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BUSINESS MODEL INNOVATION OF HOTELS IN VIETNAM DURING THE COVID-19 PANDEMIC

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ABSTRACT

The tourism sector encountered significant difficulties in sustaining operations amidst the global economic downturn caused by the COVID-19 pandemic. Initial observations within the hospitality industry suggest that redesigning the business models could be a key solution for recovery. However, there is a scarcity of empirical studies on this topic, particularly in the hotel industry. To address both practical and theoretical gaps, the authors conducted a study on business model innovation of hotels in Hanoi during the COVID-19 pandemic. The study involved 300 participants with diverse genders and roles working in high ranking lodging units, aiming to evaluate how hotel firms transformed their business models from the perspective of industry professionals. The results indicated that factors such as the business environment, the impact of the COVID-19 pandemic, and a culture of innovation positively influenced the degree of business model innovation among hotel firms. Furthermore, a higher level of business model innovation was found to have positive effects not only in the short term but also on overall business performance.

Keywords*: Canvas business model; business model innovation; drivers; business environment; technology; COVID-19 pandemic; innovation culture; business performance; hospitality*

1. INTRODUCTION

The COVID-19 pandemic has been described as an unprecedented crisis, profoundly impacting the global economy. Swift government measures like social distancing and travel restrictions significantly reduced tourism demand. The World Tourism Organization highlighted tourism as the most severely affected sector, estimating millions of job losses and hindering balanced and sustainable development (Zurab Pololikashvili, 2020). The hotel industry faces immense challenges amidst the global economic crisis, necessitating business model innovation (BMI) to adapt to new societal conditions and sustain long-term operations and development.

BMI is considered a promising solution for businesses, including tourism, to recover swiftly from the pandemic's impact (Kraus et al., 2020). However, empirical studies on BMI in the hotel sector is restricted (Breier et al., 2021; Pascual-Fernández et al., 2021), and the comprehensive impact on business performance outcomes remains poorly understood (Foss and Saebi, 2017).

Mitchell and Coles (2003) defined BMI as replacement made by companies that introduce new product or service offerings to customers and end-users that were not previously available. This procedure encompasses the development and execution of innovative approaches to generate value, as opposed to depending solely on past data or imitating competitors. Business Model Innovation (BMI) strives to challenge established norms and cater to previously unexpressed consumer needs.

The concept of BMI encompasses both incremental and significant modifications within a business model (BM), impacting clients, rivals, the sector, and the enterprise itself. The goal is to achieve a competitive edge, uniqueness, and expansion by combining various components of the business model to create novel value for clients and partners. BMI is especially valuable during periods of unpredictability, disruption, and heightened competition, serving as a means for companies to safeguard declining primary enterprises or counteract assertive rivals. Being proactive in seeking out new path for growth is essential for a successful Business Model Innovation (BMI). BMI can take place through deliberate efforts within existing companies, as a result of mergers and acquisitions, or within start-up firms. It serves as a critical factor in achieving success, providing a vital way to accomplish organizational goals.

Numerous studies show that BMI positively impacts firms' financial performance. The implementation of an innovative BM can significantly influence a firm's performance capabilities. Despite extensive research on BMI, there is limited experimental evidence within the hotel industry. The COVID-19 pandemic further emphasizes the need for research on the renewal of BM in the hospitality industry. However, there are a few studies exploring the motivation for BMI during this challenging period.

This study aims to fill the research gap by investigating the impact of the COVID-19 pandemic on BMI in the hotel industry in Vietnam. It employs a hybrid approach combining qualitative and quantitative techniques for data gathering, aiming to provide a comprehensive analysis of the influence of BMI on various aspects of the industry.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Definition of Business Model Canvas and the Level of Business Model Innovation

In general, the term business model refers to the representation of an enterprise's logic for creating, distributing, and capturing value for its stakeholders (Bouwman et al., 2018; Chesbrough and Rosenbloom, 2002). Despite considerable research on business model from various disciplines, a wide array of definitions exists (DaSilva and Trkman, 2014). In this study, we adopt the Business Model Canvas (BMC) by Osterwalder and Pigneur (2010) as a means of describing how an enterprise or network of enterprises generates and captures value for stakeholders, including (networked) enterprises and customers (Bouwman et al., 2018).

