Volume 4, Eds 1
e-ISSN: 2716-666X

The Asian Journal of Professional and Business Studies

Please cite this article as: Adnan, F & Seman, SA (2023). The Influence of Economic, Social, and Environmental Dimensions on Small and Medium-sized Enterprises (SMEs) Sustainability in Selangor. AJPBS Vol 4, Ed 1, UPTM. Paper ID AJPBS4.1-327

THE INFLUENCE OF ECONOMIC, SOCIAL, AND ENVIRONMENTAL DIMENSIONS ON SMALL AND MEDIUM-SIZED ENTERPRISES (SMES) SUSTAINABILITY IN SELANGOR

Nur Farahanim Adnan*(a), Shahri Abu Seman(b)
Corresponding author*

(a) Institute Graduate Studies, Universiti Poly-Tech Malaysia, farahanim@student.uptm.com
(b)Faculty of Business & Accounting, shahri@uptm.edu.my

DOI:
Received 1 April 2023, Accepted 1 June 2023, Available online 30 Jun 2023

ABSTRACT

This study endeavors to determine factors shaping Small and Medium-sized Enterprises (SMEs) sustainability, with a particular focus on the SMEs in Selangor. SMEs sustainability refers to the ability of Small and Medium-sized Enterprises (SMEs) to maintain and enhance their economic, social, and environmental performance over the long term. It involves responsible and efficient use of resources, the development of resilient business practices, and a commitment to addressing social and environmental challenges. Sustainable SMEs strive for economic viability while considering the well-being of society and minimizing negative impacts on the environment. This includes efforts to foster innovation, ethical business conduct, community engagement, and environmental stewardship, contributing to long-term business success and positive societal outcomes. By gathering and examining data from a sample of 100 SMEs operating in the Selangor region, this research delves into the factors that influence sustainability of SMEs. It employs a quantitative research approach by disseminating a questionnaire through a Google Form developed by the researcher. The statistical significance of the data was assessed using Statistical Package for the Social Sciences (SPSS) Software version 29. The findings indicate that all the variables had a substantial impact on the firm's performance. Consequently, to enhance the understanding of financial transparency within the company, it is imperative to give particular attention to improving the organizational structure within the workplace to enhance overall firm performance..

ARTICLE INFO

Keywords:

Economic,
Social,
Environment,
SMEs,
Sustainability

Copyright: © 2024 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

1 INTRODUCTION

The sustainability of Small and Medium-sized Enterprises (SMEs) is increasingly recognized as a vital element in the economic landscape, particularly within the Malaysian context where SMEs are pivotal in driving economic growth and reducing unemployment. The growth of SMEs worldwide has been notable due to the relatively low capital required to start such businesses; as defined by SMEcorp, SMEs span various sectors including manufacturing, services, and agriculture, each adhering to specific thresholds of revenue and employee numbers (Moursellas et al., 2022; . However, this economic promise is often accompanied by significant environmental challenges, including climate change and resource depletion, necessitating that SMEs adopt more sustainable practices. An increasing body of research highlights that SMEs face mounting pressures not only from regulatory frameworks but also from customer demand for greener products and sustainable practices, often serving as external motivators for these businesses Ali et al., 2021)Clemente-Almendros et al., 2025).

Despite their essential role in the economy, SMEs often lag in implementing comprehensive sustainability measures. A study by Moursellas et al. suggests that the engagement of SMEs with sustainability practices varies significantly across different industries, reflecting the complexity of integrating sustainable operations within diverse business models (Moursellas et al., 2022; Ali et al., 2021). Effective sustainable entrepreneurship must balance economic growth with social and environmental responsibilities, yet many SMEs still struggle to recognize the full spectrum of benefits that sustainable practices can provide. These benefits can include improved competitive capabilities and enhanced performance metrics within economic, environmental, and social domains (Malesios et al., 2018; Min et al., 2023).

Characteristically, SMEs are often constrained by limited resources, which can hinder their ability to invest in sustainable practices. This limitation is compounded by a general lack of awareness and expertise regarding environmental impacts and sustainability options (Boiral et al., 2013; Durrani et al., 2024). However, studies have identified that innovative approaches tailored to SMEs' specific needs can facilitate greater engagement with sustainability initiatives. For instance, fostering organizational flexibility and integrating sustainable principles into strategic management can lead to enhanced business performance and allow SMEs to contribute positively towards Sustainable Development Goals (SDGs) (Malesios et al., 2018; Hanan et al., 2021).

