ASEAN Entrepreneurship Journal (AEJ)

Organizational Performance of Small and Medium Enterprises through Corporate Entrepreneurship and Innovation Ambidexterity

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Abstract
SMEs are the fundamental source of innovation and economic growth in intensifying productivity and competitiveness. Innovation is the mechanism for SMEs to gain a competitive advantage and be successful. This research aims to explore the impact of corporate entrepreneurship mediating by innovation ambidexterity on Malaysian SMEs' organizational performance. A quantitative method is deployed using an online survey due to the unprecedented event of COVID-19. The study's unit of analysis is SMEs, and the SMEs' senior management represents the organizations. Simple random sampling was used for sample selection from the database of SMECorp. Malaysia. Data was then analysed using descriptive and Structurer Equation Modelling- Partial Least Square (PLS-SEM). The findings disclosed that mediating innovation ambidexterity, which complied with explorative and exploitation innovation, positively influences the SME's organizational performance. Corporate entrepreneurship has also shown a significant relationship towards performance. The results proved a more profound understanding of the relationship between corporate entrepreneurship, innovation ambidexterity, and organizational performance in small and medium enterprises

Keywords: Innovation Ambidexterity, Corporate Entrepreneurship, Organizational Performance, SME

ARTICLE INFORMATION
Received: 29 Aug 2023
Revised: 29 Sept 2023
Accepted: 11 Oct 2023
Published: 31 Oct 2023

1.0 INTRODUCTION

Small and Medium Enterprises (SMEs) are vital drivers of innovation, economic growth, and competitiveness (Gherghina et al., 2020). In Malaysia, efforts are underway to develop an innovative ecosystem that fosters widespread technological innovation. This includes initiatives to improve productivity and enable innovation, especially within SMEs. In light of embracing the Fourth Industrial Revolution, Malaysia aims to revolutionize manufacturing services, enhance automation, and promote digitalization to increase efficiency, optimize logistics, and foster transparent and competitive pricing (MPC, 2018).

Despite the challenges posed by a complex domestic and global environment, SMEs in Malaysia have shown resilience. Malaysia's micro, small and medium enterprises (MSME) achieved a Gross Domestic Product (GDP) growth of 11.6 per cent in 2022, surpassing the national GDP growth of 8.7 per cent (Department of Statistic, 2023). However, the COVID-19 pandemic has had a significant impact, with a poll conducted by SME Corp. Malaysia predicting that 73% of SMEs would face financial difficulties in 2020. To navigate these challenges, Malaysian SMEs must swiftly adapt strategies to withstand the new normal. This includes managing cash positions by collaborating closely with financial institutions, embracing digitalization for operational efficiency, and developing robust business continuity plans (SME Annual Report, 2021). Additionally, the government intervention plays a significant role in facilitating the SMEs to sustain their businesses in the industry by providing financial aid to individuals and organizations to mitigate the economic catastrophe and prevent mass layoffs (Hasin et al.2921).

In the face of the pandemic-induced adjustments in the business ecosystem, SMEs must reevaluate their business models to enhance resilience and improve performance (Gregurec et al., 2021). Innovation plays a critical role in promoting business performance (Adam & Alarifi, 2021). SMEs are at the core of inclusive growth initiatives, with innovation being a critical factor in long-term productivity and growth. Recent market and technological advancements have created new

opportunities for SMEs to innovate and prosper. Encouraging innovation in established SMEs can also lead to more equitable growth by reducing productivity and salary gaps between small and large businesses (OECD, 2018). Notably, a survey conducted by the OECD in higher-income countries such as Germany, Denmark, and Singapore found that SMEs engaging in various forms of innovation outperformed large companies in terms of productivity (OECD, 2017). Asia has risen to become an innovation powerhouse, contributing to more than half of world patents. The rise of Asia as an innovation hub has been driven by a few frontier countries that have experienced a sharp increase in digital and computer-related patents, supported by solid R&D spending and a large share of researchers in the labor force (Dabla_Norris et al., 2023).