The BMC is a modern strategic management tool used to represent existing BMs or develop new ones. It comprises nine elements: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure (Osterwalder and Pigneur, 2010). By visualizing the different components of the BM and their interactions, the BMC aids in understanding the value that each element can provide for the firm. This tool allows users to explore various business ideas and devise strategies to achieve their goals. Due to its widespread adoption and user-friendly nature, the BMC is an ideal platform for showcasing BMI.

Business model innovation (BMI), as defined by Zott and Amit (2010), refers to changes in an enterprise's business model that are either new to the world or new to the enterprises under analysis. It involves reconfiguring activities within an existing BM to introduce new elements to the market where the enterprise competes (Santos, Spector, and Van der Heyden, 2009). This deliberate process alters the core elements and business logic of the enterprise (Bucherer, Eisert, and Gassmann, 2012).

Various authors measure components of BMI differently. Santos et al. (2009) consider changes in the architecture of BMs as an indicator of BMI. On the other hand, Foss and Saebi (2017) suggest two perspectives on BMI: changes in the architecture of a BM and changes in one or more components of BMs. This results in a two-dimensional framework: scope and novelty. The scope dimension involves architectural and modular changes, while the novelty dimension describes whether the changes are new to the enterprise or the industry. Clauss (2017) provides another valuable conceptualization by developing a validated scale for BMI. In our study, we perceive four levels of BMI: BMs new to the industry, BMs never implemented by competitors before, BMs not found in dominant BMs in the industry, and BMs not invented by other enterprises.

Drivers of the Level of BMI

Prior studies have emphasized the diverse factors that influence drivers' behaviors and practices concerning Business Model Innovation (BMI), whether originating from within or outside the organization (Foss and Saebi, 2017; Andreini and Bettinelli, 2017). Externally, a range of drivers have been identified, including shifts in stakeholder expectations, alterations in the competitive landscape, and advancements in communication and information technologies (Ferreira et al., 2013). Nevertheless, current researches have yielded inconclusive findings regarding the influence of environmental factors on BMI (Bouwman et al., 2018; Pateli and Giaglis, 2005). To be specific, recent studies have not been able to establish a clear connection between the level of competition and business models experimentation (Bouwman et al., 2018). Despite this, empirical inquiries into the impact of various drivers on the inclination to engage in BMI have been limited (Foss and Saebi, 2017; De Reuver et al., 2009).

Previous research has highlighted the diverse factors influencing drivers' behaviors and habits regarding BMI, which can be intrinsic or extrinsic to the organization (Foss and Saebi, 2017; Andreini and Bettinelli, 2017). In the external environment, various drivers have been identified, such as shifts in stakeholder demands, changes in the competitive landscape, and advancements in communication and information technologies (Ferreira et al., 2013). However, existing research has produced inconclusive results regarding the impact of business environment factors on BMI (Bouwman et al., 2018; Pateli and Giaglis, 2005). Specifically, recent studies have failed to substantiate the link between competition intensity and BM experimentation (Bouwman et al., 2018). Nevertheless, empirical investigations on the influence of different drivers on the propensity for engaging in BMI have been limited (Foss and Saeb, 2017; De Reuver et al., 2009).

Pucihar et al. (2019) put forward the notion that the business environment, especially in the context of small and medium-sized enterprises, acts as an external factor affecting the level of Business Model Innovation (BMI). This environment is marked by fierce competition and market volatility, with researchers analyzing the vigorous actions of both competitors and customers in the market (Jaworski and Kohli, 1993). Eventually, Pucihar et al. conclud that the business environment positively impacts the extent of BMI. Drawing from prior research findings, we posit the following hypothesis:
H1: The business environment has a positive impact on the level of BMI of hotel firms.

