

Building Resilience Through Sustainable Crisis Marketing – A study of Micro-enterprises

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Abstract: In today's dynamic, crisis-driven business environment, small business owners need to adopt long-lasting, sustainable methods to run their businesses. However, they may lack the skills and knowledge to manage crises and link marketing concepts to disruptive conditions. This research aims to evaluate how micro-enterprises integrate crisis and marketing strategies. Data was collected from 146 samples using purposive sampling. Exploratory Factor Analysis was conducted to identify the factors that constitute sustainable crisis marketing strategies. This was done to build a scale that was previously missing in the literature. The findings indicated that three factors can be identified, namely, the sustainability and crisis management with marketing factor, the building business resilience factor, and the business existence and continuity factor. This research is topical in nature, as every sector is affected by various types of crises in the ongoing disruptive market conditions.

Keywords: Sustainability; Crisis; Market disruption; Business continuity; Business resilience; Entrepreneurship.

Introduction

Sustainability has become a business imperative as organizations struggle to survive the unexpected global business changes and unstable global business environments. Continuous disruptions due to rapid technological changes, evolving consumer expectations, unstable geopolitical conditions, dynamic climate changes, disruptions and emergencies, and the aftereffects of crises are reshaping and restructuring the business world. Those conditions lead to operational uncertainty, particularly for small business owners who usually lack managerial competencies, strategic adaptability, and technological readiness required for long-term resilience. Along with traditional small businesses and startups, the deep-tech start-ups face greater challenges because most of them emerged during or after the COVID-19 pandemic. And, they are continuing their businesses during the ongoing global crisis, with a disrupted supply chain. Hence, small businesses are forced to rethink their marketing practices and adopt more

adaptive and resilient systems [1, 2]. Crisis management evolved over a period as a part of modern management practices. This management principle enables organizations to deal with crises in the form of identifying the crises and their effect before they emerge; to manage things while the crisis is going on; and to deal with the aftereffects of a crisis. Though every functionality is included in crisis management, the focus of this paper is on the marketing function. It covers issues such as low-cost promotional strategies, entering into long-term contracts with customers and vendors, with the aim of building long-lasting relationships, etc. This also includes a defensive mechanism to sustain long-term losses and adverse conditions [3]. This intersection and convergence of sustainability, crisis management, and modern marketing concepts have become a wonderful mechanism of managing small businesses with the sole purpose of enabling them to deal with disruptive conditions and go through the tough times in a smooth way. Such an approach is particularly relevant for small enterprises and deep-tech start-ups operating within unpredictable economic and technological environments. In this context, the present study investigates the integration of sustainability and crisis management principles within marketing strategy development and examines their role in shaping sustainable crisis-responsive business frameworks for contemporary organizations [4, 5]. This research paper attempts to evaluate the sustainable marketing practices of the micro-enterprises and build a scale to measure them.

Scope of the Study

The present study is geographically confined to the Hyderabad region of Telangana and examines both traditional small businesses and emerging deep tech start-ups. We have investigated the strategies adopted by these enterprises after the COVID-19 shock or lessons. An empirical study was conducted to evaluate the sustainable crisis marketing strategies adopted by small businesses, both traditional and deep tech startups, the way they have been trying to build business resilience through these modern marketing practices, and the way this is eventually enabling them to navigate through the disruptive VUCA conditions [6, 7].

Conceptual Framework

The conceptual framework of this research is supported by Dynamic Capabilities Theory, which explains how organizations operating in highly uncertain and disruptive business environments must continuously adapt, reorganize, and strengthen their strategic capabilities to sustain competitiveness and long-term viability [8]. In the modern disruptive market conditions, firms, particularly the smaller ones, are required to move from static organizational resource management to flexible or dynamic organizational resource management. In this framework, we proposed a relationship between the sustainable crisis marketing strategies, business resilience, and business continuity by micro-enterprises during and crises conditions. Marketing mechanisms such as low-cost promotions are treated as the primary independent variables; they

would build small business resilience that would in turn enable a micro-enterprise to withstand the critical and disruptive business conditions [9, 10, 11].

