DOI: 10.30519/ahtr.1537391

Advances in Hospitality and Tourism Research (AHTR)
An International Journal of Akdeniz University Tourism Faculty
ISSN: 2147-9100 (Print), 2148-7316 (Online)
Webpage: https://dergipark.org.tr/en/pub/ahtr

Article in press

NAVIGATING CHALLENGES: HOW FLEXIBILITY, DIGITAL TRANSFORMATION, AND VALUE CREATION DRIVE RESILIENCE IN TOURISM SMES

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ABSTRACT

This study examines the business resilience of small and medium-sized tourism enterprises (SMEs) in Malaysia through flexibility, digital transformation and value creation. The research model and proposed hypotheses were developed based on the resource-based view theory and the dynamic capabilities theory. The research employed quantitative methods to obtain data from 250 owners and managers of tourism SMEs. The data analysis was performed through structural equation modelling using the SmartPLS software version 4. The research outcomes demonstrate that tourism SMEs in Malaysia can benefit from business resilience through digital transformation and flexibility practices. Value creation functions as a mediator which explains the relationships between the variables. Tourism SMEs should follow recommendations to succeed in an unpredictable volatile market. These organisations need to develop business resilience effectively to handle crises and disruptions.

Article History
Received Sept. 11, 2024
Revised February 14, 2025
Accepted March 4, 2025
Published online June 4, 2025

Keywords
Business resilience,
Flexibility,
Digital transformation,
Value creation,
SMEs in Malaysia

INTRODUCTION

Tourism represents a vital sector in Malaysia which generates substantial economic value for the national economy. Tourism became the third largest economic contributor to the GDP in 2021 according to Hamid et al. (2021).

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Please cite this article as: Hninn, P. P., Choong, Y. O., & Seow, A. N. (in press). Advances in Hospitality and Tourism Research, https://doi.org/10.30519/ahtr.1537391

MOTAC (2022) reports that the industry achieved its highest performance in 2019 with 26.1 million tourist arrivals that produced RM86.1 billion in tourism revenue. Tourism represents a major sector of employment in Malaysia where 3.6 million people work as part of the 15.8% labor force (MOTAC, 2022). Small and medium enterprises (SMEs) in the tourism sector function as a vital component because they constitute more than one-third of the SMEs operating in the service sector (Department of Statistics Malaysia, 2022). Tourism activities in Malaysia include hotels together with restaurants and travel agencies and tour operators and souvenir shops (Arulthevan, 2020). The tourism industry in Malaysia experiences significant business failures among small and medium enterprises. The failure rate of SMEs in Malaysia reaches 3.5% during the first two years and 54% experience closure within four years (Zainol Abidin et al., 2021). Tourism SMEs operating in Malaysia encounter different disruptive events that affect their sustainability and growth potential within the globalized environment. Examples of such disruptions are the recent COVID-19 pandemic, economic downturns, variations of visitors, environmental problems, and consumer preferences changes etc. (Pham et al., 2021).

The above-mentioned challenges should be considered to understand the dynamic and customer-based tourism industry. In this regard, tourism SMEs with strong business resilience are better positioned to innovate, seize new opportunities and react promptly to the market demands (Kativhu et al., 2018). This also contributes to increasing the competitiveness of tourism SMEs, attracting more customers and differentiation of the products and services in a highly competitive market (Surugiu et al., 2022). This is especially crucial in aftermath of the recent global crisis that caused severe impacts on Malaysia's tourism industry.

While Kraus et al. (2021), Mejri et al. (2018), and Pham et al. (2021) have focused on factors of flexibility, digital transformation, and value creation respectively, there is a lack of combined and detailed discussions on the interaction of these factors for improving the business resilience of tourism SMEs. Tourism SMEs must be prepared for dealing with the disruptions that are likely to affect their operations and revert to providing solutions to the customer needs. Flexibility, in this case, refers to the ability to adapt to disruptions and crises by changing suppliers, altering the strategies or changing the production schedules to adapt to the changes in the demands while ensuring product quality (Seitz & Burosch, 2018).