Ritter and Pedersen (2020) conducted an analysis of how the COVID-19 pandemic may have affected existing business models (BMs). Similarly, Kraus et al. (2020) explored the responses of family-owned businesses, including those in the hospitality sector, to the COVID-19 crisis. Their research identifies temporary Business Model Innovation (BMI) as a potential strategy

for recovery of the crisis. Moreover, Breier et al. (2021) conduct a study indicating that BMI could be a viable approach for hotels to recuperate and recommence operations following a crisis, such as the COVID-19 pandemic. The authors further propose that the pandemic's lockdown measures resulted in a complete halt in revenue streams, putting significant pressure on firms to adopt innovative models. The following hypothesis is proposed:
H2: The COVID-19 pandemic has a positive impact on the level of BMI of hotel firms.

Past research has also defined Business Model Innovation (BMI) as an effort to leverage new opportunities, particularly those stemming from emerging information technologies (Bouwman et al., 2018). Many previous studies have primarily utilized case studies as their foundational methodological approach (Foss and Saebi, 2017). Some scholars have specifically concentrated on investigating how technological progress influences the emergence of new business models in the realm of electronic commerce (Foss and Saebi, 2017; Jaworski and Kohli, 1993; Wirtz, Schilke, and Ullrich, 2010). Furthermore, existing literature has compellingly shown that the dynamism of technology significantly impacts the experimentation and exploration of novel business models (Upward and Jones, 2016). Recognizing technology innovation as a pivotal driver for achieving effective business operations, driving BMI, and even catalyzing the emergence of disruptive business models has gained widespread acceptance. Pucihar et al. (2019) supported these concepts through their research, emphasizing that the adoption of technology positively affects BMI levels. Therefore, the hypothesis is posited as follows:
H3: Technology has a positive impact on the level of BMI of hotel firms.

The concept of BMI hinges on a company's ability to leverage its internal capabilities and resources to foster innovative changes within its BM (Zott and Amit, 2010). In this study, innovation is viewed as an endogenous factor and is defined as the enterprise's capacity or potential to introduce novel processes or new products/services within the organization (Hult, Hurley, and Knight, 2004). By implementing innovative practices, small and medium-sized enterprises can effectively engage in BM experimentation. Previous research has indicated a positive association between innovation efforts and the willingness to experiment with different BMs (Foss and Saebi, 2017). Building on this foundation, Pucihar et al. (2019) demonstrates a favorable correlation between the level of innovativeness and the extent of BMI. The present study articulates the research hypothesis in the following manner:
H4: Innovation culture has a positive impact on the level of BMI of hotel firms.

Outcomes of BMI

Business Model Innovation (BMI) results in changes to the business model structure, potentially involving adjustments of one or several components (Zott and Amit, 2010; Foss and Saebi, 2017; Santos, Spector, and Van der Heyden, 2009). Bashir, Naqshbandi, and Farooq (2020) have outlined three main outcomes stemming from the incorporation of this innovative business model into the business process system. These outcomes encompass improvements in business performance, heightened competitive edge, and a stimulating effect on innovation.

Foss and Saebi (2017) present a theoretical framework for comprehending BMI, classifying it into two dimensions: "scope" and "novelty." The "scope" dimension pertains to the degree of structural or modular adjustments within the business model, while "novelty" is linked to the level of originality in these changes, whether they are considered groundbreaking by the firm, the industry, or on a global scale (Foss and Saebi, 2017). This study delves into the connection between the novelty of BMI and its impact at the enterprise or industry level.

In order to gauge the temporery effects of BMI in enterprises, the research team employs nine measuring factors. These encompass alterations in critical business processes, the utilization of information technology in managing and overseeing internal operational procedures, standardization and integration of operational processes, the application of information and communication technology, optimization of the information technology infrastructure, application of media and social networks, and adjustments in the organizational structure of the hotel. The current investigation formulates the research hypothesis as follows:
H5: The level of BMI has a positive impact on the short-term outcomes of hotel firms.