Literature review

The small business sector, a.k.a. Entrepreneurship Development (ED), has become an important economic segment in developing countries due to its role in GDP, employment generation, and economic growth. However, entrepreneurial ecosystems, not only in India but also in South Asia, are not exempt from barriers and challenges. [12] studied the operational barriers faced by Indian MSMEs across sectors and found that the major barriers are a lack of managerial efficiency and inadequate institutional support, which result in weak entrepreneurial competencies. Similarly, [13], in their analysis of micro, small, and medium enterprises in Jammu and Kashmir, concluded that business performance and survival competitiveness are negatively influenced by unstable business environments (an external factor), lack of strategic preparedness (an internal factor), and low entrepreneurial capabilities. Many studies have also highlighted the importance of entrepreneurial and business management skills among entrepreneurs in developing countries. [14], who surveyed 204 manufacturing SMEs in India, found that higher business competencies positively affected business performance. Similarly, [15], who conducted research in South Asia, concluded that factors that negatively affected entrepreneurial ability and small business growth include low technical skills, lack of innovation capacity, and lack of knowledge to use the resources.

Knowledge of go-to-market strategies and the ability to adapt to prevailing market conditions have also become major concerns in entrepreneurial marketing. The entrepreneurs do not, or at least may not, have modern marketing skills, particularly digital marketing skills. The literature clearly indicates that SMEs lack digital marketing and social media marketing skills [16, 17], along with the general marketing skills such as understanding the changing customers' needs, which have negatively affected their marketing performance and competitiveness. In addition to marketing, sustainability has become another imperative in entrepreneurial marketing. Sustainable marketing practices are the need of the hour, as they address not only the environmental concerns but also the longevity of the small business. According to [18], SMEs are not applying sustainable business practices due to very limited knowledge of integrating sustainability with small business management.

Further, in addition to sustainable marketing, crisis marketing too has become a small business imperative. The related literature highlights that the small business owners are not fully prepared to handle sudden or even predicted crises. Most of them can't even predict a crisis. They are not in a position to identify the market disruptions or do not have reasonable skills to handle the disruptive market conditions, which have negatively affected their business stability [12, 19] and

crisis navigation ability [13]. It is also noteworthy that sustainability practices, when clubbed with crisis and marketing principles, help businesses to build business resilience and crisis response capability. The summary of the literature that we have conducted is presented in Table 1 below.

Table 1: Summary of literature review

Author(s)	Objective(s)	Methodology	Key findings
[12]	To evaluate the barriers affecting the sustainability and growth of Indian MSMEs	- Sample size: 153 - MSMEs across different sectors in India	6 constraints faced - Financial, Managerial, Marketing, Technological, Manpower-related and Vendor-related - These deficiencies have -vely affected MSME performance
[13]	- To examine the influence of environmental factors (micro and macro) on small business success - To evaluate the impact of that success on perceived socio-economic benefits	- Sample size: 373 - Jammu & Kashmir	- Environmental factors influenced entrepreneurial success - That success had a +ve impact on perceived socio-economic benefits - In case of environmental instability was found, it has -vely influenced entrepreneurial success
[14]	- To study the relationship between competencies and business performance (financial and non-financial) by SMEs - To evaluate the lack of institutional support on this relationship.	- Sample size: 204 - SMEs in Indian manufacturing sector	- Entrepreneurial competencies +vely influenced business performance - Lack of institutional support -vely affects business performance
[15]	To analyze innovation barriers in South Asia	- Mixed method - Quantitative data based on secondary data	- India: Resource-constrained innovation - Pakistan: Conventional innovation

			• Bangladesh: Firm characteristics influence innovation
[16]	• To evaluate the impact of social media marketing-SMM on sustainable business growth	• Sample size: 304 • Employees of 50 SMEs in India	• SMM application +vely contributes to sustainable business growth
[17]	• Export entrepreneurship and its determinants	• Sample size: 70 • SMEs in engineering industry	• Age of the CEO's (young) +vely influences the export entrepreneurship • Export entrepreneurship +vely influences the business performance
[18]	• To examine the circular economy practices of SMEs	• Qualitative of 2 Ayurveda SMEs in India	• Though circular economy concepts are relatively new, they are applied with a blend of indigenous practices • Social values and heritage preservation are key aspects beyond profit-making

Research gaps

The following section explains the research gaps based on the literature review. The literature focused on 6 different constraints but did not include the crisis response conditions; it examined the influence of environmental factors on small business success but ignored the importance of building business resilience, which is a key variable in crisis response management [20]. This clearly presents the gap related to the inclusion of crisis-responsiveness in the research. Further, the literature placed less emphasis on the sustainable marketing strategies and adaptive marketing strategies to apply before, during or after a crisis that could successfully build business resilience [21]. Hence, there is a need to focus on the comprehensive nature of the current market, i.e., sustainability plus crisis management plus marketing, which is appropriately covered in this research.