Innovation is essential for enhancing organizational performance. Previous research emphasizes the importance of innovation ambidexterity, which involves balancing existing capabilities and exploring new opportunities to ensure superior performance (Adam & Alarifi, 2021). While much of the existing literature on ambidexterity focuses on larger companies, evidence suggests that SMEs, with their inherent flexibility, are particularly suited for ambidexterity (Boronat-Navarro et al., 2021). Establishing ambidexterity requires managing the dual dimensions of exploration and exploitation stemming from divergent knowledge-processing capabilities (Koryak et al., 2018). Whether organizations can engage in a balanced dimension of exploration and exploitation or not in developing ambidexterity, the result will still be impactful to the organization's performance.

Moreover, organizations nowadays understand the benefits of affiliating with corporate entrepreneurship, thus the reason companies are becoming more entrepreneurial. The concept has gained considerable recognition over the past decades. Researchers have continually cited corporate entrepreneurship's importance as a growth strategy and innovation and increased the value of the firm and its performance (Tseng & Tseng, 2019). In the current era of innovation, corporate entrepreneurship and innovation ambidexterity can be poignant to SMEs' performance. Therefore, the study is expected to advance theory by elucidating how SMEs can create a higher level of performance by absorbing these two elements into their organizations.

2.0 LITERATURE REVIEW

The study examines the relationship between corporate entrepreneurship, innovation ambidexterity, and organizational performance in small and medium enterprises (SMEs). The paper provides a literature review summarizing relevant studies and definitions related to organizational performance, corporate entrepreneurship, and innovation ambidexterity.

Organizational performance is defined as the cumulative output of an organization's activities and ability to access and manage various resources to achieve goals and objectives (Alrowwad et al., 2020). It encompasses greater earnings, revenue, growth, improved product quality, more significant market share, financial outcomes, and survival (Hilton et al., 2021). Each metric for measuring performance is unique, especially in small and medium businesses (Costa-Mello et al., 2023). Gutterman (2023) asserts that an organization's performance is the result of a complex interaction between six performance criteria: - effectiveness, efficiency, quality, productivity, innovation, and profitability, which are to be measured at both organizational and work-it levels assuming these dimensions as lagging indicators. Measuring organizational performance in SMEs is different from that of a large organization. SMEs are characterized by their smaller firm size and limited abilities (Lefebvre, 2023). Miklian et al. (2022) argue that no specific measurement of performance suits SMEs and suggest that an integration of performance measurements be applied to SMEs. By measuring the organizational performance and the capabilities or resources of the organization, an organization will be able to assess its position and goals.

Corporate entrepreneurship (CE) refers to starting a new business within an existing company to increase profitability and competitiveness (Abdissa et al., 2021). It involves developing new commercial endeavors, innovative actions, and orientations such as new products, services, technology, administrative procedures, strategies, and competitive postures (Tseng & Tseng, 2019; Urbano et al., 2022). According to these definitions, corporate entrepreneurship is a multi-dimensional construct comprising three components: corporate venturing, intrapreneurship, and strategic renewal (Castriotta et al. (2021). Urbano et al (2022) posits five dimensions of corporate entrepreneurship:

innovativeness, risk propensity, proactiveness, corporate venturing, and self-renewal. Günay and Karabulut (2018) emphasizes four dimensions (new business venturing, innovativeness, self-renewal, and proactiveness). Corporate Entrepreneurship can also combine innovativeness, proactiveness, and risk propensity (Astrini et al., 2020). In this study, CE would be measured with three components (innovativeness, risk propensity, and proactiveness), as suggested by Astrini et al. (2020).

