

Operational Challenges, Market Environment, and Business Opportunities toward Business Sustainability among SME Entrepreneurs in Malaysia's Custom Clothing Digital Printing Sector

Ahmad Ziyad Bin Shamsol Bahari¹, Nurul Zarirah Nizam²

Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka,
Centre of Technopreneurship Development, 75450 Ayer Keroh, Melaka, Malaysia

DOI: <https://doi.org/10.47772/IJRISS.2026.100500738>

Received: 20 May 2026; Accepted: 26 May 2026; Published: 12 June 2026

ABSTRACT

This conceptual paper examines the factors influencing business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector. The study focuses on three main factors: operational challenges, market and industry environment factors, and business opportunities. Although the digital printing sector offers growth potential through product customisation, digital marketing, and online platforms, SMEs continue to face financial constraints, skilled labour shortages, production issues, and intense market competition. Guided by the Resource-Based View, Dynamic Capabilities Theory, and Contingency Theory, this paper proposes a conceptual framework to explain how internal challenges, external market conditions, and business opportunities influence SME business sustainability. The study contributes to the literature by focusing on an underexplored SME segment in Malaysia's digital printing industry and provides a foundation for future empirical research.

Keywords: SME entrepreneurs, digital printing, custom clothing, operational challenges, business sustainability.

INTRODUCTION

Small and medium enterprises (SMEs) play an important role in supporting Malaysia's economic growth, employment creation, and industrial development. In Malaysia, SMEs represent the majority of business establishments and contribute significantly to national productivity and entrepreneurship development [1]. Among the various SME sectors, the digital printing industry has become increasingly relevant due to the expansion of digital technology, online business platforms, and growing consumer demand for customised products. In particular, the custom clothing digital printing sector has gained attention as consumers increasingly seek personalised apparel such as T-shirts, jerseys, uniforms, hoodies, and promotional clothing.

Digital printing technology provides several advantages to SME entrepreneurs, including faster production, lower setup costs, flexible design processes, and suitability for small-batch production [2]. These advantages allow SMEs to serve niche markets and respond quickly to changing customer needs. In addition, the growth of social media, e-commerce platforms, and digital marketing has created new opportunities for SMEs to promote their products, reach wider customers, and improve business visibility [3], [4]. As a result, many custom clothing printing businesses in Malaysia use online platforms such as Shopee, TikTok Shop, Instagram, and Facebook to support sales and customer engagement.

Despite these opportunities, SME entrepreneurs in the custom clothing digital printing sector continue to face several challenges that may affect their long-term sustainability. Operational challenges such as limited financial resources, shortage of skilled labour, production inefficiencies, and limited access to advanced printing technology can reduce business performance and competitiveness [5]. At the same time, external market and industry environment factors such as intense competition, changing customer preferences, technological changes,

and economic uncertainty create additional pressure for SMEs [6]. These challenges require SME entrepreneurs to strengthen their internal capabilities and adapt effectively to the changing business environment.

Business sustainability is important for SMEs because it reflects their ability to maintain stable performance, survive in competitive markets, and achieve long-term growth. In the digital printing sector, sustainability does not only depend on financial performance, but also on the ability of SMEs to manage operations efficiently, retain customers, adopt technology, and respond to market opportunities. Previous studies have discussed SME sustainability, digital transformation, and business performance in general; however, limited studies have focused specifically on SME entrepreneurs in Malaysia's custom clothing digital printing sector. This creates a research gap because this sector has unique operational characteristics, customer demands, and technology requirements.

Therefore, this conceptual paper aims to examine the relationship between operational challenges, market and industry environment factors, business opportunities, and business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector. This study is guided by the Resource-Based View, Dynamic Capabilities Theory, and Contingency Theory. These theories explain how internal resources, adaptive capability, and external environmental alignment may influence SME sustainability [7], [8]. The proposed framework is expected to contribute to the literature by providing a clearer understanding of the factors affecting business sustainability in Malaysia's custom clothing digital printing sector.

PROBLEM STATEMENT

Although SMEs are important contributors to Malaysia's economy, many continue to face difficulties in sustaining long-term business performance due to financial limitations, resource constraints, and rapid technological changes [1], [2]. In the custom clothing digital printing sector, SME entrepreneurs are required to manage customer demand for personalised apparel, invest in suitable printing technologies, and compete in a market that is increasingly influenced by digital platforms and changing consumer preferences [3], [4]. These conditions create pressure for SMEs to remain competitive while maintaining stable business operations.