Research methodology

We have adopted a quantitative research method in this research. Exploratory Factor Analysis (henceforth referred to as EFA) was conducted with 33 variables that were reduced to 20

variables. The data was collected from 283 respondents selected through the purpose sampling method. A total of 221 valid responses were used in the data analysis. The data that was analyzed on SPSS proved to be highly reliable with a Cronbach's Alpha value of 0.887 for 30 items and 0.981 for 20 items.

Data analysis and interpretation - Exploratory Factor Analysis (EFA)

The main objective was to identify the sustainable crisis marketing strategies being applied by micro-enterprises. This has necessitated the development of key variables that constitute a converged concept of 'sustainable crisis marketing strategies'. As there was no prior established scale to measure this aspect, there arose a need to conduct EFA. Literature was reviewed to develop the initial pool of items under each of the three major constructs identified, viz., 1)Sustainability principles, Crisis Management, and Marketing Strategies (SCMS); 2)Building Business Resilience (BR), and 3)Continuing Business during crisis (BC). Firstly, SCMS included a total of 17 variables to capture the integration of sustainability-oriented crisis management practices within marketing activities. These items included various issues such as marketing mix and relationship marketing, along with segmentation and targeting. Secondly, BR included a total of 8 variables to measure an organization's ability to deal with disruptive market conditions. Thirdly, Business Continuity (BC) included a total of 8 variables to assess the small businesses' ability to continue their business during and after a crisis. From these 33 variables, after applying the EFA, a total of 20 variables were identified.

The following section explains various technical issues related to the application and analysis of EFA. Reliability analysis with the help of Cronbach's Alpha for 33 items, 0.887, and for 20 items, 0.981, indicates the internal consistency of the variables used. Also, a statistically significant KMO value for 33 items, 0.895** ($p < 0.01$), and for 20 items, 0.901* ($p < 0.05$) indicates that the factor analysis can be conducted on these items. Further, the total variance explained by 33 items by 8 factors was 75.04%. Whereas, after the data reduction, the total variance explained by 20 items through 3 factors increased to 89.77%. The factor loadings for all 20 items were greater than 0.75 (Table 2). In the process of data reduction, the criteria adopted for removing items with weak loadings, cross-loaded items, and items that are not conceptually fitting the factors. And at the end of the EFA, we arrived at a cleaner structure with 3 factors (Table 2).

Table 2: Factors for sustainability and crisis management in marketing

Sustainable Crisis Marketing Strategies	Safe to use products	.803
	Adaptable products	.812
	Socially reflective prices	.805
	Competitive prices	.844
	Sustainable storage facilities	.789

	Disruption-sustained storage facilities	.773
	Not lying in product promotions	.756
	Low-cost promotions	.845
	CRM – Longterm	.810
	PRM – Longterm	.790
	STP – sustainability and ethical	.811
Business Resilience	Quick response	.898
	Operations under control	.844
	Can make changes to strategies	.859
	Can build relationships	.821
Business Continuity	Continued operations	.799
	Continued revenue	.864
	Continued profits	.753
	Continued customer base	.785
	Continued relationships	.818

Discussion

The present study aims to develop and validate a measurement scale that covers the convergence of sustainability practices, crisis management techniques; business resilience; and business continuity within the context of micro-enterprises operating in South India. The EFA that we conducted suggested a factor structure that offers a more appropriate along with a practically and theoretically meaningful representation of the identified constructs, viz., SCMS, BR and BC. These findings are consistent with the existing literature that focused on the scale-development through item purification which could enhance the construct validity and lead to the factor stability [22]. Further, all items' factor loadings above 0.75 indicate a highly representative variable combination [23].