The assessment of a company's performance is of utmost significance as a significant metric (Pucci, Nosi, Zanni, 2017). Numerous prior studies have established a correlation between business performance and Business Model Innovation (BMI) (Zott and Amit, 2007; Aspara, Hietanen, and Tikkanen, 2010; Cucculelli and Bettinelli, 2015; Volberda, van den Bosch, Heji, 2017). Empirical inquiries have indicated that implementing various modifications to the business model can potentially lead to enhancements in overall business performance (Giesen et al., 2007). Scholars have also observed that the evaluation of a company's performance can be accomplished through the application of financial metrics, non-financial metrics, or a combination of both (Shane and Venkataraman, 2000; Cucculelli and Bettinelli, 2015). In this context, diverse criteria are employed to assess business performance, including hotel revenue, hotel profitability, hotel market share, customer loyalty, and customer satisfaction. The authors posit the subsequent hypothesis:
H6: The short-term outcomes of BMI have a positive impact on the business performance of hotel firms.

The following research model is constructed and amalgamated from the research hypotheses presented in the previous content:

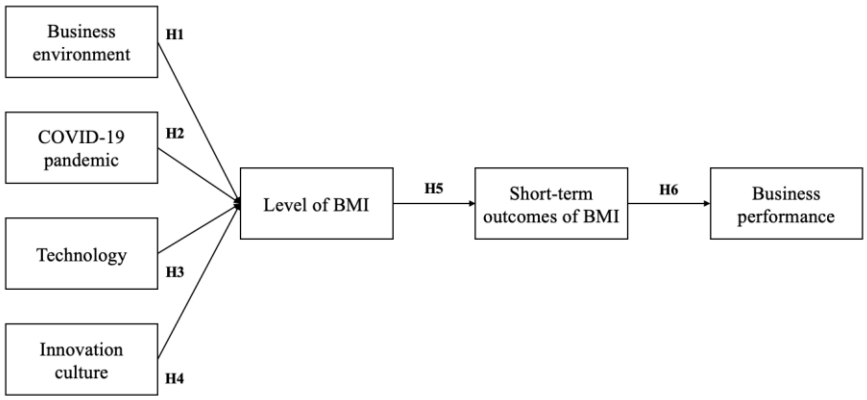

Figure 1. Research Model

3. RESEARCH METHODOLOGY

Variables Measurement

The research team compiled a comprehensive set of validated measurements based on a thorough review of the literature pertaining to BMI and its application in the hotel industry. The detailed questionnaire covered various aspects of business models (BMs) and BMI

practices, including BMI drivers, BMI levels, types of innovations, BM modifications, BMI outcomes, performance metrics, and the effects of the COVID-19 pandemic.

To conduct the empirical analysis for our study, we constructed variables for regression. Only the questions directly related to the components outlined in our established study model (Figure 1) were selected for further investigation. We adapted and utilized items from Jaworski and Kohli (1993) and Johnson et al. (2008) to represent the business environment construct. For the information technology construct, we incorporated items from Marolt et al. (2016) and Bouwman et al. (2018). To form the innovation culture construct, we drew on earlier studies by Hult et al. (2004), Subramanian (1996), Atuahene-Gima and Ko (2001), Calantone et al. (2002), and Naman and Slevin (1993). Additionally, the authors introduced two novel concepts, the COVID-19 pandemic and Level of BMI. We used items from Pucihar et al. (2019) and Ross et al. (2006) to assess the BMI outcomes construct. For the business performance construct, we referenced research by Cucculelli and Bettinelli (2015), Venkatraman and Ramanujam (1986), and Guo et al. (2017). The constructs and their respective measurement items are provided in the appendix. Respondents' agreement with statements in the questionnaire was measured using a five-point Likert scale (1—strongly disagree, 5—strongly agree).

Table 1. Constructs and Items in the Research Model

Construct	Measure of Scale	Variable	Sources
Business Environment (BE)	The government policies and decisions in our country change frequently.	BE1	Jaworski and Kohli (1993); Johnson et al. (2008)
	Our hotel offers competitive prices compared to the industry standard.	BE2	
	Our competitors have exhibited strong reactions to our innovation.	BE3	
	The preferences and needs of our customers are subject to regular changes.	BE4	
Covid-19 Pandemic (CV)	During the COVID-19 pandemic, demand for hotels plummeted.	CV1	Conducted by authors
	During the COVID-19 pandemic, hotel revenue suffered a significant decrease.	CV2	
	During the COVID-19 pandemic, many hotels experienced significant reductions in expenses, including costs related to salaries, advertising, and communication.	CV3	
	During the COVID-19 pandemic, there was a decrease in the level of employee engagement and loyalty.	CV4	