One major issue faced by SMEs in this sector is operational challenges. Limited financial resources, shortage of skilled workers, production inefficiencies, and limited access to advanced technology may affect production quality, delivery time, customer satisfaction, and overall business performance [5], [6]. Since digital printing businesses depend on equipment, design capability, materials, and skilled labour, weak operational capacity can reduce SMEs' ability to sustain their business in a competitive market.

Besides internal challenges, SME entrepreneurs are also affected by market and industry environment factors. The digital printing sector has relatively low entry barriers, which increases competition and price pressure among businesses. At the same time, customer preferences are changing rapidly as consumers increasingly demand customised, high-quality, and fast-delivery products [4], [7]. SMEs that fail to adapt to these market changes may lose competitiveness and struggle to achieve long-term sustainability.

Although business opportunities exist through product customisation, digital marketing, e-commerce platforms, and social media, not all SMEs are able to utilise these opportunities effectively. Some entrepreneurs may lack digital skills, innovation capability, and strategic planning to fully benefit from online platforms and new printing technologies [2], [8]. Therefore, there is a need to examine how operational challenges, market and industry environment factors, and business opportunities influence business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

This study is important because previous research has mainly discussed SME sustainability, digital transformation, and business performance in broader contexts. Limited attention has been given specifically to Malaysia's custom clothing digital printing sector, even though your proposal identifies this sector as a growing SME segment involving T-shirt printing, jersey printing, uniform printing, and customised apparel.

RESEARCH OBJECTIVES

The main objective of this conceptual paper is to examine the factors influencing business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector. Specifically, this paper focuses on three

main factors: operational challenges, market and industry environment factors, and business opportunities. The research objectives are:

RO1: To determine the influence of operational challenges on business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

RO2: To examine the influence of market and industry environment factors on business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

RO3: To analyse the role of business opportunities in enhancing business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

These objectives are aligned with the original research proposal, which focuses on SME entrepreneurs involved in custom clothing digital printing activities such as T-shirt printing, jersey printing, uniform printing, and personalised apparel production.

SIGNIFICANCE OF RESEARCH

This study is significant because it provides a clearer understanding of the factors influencing business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector. Although SMEs are recognised as important contributors to Malaysia's economic growth, many still face challenges in sustaining their business due to limited resources, operational weaknesses, and changing market conditions [1]. Therefore, this study contributes to the literature by focusing on a specific SME segment that has received limited academic attention.

From a theoretical perspective, this study supports the application of the Resource-Based View, Dynamic Capabilities Theory, and Contingency Theory in explaining SME sustainability. These theories help explain how internal capabilities, business adaptability, and external market alignment influence long-term business performance [7], [9]. By integrating operational challenges, market and industry environment factors, and business opportunities in one conceptual framework, this study provides a more comprehensive view of SME sustainability.

From a practical perspective, the findings may help SME entrepreneurs understand the key challenges that affect their business operations, including financial constraints, shortage of skilled workers, production inefficiencies, and technology limitations [5], [6]. This understanding can assist entrepreneurs in improving their operations, strengthening competitiveness, and making better strategic decisions.

This study is also useful for policymakers, SME support agencies, and industry stakeholders. The findings may support the development of better training programmes, financial assistance, technology adoption support, and digital marketing initiatives for SMEs in the custom clothing digital printing sector [1], [8]. Overall, this research can contribute to strengthening the sustainability and competitiveness of SMEs in Malaysia's digital printing industry.

Theoretical Overview

This study is supported by the Resource-Based View (RBV), which explains that internal resources and capabilities are important for achieving business sustainability. In this study, operational challenges such as financial constraints, shortage of skilled workers, production inefficiencies, and limited technology access may weaken SME competitiveness and long-term performance [7].

The study also applies Dynamic Capabilities Theory, which highlights the ability of SMEs to adapt, innovate, and respond to changing business conditions. This theory is relevant because SME entrepreneurs in the custom clothing digital printing sector need to use opportunities such as product customisation, digital marketing, online platforms, and new printing technologies to remain competitive [9].

In addition, Contingency Theory explains that business sustainability depends on how well SMEs align their strategies with external market and industry conditions. Factors such as competition, changing customer preferences, technological changes, and market uncertainty require SMEs to adjust their operations and strategies in order to survive and grow [10].