Digital transformation is not merely about adopting new solutions by implementing innovative technologies. It requires a paradigm shift in the ways that various firms have been conducting business by adopting change and innovation (Kraus et al., 2021). In addition, given the current trend towards the development of high-tech and digital technology, it is crucial for SMEs to adapt to these changes in order to compete in the market and overcome the disruptions (Choong et al., 2022). It is revealed that SMEs with ICT skills can evaluate the opportunities and threats in the market external environment and exhibit enhanced business resilience (Choong et al., 2023). Thus, digital tools can ensure better customer experiences especially during challenging periods when it is difficult to retain customers (Abdullah et al., 2021). Nonetheless, SMEs face challenges such as poor adaptability towards fast-developing digital technologies, which restricts them in expanding their market reach and limits them from becoming more efficient (Lara et al., 2017).

Moreover, the existing literature lacks a detailed explanation of how value creation acts as a mediating factor. The concept of value creation is not solely aligned with the generating of profit or financial benefits. It involves the development of long-term employee-customer relationships, product differentiation and building long-term customer relations and company profitability (Freudenreich et al., 2020). In case of the tourism industry, companies which implement innovative practices are more sustainable and they are prepared for changes in the supply chain and demand fluctuations (Seow et al., 2021, 2024). This helps them to deliver greater value and build business resilience through customer retention, operational stability and conformity with sustainability objectives that are ideal in the long run (Teece, 2018).

Although researchers have conducted some similar studies (Mohamad et al., 2022; He et al., 2023; Saad et al., 2021), this research targets to investigate, in the context of the Malaysian tourism industry, flexibility and digital transformation, and value creation as influencers of business resilience. A common factor characterising the tourism industry is the fact that it is sensitive to various adverse events, especially for the SMEs in the sector. This requires individual SMEs to build and improve their overall business resilience. Therefore, this research seeks the following objectives: (1) to investigate the impact of flexibility, digital transformation and value creation on business resilience of the Malaysian tourism SMEs; (2) to examine whether value creation moderates the relationships between flexibility, digital transformation and business resilience in the Malaysian tourism SMEs.

LITERATURE REVIEW

Underpinning Theory and Proposed Conceptual Framework

Resource-Based View (RBV) theory is a strategic management model that highlights that competitive advantage is derived from the firm's internal resources and assets (Madhani, 2010). As Barney (1991) mentioned, firms can secure competitive advantage and higher performance if they possess and utilise resources which are valuable, rare, difficult to imitate, and difficult to substitute. RBV theory suggests that a firm's resources can be tangible (physical and financial resources and human resources) or intangible (intellectual, brand and customer loyalty) which should be valuable and hard to imitate or duplicate by competitors in the industry (Adnan et al., 2018).

In addition, the dynamic capabilities theory focuses on the organisation's capability to reconfigure its resources to adapt to shifting market conditions and gain competitive advantage (Teece, 2018). It also suggests that dynamic capabilities are critical in the firm's ability to adapt with market disturbances, which are comprised of technology, competition and market forces, in an effort to achieve long-lasting success and performance (Bleady et al., 2018). Relative to tourism SMEs, the dynamic capability theory serves as an important framework to understand and manage the change in the organisational processes, to reduce their vulnerability in a volatile industry.