This research thus aims to elucidate the key factors influencing the sustainability of SMEs in Selangor, Malaysia. It will scrutinize the interrelationships between economic, social, and environmental dimensions as pivotal components of SME sustainability. Such insights will be invaluable for SMEs seeking to harmonize their operational pursuits with sustainable development principles, ultimately contributing to a more robust academic discourse on the sustainability of SMEs (Malesios et al., 2018; Hanan et al., 2021).

2 LITERATURE REVIEW

The increasing focus on sustainability within Small and Medium-sized Enterprises (SMEs), particularly in Malaysia, reflects a growing recognition of the need to harmonize economic viability,

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

environmental stewardship, and social engagement. This synthesis presents a comprehensive overview of the literature surrounding the multidimensional approach to SME sustainability, specifically addressing the economic, social, and environmental dimensions as articulated within the Triple Bottom Line (TBL) framework.

2.1 Sustainability and the TBL Framework

The concept of sustainability is pivotal to the operational dynamics of SMEs, where it serves as a guiding principle for the integration of economic, environmental, and social factors. The TBL framework posits that businesses should evaluate their performance not just on financial outcomes but also on their social and environmental impacts (Wassan et al., 2023). For Malaysian SMEs, embracing the TBL perspective is essential as it fosters a comprehensive understanding of the interplay between profit-making and societal welfare, thereby enabling these enterprises to pinpoint strategic areas for improvement and ultimately gain competitive advantages (Castellani et al., 2023; (Suchek et al., 2022; .

2.2 Economic Dimension of Sustainability

The economic dimension plays a crucial role in the sustainability narrative for SMEs. It encompasses profitability, market competitiveness, and job creation, which are vital for the local and national economies (Guijarro & Gómez-Guillamón, 2023; (Bag et al., 2022; . Studies show that adopting sustainable practices is directly correlated with enhanced financial performance in SMEs, as these practices often lead to cost reductions and improved access to capital (Hermawan et al., 2023; Ali et al., 2020). Furthermore, engaging in sustainable activities aids SMEs in navigating economic downturns more resiliently, as their commitment to sustainability enhances their reputation and customer loyalty over time (Oyewole et al., 2024; Ali et al., 2021). Addressing disparities in income and resource distribution through strategies like workforce development not only supports economic viability but also promotes a fairer economic landscape (Yacob et al., 2021; Tsvetkova et al., 2020).

2.3 Social Dimension of Sustainability

In the context of the social dimension, SMEs are increasingly recognized for their role in community engagement and social responsibility. Effective social sustainability practices not only align with contemporary societal expectations but also strengthen stakeholder relationships (Masocha, 2019; Mengistu & Panizzolo, 2023). Empirical evidence suggests that SMEs proactive in their social commitments—such as charitable contributions and local investments—experience marked improvements in customer satisfaction and employee engagement, ultimately contributing to their overall success (Johnson & Schaltegger, 2015; López-Pérez et al., 2018). The integration of corporate social responsibility (CSR) aligns closely with the TBL philosophy, emphasizing ethical practices and social obligations as core business strategies for SMEs (Suchek et al., 2022; Tsvetkova et al., 2020). Consequently, adopting performance indicators for social sustainability is vital for Malaysian SMEs

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

to effectively measure and enhance their social contributions (Castellani et al., 2023; Tsvetkova et al., 2020).

2.4 Environmental Dimension of Sustainability

Environmental sustainability within SMEs is increasingly critical as firms strive to minimize their ecological footprint. Effective environmental management practices—including waste reduction, resource conservation, and eco-innovation—are shown to have significant positive impacts on both environmental performance and economic outcomes (Yacob et al., 2021; Ali et al., 2021). Research indicates that a commitment to sustainable manufacturing correlates with improved environmental performance, highlighting the necessity for Malaysian SMEs to adopt green technologies and sustainable materials (Sawang et al., 2024; Hermawan et al., 2023). Despite concerns about the costs associated with implementing environmental practices, studies reveal that the long-term benefits, including resource savings and enhanced brand reputation, often outweigh initial investments (Bag et al., 2022; Junejo et al., 2024).