Innovation ambidexterity refers to an organization's ability to manage present demands while responding to environmental changes (Koryak et al., 2018). It involves balancing exploratory and exploitative innovations, where exploration refers to searching, experimenting, and discovering, while exploitation involves refining, efficiency, selection, and improvement (Koryak et al., 2018). Wu and Qu (2021) claim that a close balance of exploratory and exploitative innovations is beneficial to SMEs' accessibility both internally and internationally. Balancing these two types of activities is essential for achieving superior performance (Koryak et al., 2018). However, organizations tend to prioritize exploitation over exploration due to the latter's higher risk and greater distance in time and place between the locus of learning and the location of return realization (Eriksson & Szentes, 2017). Many scholars believe that firms have to achieve both explorative and exploitative activities; however, there needs to be an underlying gap between these two types of innovation to be attained for SMEs. Although there is a dispute on whether exploration and exploitation are continuous processes or discrete choices, most researchers agree that a company can do both and that both are essential aspects of organizational learning (Marín-Idárraga et al. 2020). Still, because of the more significant risk and distance in time and space between the locus of learning and the locus of realization of rewards, organizations tend to prioritize exploitation over exploration (Nielsen et al. 2018). This imbalance can lead to short-term success but long-term stagnation and failure, necessitating an ambidexterity mindset. As a result, SMEs confront more significant difficulties than larger companies in managing tensions, contradictions, and trade-offs connected with explorative and exploitative innovations (Bettiol et al., 2023).

The review by Nielsen et al. (2018) suggests that SMEs face unique challenges in managing corporate entrepreneurship and innovation ambidexterity due to resource constraints and organizational complexities. Nevertheless, these concepts are still crucial for SMEs to enhance performance, remain competitive, and achieve long-term success. Balancing exploration and exploitation and integrating corporate entrepreneurship and innovation ambidexterity can contribute to SMEs' growth and sustainability. Based on the literature review, the following hypotheses have been developed.

H1: Corporate Entrepreneurship has a significant relationship with Organizational Performance

H2: Corporate Entrepreneurship has a significant relationship with Innovation Ambidexterity

H3: Innovation Ambidexterity mediates the relationship between Corporate Entrepreneurship and Organizational Performance

3.0 RESEARCH METHODOLOGY

In order to assess the relationships within the research model, a survey methodology was implemented. Online surveys have become an indispensable means of collecting data in research studies. This approach offers several advantages, including cost-effectiveness and easy accessibility to potential respondents based on their backgrounds. Moreover, extensive studies have highlighted the pivotal role of online surveys in market research, with a notable allocation of approximately 20% of global data collection expenditures towards this method (Wu et al., 2022). The study employed online survey methods as it has numerous constructive benefits.

The measurement of innovation ambidexterity in this study was based on a previous research paper by Lisboa et al. (2011), utilizing eight specific items. Corporate entrepreneurship and organizational performance were assessed using six and seven items, respectively, drawing from relevant studies conducted by Zhang et al. (2016). All items were evaluated using a five-point Likert-type scale, ranging from 'strongly disagree' to 'strongly agree.' To enhance the questionnaire's effectiveness and mitigate response monotony, certain items were worded with negation and shuffled to reduce repetitiveness when measuring the same construct. The research design employed in this study was quantitative, aimed at examining the relationships among the independent variable (corporate entrepreneurship), mediating variable (innovation ambidexterity), and dependent variable (organizational performance) within the SME population.

Table 1. Convergent Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Corporate Entrepreneurship	0.885	0.912	0.635
Exploitative Innovation	0.858	0.904	0.701
Explorative Innovation	0.877	0.916	0.731
Organizational Performance	0.902	0.923	0.63

Causal research will establish a cause-and-effect relationship between variables, employing statistical testing to explain their relationships (Williams, 2007). It is used to validate hypotheses and provide evidence of relationships or associations between independent and dependent variables (Zikmund et al., 2010). The population frame for this study consisted of the list of Small and Medium Enterprises (SMEs) obtained from SMECorp. Malaysia and the Malaysian Technology Development Corporation (MTDC). The unit of analysis is the top management of the SMEs, as they represent the organizations and possess crucial insights. Simple random sampling used select the target respondents from the population (Zikmund et al., 2010).