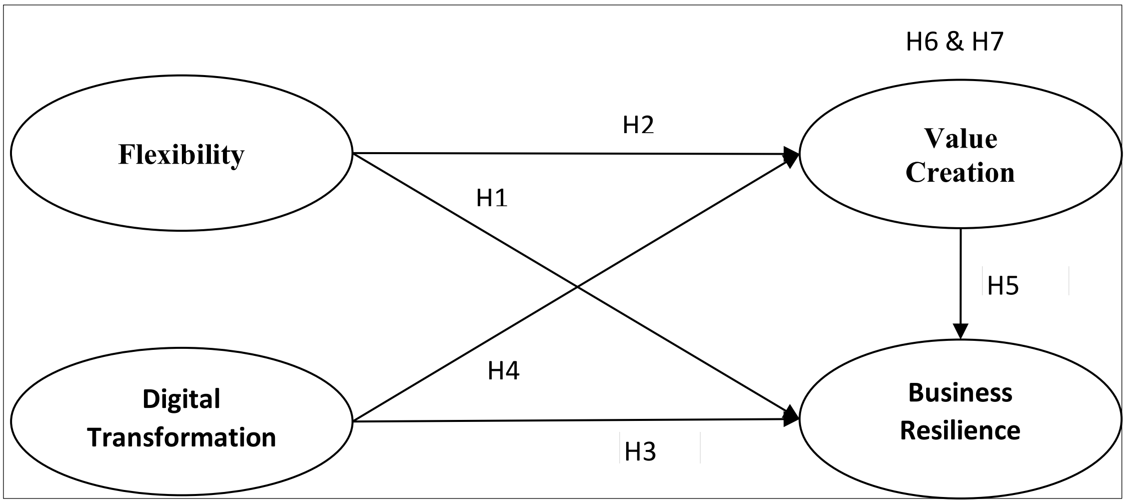

Figure 1. Proposed Conceptual Framework.

Thus, the research model in figure 1 indicates that flexibility, digital transformation and value creation are associated with business resilience of tourism SMEs with value creation as a mediator. To elaborate these relationships, seven hypotheses (H1-H7) are developed to test the direct and indirect relationship between these factors.

Business Resilience

Business resilience is the ability of an organisation to survive and continue operations in the face of adversity as well as to recover from various crises and disruptive events (Pham et al., 2021). The focus of business resilience is not only the survival of the business but also being able to continue and sustain performing its essential operations in the midst of the changes and shocks. For a SMEs within the tourism sector, it is vital to have the ability to predict as well as respond to disruptions that are likely to occur within the business environment to ensure it remains operational and competitive within the industry (Buzzao & Rizzi, 2023). Rastegar et al. (2023) investigated the level of resilience of the tourism SMEs in Iran and found that the SMEs that had prepared well by executing strategic plans in advance were in a better position to manage the effects of the pandemic. This implies that SMEs that operate in the tourism sector should follow certain guidelines to embrace flexibility in planning and resource management with the aim of ensuring that the future of the business is secure.

Therefore, there is a need for organisations to adopt flexibility, digital transformation, and value creation strategies, which assist organisations to not only survive through and after disruptions but to thrive despite the disruptions as well. Tourism SMEs utilise flexibility to transform their operational strategies, while digital transformation involves using technology to extend market coverage and provide improved services and products and value creation occurs through unique service or product creation. These business strategies enhance the long-term sustainability of tourism SMEs operating in dynamic markets.

Flexibility

The primary objective of business flexibility involves adjusting operations to market volatility and customer demand changes and operational factors at the organisational level (Mejri et al., 2018). Organisations gain the ability to address unexpected problems through innovation by developing new solutions which also allows them to capture emerging business opportunities within their environment. The implementation of flexible business networks produces positive impacts on business resilience as Wooderson (2022) explains. Tourism SMEs with flexibility act quickly to minimise operational disruptions and at the same time potentially use their position to mitigate the risks produced by disruptive events. DesJardine et al. (2019) demonstrated how flexibility plays a major role in enhancing business resilience during environmental risks and changes.

According to Brozovic et al. (2016), flexibility demonstrates acts as a fundamental element for value creation throughout the service sector, specifically within the tourism industry. Service providers that adapt their operational style to changing circumstances can create customised offerings that fulfil the customers' specifications and in turn upgrade their service value and quality. According to Bashir (2023), tourism SMEs need to prioritise flexibility as it plays a vital role in enhancing performance through business model innovation (BMI). Strategic flexibility through this innovation develops additional avenues to create value thus demonstrating how flexibility leads to value creation. Thus, the study proposes the hypothesis that:

H1: Flexibility is positively related to the business resilience of tourism SMEs.

H2: Flexibility is positively related to the value creation of tourism SMEs.

Digital Transformation

Digital transformation is concerned with the integration as well as the efficient use of digital technologies within a business or organisational environment to transform them and its operations, communications, and ways of managing change (Kontić & Vidicki, 2018). By leveraging the latest digital technology platforms, it becomes easier for an organisation to redesign its strategies, processes as well as its product or service offerings whenever there is a shift in the business environment. Kurniawati et al. (2022) in their study identified that in Indonesia, during the pandemic, MSMEs used social media in marketing particularly the most common platforms such as WhatsApp, Facebook, and Instagram. This drive for digital transformation was the reason that allowed these MSMEs to continue their operations and keep their business going during the crisis. In addition, Elgazzar et al. (2022) noted that there is a growing expectation that organisations will rely more on data analytics tools and automation when identifying risks and responding to them in a firm's environment in order to improve business resilience.

