findings of this exploratory investigation.

# **Literature Review**

# Dynamic Capability

Dynamic capability refers to an organization's ability to renew itself through time. To acquire a competitive edge, a company's resources must be aligned with the changing business environment through business processes or operational capabilities (Zaefarian et al., 2017). It is considered as one of the primary drivers of a firm's performance in changing settings is dynamic capabilities, which are defined as restructuring a company's resource base to better identify and grasp opportunities (Schilke et al., 2018).

According to Kristinawati and Hidajat (2017), dynamic capability represents a company's ability to attain competitive excellence, implying that dynamic capability is linked to performance. Companies can survive through fast changes in the environment if they have dynamic capabilities that impact the rate of their adjustment processes (Dyduch et al., 2021) as dynamic capabilities incorporate processes that enable businesses to maintain outstanding performance over time (Wilden et al., 2013).



# Technological Ability

Technological ability is critical for a company's efficiency in terms of innovation and manufacturing process (Salisu et al., 2020). According to Zawislak (2012), technological ability encompasses not just technical mastery, but also the ability to grow and deploy the firm's fundamental skills, as well as efficiently combine and mobilize technological resources across the organization.

Digitalization and the use of ICTs boost MSME performance, according to numerous studies (Jingtao et al., 2013; Cuevas Vargas et al., 2016), gain competitive edge (Rahmani et al., 2015), stretch the MSME's competitive capabilities (Unsal & Cetindamar, 2015; Kang et al., 2017), and allows for the development of the firm's longevity (Weller, 2020).

# Agile Leadership

Agile leadership is characterized by Parker et al. (2015) as sharing responsibilities, being successful in spotting problems and making choices, having an adaptable system, and having a flexible framework. Agile leadership enables for consistency in strategy execution, rapidly articulates, builds a strategy into the business logic and infrastructure choices (Li et al., 2018) and in an unexpected situation, must be fast, adaptive, and flexible in responding to unforeseen circumstances (Attar & Abdul-Kareem, 2020).

# Innovation Ambidexterity – Exploration Innovation

The word "exploratory innovation" refers to businesses developing new knowledge, products, and services through the continual quest for fresh information (Zhang et al., 2021). It also alludes to long-term potential, increased unpredictability, and room for managerial freedom (Dranev et al., 2020). Exploration helps businesses to test out new ideas and adapt to changing circumstances (Khan et al., 2020).

# Innovation Ambidexterity – Exploitation Innovation

Exploitation is the process of refining and increasing performance to create a predictable outcome by extending an organization's existing capabilities, processes, and technology (Zhang et al., 2021). Exploitation according to Duodu and Rowlinson (2020), concentrates on what the company already has and understands.

# Business Resilience

In business and management studies, the concept of 'resilience' is new (Anderson et al., 2019; Duchek, 2019). It came to light lately when researchers and academics began to look into how firms expand and create new skills under difficult times (Ma et al., 2018). Small enterprises, it is claimed, face higher unpredictability and resource limits than larger organizations, posing challenges to organizational resilience (Wishart, 2018).

According to Sahebjamnia et al. (2018), a company that demonstrates resilience is capable of carrying with its critical functions with the bare minimum of business continuity goals and enduring the longest duration of interruption possible. In order to survive and thrive, MSMEs must create adequate strategic crisis planning (Muñoz et al., 2018) and access to money, material assets, networking, and strategic and operational flexibility have all been proven to be critical for small business resilience, particularly in times of crisis (Pal et al., 2014).



# **Hypothesized Model**

Based on the synthesized literature, the figure below presents the hypothesized model which shows the relationship among the variables. The hypothesized relationships of the independent variables which are dynamic capability, technological ability, and agile leadership to a dependent variable which is business resilience. Moreover, exploration and exploitation innovation also referred to as innovation ambidexterity is posited to have mediating roles between the independent and independent variables.

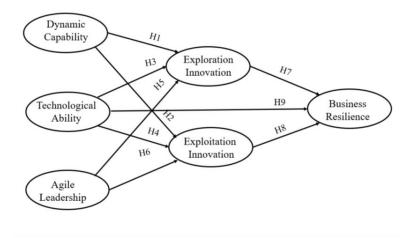


Figure 1: The Proposed Model

# **Research Method**

This research reviews existing studies that validated the different factors that have an impact on business resiliency. The reviewed journals were synthesized, summarized, and presented in this paper. Based on the synthesis, the following were identified as the independent variables as shown in the hypothesized model: dynamic capability, technological ability, and agile leadership. On the other hand, innovation ambidexterity which is divided into exploration innovation and exploitation innovation served as the mediating variables.