Data analysis deployed descriptive analysis using IBM SPSS software to analyse the collected data. Causal-effect analysis was conducted using partial least squares of structural equation modelling (PLS-SEM), which allows for the modelling of latent variables and accommodates non-normality with small to medium sample sizes (Hair, Sarstedt, Ringle, & Mena, 2012; Hair et al., 2014). Throughout the research, ethical considerations were closely followed to protect respondents' rights and maintain the trustworthiness of the findings. Free consent was obtained from the respondents, who participated voluntarily without any coercion. The research objectives were clearly communicated to eliminate ambiguity, and respondents' data were kept confidential.

4.0 RESULTS AND DISCUSSION

The study employed Partial Least-Squares Structural Equation Modelling (PLS-SEM) with the Smart PLS 3.0 software (Hair, Ringle & Sarstedt, 2017) to validate measures and test hypotheses, utilizing a latent structural equation modelling technique that employs a component-based approach to minimize sample size requirements (Hair, Ringle & Sarstedt, 2011). This PLS approach serves to confirm theories and indicate potential relationships. The data analysis consisted of two steps: evaluating the measurement model using PLS for item loadings, internal consistency, and discriminant validity, and investigating the structural model and hypotheses by analyzing standardized betas as path coefficients while assessing the explained variance in dependent constructs as an indicator of the overall predictive power of the model.

4.1 Measurement Model

The analysis of the outer model, based on the recommendations of Chin (2010) and utilizing the PLS threshold values proposed by Hair, Ringle, and Sarstedt (2011), examined the loadings, reliability, and validity of the measures representing each construct. The results indicated that the variables exhibited favourable outer loadings, ranging from 0.773 to 0.861. Convergence validity was assessed using the factor loadings, composite reliability, and average variance extracted, as suggested by Hair et al. (2017). As presented in Table 1, the composite reliability values exceeded the recommended threshold of 0.7, indicating that the construct indicators reliably capture the latent variables (Hair et al., 2017). Moreover, the average variance extracted, reflecting the overall variance accounted for by the latent construct, surpassed the recommended threshold of 0.5 (Hair et al., 2011). Consequently, all variables/constructs demonstrated strong levels of convergent validity.

Discriminant validity refers to the degree to which a measure is distinct from other variables, as indicated by a weak correlation between the measure of interest and

Table 2. Convergent Validity

	1	2	3	4	5
Corporate Entrepreneurship	0.797				
Exploitative Innovation	0.799	0.837			
Explorative Innovation	0.788	0.797	0.855		
Innovation Ambidexterity	0.846	0.951	0.939		
Organizational Performance	0.784	0.731	0.701	0.766	0.794

measures of other constructs (Cheung & Lee, 2010). In Table 2, all variable values were found to be below 0.9, confirming the establishment of discriminant validity.

4.2 Structural Model

The validity of the structural model is investigated using the coefficient of determination (R2) and path coefficients. In addition, this study also examines the mediation relationships that are being proposed in the research model. The mediation relationships are tested using the guidelines proposed by Baron and Kenny (1986). A total of 65.2% of the variance (R^2) in organizational performance showed a reliable predictive explanatory power of variance explained by antecedents of corporate entrepreneurship and innovation ambidexterity of SME, as shown in Figure 1. The analysis showed that organizational performance is influenced directly by corporate entrepreneurship (β=0.48, t=5.155, $p<0.05$), supporting hypothesis H1.

Furthermore, the relationship between corporate entrepreneurship and innovation ambidexterity was tested and confirmed its direct influence towards the variable (β=0.846, t=32.914, $p<0.001$); thus, hypothesis H2 is supported. The study also determined the positive influence of innovation ambidexterity as mediating in the relationship between corporate entrepreneurship and organizational performance (β=0.305, t=3.297, $p<0.001$). Table 4 presents the findings of the total effect and hypotheses of the study.