Digital transformation means an evolution in the utilisation of technology in managing business processes to create new sources of value for stakeholders and customers. (Matarazzo et al., 2021). Moreover, Markovits (2022) urges that organisations should implement digital strategies with the initiative of creating more value through the process of digital transformation. It is crucial that for digital transformation to occur, digital plans are added to existing technologies and are aligned with strategic plans of value creation. According to the above discussion, therefore, the following hypothesis is developed:

H3: Digital transformation is positively related to the business resilience of tourism SMEs.

H4: Digital transformation is positively related to the value creation of tourism SMEs.

Value creation and its mediating role

As the performance of the tourism industry is based on the values it serves to the customers, value creation is a critical factor to the development of SMEs in the tourism sector. Value creation is defined as making a change in the worth, utility, or value delivery for the customers, service providers or organisation (Luján Salazar, 2017). Establishing trust is essential for a business when it comes to creating value that will help the firm adjust to challenges, changes, and fluctuations that normally hinder its growth and innovation (Niemimaa et al., 2019). This was revealed in research carried out by Alake et al. (2022) in Nigeria, which asserted that SMEs could maintain competitiveness in the market by adapting its products and services to meet customer needs. By doing so, these firms will be in a better position to create more value for the existing and potential customers as well as improve their business capabilities and stability.

Furthermore, Borah et al. (2023) agreed that the practice of sustainable value co-creation strengthens organisational capabilities that in return promotes the organisation’s equity. This explains that there is a need for firms to include value co-creation as a way of improving the ability of businesses to operate in certain environmental conditions. Therefore, based on the existing literature and the dynamic capabilities theory, the relationships between flexibility, digital transformation, value creation, and business resilience have been discussed. Therefore, the following hypothesis has been produced:

H5: Value creation is positively related to the business resilience of tourism SMEs.

This study also proposes that in the relationship between flexibility and business resilience, value creation acts as a mediator. Flexibility and business resilience work closely together to determine how organisations deal with challenges and the uncertainties that are likely to prevail. When a business can have versatility in its operations, approaches, and choices, it is well prepared for an uncertain future, and it can recover from a shock when it occurs (Kim & Shim, 2018). The relationship between value creation and business resilience defines a firm's ability to adapt to the conditions of a dynamic environment. By improving customers' value, the competitiveness of the organisation rises and strengthens its market position (Alake et al., 2022). Hence, the study hypothesis:

H6: Value creation significantly mediates the relationship between flexibility and business resilience of tourism SMEs.

The study also investigates how value creation serves as a mediator in the relationship between digital transformation and business resilience. Businesses that digitalise their operations can improve their operational resilience by developing innovative methods to generate enhanced customer value propositions (Kontić & Vidicki 2018; Matarazzo et al., 2021). This demonstrates that managers who deploy digital technologies effectively generate fresh approaches to deliver increased customer value. In the case of tourism SMEs, the ability to create and innovate in production is not only about sustaining the business against the disruption but also about optimising on opportunities that can come with such disruptions (Matarazzo et al., 2021). Therefore, value creation is a mediator between digital transformation and business resilience, which leads to the following research hypothesis:

H7: Value creation significantly mediates the relationship between digital transformation and the business resilience of tourism SMEs.

METHODOLOGY

Research Procedure and Sample

The research used a quantitative approach to gather primary data. The research used non-probability quota sampling to efficiently choose participants who met specific requirements of (1) sales turnover and (2) employee numbers. The research criteria matched the SME definition and classification system from SMECorp Malaysia. The research examined

Malaysian micro, small and medium tourism enterprises as part of its sample.

The owners or managers of tourism SMEs served as the target respondents because they hold essential knowledge about their business operations and strategic planning. Data collection occurred in four Malaysian states which received the most tourism arrivals: Selangor, Kuala Lumpur, Perak, and Pahang to achieve geographical diversity and obtain a comprehensive understanding.

The research gathered 250 samples based on Memon et al. (2020) power analysis guidelines using the G-Power program. The study design utilised power analysis guidelines from Memon et al. (2020) to establish an appropriate sample size which prevented problems related to underpowered or oversized samples. The researchers distributed questionnaires to respondents personally and retrieved responses as soon as participants finished the survey.