2.5 Conclusion and Future Directions

The empirical literature consistently highlights the interconnectedness of the economic, social, and environmental dimensions of sustainability within SMEs. The TBL framework provides a valuable blueprint for Malaysian SMEs seeking to integrate sustainability into their core strategies, fostering not only competitive advantages but also contributing to national and global sustainability goals. Future research should explore innovative practices that further bridge the gaps between sustainability commitments and operational effectiveness, especially in resource-constrained environments typical of SMEs..

3 METHODOLOGY

This study aims to assess the extent to which Small and Medium-sized Enterprises (SMEs) in Selangor adopt the Triple Bottom Line (TBL) framework—encompassing economic, social, and environmental dimensions—as part of their sustainability practices. A quantitative research approach was selected to ensure objectivity and generalizability. This involved the use of online questionnaires distributed via digital platforms such as WhatsApp, Microsoft Teams, and Facebook, allowing efficient data collection across a diverse sample.

Primary data was prioritized for its reliability and relevance, offering better control over sampling design and data quality compared to secondary data. The study utilized a cross-sectional design, capturing responses at a single point in time, suitable for identifying patterns in sustainability practices among SMEs.

The target population comprised SMEs located in Selangor, selected due to the state's high SME concentration. Based on Krejcie and Morgan's (1970) sample size table, a total of 100 SMEs were surveyed. The sampling technique combined simple random sampling, where each SME had an equal chance of selection, and purposive sampling, targeting respondents who were medium-sized enterprises and willing to participate.

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

The research instrument was a structured questionnaire developed from validated tools in previous sustainability studies, ensuring both reliability and replicability. The questionnaire included two sections: Section A gathered demographic data (age, gender, academic background, position), while Section B explored sustainability dimensions using a 5-point Likert scale (from strongly disagree to strongly agree). A total of 25 concise questions were included to minimize respondent fatigue. A cover page outlined the study's objectives and assured respondents of confidentiality under data protection regulations.

A pilot test involving 10 SMEs in Selangor was conducted to assess reliability. Using SPSS, Cronbach's Alpha values exceeded 0.90 for all constructs, and inter-item correlations ranged from 0.70 to 0.95, demonstrating excellent internal consistency.

After data collection, responses were checked for missing or inconsistent data and then coded and transcribed into SPSS for statistical analysis. Descriptive analysis summarized demographic profiles and central tendencies (mean, standard deviation, skewness, and kurtosis). Scale measurement included normality testing to confirm the data's suitability for inferential analysis, and reliability analysis to ensure consistency of responses.

Inferential statistics included Pearson Correlation to determine relationships between independent variables (economic, social, and environmental factors) and sustainability adoption, with correlation coefficients above 0.70 indicating strong relationships. Multiple Linear Regression Analysis was used to identify significant predictors of sustainability practices. The model's effectiveness was evaluated through R-squared, F-ratio, and t-statistics, with significance set at the 95% confidence level ($p < 0.05$).

In conclusion, the study employs a robust quantitative methodology, combining structured data collection, rigorous sampling, validated instruments, and comprehensive statistical analysis to explore how SMEs in Selangor implement sustainability through the TBL framework.

4 FINDINGS AND DISCUSSION

4.1 4.1 Summary of Statistical Analysis

This chapter provides a summary description of the statistical analysis, including descriptive analysis, reliability analysis, inferential analysis, and regression analysis, along with discussions of major findings and results.

4.2 4.2 Descriptive Analysis

The demographic profile of the respondents (N=100) was analyzed based on type of sector, company size, job position, age, and education.

4.2.1 4.2.1 Type of Sector

The research found a predominant presence of SMEs within the Services sector (83% of the sample), with 16% in Manufacturing and 1% in other sectors. This highlights a potential connection between sector specialization and SME sustainability, suggesting the need for tailored support mechanisms.

4.2.2 4.2.2 Company Size

The majority of SMEs had less than 5 employees (52%), followed by 37% with 6 to 30 employees, 9% with 31 to 75 employees, and 2% with more than 75 employees. This breakdown underscores the prevalence of micro-enterprises and small businesses, implying that sustainability factors may need to consider the unique challenges of smaller-scale enterprises.