# Conclusion

The COVID-19 pandemic caught everyone by surprise and exposed many gaps including the resiliency of many businesses, particularly the micro, small, and medium enterprises (MSMEs). The synthesized literature provided insights into the different factors that impact business resilience. These factors were used to propose a resiliency model that will become a basis for quantitative research. These factors are dynamic capability represents a company's ability to attain competitive excellence, and technological ability, which is about integrating digitalization, agile leadership which focuses on flexibility, innovativeness, and adaptability. Moreover, innovation ambidexterity deals with exploring new possibilities and using existing resources to become resilient.

# Acknowledgement

The authors would like to acknowledge and extend special gratitude to the Global Academic Excellence (M) Sdn Bhd, which approved the publication of this research. Moreover, the researchers extend their appreciation to those who supported this academic endeavour.



## References

- Andersson, T., Caker, M., Tengblad, S., & Wickelgren, M. (2019). Building traits for organizational resilience through balancing organizational structures. Scandinavian Journal of Management, 35(2019), 36-45. https://doi.org/10.1016/j.scaman.2019.01.001
- Attar, M., Abdul-Kareem, A. (2020). The Role of Agile Leadership in Organizational Agility. In Agile Business Leadership Methods for Industry 4.0; Emerald Publishing Limited: Bingley, UK. 171–191. https://doi.org/10.1108/978-1-80043-380-920201011
- Botha, M., & Taljaard, A. (2021). Exploring the entrepreneurial intention-competency model for Nascent Entrepreneurs: Insights from a developing country context. Frontiers in Psychology, 12, 516120. https://doi.org/10.3389/fpsyg.2021.516120
- Cuevas-Vargas, H., Estrada, S., & Larios-Gómez, E. (2016). The effects of ICTs as innovation facilitators for a greater business performance. evidence from Mexico. *Procedia Computer Science*, *91*, 47–56. https://doi.org/10.1016/j.procs.2016.07.040
- Dranev, Y., Izosimova, A., & Meissner, D. (2020). Organizational ambidexterity and performance: Assessment approaches and empirical evidence. Journal of the Knowledge Economy, 11(2), 676–691. https://doi.org/10.1007/s13132-018-0560-
- Duchek, S. (2019). Organizational resilience: A capability-based conceptualization. Business Research, 13(1), 215-246. https://doi:10.1007/s40685-019-0085-7
- Duodu, B., & Rowlinson, S. (2020). The effect of social capital on exploratory and exploitative innovation. European Journal of Innovation Management, 23(4), 649–674. https://doi.org/1108/EJIM-08-2018-0178
- Dyduch, W., Chudziński, P., Cyfert, S., & Zastempowski, M. (2021) Dynamic capabilities, value creation and value capture: Evidence from SMEs under Covid-19 lockdown in Poland. PLoS ONE, 16(6), 1-18. https://doi.org/10.1371/journal.pone.0252423
- Jingtao, Y., Wang, C., & Kafouros, M. (2013). The effects of innovative capabilities on exporting: Do institutional forces matter? *International Business Review*, 22(2), 392–406. https://doi.org/10.1016/j.ibusrev.2012.05.006
- Kang, T., Baek, C., & Lee, J.D. (2017). The persistency and volatility of the firm R&D investment: Revisited from the perspective of technological capability. Research Policy, 46 (9), 1570-1579, 2017. https://doi.org/10.1016/j.respol.2017.07.006
- Khan, H., Freeman, S., & Lee, R. (2020). New product performance implications of ambidexterity in strategic marketing foci: A case of emerging market firms. Journal of Business & Industrial Marketing, 36(3), 390–399. http://dx.doi.org/10.1108/JBIM-01-2020-0003
- Kristinawati, D., & Hidajat Tjakraatmadja, J. (2017). Explorative conceptual study on the relationship pf dynamic capabilities and company performance. Indonesian Journal of Management, 17 (1), 1-12. https://doi.org/10.25124/jmi.v17i1.858
- Li, L., Su, F., Zhang, W., & Mao, J. (2018). Digital transformation by SME entrepreneurs: A capability perspective. Information Systems Journal, 28 (6), 1129–57. https://doi.org/10.1111/isj.12153
- Ma, Z., Xiao, L., & Yin, J. (2018). Towards a dynamic model of organizational resilience. Nakai Business Review International, 9(3), 246-263.
- Mortan, R. A., Ripolla, P., Carvalho, C., & Bernal, M. C. (2014). Effects of emotional intelligence on entrepreneurial intention and self-efficacy. Journal of Work and Organizational Psychology, 30(3), 97-104. https://doi.org/10.1016/j.rpto.2014.11.004