Technology (TE)	The technology in the industry, including payment methods and booking platforms, is undergoing rapid evolution.	TE1	Bouwman et al. (2018); Marolt et al. (2016)
	The level of technological advancement in the industry is exceptionally high.	TE2	
Innovation Culture (IC)	Our hotel's culture is focused on continuous innovation.	IC1	Hult et al. (2004); Subramanian (1996); Atuahene-Gima and Ko (2001); Calantone et al. (2002); Naman and Slevin (1993)
	Our management encourages staff to embrace a breakthrough and innovative mindset.	IC2	
	Our managers place a high value on unique and innovative ideas.	IC3	
	Our hotel is prepared to embrace risks.	IC4	
	Our hotel is committed to turning ideas into reality.	IC5	
	Our hotel has the capacity to identify opportunities for growth.	IC6	
	Our hotel aims to create multiple innovations annually.	IC7	
	Our hotel has introduced innovative concepts to the market.	IC8	
	Our hotel frequently executes multiple innovations concurrently.	IC9	
	Our hotel is among the leader in the city to put in place innovations.	IC10	
	Our hotel utilizes inventive approaches to meet the requirements of a wide range of stakeholders, encompassing customers, suppliers, and third-party entities.	IC11	
Level of BMI (LEV)	How does your hotel innovate its BM? (BMI is measured by the number of BMC elements that are innovated.)	LEV	Based on Osterwalder and Pigneur (2010)
Short-Term Outcomes of BMI (OC)	Our hotel has made improvements in key business processes.	OC1	Ross et al. (2006); Pucihar et al. (2019)
	Our hotel has incorporated state-of-the-art information technology in its operational management.	OC2	

	Operational processes are now managed with a greater degree of systematic and efficient control.	OC3	
	The operational process has been standardized following the implementation of a new BM.	OC4	
	The operational process is closely interlinked.	OC5	
	The workforce has been strengthened and the level of expertise has been elevated.	OC6	
	The hotel has effectively upgraded and utilized its information technology and communication platform.	OC7	
	Our hotel makes extensive use of social media platforms to promote and engage with customers.	OC8	
	Our hotel's organizational structure has undergone improvements.	OC9	
Business Performance (BP)	The revenue of the hotel has increased.	BP1	Cucculelli and Bettinelli (2015); Venkatraman and Ramanujam (1986); Guo et al. (2017)
	The profit of the hotel has increased.	BP2	
	The market share of the hotel is greater.	BP3	
	The level of customer loyalty has increased.	BP4	
	The level of customer satisfaction has increased.	BP5	

Sample and Data Collection

Primary data and secondary data were both included in the research team's data collection. Secondary data is material that has been extensively investigated and referenced from reliable sources, such as academic journals, previous authors' research outputs, textbooks, and publications written in line with accepted scientific and technological norms. precision, punctuality, and detail. For research purposes, the content and quality of secondary data sources are assured.

An online survey that included questions and information on survey respondents' gender, age, education level, work experience, workplace conditions, jobs, working departments, and current positions produced primary data.

There are two primary parts to the data gathering procedure, which spans 6 weeks in Vietnam from March to the end of April 2022. Phase 1 is an initial data gathering project. The study team first emailed questionnaires to the first 20 individuals, and then used the feedback to change the survey's variables, descriptions, questions, and scales in preparation for phase 2. The official data gathering investigation is phase two. The study team collected 355 online

replies from survey participants after conducting a random online survey. 350 of these are legitimate responses, yielding a 98% response rate. The survey findings are utilized as data input to carry out the next phases of processing and evaluating the survey data.