Research Instrument

The questionnaire contained five distinct sections which originated from scholarly works while receiving minor adjustments to match the research goals. Section A collected demographic data by asking five questions which delivered a complete picture of participant characteristics. The business resilience evaluation of tourism SMEs was conducted through seven questions derived from Asgary et al. (2013). The flexibility assessment of these SMEs contained seven questions which were developed based on Guo and Cao (2014) and Yousaf and Majid (2018). The assessment of digital transformation impacts in Section D incorporated six items which researchers obtained from Kontić and Vidicki (2018) and Mai et al. (2023). Section E used five questions from O'Cass and Ngo (2012) to assess the SMEs' value creation activities for their customers.

The survey questions from Sections B through E employed a 5-point Likert scale that spanned from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Researchers chose this scale because it effectively measures attitude responses with sufficient grading levels while keeping both the process simple and engaging for respondents (Aybek & Toraman, 2022; Mumu et al., 2022).

The instrument completed multiple validation steps before its release for use. Three field experts from the same discipline formed an expert panel to review the questionnaire through a pre-test evaluation process for its content clarity and relevance and comprehensive nature. The questionnaire underwent a pilot study which evaluated both the reliability and construct validity of its items to guarantee precise data analysis and instrument accuracy.

Data Analysis

In this study, Partial Least Squares Structural Equation Modelling (PLS-SEM) is used, a statistical method which is recognised as efficient for examining the proposed relationships among various variables (Memon et al., 2020). To execute the data analysis, this research utilises the SmartPLS software to assess the research model and hypotheses. Furthermore, SPSS software was utilised for generating descriptive analyses and conducting normality tests. The data analysis process is presented in four steps: (1) descriptive statistics and demographic characteristics, (2) Preliminary analysis, (3) Evaluation of the measurement model, and (4) Structural Model Evaluation.

Preliminary Analysis

Table 1 displays descriptive statistics which reveal key aspects about the dataset. The survey included 250 participants who offered detailed information about SMEs across multiple dimensions including business types and positions alongside age groups and gender distribution and duration of service and business establishment and operational characteristics and state locations. The majority of participants work at small-sized SMEs while holding managerial positions and falling within the age range of 30 to 40 and serving the organisation for 2 to 5 years. The majority of businesses established between 5 and 10 years ago function in the transportation sector while being based in Selangor.

Table 1. Descriptive statistics

Profiles		Frequency Count	Percentage
Type of SME	Micro	15	7.10%
	Small	125	59.50%
	Medium	70	33.30%
Position in the company	Owner	38	18.10%
	Manager	139	66.20%
	Director	16	7.60%
	Other equivalent managerial position	17	8.10%
Age group	Below 30 years	12	5.70%
	30 - 40 years	128	61%

	More than 40-50 years	57	27.10%
	Above 50 years	13	6.20%
Gender	Male	117	55.70%
	Female	93	44.30%
Years of Serving in the firm	Less than 2 years	26	12.40%
	2-5 years	142	67.60%
	More than 5-10 years	29	13.80%
	More than 10 years	13	6.20%
Firm's years in operation	Less than 5 years	48	22.90%
	5-10 years	139	66.20%
	More than 10 - 20 years	19	9%
	More than 20 years	4	1.90%
Products/services provided by the company	Accommodation	19	9%
	Transportation	104	49.50%
	Art, entertainment, and recreation	28	13.30%
	Food and beverages	54	25.70%
	Miscellaneous tourism	3	1.40%
	Travel agency, tour operator, and tourism guide	2	1%
Location of the firm	Selangor	67	31.90%
	Kuala Lumpur	55	26.20%
	Perak	40	19%
	Pahang	48	22.90%

A full multicollinearity test was conducted to address the issue of common method bias by assessing the variance inflation factor (VIF), as recommended by Kock (2015). The results showed that none of the VIF values exceeded 3.3, indicating that there are no constructs highly correlated with each other.

