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THE ROLE OF A FIRM'S CAPABILITIES ON BUSINESS MODEL INNOVATION; EVIDENCE FROM HOTELS IN INDONESIA

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ABSTRACT

A business model is a strategic plan for creating, delivering, and retaining value, ensuring profitability and competitiveness. To thrive in a dynamic market, a company should harness its strengths and innovate its business model to address opportunities or challenges. Strong capabilities empower a firm to effectively implement business model innovation in response to market fluctuations. This quantitative study examines the role of a firm's capabilities, which are dynamic capabilities and market orientation toward a business model innovation in Indonesia's hotel industry after the pandemic. Inferential statistical analysis was conducted on two independent variables, dynamic capabilities, and market orientation, to examine their impacts on business model innovation as a dependent variable using Structural Equation Modelling with software Smart PLS 4. The samples included 492 general managers at three to five-star hotels in Indonesia who were used as respondents. They were selected using purposive sampling to examine two hypotheses. A five-point Likert-scale online questionnaire included thirty-two questions from seven dimensions covering two independent variables examined. The results of the T-test show that the firm's capabilities, which are dynamic capabilities and market orientation, have significant effects independently on business model innovation, with each substantial value of $p<0.05$. Dynamic capabilities affect business model innovation by 42.9%, followed by Market orientation, which contributes to business model innovation generation by 35%. Additionally, Importance-Performance Map Analysis (IPMA) identifies the practical contributions of firm capabilities, particularly highlighting the significance of proactive market orientation in influencing business model innovation.

Keywords : *Dynamic Capabilities; Market Orientation; Business Strategy; Strategic Management; Competitive Advantage; Hospitality*

INTRODUCTION

Globalization and rapid technological advancements have led to a significant level of competition. In addition, sometimes disruption compels companies to reevaluate their business models to compete in the market and sustain their businesses. What was considered a novel invention just a few months ago quickly becomes obsolete due to disruptive forces. The ever-evolving and highly uncertain market conditions often disrupt a company's business model (David J. Teece, 2010), where innovation, a critical pathway to achieving competitive advantage, is pivotal in reshaping the utilized business model (Assink, 2006).

The innovation within business models becomes a foundation for a sustainable competitive edge that is challenging for rivals to replicate, offering more tremendous advantages than other forms of creation. In response to crises and disruption, the company must use its internal capabilities to adjust its business model's organizational structure, processes, and resources accordingly. The capabilities of a firm encompass the ability to utilize its dynamic capabilities and market orientation to innovate its offerings. Furthermore, by optimizing those internal capabilities, a firm is expected to innovate its business model, as Business Model Innovation is crucial in responding to crises (Breier et al., 2021).

The hotel industry in Indonesia is a significant part of the tourism sector, holding economic importance, notably in government tax revenue generated from hotels. The hospitality industry has experienced various challenges, such as the growth of a digital platform-based business model called the Virtual Hotel Operator (VHO) in 2015 in Indonesia. The Virtual Hotel Operator platform offers low-budget yet clean accommodation options and utilizes a digital-based booking system, which has experienced rapid growth since its inception. They use innovation in their business model to provide better, faster, and more accessible customer service and disrupt the market. Meanwhile, not all conventional hotels prioritize innovation, including technology

innovation; instead, hotel managers commonly prioritize introducing new guest room amenities or another similar service that may be less critical for business strategy (Wiastuti & Susilowardhani, 2016). Thus, it implies that the hotel industry may need more ability to change quickly through their current business model to anticipate environmental changes. Additionally, the COVID-19 pandemic was another crisis experienced worldwide. Over the last three years, the tourism and hospitality sector has been dramatically influenced by the pandemic, causing significant losses for hotels and accommodations. In 2020, the national average occupancy rate stood at a mere 35%, reflecting a 20% drop compared to the pre-pandemic year of 2019. This fact underscores the need for adaptability and resilience within the hotel industry's business model as it navigates evolving market dynamics and external crises.