Factor-1, a converged concept of Sustainability, Crisis management and Marketing, presented in Table 2, is in line with [22] description of sustainable marketing concept. Other variables in this construct, relationship orientation and sustainability-based segmentation, align with the findings of [24], who concluded that small businesses that focused on adaptive customer orientation and long-term relationship building became resilient during the disruptions created by the COVID-19 pandemic. Our findings also align with the research and proposals of [25], who argued that modern sustainable marketing must consider crises and the disruptions they cause. Factor-2 that encompasses issues related to building resilience by small businesses, including response time, controlled operations and building long lasting relationships with key stakeholders. These findings are consistent with the research findings of [26] and [24] who recommended that business resilience involves operational and strategic competencies. Factor-3, related to

continuing the businesses in spite of severe disruptive conditions, include continuing operations and sales along with having a continued customer base. This finding aligns with the related literature, which concluded that it can be called as continuity, if the business sustains critical functions during and after a crisis [27, 22].

Conclusion

In the current dynamic business world that is constantly attacked by pandemics, corporate mismanagement, spyware attacks, rapid technological changes and geopolitical changes that are making it not only complicated but also more vulnerable to downfalls. In such disruptive market conditions, the most weakest are small businesses. Hence, there is a need to develop among the small business owners, particularly the micro-enterprises, the ability to deal with more weak, vulnerable and disruptive market conditions. The concept of sustainability comes in rescue along with the critical crisis management techniques while navigating through business turbulence [28]. These two concepts, if clubbed with the marketing philosophy, it can emerge as a new discipline called as sustainable crisis marketing. The practices of the sustainable crisis marketing strategies are expected to enhance a micro-enterprise's ability to build the shock proof or resilient organization. Thus, the micro-enterprises can continue their businesses during and after crises [29].

References

1. Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56. <https://doi.org/10.1016/j.jclepro.2013.11.039>
2. Kotler, P., Kartajaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for humanity*. John Wiley & Sons.
3. Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and crisis management: Integration, interpretation, and research development. *Journal of Management*, 43(6), 1661–1692. <https://doi.org/10.1177/0149206316680030>
4. Day, G. S. (2011). Closing the marketing capabilities gap. *Journal of Marketing*, 75(4), 183–195. <https://doi.org/10.1509/jmkg.75.4.183>
5. Varadarajan, R. (2020). Customer information resources advantage, marketing strategy and business performance: A market resources based view. *Industrial Marketing Management*, 89, 89–97. <https://doi.org/10.1016/j.indmarman.2020.03.003>
6. Bennett, N., & Lemoine, G. J. (2014). What VUCA really means for you. *Harvard Business Review*, 92(1–2), 27. <https://hbr.org/2014/01/what-vuca-really-means-for-you>
7. Sarwar, D. & Rye, S. (2025) The impact of the Russia-Ukraine war on global supply chains: a systematic literature review. *Frontiers in Sustainable Food Systems*. 9:1648918. <https://doi.org/10.3389/fsufs.2025.1648918>