- Muñoz, P.; Kimmitt, J.; Kibler, E.; Farny, S. (2019). Living on the slopes: Entrepreneurial preparedness in a context under continuous threat. Entrepreneurship & Regional Development, 31(5-6), 413–434. https://doi.org/10.1080/08985626.2018.1541591
- Pal, R., Torstensson, H., & Mattila, H. (2014). Antecedents of organizational resilience in economic crises—An empirical study of Swedish textile and clothing SMEs. International Journal of Production Economics, 147(PB), 410–428. https://doi.org/10.1016/j.ijpe.2013.02.031
- Parker, H., & Ameen, K. (2018). The role of resilience capabilities in shaping how firms respond to disruptions. Journal of Business Research, 88 (C), 535-541. https://doi.org/10.1016/j.jbusres.2017.12.022
- Rahmani, Z. & Keshavarz, E. (2015). Prioritization of technological capabilities to maximise the financial performance by fuzzy AHP. International Journal of Operational Research, 22 (3), 263-286.
- Sahebjamnia, N., Torabi, A.S., & Mansouri, A.S. (2018). Building organizational resilience in the face of multiple disruptions. International Journal of Production Economics, 197(2018), 63-83. https://doi.org/10.1016/j.ijpe.2017.12.009
- Salisu, Y. & Abu Bakar, L.J. (2020). Technological capability, relational capability and firms' performance: The role of learning capability. Revista de Gestão, 27 (1), 79-99. https://doi.org/10.1108/REGE-03-2019-0040
- Schilke, O., Hu, S., Helfat, C.E. (2018). Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of Management Annals, 12*(1), 390–439. https://doi.org/10.5465/annals.2016.0014
- Shinozaki, S. & Rao, L. (2021). COVID-19 impact on micro, small, and medium-sized enterprises under the lockdown: Evidence from a rapid survey in the Philippines. ADBI Working Paper Series. Retrieved on May 28, 2022 from https://www.adb.org/sites/default/files/publication/677321/adbi-wp1216.pdf
- Unsal, E. & D. Cetindamar, D. (2015). Technology management capability: Definition and its measurement. European International Journal of Science and Technology, 4 (2), 181-196.
- Weller, J. (2020). Technological transformations and employment in Latin America: Opportunities and challenges. *CEPAL Review*, 2020(130), 7–27. https://doi.org/10.18356/ce83a6d1-es
- Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic capabilities and performance: Strategy, structure and environment. Long Range Planning, 46(1), 72– 96. https://doi.org/10.1016/j.lrp.2012.12.001
- Wishart, M. (2018). Business resilience in an SME context: A literature review. Enterprise Research Centre and Warwick Business School. https://www.enterpriseresearch.ac.uk/publications/business-resilience-sme-contextliterature-review/
- Zaefarian, G., Forkmann, S., Mitręga, M. & Henneberg, S.C. (2017) A capability perspective on relationship ending and its impact on product innovation success and firm performance. Long Range Planning, 50(2), 184–199. https://doi.org/10.1016/j.lrp.2015.12.023
- Zawislak, P. A., Alves, A. C., Tello-Gamarra, J., Barbieux, D., & Reichert, F. M. (2012). Innovation capability: From technology development to transaction capability. *Journal of Technology Management and Innovation*, 7(2), 14–25. https://doi.org/10.4067/S0718-27242012000200002



Volume 5 Issue 13 (June 2023) PP. 13-19 DOI 10.35631/IJIREV.513002 How does digital transformation

Zhang, J., Long, J., & von Schaewen, A. M. E. (2021). How does digital transformation improve organizational resilience? Findings from PLS-SEM and fsQCA. *Sustainability*, 13(20), 11487. http://dx.doi.org/10.3390/su132011487