Measurement Model Analysis

The measurement model analysis indicates that most items have factor loadings above 0.70, signifying strong individual item reliability. This means that the items are effectively capturing the constructs they are intended to measure. As presented in Table 2, the average variance extracted (AVE) values for the constructs range from 0.573 to 0.807, all of which exceed the minimum threshold of 0.500. The AVE values demonstrate that the items share a high degree of common variance and adequately represent the underlying constructs, thereby establishing that convergent validity is satisfactory (Hair et al., 2020). Additionally, the constructs exhibit excellent internal consistency, as indicated by the composite reliability scores, which all surpass 0.9. This high level of internal consistency means that the items are highly correlated with each other within their respective constructs, providing further evidence of the robustness of the measurement model (Hamid et al., 2017).

Table 2. Convergent Validity Result

	Outer loadings	Cronbach's alpha	Composite reliability	Average Variance Extracted (AVE)
F1 <- F	0.905	0.864	0.955	0.573
F2 <- F	0.936			
F3 <- F	0.926			
F4 <- F	0.729			
F5 <- F	0.750			
F6 <- F	0.424			
F7 <- F	0.424			
DT1 <- DT	0.922	0.951	0.951	0.807
DT2 <- DT	0.941			
DT3 <- DT	0.948			
DT4 <- DT	0.937			
DT5 <- DT	0.817			
DT6 <- DT	0.813			
VC1 <- VC	0.898	0.935	0.935	0.794
VC2 <- VC	0.934			
VC3 <- VC	0.926			
VC4 <- VC	0.851			
VC5 <- VC	0.843			
BR1 <- BR	0.616	0.921	0.930	0.686
BR2 <- BR	0.812			
BR3 <- BR	0.864			
BR4 <- BR	0.868			
BR5 <- BR	0.864			
BR6 <- BR	0.889			
BR7 <- BR	0.851			

Note. F=Flexibility, DT=Digital Transformation, VC=Value Creation, BR=Business Resilience

The discriminant validity was evaluated using the Heterotrait-Monotrait (HTMT) ratio as shown in Table 3. Henseler et al. (2015) recommend that HTMT values should be below 0.85 for constructs to be considered distinct, though a more lenient threshold of 0.90 is also acceptable in some cases. In this study, the HTMT ratios for the constructs of flexibility, digital transformation, value creation, and business resilience are mostly below the stricter threshold of 0.85, except for digital transformation and value creation (0.864), digital transformation and business resilience (0.886) and value creation and business resilience (0.887), which are slightly above but within the 0.90 threshold. This suggests that the constructs are sufficiently distinct, thus demonstrating adequate discriminant validity. Next, Table 4 presents the Fornell-Larcker criterion, which shows that the majority of the square root of AVE values are higher than the inter-construct correlations. This indicates that the constructs in this study generally exhibit acceptable discriminant validity (Fornell & Larcker, 1981).

Table 3. Heterotrait-Monotrait (HTMT) ratio

	Flexibility	Digital Transformation	Value Creation	Business Resilience
Flexibility				
Digital Transformation	0.793			
Value Creation	0.750	0.864		
Business Resilience	0.709	0.886	0.887	

Table 4. Fornell-Larcker

	Flexibility	Digital Transformation	Value Creation	Business Resilience
Flexibility	0.757			
Digital Transformation	0.759	0.898		
Value Creation	0.724	0.817	0.891	
Business Resilience	0.728	0.83	0.827	0.828

Structural Model Analysis

The structural model analysis involved evaluating path coefficients (β), standard deviations, t-statistics, p-values, and the predictive power (R^2) to determine the significance and strength of the hypotheses. The results are shown in Table 5 and Table 6 which indicate that all seven hypotheses were supported and significant: Flexibility is positively related to business resilience ($\beta = 0.131$, $t = 2.537$, $p < 0.05$) and value creation ($\beta = 0.245$, $t = 4.308$, $p < 0.001$), supporting Hypothesis H1 and H2. Digital transformation has a significant positive impact on business resilience ($\beta = 0.398$, $t = 6.948$, $p < 0.001$) and value creation $\beta = 0.631$, $t = 11.65$, $p < 0.001$), supporting Hypothesis H3 and H4. Value creation is also positively related to business resilience ($\beta = 0.408$, $t = 8.345$, $p < 0.001$), supporting Hypothesis H5.

Table 6 presents the mediation analysis, demonstrating that value creation mediates the relationship between flexibility and business resilience ($\beta = 0.100$, $t = 3.594$, $p < 0.001$), and the relationship between digital transformation and business resilience (β = 0.257, t = 6.958, p < 0.001), supporting Hypotheses H6 and H7. Since both the direct and indirect paths are significant, the proposed mediation hypotheses suggest partial mediation.