Therefore, hotels must use their internal capabilities to conceptualize and implement business model innovation to sustain their competitive advantage. The significance of the ability to innovate a business model is also established in the study by (Timotius, 2023), who emphasized that businesses must embrace innovation to adapt their business models, enhancing competitiveness and resilience in an increasingly uncertain environment (Adam & Alarifi, 2021). In uncertainty, the capacity for innovation within currently utilized business models emerges as a competitive advantage for corporations. Dynamic capabilities are considered the cornerstone of a corporation's strength in innovating its business model by exploiting internal and external resources. This research contributes novelty by delineating market orientation, perceived as an integral part of a corporation's dynamic capabilities, specifically regarding how corporations employ market orientation to apprehend market needs. This study aims to elucidate how dynamic capabilities in managing resources, augmented by the ability to capture market demands, act as catalysts for a corporation's innovation capacity in altering business models amidst market uncertainties.

Business Model Innovation

A business model shows how a firm develops and provides value to customers. It is also a method to preserve some value for business model development. Innovation is sparked by a business model, which then develops into a subject of innovation. The business model offers a method by which technical advancement and knowledge, in conjunction with the use of tangible and intangible assets and capabilities, are converted into a source of profit for the organization (D J Teece, 2018). A business must establish its business model using one or more business model concepts or designs to achieve superior performance. The business model themes can drive innovation and provide direction in how the business model operates. By carefully selecting and implementing business model themes, companies aim to achieve superior performance and stay competitive in a rapidly changing business environment.

Facing a crisis or uncertain market is the least expected by a firm, and managing the resources under the circumstances takes work. Given the continuous shifts in competition, it was evident that business model innovation has evolved into a crucial element to consider in company strategy (Pereira et al., 2015). Business model innovation involves making significant changes or adjustments within a company, utilizing its capabilities to adapt to market conditions, especially in an uncertain and dynamic environment. A company must constantly adapt and innovate, employing novel creative ideas and technology, as business models are only sometimes stable and enduring. The company can create unique value propositions and turn them into business model innovations using its capabilities. Furthermore, Business Model Innovation is a company's flexibility to adjust to crises, and it is a potent recovery response to the COVID-19 crisis (Breier et al., 2021). In other words, the company must use its capabilities to develop business model innovation to respond to crises and survive. The dynamic capabilities and market orientation are important to creating value and delivering it to consumers. The result of the firm's capabilities enables the company to create efficiency or novelty in the way it delivers value to the customer through its business model. Further, in a study by (Yang et al., 2020) on promoting business model innovation, companies must initially define new value propositions or design themes. Business model innovation means reconfiguring the entire business model or some components in response

to obstacles or as a strategy for innovation and diversification. In this case, companies can adopt an approach of efficiency or novelty to transform or enhance their existing business model. According to (Zott & Amit, 2007a), the business model innovation can be translated into indicators as follows;

1) Easy transactions conducted with customers.
2) Efficiency in accessing every transaction.
3) Providing novel combinations for service.
4) Linking the staff and clients in novel ways.
5) The strategy of revenue generation is innovative.

Dynamic Capabilities

The firm's internal capability to manage its resources is crucial in gaining a competitive advantage and sustaining the business through a business model. Three critical resource areas contribute to this advantage: nature-based, knowledge-based, and dynamic capability-based views. The latter view, dynamic capability-based, focuses on the dynamism of the company's environment. Using dynamic capabilities, an organization's internal and external abilities must be integrated, built, and reconfigured to adapt to rapid environmental changes. Dynamic capabilities constitute an essential part of Business Model Innovation (David J. Teece, 2018) and serve as a critical antecedent to business model innovation (Franco et al., 2021). A company must be able to detect and influence opportunities and challenges, coordinate across its functions, and integrate and, if necessary, reconfigure internal resources to operate the business model innovation. At the same time, the company must have the competitive capability to make improvements, which is used as opportunities for innovation (Vu, 2020). Innovation supported by technological capabilities will result in a company's dynamic ability to adapt to environmental changes (Ilmudeen, 2021). The study employs five dimensions modified from the study of (Mikalef & Pateli, 2016; Pavlou & El Sawy, 2011) to identify the dynamic capabilities, which are then translated into activities of;