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

4.2.3 4.2.3 Job Position

Senior management constituted a substantial 73% of the sample, owners accounted for 18%, while executives and board of directors represented 5% and 3% respectively, and supervisors 1%. This prominence suggests that key decisions influencing SME sustainability are often shaped by individuals in leadership roles.

4.2.4 4.2.4 Age of the Respondents

The majority of respondents (60%) were aged between 31 and 40 years, with 29% below 31 years. Smaller percentages were observed in older age brackets: 6% between 41-50 years, and 1-2% for 51-60 years, 61 years and above, 62 years and above, and 63 years and above. This age distribution suggests a significant portion of participants are in early to mid-career stages, offering insights into varying experiences and priorities for sustainability strategies.

4.2.5 4.2.5 Level of Education

The highest percentage of respondents (61%) had undertaken Short Courses, followed by Bachelor's/Degree holders (20%), Diploma holders (10%), Post Graduate Masters/PhD (5%), and Matric (4%). This diverse educational background may influence perspectives and decision-making related to SME sustainability, highlighting the value of tailored strategies.

4.2.6 4.4 Reliability Analysis

Reliability analysis, utilizing SPSS, assessed the degree of error-free and consistent results. Cronbach's Alpha indicated the internal consistency of the measurement scales. For SMEs Sustainability, the Alpha value was 0.761 (good). The Economic Dimension showed 0.82 (very good), Social Dimension 0.765 (good), and Environment Dimension 0.802 (very good). These results confirm the reliability and consistency of the measurement scales for economic, social, and environmental dimensions, contributing to a robust evaluation of factors influencing SMEs sustainability.

4.2.7 4.5 Inferential Analysis

Inferential analysis provided insights into the relationships between variables.

4.2.7.1 4.5.1 Pearson Correlation Analysis

- Economic Dimension: A Pearson Correlation coefficient of 0.412 with a p-value less than 0.001 (0.000) indicated a strong positive correlation between the Economic Dimension and SMEs Sustainability. This suggests that improvements in economic factors are associated with a positive impact on SME sustainability.

- Social Dimension: A Pearson Correlation coefficient of 0.433 with a p-value less than 0.001 (0.000) demonstrated a strong positive correlation between the Social Dimension and SMEs Sustainability. This implies that improvements in social factors are linked to a positive impact on SME sustainability.

- Environment Dimension: An exceptionally strong and significant positive correlation was found between the Environment Dimension and SMEs Sustainability, with a Pearson Correlation coefficient of 0.782 and a p-value less than 0.001 (0.000). This suggests that improvements in environmental factors are strongly associated with a positive impact on SME sustainability.

4.2.8 4.6 Multiple Regression Analysis

Multiple linear regression analysis aimed to explain the relationship between independent variables and the dependent variable, examining determinants influencing SMEs sustainability in Selangor.

4.2.8.1 4.6.1 Regression Statistics

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

The Model Summary table revealed a multiple correlation coefficient (R) of 0.810, signifying a robust positive relationship. The coefficient of determination (R Square) of 0.656 indicated that approximately 65.6% of the variability in SMEs sustainability is accounted for by the combined influence of Social, Economic, and Environmental factors. The Adjusted R Square was 0.645, and the standard error of the estimate was 0.30070, indicating a good fit of the model.

4.2.8.2 4.7.2 Analysis of Variance (ANOVA)

The ANOVA table confirmed the statistical significance of the regression model. The regression sum of squares was 16.550 (3 degrees of freedom), and the residual sum of squares was 8.680 (96 degrees of freedom), with a total sum of squares of 25.230 (99 degrees of freedom). The F-statistic (61.010) with a significance level of 0.000 indicates that the model is statistically significant in explaining SMEs sustainability.

4.2.8.3 4.6.3 Model Coefficients

The Model Coefficients table provided insights into individual factor impacts. Environmental factors showed a highly significant positive impact (coefficient = 1.041, Beta = 0.908, Sig = 0.000), indicating a strong association with enhanced sustainability. Conversely, Economic factors exhibited a statistically significant negative impact (coefficient = -0.307, Beta = -0.274, Sig = 0.002), underscoring potential challenges. Social factors contributed significantly and positively (coefficient = 0.153, Beta = 0.136, Sig = 0.049). While the constant term was not statistically significant, the overall findings emphasize prioritizing environmental and social considerations while addressing economic challenges.