4. RESULTS

Descriptive Statistics

The quantitative research section encompasses a primary research sample of 350 participants. These individuals are survey respondents employed in 3 to 5-star hotels across Vietnam, occupying diverse positions and roles within the establishments. The research aims to evaluate the BMI from the viewpoint of enterprise operators, who possess educational qualifications ranging from vocational college level to higher education, and hold positions ranging from directors to employees. Predominantly, the survey participants are affiliated with 3-star and 4-star hotels in five key cities: Hanoi, Ho Chi Minh City, Hai Phong, Da Nang, and Quang Ninh. Notably, more than 70% of the survey samples originate from hotels situated in Hanoi. Detailed characteristics of the sample are presented in the table below.

Table 2. Sample Statistics

	Description	Frequency	Percentage (%)
Gender	Male	152	43.4
	Female	198	56.6
Age	18 – 25	72	20.6
	25 – 30	145	41.4
	30 – 35	87	24.9
	35 – 40	24	6.9
	40 – 45	16	4.6
	Above 45	6	1.7
Education	Undergraduate	40	11.5
	Bachelor's degree	285	81.4
	Pursuing higher education	21	6.0
	Others	4	1.1
Years of Experience in the Hospitality Industry	Less than 5 year	142	40.6
	5 – 10 years	78	22.3
	10 – 15 years	87	24.9
	15 – 20 years	25	7.1
	20 – 25 years	16	4.6
	25 – 30 years	1	0.3
	More than 30 years	1	0.3

Star Rating of the Hotel	6-star	9	2.6
	5-star	32	9.1
	4-star	145	41.4
	3-star	164	46.9
	Others	0	0.0
Location of the Hotel	Ha Noi	242	69.1
	Ho Chi Minh City	15	4.3
	Quang Ninh	17	4.9
	Hai Phong	68	19.4
	Da Nang	4	1.1
	Others	4	1.1
Department	Management department	32	9.1
	Front office department	89	25.4
	Housekeeping department	25	7.1
	Food and beverage	107	30.6
	Sales and marketing	45	12.9
	Accounting	10	2.9
	Human resources	8	2.3
	Security department	2	0.6
	Engineering and IT	10	2.9
	Event planning department	20	5.7
	Others	2	0.6
Position	CEO	2	0.6
	Head of department	14	4.0
	Manager	38	10.9
	Assistant	68	19.4
	Staff	220	62.9
	Others	8	2.3

Source: Collected from AMOS

Validity and Reliability

Table 3. Scale Reliability and Convergent Validity

Construct	Items	Factor Loadings	Cronbach's Alpha	CR	AVE
Innovation Culture	IC7	0.859	0.954	0.955	0.658
	IC11	0.855			
	IC6	0.847			
	IC9	0.826			
	IC4	0.825			
	IC1	0.819			
	IC8	0.815			
	IC10	0.798			
	IC2	0.794			
	IC3	0.783			
	IC5	0.671			
Short-Term Outcomes of BMI	OC7	0.874	0.921	0.922	0.568
	OC9	0.834			
	OC4	0.795			
	OC8	0.754			
	OC1	0.741			
	OC6	0.724			
	OC3	0.646			
	OC2	0.634			
	OC5	0.610			
Business Performance	BP2	0.787	0.851	0.853	0.537
	BP1	0.764			
	BP3	0.717			
	BP5	0.688			
	BP4	0.606			
Covid-19 Pandemic	CV3	0.843	0.878	0.878	0.643
	CV2	0.795			

	CV1	0.776			
	CV4	0.757			
Business Environment	BE3	0.851	0.866	0.871	0.630
	BE4	0.812			
	BE1	0.787			
	BE2	0.715			
Technology	TE1	0.940	0.887	0.889	0.801
	TE2	0.846			

Source: Collected from AMOS by the Author

It can be concluded that six factors have been identified that satisfy the properties of distinctiveness and convergence, with factor loadings greater than 0.5. Accordingly, these factors are suitable for conducting Exploratory Factor Analysis (EFA) and meet the necessary conditions to proceed with further analyses.

The CR values and AVE values of all variables are greater than 0.5, and the Cronbach's Alpha coefficients are greater than 0.6. Hence, the scale of this research is considered reliable (Hair et al., 1995; Nunnally, 1978).