1) Sensing
2) Coordinating
3) Learnin
4) Integrating
5) Reconfiguring

Market Orientation

Rapid changes in the market may lead to consumer behavioral changes as well. Therefore, companies need to recognize consumer needs and respond to information gathered from the market. After collecting the consumer's needs, the company transforms them into practical value creation, followed by disseminating them across all functional aspects of the business. The objective is to provide superior products and services to customers. The ability to search and collect market data regarding present and future needs is known as market orientation. Market orientation is part of a firm's capability to assist in creating innovation by understanding the market's needs. The understanding of current consumer and potential future needs serves as guidance in creating value and is a crucial part of business model innovation (Amit & Zott, 2012, 2015). A capability perspective of Market Orientation is adopted to influence innovation, where Market Orientation facilitates an understanding of customers and competitors. Furthermore, understanding what customers require enables a business to define its value proposition and support business model innovation (Ramani & Kumar, 2008). In other words, implementing market orientation can help the firm innovate its current business model. The evolution in Market Orientation literature is categorized into two dimensions: Responsive Market Orientation and Proactive Market Orientation (Narver et al., 2004). Responsive market orientation emphasizes existing customers, potential threats, and opportunities within established market segments. Conversely, Proactive market orientation, which centers around future or emerging markets,

directs more attention toward concerns for potential rivalry and new market prospects (Wei et al., 2014; Yang et al., 2020). Therefore, this study employs two dimensions of Market orientation adopted from study by (Lamore et al., 2013; Yang et al., 2020; Yannopoulos et al., 2012), to identify the current and potential of customer's needs, which are through;

1) Responsive market orientation.
2) Proactive market orientation.

Strong dynamic capabilities are required for business model innovation development (Teece, 2018a) . Several researchers tried to understand the relationship between dynamic capabilities and business model innovation for multinational companies and their environment to drive innovation within companies (Augier & Teece, 2009; Bocken & Geradts, 2020; Zahra & George, 2002). By optimization of dynamic capabilities, it would be expected that a firm can implement business model innovation and create a sustainable competitive advantage regardless it is still debatable whether short or long sustainable competitive advantage (Banerjee et al., n.d.; Jabbarzadeh et al., 2018; Kuo et al., 2017; Naguib et al., 2017). However, it is essential to acknowledge that business model innovation requires dynamic capabilities to face the volatile market like pandemic covid 19 and sustain the business (Mohammed et al., 2021). The previous researchers also tried to link the relationship between the importance of market orientation to conceptualize and implement business model innovation (Amit & Zott, 2012; Chesbrough, 2010; Narver & Slater, 2012). However, it is still open to examining the different dimensions of market orientation in influencing business model innovation (Gupta et al., 2019), particularly in the hotel industry as a vital country's national revenue. Therefore, it is crucial to investigate how firm capabilities, which are dynamic capabilities and market orientation, can affect the generation of business model innovation in Indonesia's hotel industry to sustain the business after the pandemic.

The research is motivated to assist hotel management in understanding the importance of the firm's capabilities, which are dynamic capabilities and market orientation, in influencing business model innovation after the pandemic. Using the quantitative approach, the relationships between these variables are disclosed. The findings will assist hoteliers in prioritizing the development of innovative business models that leverage the firm's capabilities and create a sustainable competitive advantage. This study aims to uncover the role and relationships among the variable of Dynamic capabilities, with the dimensions of Sensing, Coordinating, Learning, Integrating, and Reconfiguring, and the variable of Market Orientation with its dimensions of Responsive market orientation and Proactive market orientation in influencing a Business Model Innovation within the Indonesian hotel industry. Thus, the hypotheses of the study are proposed as follows;

H_1: Dynamic capabilities have a significant direct effect on business model innovation.
H_2: Market orientation has a significant direct effect on business model innovation.