LITERATURE REVIEW

A. Business Sustainability among SMEs

Business sustainability refers to the ability of SMEs to maintain stable performance, survive in competitive markets, and achieve long-term growth. SMEs need strong financial control, efficient operations, customer retention, and the ability to adapt to changes in the business environment. Previous studies highlight that SME sustainability is influenced by internal capability, digital transformation, innovation, and external market pressure [1], [2].

B. Operational Challenges

Operational challenges are internal problems that may reduce SME performance and sustainability. In the custom clothing digital printing sector, these challenges include limited financial resources, lack of skilled workers, production inefficiency, rising material costs, and limited access to advanced printing technology. These issues may affect product quality, delivery time, customer satisfaction, and business growth [5], [6].

C. Market and Industry Environment Factors

The Market and industry environment factors refer to external conditions that influence SME operations. These include intense competition, changing customer preferences, technological changes, and uncertain market demand. In the digital printing sector, SMEs must compete through price, quality, creativity, fast delivery, and customer service. Businesses that fail to adapt to these external pressures may face difficulties in sustaining their performance [4], [7].

D. Business Opportunities

Business opportunities can help SMEs improve competitiveness and long-term sustainability. In the custom clothing digital printing sector, opportunities exist through product customisation, digital marketing, e-commerce platforms, social media promotion, and new printing technologies. These opportunities allow SMEs to reach wider customers, improve brand visibility, and respond better to personalised consumer demand [3], [8].

E. Research Gap

Although previous studies have discussed SME sustainability, digital transformation, and business performance, limited research focuses specifically on SME entrepreneurs in Malaysia's custom clothing digital printing sector. Existing studies also tend to examine operational challenges, market factors, and business opportunities separately. Therefore, this study proposes an integrated conceptual framework to examine how these three factors influence business sustainability among SME entrepreneurs in this sector. This is aligned with your proposal's research gap, which highlights the lack of specific studies on Malaysia's custom clothing digital printing SMEs.

CONCEPTUAL MODEL DEVELOPMENT

This paper proposes a conceptual framework to examine the relationship between operational challenges, market and industry environment factors, business opportunities, and business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector. In this framework, operational challenges, market and industry environment factors, and business opportunities are the independent variables, while business sustainability is the dependent variable.

Operational challenges are expected to negatively influence business sustainability because SMEs with financial constraints, limited skilled workers, production inefficiencies, and weak technology access may struggle to

maintain performance and competitiveness [5], [6]. Market and industry environment factors are expected to significantly influence sustainability because competition, changing customer demand, and technological changes affect how SMEs operate and survive in the market [4], [7]. Meanwhile, business opportunities are expected to positively influence business sustainability because product customisation, digital marketing, e-commerce, and new printing technologies can help SMEs improve market reach and business growth [3], [8].

Proposed Hypotheses:

H1: Operational challenges negatively influence business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

H2: Market and industry environment factors significantly influence business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

H3: Business opportunities positively influence business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