Table 4. Fornell and Larcker Table

	AVE	**MSV**	**IC**	**OC**	**BP**	**CV**	**BE**	**TE**
IC	0.658	0.181	0.811					
OC	0.568	0.420	0.426***	0.754				
BP	0.537	0.420	0.283***	0.648***	0.733			
CV	0.643	0.248	0.137*	0.498***	0.399***	0.802		
BE	0.630	0.142	0.084	0.377***	0.315***	0.059	0.794	
TE	0.801	0.063	0.101†	0.171**	0.250***	-0.004	0.093	0.895

The correlations for each pair of variables do not equal 1, and the Fornell-Larcker standard is satisfied because the square root of AVE is greater than all the absolute values of the correlation coefficients between it and other factors. Hence, these factors are discriminant from each other.

Structural Model Analysis and Hypotheses Testing

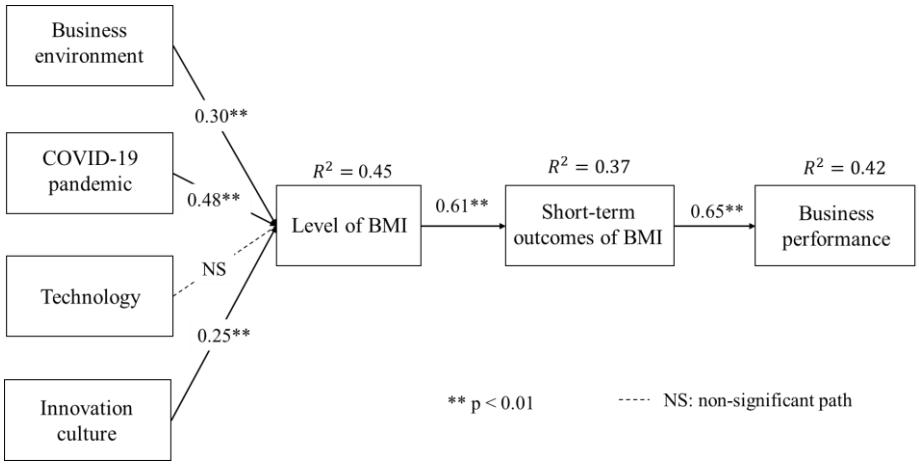

Figure 2. Empirical Results

Hypotheses 1, 2, 4, 5 and 6, with p-values < 0.01, indicate statistically significant relationships. Hypotheses 1, 2, and 4 are accepted, demonstrating that Business Environment (BE), COVID-19 Pandemic (CV), and Innovation Culture (IC) have a positive impact on the level of BMI (LEV). Hypothesis 5 is accepted, indicating that the level of BMI (LEV) positively influences the direct outcomes of BMI (OC). Finally, hypothesis 6 is accepted, showing that the direct outcomes of BMI (OC) have a positive impact on Business Performance (BP). Hypothesis 3, with a p-value of 0.951 > 0.05, is not statistically significant. Therefore, Hypothesis 3 is rejected. The results demonstrate that Technology (TE) does not influence the level of BMI (LEV).

5. DISCUSSION

Theoretical Implications

The experimental results of the study indicate that the COVID-19 pandemic is the most influential factor on the business model innovation of hotels in Vietnam among the four researched drivers. This finding can be thoroughly explained by the severe impact of the COVID-19 pandemic on the global economy (Gursoy and Chi, 2020). Various measures, such as social distancing and travel restrictions, have been implemented by governments worldwide to cope with the rapid spread of the Coronavirus (Davahli et al., 2020). In the study conducted by Le et al. (2020), several policies implemented by the Vietnamese government in 2020 were outlined, including school closures, border closures, localized lockdowns, and others. The decline in both domestic and international tourism combined with travel restrictions has posed significant challenges for Vietnamese hotels. Consequently, adapting to the pandemic context necessitates changes, improvements in operational mechanisms, and implementation of innovation.

Another external driver that has a positive impact on the business model innovation of hotels in Vietnam is the business environment. It significantly influences enterprises across industries. Pucihar et al. (2019) also found a positive correlation between the business environment and business model innovation. Unlike their study, this article examines the business environment with distinct factors: government policies, business competition, and customer demands. As hotels depend heavily on customer satisfaction due to their service-oriented nature, customer

preferences and demands play a crucial role in driving hotel innovation to meet customer needs. Particularly, in the current pandemic context, hotel managers prioritize government policies to curb the virus spread while devising their business strategies.