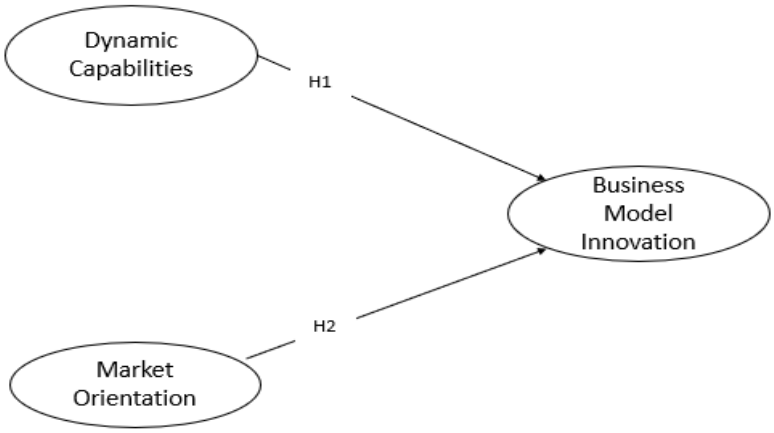

Figure 1
Conceptual Framework

RESEARCH METHOD

The study examines the role of a firm's Dynamic Capabilities and Market Orientation as independent variables on Business Model Innovation as dependent variables, utilizing a one-tailed test. The conceptual framework, depicted in Figure 1, illustrates the connections between these variables. This research involves five dimensions from variable Dynamic Capabilities, two dimensions from variable Market Orientation and Business Model Innovation translated into thirty-two indicators in total, which are summarized in Table 1. The questions in a 5 points Likert-scale (1 – strongly disagree to 5 – strongly agree) distributed to selected respondents using non-probability Purposive Sampling to who hold managerial positions as General Managers of three to five-star hotels in Indonesia, the establishment of the hotel is a minimum of seven years and have a minimum of 5 years of tenure at the same hotel until 2023.

Table 1 Research Variables, the Dimensions, and Indicators

Variables	Dimensions	Indicators	Sources
Dynamic Capabilities	Sensing	Scanning process in identifying new business opportunities (Sensing-1)	Modified from (Pavlou & El Sawy, 2011) and (Mikalef & Pateli, 2016)
		Reviewing product and service development efforts (Sensing-2)	
		Understanding how the competitive landscape evolves Sensing-3)	
		Gathering important intelligence (Sensing-4)	
	Coordinating	Coordinating several functional tasks in an efficient manner (Coordinating-1)	
		Providing effective coordination with external parties (Coordinating-2)	
		Synchronizing activities with functional units (Coordinating-3)	
	Learning	Discovering and importing novel knowledge and information (Learning-1)	
		Converting previously acquired knowledge into new understanding (Learning-2)	
		Assimilating new information and knowledge (Learning-3)	
		Utilizing expertise and data gathered to support in decision-making (Learning-4)	
	Integrating	Real-time, simple access to vital data from business partners (Integrating-1)	
		Streamlining interactions between business partners (Integrating-2)	
		Incorporating important information from key partners (Integrating-3)	
	Reconfiguring	Preparing for unanticipated changes (Reconfiguring-1)	
		Reconfiguring business processes to create new productive assets (Reconfiguring-2)	
Market Orientation	Responsive Market Orientation	Maintaining a high level of dedication to fulfilling customer demands (RMO-1)	(Lamore et al., 2013; Yang et al., 2020; Yannopoulos et al., 2012)
		Monitoring orientation degree to fulfilling customers' requirements (RMO-2)	
		Measuring customer satisfaction systematically (RMO-3)	
		Distributing information on customer satisfaction on a regular basis (RMO-4)	
		The company exist primarily to serve consumers (RMO-5)	
	Proactive Market Orientation	Continuously identifying customer extra requirements which they are unaware of (PMO-1)	
		Extrapolating key technology to gain insight into potential customer's needs. (PMO-2)	
		Using outcome from operational activities to gain potential customer's needs in the future (PMO-3)	
		Utilizing customer behavior patterns to identify potential requirements in the future (PMO-4)	
		Brainstorming for projected future demands based on how consumers utilize products and services (PMO-5)	
		Exploring the information from key account clients to gain potential future needs (PMO-6)	
Business Model Innovation (BMI)		Easy transaction conducted with customers (BMI-1)	(Zott & Amit, 2007b)
		Efficiency in accessing every transaction (BMI-2)	
		Providing novel combinations for service (BMI-3)	
		Linking the staff and clients in novel ways (BMI-4)	
		The way to generate revenues is novel (BMI-5)	

In testing the variables, two stages of calculations will be conducted: Lower-order for dimensions and Higher-order for variable level. Data analysis using Structural Equation Modeling (SEM) with the software Smart PLS 4, encompassing model specification for the outer model and inner model. The outer model assessed the validity with a value exceeding 0.7 and an AVE value surpassing 0.5, testing reliability using Cronbach Alpha and Composite Reliability with a value

above 0.70, and testing the discriminant validity using Fornell-Lacker (Hair et al., 2019). In the inner model assessment, a test for multicollinearity is conducted using VIF (Variance Inflated Factor) with values less/below 5, the Determinant Coefficient (R2 and R2 adjusted), and Predictive Relevance (Q square) value above 0.