4.2.9 4.7 Conclusion of Hypotheses

Based on the model coefficients:

- H1: Economic dimension has a positive effect on SMEs' sustainability. Result: Reject. The study found a negative relationship between economic factors and SMEs sustainability.
- H2: There is a positive relationship between social dimension and SMEs sustainability. Result: Accept. Social factors demonstrated a positive influence on SMEs sustainability.
- H3: There is a positive relationship between environment dimension and SMEs sustainability. Result: Accept. Environmental factors had a highly significant positive impact on SMEs sustainability.

5 CONCLUSION

This study sheds light on factors influencing the sustainability of SMEs in Selangor, with a focus on the Services sector, where micro and small enterprises dominate. The findings reveal that senior management plays a crucial role in decision-making, directly impacting sustainability. Correlation analysis indicated positive relationships between economic, social, and environmental dimensions and SME sustainability, with environmental factors showing the strongest association. However, multiple regression analysis revealed a surprising result: economic factors had a significant negative relationship with sustainability, suggesting that certain economic pressures may hinder SME sustainability. Hypotheses testing confirmed positive impacts of social and environmental dimensions but rejected the economic dimension due to this negative correlation.

The study has important implications for SME managers and policymakers. It recommends prioritizing social responsibility and environmental sustainability, while acknowledging and

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

addressing economic challenges. The role of senior management in strategy development is emphasized.

Limitations include a small, geographically limited sample size, sectoral bias, and a cross-sectional design. Future research should include broader samples, longitudinal studies, and mixed-methods approaches. Comparative sectoral studies and international perspectives are also suggested to identify global best practices. Interventions to alleviate economic burdens on SMEs could further inform practical strategies for sustainable development in this sector.

REFERENCES

Ali, H., Chen, T., & Hao, Y. (2021). Sustainable manufacturing practices, competitive capabilities, and sustainable performance: moderating role of environmental regulations. Sustainability, 13(18), 10051. https://doi.org/10.3390/su131810051

Ali, H., Chen, T., & Hao, Y. (2021). Sustainable manufacturing practices, competitive capabilities, and sustainable performance: moderating role of environmental regulations. Sustainability, 13(18), 10051. https://doi.org/10.3390/su131810051

Ali, Y., Younus, A., Khan, A., & Pervez, H. (2020). Impact of lean, six sigma and environmental sustainability on the performance of smes. International Journal of Productivity and Performance Management, 70(8), 2294-2318. https://doi.org/10.1108/ijppm-11-2019-0528

Bag, S., Dhamija, P., Bryde, D., & Singh, R. (2022). Effect of eco-innovation on green supply chain management, circular economy capability, and performance of small and medium enterprises. Journal of Business Research, 141, 60-72. https://doi.org/10.1016/j.jbusres.2021.12.011

Boiral, O., Baron, C., & Gunnlaugson, O. (2013). Environmental leadership and consciousness development: a case study among canadian smes. Journal of Business Ethics, 123(3), 363-383. https://doi.org/10.1007/s10551-013-1845-5

Castellani, P., Rossato, C., Giaretta, E., & Sánchez, A. (2023). Partner selection strategies of smes for reaching the sustainable development goals. Review of Managerial Science, 18(5), 1317-1352. https://doi.org/10.1007/s11846-023-00656-7

Clemente-Almendros, J., García, M., & Blanco-Hernández, M. (2025). Smes and sustainable practices: identifying key factors from spanish evidence. Sage Open, 15(1). https://doi.org/10.1177/21582440251329631

Durrani, N., Raziq, A., Mahmood, T., & Khan, M. (2024). Barriers to adaptation of environmental sustainability in smes: a qualitative study. Plos One, 19(5), e0298580. https://doi.org/10.1371/journal.pone.0298580

Guijarro, A. and Gómez-Guillamón, A. (2023). Sustainable development barriers and pressures in smes: the mediating effect of management commitment to environmental practices. Business Strategy and the

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

Environment, 33(2), 949-967. https://doi.org/10.1002/bse.3537

Hanan, A., Shahira, A., & Ali, M. (2021). Drivers of sustainable entrepreneurship among smes in pakistan: does entrepreneurial knowledge matter?. Indonesian Journal of Innovation and Applied Sciences (Ijias), 1(2), 161-176. https://doi.org/10.47540/ijias.v1i2.257