Table 5. Hypotheses Testing

Hypotheses	Path Coefficients (β)	Standard deviation	t-statistics	Decision	p-values	R^2
F -> BR	0.131	0.052	2.537	Supported	0.011	0.763
F -> VC	0.245	0.057	4.308	Supported	0.000	
DT -> BR	0.398	0.057	6.948	Supported	0.000	
DT -> VC	0.631	0.054	11.65	Supported	0.000	
VC -> BR	0.408	0.049	8.345	Supported	0.000	

Note. F=Flexibility, DT=Digital Transformation, VC=Value Creation, BR=Business Resilience, R^2=Explanatory Power

Table 6. Mediation Analysis

	Path Coefficients	Standard deviation	t-statistics	Decision	p-values	R^2
F -> VC -> BR	0.100	0.028	3.594	Supported	0.000	0.692
DT -> VC -> BR	0.257	0.037	6.958	Supported	0.000	

Note. F=Flexibility, DT=Digital Transformation, VC=Value Creation, BR=Business Resilience, R^2=Explanatory Power

DISCUSSION

The study yielded significant findings. First of all, hypothesis H1 which stated that flexibility would have a positive correlation with business resilience was proved to be true among tourism SMEs in Malaysia. The ability to adapt quickly to market forces and customer demands and social environment events remains possible due to this approach. The research findings validate previous studies which show that flexibility enables SMEs to sustain their operations during emergency situations (De Matteis et al., 2023; Hu & Kee, 2021). The following methods serve to enhance flexibility in SMEs. Tourism SMEs need to develop strategies that promote agility through innovative culture which provides a learning environment. Local and foreign tourists become more likely to choose tourism SMEs through flexible online booking procedures that offer customised services along with local experience packages. Resource-Based View (RBV) theory shows that firms which develop dynamic capabilities and execute them successfully ensure competitive sustainability along with business resilience (Teece et al., 2016).

Business resilience of tourism SMEs towards various disruptions significantly depends on their level of digital transformation. Technology adoption has improved business process operations (Kraus et al., 2021) and it simultaneously strengthened decision-making abilities and market accessibility. Tourism SMEs should boost their digital transformation programmes by implementing e-commerce options while developing customer relationship tools along with deploying digital advertisement platforms. Through these tools the tourism SMEs can enhance their operational capabilities that leads to better adaptation potential and growth prospects. Smaller businesses that use technology while adjusting their plans and activities based on market transformations and competitors gain stronger strategies to combat challenges (Elgazzar et al., 2022). There are also challenges that prevent SMEs from adopting digital technologies including financial challenges and lack of digital expertise and their reluctance to implement change. Lack of capital together with insufficient technical expertise presents barriers to SMEs when they attempt to implement new technologies. The tourism SMEs can obtain suitable technological solutions for engaging customers through partnerships with local technology companies that also bring down associated costs.

Finally, value creation acts as the mediator through which flexibility together with digital transformation leads to increased business resilience of Malaysian tourism SMEs. The study confirms that tourism SMEs which implement customer value delivery enhancements as strategic initiatives will develop resilient business operations into the long run. This highlights the importance of understanding the customer needs and expectations, building lasting customer relations and improving the products and services quality (Núñez-Ríos et al., 2022). While the advantages of flexibility and digital transformation are highlighted in this study, it is important to also consider the challenges that are associated with these factors such as costs, skill gaps and organisational resistance. These issues can be addressed through effective strategic planning, promoting collaboration, and continuous training efforts (Horváth & Szabó, 2019).

CONCLUSION

This study offers insights into how tourism SMEs can endure and prosper amidst market unpredictability and external disturbances. A new perspective on building resilience in tourism SMEs, which has not been extensively explored in previous empirical studies is delivered. Key factors that enhance business resilience in Malaysian tourism SMEs, specifically flexibility, digital transformation, and value creation were identified. Adapting strategies and operations swiftly to changing conditions within the tourism sector to foster a culture of continuous learning to enhance business resilience. By embracing digital transformation, it improves SMEs' operational efficiency in tourism businesses and expands market reach. Additionally, value creation generates unique and personalised experiences for the customers, thus boosting tourists' satisfaction and loyalty. This study provides valuable recommendations to enhance competitiveness and adaptability, guiding tourism SMEs towards sustained success in a dynamic market in Malaysia.

