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**THE INFLUENCE OF ENTREPRENEURIAL ORIENTATION,
GOVERNMENT SUPPORT AND SOCIAL MEDIA ADOPTION ON
THE PERFORMANCE OF SMES:
A VOLATILE ENVIRONMENT PERSPECTIVE**

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Abstract:

Small and Medium Enterprises (SMEs) have a notable impact on global economies, including Malaysia, by contributing substantially to the nation's exports, income growth, and job creation. Their strategic role is particularly crucial for improving economic conditions, especially in rural economies like Perlis. However, the emergence of outbreaks and environmental turbulence created uncertainty in the market and disrupted economies on a global scale. Even in Perlis, Malaysia's smallest and northernmost state, SMEs have faced difficulties during these volatile times. These enterprises have encountered various difficulties in maintaining their business survival. As a response to these challenges, this study is set forth to investigate the key factors that can help SMEs to sustain firm performance during challenging business environments. It investigates three entrepreneurial orientation (EO) dimensions - proactiveness, innovativeness, and risk-taking - along with government support, and social media adoption as the independent variables, with SMEs' business performance as the dependent variable. The data was gathered through questionnaires, involving the total participation of 129 SMEs in Perlis. The findings revealed that risk-taking, government support, and social media adoption are significant predictors of SMEs' business performance, while SMEs' proactiveness and innovativeness showed no significant effect on the performance of SMEs in Perlis. These findings hold important implications for SMEs, highlighting the need to embrace calculated risks, foster good relationships with government agencies, and leverage social media to enhance their market position, especially in volatile conditions. Policymakers could use these inputs to develop strategies, policies and support

mechanisms tailored to SMEs facing uncertain market and economic challenges.

Keywords:

SMEs, Volatile Environment, Entrepreneurial Orientation, Government Support, Social Media Adoption, Business Performance

Introduction

It is a widely known fact that small and medium enterprises (SMEs) contribute significantly to countries' economies worldwide. In the context of Malaysia, the contributions of the SME sector can be tracked through their huge contribution to the country's economy (Yiau, 2025). As for Perlis, Malaysia's smallest and northernmost state, the state government acknowledges the significant role of SMEs in enhancing the state's economic condition. At the launch ceremony of the Perlis Human Capital Program by the Northern Corridor Implementation Authority (NCIA) on 28 November 2019, the former Chief Minister of Perlis emphasized in his officiating speech that "*SMEs function as the backbone for local economic development, especially for rural states like Perlis*" (NCER, 2019). On a regional development planning level, Perlis' position within the broader Northern Corridor Economic Region (NCER) highlights the strategic expectation that SMEs represent an essential component of economic transformation in Perlis and other Northern states. These facts imply that SMEs in Perlis are expected to serve as a central engine of local economic growth by generating employment, stimulating rural development, and strengthening grassroots economic activities. In October 2025, His Royal Highness Tuanku Syed Faizuddin Putra highlighted the crucial role of Perlis entrepreneurs in representing the state, urging them to maintain integrity, expand their knowledge, and leverage government resources (The Sun, 2025). He called for increased support from agencies to strengthen the local economy through strategic initiatives. This underscores the importance of SMEs in Perlis as key drivers of economic growth, product promotion, and market expansion, contributing significantly to the state's development and reputation. At the same time, they signal that SMEs will remain a primary focus of state and regional development policies, with greater institutional support, capacity-building initiatives, and resource allocations to enhance their competitiveness and long-term sustainability.