8. Roh, T., & Xiao, S. (2024). Extending the research agenda for supply chain management in the age of disruption: The multifaceted role and implications of dynamic capabilities. *Journal of General Management*, 50(1), 5–15. <https://doi.org/10.1177/03063070241272373>
9. Koporcic, N., Kukkamalla, P. K., & Markovic, S. (2025). Resilience of small and medium-sized enterprises in times of crisis: an umbrella review. *Review of Managerial Science*, 20, 301–329. <https://doi.org/10.1007/s11846-025-00883-0>
10. Ledesma-Chaves, P., & Arenas-Gaitán, J. (2023). Dynamic capabilities in times of economic crisis: A vision of success in international markets. *Heliyon*, 9(12), e22703. <https://doi.org/10.1016/j.heliyon.2023.e22703>
11. Rao, K. K., Mackenzie, C. R., & Subedi, S. (2024). The dynamic capabilities approach and regional business resilience: An Australian case study. *Regional Studies, Regional Science*, 11(1), 175–191. <https://doi.org/10.1080/21681376.2024.2315192>
12. Maheshkar, C., & Soni, N. (2021). Problems faced by Indian micro, small and medium enterprises (MSMEs). *SEDME (Small Enterprises Development, Management & Extension Journal)*, 48(2), 142–159. <https://doi.org/10.1177/09708464211064498>
13. Singh, R., Sarangal, R. K., & Singh, G. (2022). The impact of micro and macro environment on entrepreneurial success: Case of J&K MSMEs. *FIIB Business Review*, 11(1), 94–106. <https://doi.org/10.1177/23197145211061809>
14. Kovid, R. K., Bhati, B., & Sharma, G. M. (2021). Entrepreneurial competencies, institutional voids and performance of small and medium enterprises: Evidence from an emerging economy. *Vision: The Journal of Business Perspective*, 29(1), 59–73. <https://doi.org/10.1177/09722629211058809>
15. Kabadurmus, F. N. K. (2021). Innovation challenges in South Asia: Evidence from Bangladesh, Pakistan and India. *Journal of South Asian Development*, 16(1), 100–129. <https://doi.org/10.1177/0973174121991737>
16. Chatterjee, S., Chaudhuri, R., Sakka, G., Grandhi, B., Galati, A., Siachou, E., & Vrontis, D. (2021). Adoption of social media marketing for sustainable business growth of SMEs in emerging economies: The moderating role of leadership support. *Sustainability*, 13(21), 12134. <https://doi.org/10.3390/su132112134>
17. Santhosh, C. (2021). Export entrepreneurship and SMEs: Determinants and performance. *The International Trade Journal*, 37(3), 344–363. <https://doi.org/10.1080/08853908.2021.1963888>
18. Pereira, V., Nandakumar, M. K., Sahasranamam, S., Bamel, U., Malik, A., & Temouri, Y. (2022). An exploratory study into emerging market SMEs' involvement in the circular Economy: Evidence from India's indigenous Ayurveda industry. *Journal of Business Research*, 142, pp. 188-199. <https://doi.org/10.1016/j.jbusres.2021.12.053>
19. Malik, A. Sharma, P., Sharma, P., Vinu, A., Karakoti, A., Kaur, K., Gujral, H. S., Munjal, S., & Laker, B. (2022). Circular economy adoption by SMEs in emerging markets: Towards a multilevel

- conceptual framework, *Journal of Business Research*, 142, 605-619.
<https://doi.org/10.1016/j.jbusres.2021.12.076>
20. Sajjad, A., Eweje, G., & Raziq, M. M. (2023). Sustainability leadership: An integrative review and conceptual synthesis. *Business Strategy and the Environment*. 33. 2849-2867.
<https://doi.org/10.1002/BSE.3631>
 21. Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A., & Tiberius, V. (2023). The economics of COVID-19: Initial empirical evidence on how family firms in five European countries cope with the corona crisis. *International Journal of Entrepreneurial Behavior & Research*, 29(2), 106–128. <https://doi.org/10.1108/IJEBr-04-2020-0214>
 22. Lučić, A. (2020). Measuring sustainable marketing orientation: Scale development process. *Sustainability*, 12(5), 1734. <https://doi.org/10.3390/su12051734>
 23. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate data analysis* (9th ed.). Cengage.
 24. Brown, K., Jie, F., Le, T., Sharafizad, J., Sharafizad, F., & Parida, S. (2022). Factors impacting SME business resilience post-COVID-19. *Sustainability*, 14(22), 14850.
<https://doi.org/10.3390/su142214850>
 25. Sheth, J. N., & Parvatiyar, A. (2021). Sustainable marketing: Market-driving, not market-driven. *Journal of Macromarketing*, 41(1), 150–165.
 26. Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215–246. <https://doi.org/10.1007/s40685-019-0085-7>
 27. Corrales-Estrada, A. M., Gómez-Santos, L. L., Bernal-Torres, C. A., & Rodríguez-López, J. E. (2021). Sustainability and resilience organizational capabilities to enhance business continuity management: A literature review. *Sustainability*, 13(15), 8196.
<https://doi.org/10.3390/su13158196>
 28. Malik, F.S., & Terzidis, O. (2025). Thriving in turbulence: resilience and strategic adaptation in global business. *Review of Managerial Science*. <https://doi.org/10.1007/s11846-025-00940-8>
 29. Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational Response to Adversity: Fusing Crisis Management and Resilience Research Streams. *Academy of Management Annals*, 11(2), 733–769.
<https://doi.org/10.5465/annals.2021.0064>