According to Henseler et al. (2009), evaluating the direct and indirect relationships between exogenous and endogenous latent variables is crucial in structural modelling. These relationships can be examined through mediating or moderating analysis. This study focuses on

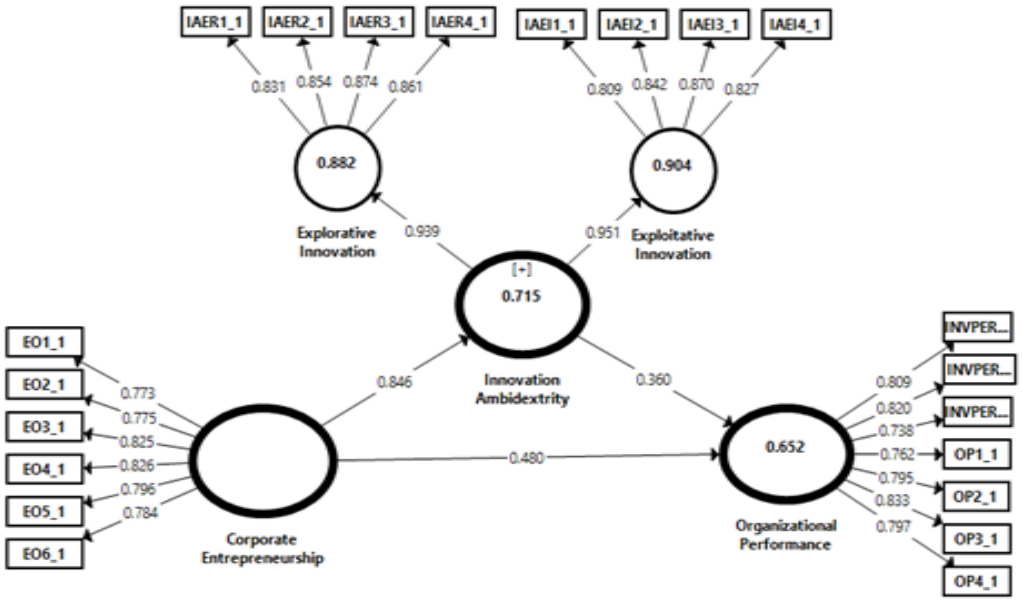

Figure 1: Structural Model

Table 3. Hypotheses Testing

	β	T Statistics	P Values	Decision
H1: Corporate Entrepreneurship has a significant relationship with Organizational Performance.	0.48	5.155	0.000	Supported
H2: Corporate Entrepreneurship has a significant relationship with Innovation Ambidexterity.	0.36	3.509	0.000	Supported
H3: Innovation Ambidexterity mediates the relationship between Corporate Entrepreneurship and Organizational performance.	0.846	3.2914	0.000	Supported

assessing the significance of mediating relationships, specifically considering innovation ambidexterity as a mediator that influences organizational performance based on theoretical reasoning (Chang et al., 2011). The post-hoc analysis, presented in Figure 1, investigates the mediating effect of innovation ambidexterity on Organizational performance. Firstly, the impact of corporate entrepreneurship on organizational performance is examined, revealing a positive influence (β= 0.48, t= 5.155) as indicated in Table 10. Next, the analysis explores the mediating effect by introducing innovation ambidexterity as a variable in the relationship between corporate entrepreneurship and organizational performance.

The findings demonstrate that innovation ambidexterity positively influences organizational performance (β=0.36, t= 3.509), while corporate entrepreneurship exhibits a significant relationship with innovation ambidexterity (β=0.846, t=32.914). Incorporating the mediating variable reduces the coefficient value between corporate entrepreneurship and organizational performance from 0.480 to 0.360. Consequently, the post-hoc analysis supports hypothesis H3. In summary, the analysis highlights the mediating role of innovation ambidexterity in the link between corporate entrepreneurship and organizational performance. These results support the proposed hypothesis, underscoring the importance of considering innovation ambidexterity as a significant factor impacting organizational performance.

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5.0 DISCUSSION AND CONCLUSION

The results of the first research question on the influence of corporate entrepreneurship on organizational performance in SMEs indicated a positive relationship, which is consistent with previous research. The finding aligned with previous studies indicating that SMEs actively engaging in corporate entrepreneurship tend to achieve better performance outcomes.

For example, Zahra and Garvis (2000) found that international corporate entrepreneurship positively affects firm performance, particularly in challenging international environments. Urban and Wood (2017) suggested that firms exhibiting corporate entrepreneurship through innovative behaviors tend to outperform their competitors in terms of financial and non-financial performance. In essence, SMEs that engage in corporate entrepreneurship are more likely to achieve improved organizational outcomes.

The second research question focuses on the role of innovation ambidexterity as a mediator between corporate

entrepreneurship and organizational performance in SMEs. The study's findings support the notion of a positive relationship between corporate entrepreneurship and innovation ambidexterity. Prior studies have also supported the hypothesis that corporate entrepreneurship has a significant relationship with innovation ambidexterity. For instance, Burgers and Jansen (2008) found that corporate entrepreneurship positively influences exploratory activities, fostering innovation ambidexterity in the relationship. Similarly, Kollmann and Stockmann (2008) found that corporate entrepreneurship positively affects innovation performance, indicating the presence of innovation ambidexterity in influencing performance. The study also highlights the importance of balancing exploration and exploitation, as Fernholz et al. (2017) emphasized in achieving superior performance and addressing theoretical and empirical gaps in interpretations.

In conclusion, this study's findings support corporate entrepreneurship's positive influence on SMEs' organizational performance and the mediating role of innovation ambidexterity. These findings are consistent with prior studies highlighting the significance of corporate entrepreneurship and innovation ambidexterity for firm performance. The results contributed to a deeper understanding of the relationship between corporate entrepreneurship, innovation ambidexterity, and organizational performance in small and medium enterprises. The results are aligned with prior research that has underscored the significance of corporate entrepreneurship and innovation ambidexterity in driving firm performance. Overall, the research enhanced our comprehension of the dynamics shaping SME success and performance in the context of entrepreneurship and innovation.

6.0 CONCLUSION

Based on the findings of this study, there are several recommendations for SMEs to enhance their performance through corporate entrepreneurship and innovation ambidexterity. Firstly, SMEs should develop a culture of corporate entrepreneurship by encouraging innovation and experimentation, involving employees in the innovation process, and providing incentives for innovative ideas. Secondly, SMEs should recognize the importance of innovation ambidexterity and prioritize incremental and radical innovations to respond to changing market conditions and remain competitive. Thirdly, SMEs should collaborate with other organizations to access resources and expertise, such as forming partnerships with other SMEs, universities, and research institutes. Fourthly, SMEs should continuously improve their processes, products, and services through research and development activities to maintain their competitive advantage. Lastly, SMEs should monitor and evaluate their performance to identify areas for improvement. The study emphasizes that SMEs should focus on enhancing their corporate entrepreneurship activities, creating an environment that fosters innovation and entrepreneurship, and investing in research and development activities.

Moreover, SMEs should develop innovation ambidexterity as a mediating factor to further enhance organizational performance by promoting a culture of innovation and collaboration and investing in training and development programs. Future research can explore the impact of digital technology on the ability of SMEs to implement corporate entrepreneurship and innovation ambidexterity. Additionally, investigating the role of external factors such as industry competition and regulatory policies can provide insights into strategies to mitigate their negative impact. Further research can also delve deeper into the relationship between innovation ambidexterity and firm performance, examining different types of innovation ambidexterity and conducting longitudinal studies to establish causality. Cross-cultural studies can be conducted to explore the role of culture in corporate entrepreneurship and innovation ambidexterity. In conclusion, further research in these areas can enhance our understanding of corporate entrepreneurship and innovation ambidexterity in SMEs, providing valuable insights for SMEs, policymakers, and stakeholders on improving organizational performance in a rapidly changing business environment.

Acknowledgments: The authors thank the Faculty of Business and Management, Universiti Teknologi MARA, for making this publication possible.

Conflicts of Interest: The authors declare no conflict of interest

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