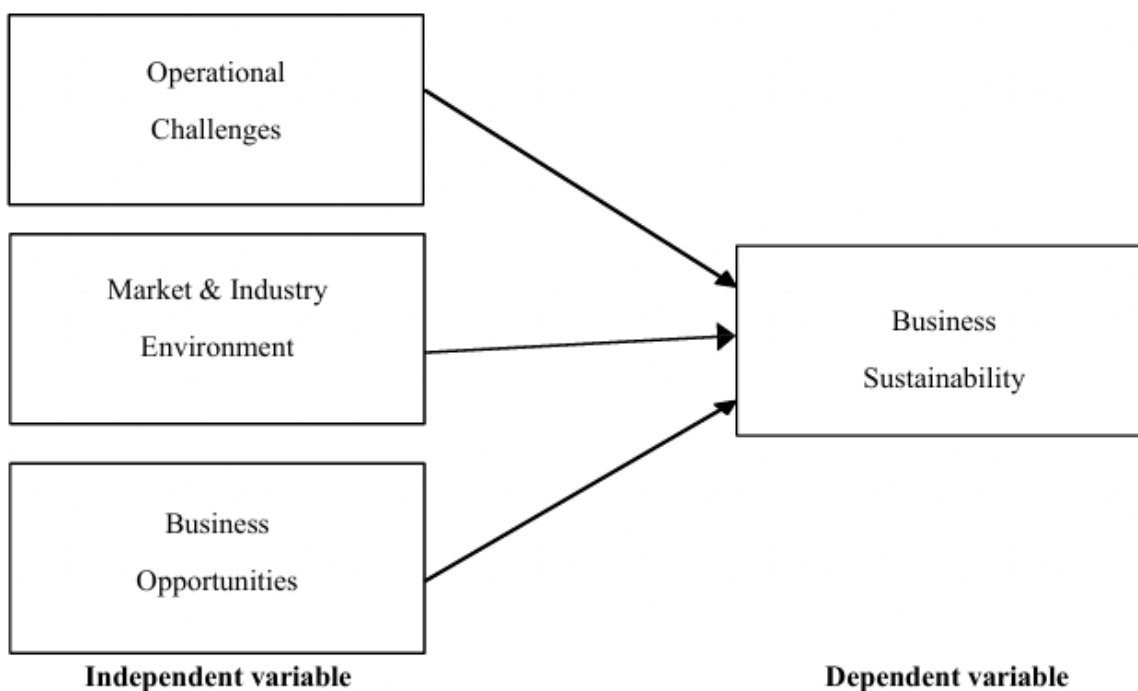


Fig. 3 Conceptual Framework;

TABLE I HYPOTHESES DEVELOPMENT

Code	Hypothesis
H1	Operational challenges negatively influence business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.
H2	Market and industry environment factors significantly influence business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.
H3	Business opportunities positively influence business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector.

CONCLUSION

This conceptual paper discusses the factors influencing business sustainability among SME entrepreneurs in Malaysia's custom clothing digital printing sector. The study focuses on three main factors: operational challenges, market and industry environment factors, and business opportunities. These factors are important because SMEs in this sector operate in a competitive and technology-driven environment where business survival depends on operational efficiency, market adaptability, and the ability to use available opportunities.

The proposed framework suggests that operational challenges may negatively affect business sustainability, while business opportunities may positively support SME growth and competitiveness. Market and industry environment factors are also expected to significantly influence sustainability because SMEs need to respond to competition, changing customer preferences, and technological development. Therefore, SME entrepreneurs must strengthen their internal capabilities while adapting to external market conditions.

Overall, this paper contributes to SME and digital printing literature by focusing on a specific and underexplored sector in Malaysia. The framework can be used as a foundation for future empirical research using quantitative methods, structured questionnaires, and SPSS analysis to test the relationship between the proposed variables. This is consistent with your proposal, which plans to collect data from 150 SME entrepreneurs and analyse it using SPSS.

ACKNOWLEDGMENT

The The author would like to express sincere appreciation to the Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, for the academic support and guidance throughout the development of this conceptual paper. Special appreciation is also extended to the supervisor for valuable comments, continuous encouragement, and constructive feedback in improving the quality of this research.

REFERENCES

1. SME Corporation Malaysia. (2023). *SME Annual Report 2022/2023*. SME Corporation Malaysia.
2. Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901.
3. Zhang, Y., Wang, X., & Liu, J. (2021). Digital textile printing technologies: A review. *Textile Research Journal*, 91(15–16), 1825–1840.
4. Kumar, V., Rajan, B., Gupta, S., & Pozza, I. D. (2022). Customer engagement in service. *Journal of Retailing*, 98(1), 1–15.
5. Abdullah, M. A., et al. (2023). SME performance in Malaysia: Key influencing factors. *Journal of Entrepreneurship in Emerging Economies*, 15(2), 300–320.
6. Nguyen, T. H. (2021). Digital transformation in SMEs: A resource-based perspective. *Technological Forecasting and Social Change*, 162, 120–130.
7. Razak, A. A., et al. (2022). SME competitiveness in Malaysia: Challenges and opportunities. *Asian Journal of Business Research*, 12(1), 45–60.
8. Chaffey, D. (2022). *Digital marketing: Strategy, implementation and practice*. Pearson.
9. Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
10. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of sustainable enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
11. Nambisan, S., Wright, M., & Feldman, M. (2022). The digital transformation of innovation and entrepreneurship. *Research Policy*, 48(8), 103773.
12. Dwivedi, Y. K., et al. (2022). Digital and social media marketing: A review and research agenda. *International Journal of Information Management*, 59, 102168.
13. Testa, F., Iraldo, F., & Daddi, T. (2021). The effectiveness of sustainability-oriented innovation in SMEs. *Business Strategy and the Environment*, 30(5), 2053–2067.
14. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate data analysis* (8th ed.). Cengage Learning.
15. Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.