The study examined various external factors, and it was found that technology does not have a direct impact on the business model innovation of hotels in Vietnam. The research focused on two aspects of technology: growth rate and level of development. While online reservation services have been widely adopted in recent times, other hotel services such as check-in and check-out procedures, luggage handling, and food service continue to be performed through traditional methods. Overall, the application of technology in the hotel industry has not seen significant breakthroughs.

The study also revealed that the sole internal factor examined, namely innovation culture, directly affects the level of business model innovation in hotels. The innovation culture of a business reflects its ability to introduce new processes, products, or services (Hult et al., 2004). In this research, innovation culture is characterized by a work environment that encourages creative innovation, a willingness to take risks, the ability to seize opportunities, and the company's overall commitment to innovation. Strong internal motivation arising from the innovation culture paves the way for extensive and profound innovation activities within the business. This perspective is supported by prior research by Pucihar (2019) and Bouwman (2018).

Furthermore, the study demonstrated that the level of business model innovation directly influences specific outcomes, including business process operations, information technology, human resources, and the organizational structure of hotels. Greater innovation leads to broader impacts on the business. This finding is consistent with previous research by Pucihar and colleagues in 2009.

The study also established a direct link between the outcomes of business model innovation and the overall business performance of hotels. In other words, the greater the extent of business model innovation and its impact on business model innovation, the more positive the business performance results. This finding aligns with previous research by Zott and Amit (2007), Aspara et al. (2010), Cucculelli and Bettinelli (2015), and Volberda et al. (2017).

Practical Implications

The study proposes practical suggestions for hotel industry managers in Vietnam if they want to successfully implement BMI. Firstly, managers need to thoroughly understand the current BMI, clearly identify the factors that need to be changed, and use tools and methods to build BMs. Secondly, businesses need to continuously innovate their BM during their operations. Finally, businesses need to focus on innovation culture, including human factors and management when implementing BMI.

6. CONCLUSION

The empirical findings of this research suggest that the degree of innovation in the business models (BM) of Hanoi's hotels is shaped by a combination of external and internal factors. Key determinants include the prevailing economic conditions, the global health crisis brought about by the COVID-19 outbreak, and the presence of an innovative culture within the corporate entity. The study reveals a positive correlation between the level of innovation in a BM and the resulting outcomes of Business Model Innovation (BMI) initiatives. Furthermore, the positive

impacts stemming from innovative activities related to the BM have a beneficial effect on the overall performance of hotels. These results underscore that BMI can lead to significant advantages for enterprises, including increased revenue from commercial operations, and an enhanced competitive edge for dining establishments.

Apart from to the aforementioned contributions, the present study also exhibits several limitations. Firstly, the author faces challenges in conducting research on the hotel industry in Vietnam due to its nascent nature, particularly in acquiring and aggregating survey data. Future investigations should endeavor to conduct more extensive and geographically diverse surveys across the country, ensuring a more equitable response rate in urban areas to improve the study's representativeness. Secondly, the study identifies certain performance indicators of the hotel industry after implementing BMI. However, these indicators, such as rate of return, market agility, and overall market value, cannot be effectively captured solely through questionnaires.

Future research endeavors should consider employing more robust survey instruments and methodologies to gather even more valuable data and indices. Additionally, it's important to acknowledge that this research provides only a limited understanding of the broader research domain encompassing business models (BMs) and Business Model Innovation (BMI). Therefore, it is strongly recommended that upcoming studies prioritize a comprehensive examination of distinct motivations and methodologies associated with BMI, with a specific emphasis on its resultant effects. Case studies can provide deeper insights into real-world scenarios and potential shortcomings linked to BMI activities and outcomes. In light of current trends, future research should also give priority to investigating the impact of BMI on business performance within the Triple Bottom Line framework, which aims to strike a balance between social responsibility, profitability, and environmental sustainability.

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