Yet, the extent to which SMEs can fulfil those expectations depends heavily on their ability to operate and survive in a challenging and vulnerable market environment. This vulnerability became especially evident during the pandemic crisis, when many SMEs across Malaysia struggled to sustain their operations amid unprecedented uncertainty and disruption. In 2020 alone, at least 150,000 SMEs were forced to cease operations nationwide (Chew, 2021), underscoring the difficulties small businesses faced in navigating the volatile market conditions brought about by the pandemic. In Perlis, similar pressures were observed. Local SMEs appealed for reduced and waived rental fees for outlets owned by state agencies (Rosli, 2020), indicating the financial strain they experienced in managing operational costs and maintaining business continuity. These realities lead to two questions: to what extent are SMEs in Perlis adopting entrepreneurial orientation (EO) to remain resilient, and are the state and federal governments providing the necessary support to help them survive and grow amidst an increasingly unpredictable business climate?

From another perspective, a study on women-owned SMEs in Perlis revealed additional challenges. Women entrepreneurs reported that their limited understanding of social media adoption hindered their ability to market their products effectively, particularly during the uncertain business conditions of the pandemic (Nazri & Halim, 2021). This indicates that beyond financial and operational pressures, many SMEs in Perlis face capability and digital gaps that restrict their ability to leverage technological advancements, innovate, and respond proactively to external shocks. In line with this, the President of the Malaysia SME Association openly admitted that many smaller SMEs, especially in rural areas or traditional sectors, struggle to adopt digital solutions (Mahalingam, 2025). High implementation costs and limited digital skills among SME owners and staff hinder their effective use of modern technologies. Considering these technological challenges, it is important to examine the impact of social media adoption on the business performance of SMEs in Perlis. Based on various issues and challenges, the main objective of this study is therefore to investigate the effects of entrepreneurial orientation (EO), government support policies, and social media adoption on the performance of SMEs in Perlis within the context of a constantly volatile and uncertain business environment.

Literature Review and Hypothesis Development

Dynamic Capability

Teece et al. (1997) highlight that the dynamic capabilities theory concerns “a firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments”. This theory emphasizes a firm’s constant reconfiguration of organizational processes and strategic positions in response to dynamic market conditions. Additionally, Teece (2023) asserts that dynamic capabilities determine the firm’s future direction, securing the resources it will require, and establishing the organisational structure that best supports the business. Dynamic capabilities become even more crucial in periods of turbulence and volatility, such as during the COVID-19 pandemic, as they enable firms to continue creating value and adapting their strategies within this difficult period (Dejardin et al., 2023; Freixanet & Renart, 2020).

In particular, Teece (2023) explains that dynamic capabilities comprise established organisational routines and proactive entrepreneurial management. Monteiro et al. (2019) argue that EO can be treated as a firm’s dynamic capability, which can boost performance by leveraging its resources, especially in the context of volatile markets. In fact, SMEs’ dynamic capability to seize government support has been proven to influence their performance and growth (Das & Ranganathan, 2020). SMEs will also deliberately utilize their sensing, transforming, and seizing capabilities to survive in times of volatility by adopting digital-based applications in their marketing strategies (Rashid & Ratten, 2020). The integration of digitalization through digital marketing and the utilization of social media also serves as a transformative capability that can enhance the performance of SMEs (Martins, 2022). Given the demonstrated impact of DCs on company performance, it is important to study the effects of DCs on SMEs within the context of the COVID-19 pandemic.

EO and SME Performance

EO has gained attention in entrepreneurial research, and it has been widely investigated by researchers around the globe (Ferreira et al., 2019). This entrepreneurial posture is vital for SMEs, especially in emerging countries, such as Malaysia, to overcome their resource constraints (Falahat et al., 2018). Furthermore, SMEs in volatile market environments depend

on such an entrepreneurial posture to maintain competitiveness and ensure business continuity (Khattak & Ullah, 2021). While previous studies have often treated EO as a unidimensional construct (Wales et al., 2020), recent research such as that by Bodlaj & Carter (2022) has delved into the multidimensional aspect of EO and how each individual dimension affects SME performance. Huang et al. (2022) found that different combinations of entrepreneurial dimensions, such as proactiveness, innovativeness, and risk-taking, would either lead to or hinder firm performance. As such, this study will assess each dimension of EO separately, focusing on the three primary dimensions as anchored by Miller (1983).