Hermawan, A., Masudin, I., Zulfikarijah, F., Restuputri, D., & Shariff, S. (2023). The effect of sustainable manufacturing on environmental performance through government regulation and eco-innovation. International Journal of Industrial Engineering and Operations Management, 6(4), 299-325. https://doi.org/10.1108/ijieom-04-2023-0039

Johnson, M. and Schaltegger, S. (2015). Two decades of sustainability management tools for smes: how far have we come?. Journal of Small Business Management, 54(2), 481-505. https://doi.org/10.1111/jsbm.12154

Junejo, I., Saraih, U., Esponda-Pérez, J., Ejaz, S., Ejaz, F., & Hossain, M. (2024). Factors affecting on environmental strategy in smes manufacturing firms of a developing country: mediating role of green employee behavior. F1000research, 13, 654. https://doi.org/10.12688/f1000research.152351.1

López-Pérez, M., Melero-Polo, I., Vázquez-Carrasco, R., & Cambra-Fierro, J. (2018). Sustainability and business outcomes in the context of smes: comparing family firms vs. non-family firms. Sustainability, 10(11), 4080. https://doi.org/10.3390/su10114080

Malesios, C., Skouloudis, A., Dey, P., Abdelaziz, F., Kantartzis, A., & Evangelinos, K. (2018). Impact of small- and medium-sized enterprises sustainability practices and performance on economic growth from a managerial perspective: modeling considerations and empirical analysis results. Business Strategy and the Environment, 27(7), 960-972. https://doi.org/10.1002/bse.2045

Masocha, R. (2019). Social sustainability practices on small businesses in developing economies: a case of south africa. Sustainability, 11(12), 3257. https://doi.org/10.3390/su11123257

Mengistu, A. and Panizzolo, R. (2023). Metrics for measuring industrial sustainability performance in small and medium-sized enterprises. International Journal of Productivity and Performance Management, 73(11), 46-68. https://doi.org/10.1108/ijppm-04-2022-0200

Min, H., Tambunan, T., & Santosa, B. (2023). The drivers of sustainability practices in smes and the impact on business performance. Journal of Economics Management and Trade, 29(12), 1-16. https://doi.org/10.9734/jemt/2023/v29i121172

Moursellas, A., De, D., Wurzer, T., Skouloudis, A., Reiner, G., Chaudhuri, A., … & Dey, P. (2022). Sustainability practices and performance in european small-and-medium enterprises: insights from multiple case studies. Circular Economy and Sustainability, 3(2), 835-860. https://doi.org/10.1007/s43615-022-00224-3..

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

Oyewole, A., Adeoye, O., Addy, W., Okoye, C., & Ofodile, O. (2024). Enhancing global competitiveness of u.s. smes through sustainable finance: a review and future directions. International Journal of Management & Entrepreneurship Research, 6(3), 634-647. https://doi.org/10.51594/ijmer.v6i3.876

Sawang, S., Ng, P., Kivits, R., Dsilva, J., & Locke, J. (2024). Examining the influence of customers, suppliers, and regulators on environmental practices of smes: evidence from the united arab emirates. Business Strategy and the Environment, 33(7), 6533-6546. https://doi.org/10.1002/bse.3831

Suchek, N., Ferreira, J., & Fernandes, P. (2022). A review of entrepreneurship and circular economy research: state of the art and future directions. Business Strategy and the Environment, 31(5), 2256-2283. https://doi.org/10.1002/bse.3020

Tsvetkova, D., Bengtsson, E., & Durst, S. (2020). Maintaining sustainable practices in smes: insights from sweden. Sustainability, 12(24), 10242. https://doi.org/10.3390/su122410242

Wassan, R., Shaikh, S., Marri, H., Memon, M., & Shah, S. (2023). Analyzing the impact of glss implementation over sustainability in pakistani smes. Benchmarking an International Journal, 31(8), 2547-2564. https://doi.org/10.1108/bij-05-2022-0338

Yacob, P., Peter, D., & Chin, K. (2021). Sustainable business practices in manufacturing smes: the mediating effect of dynamic capabilities. International Social Science Journal, 72(243), 73-89. https://doi.org/10.1111/issj.12303

Copyright: © 2023 The Author(s)
Published by Universiti Poly-Tech Malaysia.
This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode