



# The Effects of Digital Transformation and Flexibility Among Tourism Small and Medium Enterprises Business Resilience in Malaysia

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**Abstract.** In Malaysia, Small and Medium-sized Enterprises (SMEs) significantly contribute to the country's economy and employment sector. They make up a large majority of the business establishments. However, SMEs face various uncertainties, like disasters and crises, which can jeopardise their survival and operations. To address this, SMEs are working on becoming more resilient to effectively respond, predict, and adjust to unforeseen situations. Therefore, it is crucial to comprehend the factors that influence the ability of SMEs to withstand challenges in a highly unpredictable and competitive business environment. Thereby, the main aim of this study is to examine the effects of digital transformation and flexibility on tourism SMEs business resilience in Malaysia. A quantitative approach will be adopted to collect the primary data. A minimum sample of 68 SMEs will be selected. Questionnaires will be designed and distributed to SMEs' owners and managers. The data will be analysed using statistical software such as IBM SPSS V27 and Smart PLS V4 software. A partial least square structural equation modelling will be used to validate and test the proposed model and propositions. The findings of this study are expected to offer valuable insights to policymakers and SME managers on the effective strategies for improving business resilience through digital transformation and flexibility.

**Keywords:** Digital transformation, flexibility, business resilience, SMEs in Malaysia.

## 1 Introduction

Tourism SMEs play an important role in Malaysia's economic framework, contributing significantly to the nation's GDP and employment. According to the [1], the tourism industry contributes 14 percent of Malaysia's GDP. In 2022, Malaysia has recorded a total of 171.6 million number of visitors an increase of 160.1 per cent from the previous year [1]. Given that SMEs are the backbone of the tourism industry, their role in the regional development, job creation, and cultural preservation cannot be overstated [2]. As Malaysia continues to position itself as a premier tourist destina-

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tion, the resilience and success of its tourism SMEs will remain significant to its sustained growth and global appeal.

In recent years, Malaysia's tourism industry has experienced a significant shift in its business landscape. This evolution was primarily driven by the recent global events, such as the Covid-19 pandemic, changing customer preferences and the swift progression of digital innovations [3]. Due their vulnerability to such events as compared to larger organisations, tourism SMEs are faced with numerous challenges to adapt to and survive through disruptions. These challenges include financial vulnerability, lack of flexibility to adapt to changes in customer behaviour, lack of disaster preparedness strategies and lack of organisation capacities to adopt digital technologies [4].

The infusion of digital technologies and the need for organisation flexibility are becoming increasingly vital for SMEs within the Malaysian tourism industry [5]. This necessitates a comprehensive exploration into the relationships between digital transformation, flexibility, and business resilience among Malaysian tourism SMEs. While the significance of digital transformation and flexibility in enhancing business resilience is acknowledged in literature [6, 7], there is a noticeable research gap in understanding their specific impact within the context of Malaysian tourism SMEs. This paper aims to conduct an extensive review and analysis of the effects of digital transformation and flexibility on the business resilience of tourism SMEs in Malaysia. The primary objective is to gather valuable insights that can guide future research and develop practical strategies for strengthening the business resilience of tourism SMEs in Malaysia.

By synthesising existing knowledge and identifying research gaps, this paper aims to provide a conceptual framework and research agenda that can serve as a guideline for subsequent empirical investigations. The proposed research agenda intends to shed light on the critical aspects of digital transformation and flexibility that impact the business resilience of tourism SMEs, facilitating the development of tailored interventions and policy recommendations. Ultimately, this research aims to contribute to the sustainable growth and competitive advantage of the Malaysian tourism SMEs, thus fostering the overall resilience of the national tourism industry.

## 2 Theoretical Background

The Resource-Based View (RBV) theory in strategic management posits that a firm's sustained competitive advantage derives from valuable, rare, inimitable, and non-substitutable internal resources and capabilities [8, 9]. In this study, the RBV theory serves as the foundation by emphasising the significance of internal resources and capabilities, specifically in the context of digital transformation and flexibility, as determinants of business resilience in tourism SMEs. It highlights the need to identify and leverage unique and valuable resources, such as digital technologies and flexible operational processes, to gain a competitive advantage and enhance resilience. Dynamic capabilities, an extension of RBV, emphasise a firm's capacity to adapt and reconfigure these resources and capabilities in response to changing environments

[10, 11]. This extends the RBV perspective by acknowledging the dynamic nature of the tourism industry and the need for SMEs to adapt, seize opportunities, and continuously reconfigure their resources to effectively respond to unforeseen challenges. Dynamic capabilities comprise sensing and seizing opportunities, reconfiguring existing resources, fostering continuous learning and innovation, and providing strategic flexibility. Together, these concepts offer a comprehensive framework for understanding how tourism SMEs can achieve and sustain competitive advantage in a constantly evolving business landscape.

### **3 Literature Review**

#### **3.1 Digital Transformation**

Digital transformation encompasses the utilisation of digital technologies to reinvent and optimise various aspects of an organisation [12]. It involves a shift from traditional, analogue approaches to digitally driven processes. For SMEs in the tourism sector, there have been substantial changes in both operational and strategic management. This transformation stems from changes in the way tourists seek and process information, evaluate options and make decisions [5]. As highlighted by [13], the adoption of digital tools not only refines customer experiences but also streamlines operations, offering a dual advantage. While the benefits of digital transformation are evident, it can be particularly challenging for tourism SMEs, due to their constrained resources and their lack of organisational capacities which are necessary for effectively driving the adoption of digital technologies [14].

#### **3.2 Flexibility**

Organisational flexibility refers to an organisation's ability to adjust and react to changes in its environment promptly and effectively without significantly compromising its performance [15]. According to [16] diverse dimensions of flexibility, encompassing strategic, organisational, process, and product facets, can act as catalysts in improving the performance of SMEs. Given the volatility of the tourism sector, tourism SMEs in Malaysia face their own set of unique challenges, such as fluctuating travel patterns, seasonal demands, and evolving tourist preferences [17, 18]. Hence, their survival generally depends on their ability to demonstrate flexibility in adopting new strategies to navigate uncertainties and cater to customer needs efficiently [19]. Flexibility stands as a cornerstone for the vitality and resilience of SMEs, particularly in the dynamic landscape of the tourism sector.

#### **3.3 Business Resilience**

Business resilience refers to the ability of organisations to adapt, withstand, and recover from disruptions while maintaining their core functions and long-term viability [20]. It involves the capacity to withstand and respond effectively to various internal and external shocks, such as economic downturns, natural disasters, supply chain

disruptions, and changes in market conditions. Tourism SMEs are especially vulnerable to these disruptions due to their resource limitation, lack of human capital, inadequate risk management and disaster preparedness [21]. According to [22], the existing resilience frameworks within the tourism industry tend to be generic in nature, thereby inadequately addressing the specific and unique needs of tourism SMEs. In the journey towards recovery, it is vital for tourism SMEs to understand that simply overcoming existing challenges does not inherently ensure a favourable future outcome.

## 4 Hypothesis Development

The relationship between digital transformation and business resilience of SMEs was highlighted by [23], empirical investigation into digital business transformation, frugal innovation, and SME resilience in emerging markets. Their findings clearly demonstrate that digital transformation exerts a significant and positive impact on both frugal innovation and SME resilience in emerging markets. [6] also suggests that digital transformation enables organisations to swiftly respond to evolving circumstances, thereby improving their business resilience. Collectively, these studies provide evidence that digital transformation not only fosters innovation but also equips SMEs with the essential capabilities to adapt to disruptions and dynamic business landscapes. Hence, the following hypothesis is proposed:

**H1**-Digital transformation is positively related to the business resilience of tourism SMEs.

Adopting digital technologies does not mean that organisations should discard their existing resources and knowledge but rather redirect these resources to employ them more efficiently. Digital transformation enables organisations to seamlessly integrate digital technologies into their operations, optimize current practices, and maintain a competitive edge in an ever-evolving market. [12] argue that digital transformation prompts changes in organizational structures, which can enhance SMEs' flexibility to navigate market changes effectively. In this study, the relationship between digital transformation and flexibility in Malaysian tourism SMEs will be further investigated to understand how digital technologies can impact their flexibility. Therefore, the following hypothesis is proposed:

**H2**-Digital transformation is positively related to the flexibility of tourism SMEs.

In the study by [24], it suggests that SMEs with higher flexibility are better positioned to achieve business resilience in dynamic and challenging environments. This was supported by [25] in a study investigating flexibility, resilience, and coping capacity within organisations. It suggests that flexibility is not a passive quality but rather an active capability that fundamentally underpins overall organisational resilience. Applied to the context of this study, this suggests that tourism SMEs exhibiting flexibility are better equipped to endure disruptions and bolster their overall resilience. Drawing from the insights derived from the past studies, the following hypothesis is proposed:

**H3**-Flexibility is positively related to the business resilience of tourism SMEs.

## 5 Proposed Research Model

The conceptual framework of this study is based on flexibility and digital transformation as independent variables and business resilience as the dependent variable. Grounded in the Resource-Based View (RBV) theory, this framework posits that organizations can attain and sustain a competitive advantage by effectively leveraging their internal resources and dynamic capabilities, including but not limited to flexibility and digital transformation. This study's conceptual framework establishes the relationships between the three variables: flexibility, digital transformation, and business resilience. This proposition is grounded in the understanding that flexibility empowers organizations to navigate dynamically shifting environments effectively, while digital transformation equips them with the tools and strategies necessary to adapt and thrive in an increasingly digitized and turbulent landscape. As organizations become more adept at flexibly deploying digital technologies to respond to dynamic challenges and seize opportunities, they are poised to enhance their overall resilience in the face of disruptive events. This conceptual framework serves as a foundation for the empirical investigation, where the study will gather and analyse data to assess and validate these proposed relationships, thereby contributing to the broader understanding of the factors influencing business resilience in Malaysian tourism SMEs.