Proactiveness and SME Performance

According to Miller (1983), being proactive involves exploiting opportunities that lead businesses to become market pioneers and early adopters of the latest technologies within their industry. It is the ability to anticipate and respond to future demands rather than reacting to events as they unfold. Proactive SMEs typically adopt an opportunity-seeking approach to managing their business operations (Huang et al., 2022). SMEs with these mindsets tend to operate ahead of any shifts in market demands or changes.

Malaysian SMEs' proactiveness has been found to positively affect their business performance, and it is seen to reflect the firm's maturity (Alam et al., 2022). Furthermore, proactive SMEs tend to develop capabilities to thrive in new environments and volatile market conditions (Kraus et al., 2012; Zighan et al., 2022). In Malaysia, SMEs need to be proactive to survive during the pandemic and outperform rivals (Koe et al., 2022). Based on this, the following hypothesis is postulated:

H_1 : Proactiveness is expected to influence the performance of SMEs in Perlis in the context of a volatile environment.

Innovativeness and SME Performance

Miller (1983) defined innovativeness as a "series of experimentation, creative endeavours and explorations of new strategies, new product or service offerings, new technologies and new operational methods in doing business". Innovative traits relate to SMEs being experimental and coming up with unique and creative ways in their routine business processes compared to others in the industry. Kraus et al. (2012) mentioned that innovative SMEs perform better than their peers in volatile economic conditions. Firms invested in innovative efforts are more persistent in dynamic and uncertain market conditions as they are always trying new strategies and methods, and offering novel solutions to the market. Several studies have proven that innovativeness positively influences SME business performance in dynamic and volatile conditions (Kraus et al., 2012; Mok & Lo, 2020). Therefore, the following hypothesis is proposed:

H_2 : Innovativeness is expected to influence the performance of SMEs in Perlis in the context of a volatile environment.

Risk-Taking and SME Performance

The saying high risk gives high return exemplifies this aspect of EO. Risk-taking in business occurs when businesses opt for bold decisions that challenge the status quo to achieve competitive advantage. However, risk-taking does not entail SMEs making bold business decisions without proper planning and careful deliberation. Miller (1983) defined risk-taking as "a firm's willingness to employ its resources to explore ideas or ways with the sound

awareness that these explorations are uncertain and provide a tendency for failure". For SMEs, embracing risk involves the courage to pursue daring and unconventional strategies despite significant concerns and limitations stemming from their size and vulnerability.

Al-Maliki et al. (2021) discovered that SMEs are harnessing risk-taking traits within their organization during the pandemic, due to the increased risks in uncertain markets. Risk-taking has been confirmed to help SMEs survive the pandemic by reshaping their agility (Zighan et al., 2022). This highlights the importance of SMEs exploiting their risk-taking qualities to bolster their resilience in unpredictable business environments. Previous studies provide evidence that risk-taking affects SME performance (McCarthy et al., 2018). Thus, the following hypothesis is suggested:

H₃: Risk-taking is expected to influence the performance of SMEs in Perlis in the context of a volatile environment.

Government Support and SME Performance

Government support to SMEs refers to the various forms of assistance provided to elevate SME performance in the industry. It can come in the form of financial or non-financial assistance. Government support has been proven to enhance their performance (Child et al., 2022). In challenging market conditions, SMEs depend on government support for their survival. However, in the case of Malaysia, the effect of the stimulus package introduced by the Malaysian government was not apparent in 2020 (Omar et al., 2020) as most SMEs still rely on their internal strategic resources to stay afloat during this uncertain condition.

Government support, be it financial or non-financial, should be formulated to ensure SMEs' sustainability in times of economic downturn. Omar et al. (2020) argued that Malaysian SMEs recognize the importance of both government financial and non-financial support for their growth and success during the pandemic. Based on these discussions, the following hypothesis is postulated:

H₄: There is a significant relationship between government support and Perlis SME performance in the context of a volatile environment.

Social Media Adoption and SME Performance

Social media is a form of technology that allows users to interact with each other in virtual networks and communities (Dollarhide, 2021). The adoption of social media has been shown to have an impact on performance in terms of cost reduction, improved customer relations, enhanced information accessibility (Parveen et al., 2016) and increased SME performance in areas such as customer relationship management, customer loyalty, firm visibility, and expanded customer base (Qalati et al., 2021). Borah et al. (2022) also discuss how businesses are using social media for the benefits of company branding, product and service advertising, market research, generating referrals, and building customer relations. The authors also state that these benefits would further enhance the firm's competitive position in the market.

Due to the pandemic, more businesses are compelled to incorporate social media into their business. Lockdowns and movement restrictions during the pandemic caused a shift in consumer buying behaviour, and more are using the Internet and social media to shop and get their supplies (Donthu and Gustafsson, 2020). Recent studies have investigated how the digitalization of SMEs' marketing function, particularly through social media marketing, has

contributed to SMEs' sustainability and performance in the pandemic volatility (Borah et al., 2022). Thus, the following hypothesis is proposed:

H₅: There is a significant relationship between social media adoption and Perlis SME performance in the context of a volatile environment.

The research model, as illustrated in Figure 1, was developed based on the literature review. It is hypothesized that each variable has an influence on SME business performance.

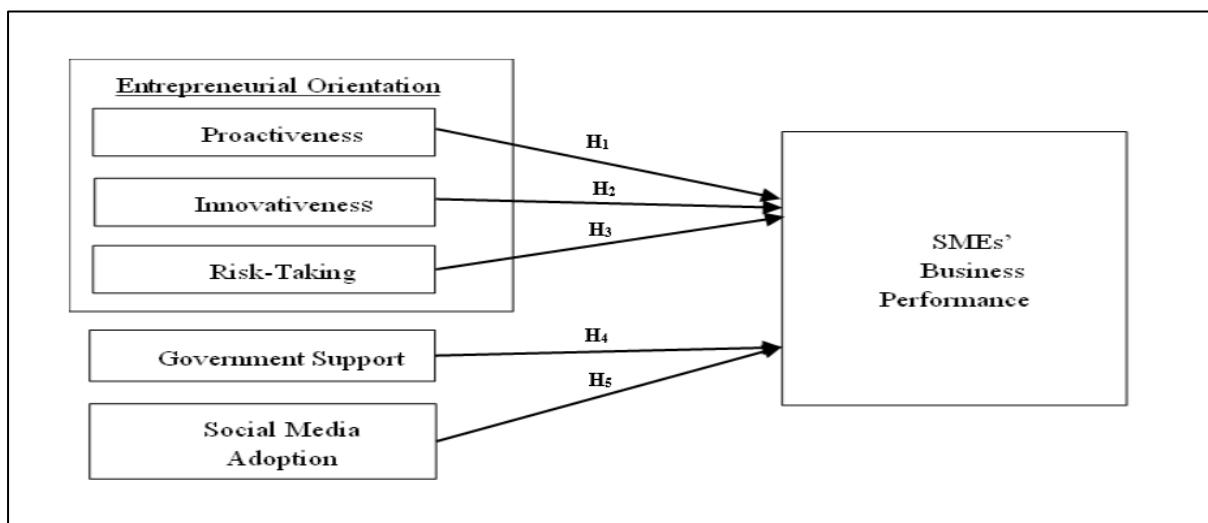


Figure 1: Research Model

Methodology

Generally, 350 questionnaires were distributed to the SMEs officially registered with the Perlis State Economic Planning in 2022. A total of 153 questionnaires were received from the SMEs, but after discarding incomplete questionnaires and SMEs not using social media in their business operations, only 129 remain suitable for data analysis. As for the survey items, all were assessed on a five-point Likert scale. The items used to measure proactiveness, innovativeness, and risk-taking were adopted from Niemand et al. (2021). As for government support, the survey questions were sourced from Rahman et al. (2019), while the items for assessing social media adoption were drawn from Qalati et al. (2021). Finally, the items to measure SMEs' business performance were derived from the work of Kropp et al. (2006).

Findings

A reliability assessment was performed by observing Cronbach's alpha value, with a threshold set at 0.7. As displayed in Table 1, all the values for each construct consistently surpass the threshold value. A descriptive analysis was carried out on the SMEs' profiles and social media usage. Based on the results, the majority of the SMEs fall into the category of small-sized enterprises. When it comes to the social media platform mostly used by these SMEs, Facebook emerged as the top choice, followed by WhatsApp, TikTok, and Instagram.

Table 1: Summary of Reliability Analysis

Variables	No. of Items	Cronbach's α
Proactiveness	5	0.783
Innovativeness	5	0.728
Risk Taking	4	0.817
Government Support Policy	7	0.879
Social Media Adoption	4	0.831
Business Performance	6	0.918

A multiple regression analysis was conducted to evaluate the associations between SME business performance and a set of independent variables: proactiveness, innovativeness, risk-taking, government support policy, and social media adoption. As presented in Table 2, the R^2 value is 0.376, signifying that the independent variables collectively account for 37.6% of the variance in the business performance of SMEs in Perlis. It also provides valuable insights into the factors that affect Perlis SMEs' business performance. Notably, proactiveness ($\beta=-0.161$, $p>0.05$) and innovativeness ($\beta=0.126$, $p>0.05$) do not demonstrate statistically significant effects on SME business performance within this particular context. In contrast, the remaining independent variables, risk-taking ($\beta=0.22$, $p<0.05$), government support ($\beta=0.318$, $p<0.001$), and social media adoption ($\beta=0.308$, $p<0.001$), exhibit significant influence on shaping SME business performance. It can also be observed that government support ($\beta=0.318$) appears as the most influential factor contributing to the business performance of SMEs.

Table 2. Regression Analysis

	Standardize coefficients Beta	t	Sig.
(Constant)		-.370	.712
Proactiveness	-.161	-1.516	.132
Innovativeness	.126	1.323	.188
Risk Taking	.222	2.132	.035
Government support	.318	4.181	.000
Social media adoption	.308	3.725	.000
$R^2=0.376$			

Dependent variable: SME business performance

Discussion

The central aim of this study is to identify and analyse the key factors that can enhance the business performance of SMEs in Perlis. The findings indicate that proactiveness does not significantly predict SME business performance in this context. This suggests that structural and operational constraints may limit firms' capacity to pursue proactive strategies, such as developing new products or service offerings. This result is consistent with the findings of Kavana and Puspitowati (2022), who similarly reported an insignificant relationship between proactiveness and SME performance. Moreover, the relatively less competitive business environment in Perlis, compared with more industrialised states such as Penang or Kuala Lumpur, may reduce the pressure on SMEs to behave proactively.

Contrary to initial expectations, the findings do not support a significant relationship between innovativeness and the business performance of SMEs in Perlis. This result is consistent with Koe et al. (2022), who found that innovativeness does not significantly enhance SME performance, and with Canh et al. (2019), who argue that innovation often yields limited

performance gains due to its high costs and lengthy development cycles. Innovation typically requires advanced capabilities, sustained investment, and considerable time and effort, which may be difficult for SMEs to mobilise, particularly in uncertain market environments. In addition, Perlis's remote geographic location, distant from major technological and industrial hubs, restricts SMEs' access to advanced infrastructure, knowledge networks, and emerging technologies. These contextual constraints may hinder the effective adoption and commercialisation of innovation, thereby reducing the expected link between innovativeness and business performance.