Theoretical Implications

This study contributes to the existing literature in business resilience through the incorporation of flexibility, digital transformation and value creation in research model. The findings of this study are supported by the RBV and Dynamic Capabilities Theory. It is evident that, for organisations to maintain competitive advantage in a dynamic environment, the development and deployment of unique resources and dynamic capabilities are crucial (Barney, 1991; Teece, 2018). In this study, value creation is presented as a dynamic capability which tourism SMEs can use to provide customers with satisfying and personalised experiences (Freudenreich et al., 2020). This paper also adds to the existing literature on business resilience by elaborating on the mediating role of value creation, to gain more insights into how the tourism SMEs can enhance their business resilience. This mediation implies that flexibility and digital transformation alone are not sufficient; tourism SMEs need to fully utilise these capabilities to co-create value with their customers. This finding is in line with the stakeholder theory perspective where stakeholders; including customers, are central to the creation of value for businesses in the long run (Freudenreich et al., 2020).

Practical Implications

The research delivers essential strategic guidance to both tourism industry entrepreneurs and managers and policymakers. The research outcomes will help practitioners develop effective strategies to reduce the vulnerability experienced by Malaysian tourism SMEs. The implementation of flexible approaches must take precedence in strategic planning as well as decision-making processes and market adaptation. The implementation of regular training programs and cross functional teams and flexible organisation structures enables this achievement (Mejri et al., 2018). SMEs need to use their resources wisely to implement digital technologies which enhance data-driven decisions and operational effectiveness and customer relationship management (He et al., 2023). Value creation should be prioritised through continuous learning of the latest trends in customer behaviour, market directions and new products or services introduced by competitors. To differentiate from competitors and create brand loyalty, it is important for tourism SMEs to offer personalised services to attract the customers' attention and make them feel prioritised (Freudenreich et al., 2020).

For policymakers, the study presents suggestions for supportive policies that enhance the business resilience of these tourism SMEs. Grants, subsidies and training schemes targeted to support the tourism SMEs will aid them in the digitisation process. Financial incentives to adopt digital technologies and conducting workshops to enhance the digital skills of the tourism SMEs can be highly beneficial (Mohamad et al., 2022). Additionally, policies for flexible working arrangements, updated regulatory processes, and policy support for innovations are some of the key measures that may facilitate the SMEs' responsiveness to changes (Niemimaa et al., 2019). The authorities should support efforts that drive value creation, for instance, tourism promotion and cooperation between SMEs and larger firms. Marketing campaigns which promote local experiences are also beneficial in attracting customer attention to SMEs in the tourism industry due to their unique market image (Pham et al., 2021).

Limitations And Future Research

Despite the valuable information presented in this study, it has certain limitations that may be improved in future research. The use of cross-sectional study design provides data at a single point in time, and therefore, changes in the variables cannot be observed over a longer period of time. Future research should attempt at examining how flexibility, digital transformation, value creation, and business resilience can develop over time or how they constantly change and adapt to various factors in the tourism industry. Moreover, future studies may focus on the specific sectors within the tourism industry such as hotels, restaurants, travel agencies, tour operators and sellers of souvenirs, given that the tourism industry consists of several different sectors. This is to determine how tourism SMEs in different sectors manage disruption, and how they utilise flexibility and digital transformation differently according to the challenges and requirements that are specific to the nature of their businesses. Finally, this study only focuses on three factors that influence business resilience, which are flexibility, digital transformation and value creation. There may be more variables that may influence business resilience, which should be considered for future research. Examples of these variables may include leadership style, organisational culture, and government support. Leadership style has an effect on business continuity and disruption since it affects people's attitude and choices (Kim & Shim, 2018). Organisational culture determines the strategies of the firm by applying similar values and perception when dealing with the challenges (Niemimaa et al., 2019). Government support for resilience strategies is also important to facilitate the recovery processes of tourism SMEs during crises (He et al., 2023). Following these recommendations, future studies can extend the understanding of this research to provide a deeper, broader perspective of business resilience of Malaysian tourism SMEs and contribute to creating more feasible and effective approaches towards the improvement of the tourism industry.

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