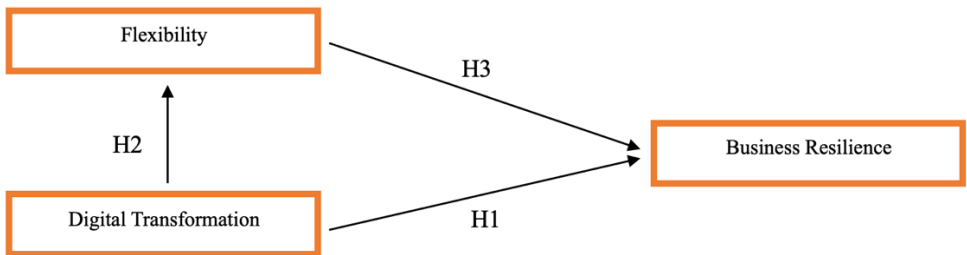


Fig. 1. Research Model

## 6 Methodology

### 6.1 Research Procedure and Samples

This study will employ a quantitative research approach to collect and analyse primary data. This method is chosen to collect structured, numerical data that can be analysed using statistical measures. This study adopts an explanatory research design to investigate the relationships between the variables: flexibility, digital transformation, and business resilience among tourism SMEs in Malaysia. The study will collect the data by distributing online survey questionnaires.

The population of this study is the tourism SMEs operating in Malaysia. These include all the micro, small and medium enterprises under the tourism sector, providing

a variety of tourism products and services. The sampling location will be the top five states in Malaysia with the highest number of domestic tourist arrivals according to the [1], Selangor (22 million tourists), Kuala Lumpur (16.9 million tourists), Sarawak (15.5 million tourists), Perak (14.6 million tourists), and Pahang (13.2 million tourists). A sample of 68 tourism SMEs are chosen. This sample size is estimated according to the data analysis method of this study which is PLS-SEM and the simplicity of the research model of this study [26]. The respondents for this study are owners or managers of tourism SMEs in Malaysia. For the data collection, a non-probability quota sampling technique will be employed. The quotas will be distributed according to the states with the highest domestic tourist arrivals in Malaysia. The questionnaires will be designed with close-ended questions, divided into four sections such as demographics, flexibility, digital transformation, and business resilience.

## **6.2 Research Instrument**

The research instrument employed for this study is online questionnaires, structured with close ended questions. The measurement scales are adapted from previous studies [27–29] and divided into two sections. Section 1 consists of questions regarding the socio-economic profile of the respondents and Section 2 consists of questions regarding effects of flexibility and digital transformation on business resilience. The questions are in three languages: English, Malay and Chinese, to ensure that there are no language barriers for the respondents to answer the questions.

## **6.3 Data Analysis**

The data analysis will be conducted using advanced statistical software such as IBM SPSS V27 and Smart PLS V4. Descriptive analysis will be conducted using the IBM SPSS software to study the trends, and patterns within the data. To validate and rigorously test the proposed research model and hypotheses, a Partial Least Square Structural Equation Modelling (PLS-SEM) approach will be employed. The PLS-SEM approach is employed to unravel intricate relationships among multiple variables, aligning seamlessly with the specific objectives and data characteristics of the research [26]. Furthermore, IBM SPSS software will be utilised to conduct the descriptive analyses and normality tests and to execute common method bias tests.

## **6.4 Expected Outcome**

This study aims to address the existing gap in the literature concerning the specific impact of digital transformation and flexibility on business resilience of tourism SMEs in Malaysia. By pinpointing these critical dimensions, this study intends to facilitate the development of tailored interventions and policy recommendations. These interventions and recommendations, grounded in empirical insights, can aid tourism SMEs in Malaysia in enhancing their resilience and adaptability to the evolving business landscape. Ultimately, the expected outcome of this research is to contribute significantly to the sustainable growth and competitive advantage of Malaysian tourism SMEs. This, in turn, can have broader implications for the overall resili-

ence and vitality of the national tourism industry. By equipping tourism SMEs with knowledge and strategies to thrive in dynamic and challenging environments, this research aims to play a vital role in fortifying the tourism sector's long-term sustainability and economic contribution.

## 7 Conclusion

In conclusion, this study aims to fill a critical gap in the existing literature by investigating the specific impact of digital transformation and flexibility on the business resilience of tourism SMEs in Malaysia. Given the significant contribution of SMEs to Malaysia's economy, particularly in the tourism sector, understanding the dynamics of resilience in the face of unpredictable challenges is of paramount importance. Leveraging the Resource-Based View (RBV) theory and the concept of dynamic capabilities, this research aims to shed light on how flexibility and digital transformation, as key determinants, influence the ability of tourism SMEs to adapt and thrive in a rapidly evolving business landscape. Through a quantitative research approach, a sample of 68 SMEs will be surveyed, and data will be analysed using statistical measures. The expected outcome of this study is to provide valuable insights for policymakers and SME managers, enabling them to formulate effective strategies for strengthening business resilience through digital transformation and flexibility. Ultimately, this research seeks to enhance the sustainability and competitive advantage of Malaysian tourism SMEs, contributing to the overall resilience of the national tourism industry.

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