Regarding risk-taking, evidence indicates that it significantly affects the business performance of SMEs in Perlis. Research by Cannavale and Nadali (2019) shows that firms adopting risk-oriented strategies are more likely to achieve superior outcomes. Risk-taking promotes growth by fostering innovative ideas and facilitating bold investments (Alam et al., 2022). It reflects the SME's readiness to allocate resources and cope with uncertainty. In a context where business opportunities are limited, SMEs must take calculated risks to establish and sustain operations. The disruptions during the pandemic further emphasized the need for decisive actions to ensure continuity.

In terms of government support, it represents the most influential factor shaping SME performance in Perlis. According to Shamsuddin et al. (2017), government initiatives can play a substantial role in enhancing firm outcomes. Given their vulnerability, SMEs regard external assistance as a vital catalyst, thus prioritizing strong ties with government agencies to access timely information and resources. Such engagement supports firms in responding effectively to market fluctuations.

Finally, from the perspective of social media adoption, the findings reveal an influential connection between this element and the business performance of SMEs in Perlis. Previous research by Alalawneh et al. (2022) confirms that social media use is positively linked to SME business performance. By exploiting social media platforms, SMEs can effectively expand their customer base beyond Perlis at minimal costs. Such digital engagement reinforces their strategic efforts to sustain performance in unpredictable and dynamic market conditions.

Implications and Conclusion

This study contributes to the extant academic literature by examining the synergistic effects of EO, government support, and social media adoption on the performance of SMEs. It contributes to a deeper understanding of the connections among key factors that affect the performance of SMEs within the specific context of a rural economy, such as Perlis, particularly in volatile and risky business environments. The findings of this study also provide substantial practical value to SMEs in Perlis. Since government support was found to be the most significant predictor of business performance, SMEs must recognize the importance of developing strong connections with government agencies. This enables them to remain well-informed about any government support initiatives available to SMEs. They should participate actively in business events or SME-tailored programs hosted by government agencies to foster strategic networking, not only with government agencies but also with industry peers.

Additionally, it is highly suggested that SMEs should take advantage of social media platforms to improve performance, as the findings of this study have shown that engaging with customers through this channel can improve sales and business growth. Moreover, SMEs in Perlis must often embrace a bold disposition during volatile times as they must adapt to the increasing level

of risks in such an environment to preserve their overall business performance. As for policymakers and government agencies, the focus should be on implementing initiatives that strengthen SME resilience and long-term sustainability in volatile business environments. This includes fostering a supportive business ecosystem that allows SMEs to operate and grow despite uncertainty. In Perlis, the state government can further support SMEs by reducing regulatory complexity, which is often time-consuming and costly. Adopting a more streamlined, transparent and efficient regulatory framework would ease compliance pressures and enhance SME performance.

This study has laid various avenues for several potential directions in future studies. Specifically, upcoming investigations could replicate the framework employed in this study to encompass a broader spectrum of various states in Malaysia or even extend the scope to cover the entire nation. Given SMEs' diverse landscapes and characteristics in different states, these variations may yield more valuable findings. Furthermore, future studies could explore how other Industry 4.0 technologies could contribute to enhancing SME business performance, with a particular focus on aspects such as competitiveness, marketing strategies, and customer engagement. Additionally, there may be other situational or external factors of SME business performance that should be further investigated in future studies.

In conclusion, this study has achieved its research objectives by identifying key factors that enable SMEs in Perlis to navigate through challenging and demanding market conditions, as well as analyzing the relationships between EO dimensions, government support, social media adoption and SME business performance. Generally, it has empirically validated the critical importance of SMEs' willingness to take risks, leverage social media platforms, and utilize government support in achieving better performance amid a volatile business environment. This study provides a timely reflection on the challenges faced by SMEs operating in a rural and resource-constrained economy. By focusing on Perlis, the findings generate context-specific insights that differ from those of more industrially advanced regions in Malaysia, thereby enriching the broader discourse on SME resilience in an unpredictable business landscape.

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