Path analysis is utilized to assess the extent of interrelationships between variables, and the significance of each effect is evaluated through hypothesis testing using the T-test and p-value. In addition, the Importance-Performance Map Analysis (IPMA) is carried out to enhance the presentation of path coefficients based on conventional PLS-SEM results. The aim is to find predecessors with significant importance for the target construct (total solid effect), but comparatively lower performance (low average latent variable scores). These aspects highlight potential areas that need improvement and deserve close attention (J. F. Hair et al., 2017). The IPMA will highlight which firm capabilities (Dynamic capabilities and Market orientation) hold significant importance but low performance in influencing Business Model Innovation as a target construct.

RESULT AND DISCUSSION

The Profile of Respondents

Of 578 collected questionnaires from January to May 2023, only 492 valid responses were selected based on criteria, tested, and further analyzed. Most respondents were male at 71.54% and women at 28.45%. The most common age range was 45-54 (39.84%), followed by 36-44 (31.70%). Most of the hotels in the classification were four-star hotels at 45.94%, followed by three-star hotels at 31.70% and five-star hotels at 22.36%. The length of work of most respondents in the same hotels was between 5-10 years (75.20%), and the largest respondents group worked in the Jakarta, Bogor, Depok, Tangerang, and Bekasi areas at 38.61%, followed by Central Java at 27.03% (Table 2).

Table 2 Demographics of the respondents

Category	Items	Frequency	Percentage
Gender	Men	352	71.54
	Women	140	28.45
Age (years)	<35 years old	92	18.70
	36-44 years old	156	31.70
	45-54 years old	196	39.84
	55-60 years old	48	9.75
Hotel Classification	3 Stars Hotel	156	31.70
	4 Stars Hotel	226	45.94
	5 Stars Hotel	110	22.36
Length of work	5-10 years	370	75.20
	10-15 years	65	13.21
	15-20 years	16	3.25
	>20 years	41	8.34
Hotel Location	Bali and Lombok	45	9.15%
	Banten	3	0.61%
	Jakarta, Bogor, Depok, Tangerang and Banten	190	38.61%
	West Java	13	2.64%
	Central Java	133	27.03%
	East Java	24	4.88%
	Sumatra Island	75	15.24%
	Kalimantan and Sulawesi	9	1.84%

Result for Outer Model (Measurement Model)

In the outer model's lower order, causal relations were established between the indicators of each dimension. Twenty-seven indicators from five dimensions of Dynamic capabilities and two dimensions of Market Orientation were examined, where overall, the valid measurement items displayed for outer loadings exceeding 0.70 (Table 3). However, at the dimension level, there are some indicators with outer loadings below 0.7, which are Reconfiguring-2, RMO-1, RMO-2, RMO-3, PMO-1, PMO-2, and PMO-6, but since their AVE values remain above 0.5, those indicators in outer loadings are retained (Joseph F. Hair et al., 2019) (Table 4).

Table 3 Outer Loading – Dimension Level

Variables	Dimensions	Indicators to Dimension	Outer Loading
Dynamic Capabilities	Sensing	Sensing-1 → Sensing	0.831
		Sensing-2 → Sensing	0.825
		Sensing-3 → Sensing	0.763
		Sensing-4 → Sensing	0.811
	Coordinating	Coordinating-1→ Coordinating	0.865
		Coordinating-2 → Coordinating	0.850
		Coordinating-3 → Coordinating	0.842
	Learning	Learning-1→ Learning	0.878
		Learning-2 → -Learning	0.843
		Learning-3 → Learning	0.729
		Learning-4 → Learning	0.852
	Integrating	Integrating-1 → Integrating	0.795
		Integrating-2 → Integrating	0.788
		Integrating-3 → -Integrating	0.847
	Reconfiguring	Reconfiguring-1 → Reconfiguring	0.715
		Reconfiguring-2 → Reconfiguring	0.668
Market Orientation	Responsive Market Orientation	RMO-1 → Responsive Market Orientation	0.696
		RMO-2 → Responsive Market Orientation	0.682
		RMO-3 → Responsive Market Orientation	0.678
		RMO-4 → Responsive Market Orientation	0.765
		RMO-5 → Responsive Market Orientation	0.727
	Proactive Market Orientation	PMO-1 → Proactive Market Orientation	0.587
		PMO-2→ Proactive Market Orientation	0.654
		PMO-3 → Proactive Market Orientation	0.776
		PMO-4 → Proactive Market Orientation	0.766
		PMO-5 → Proactive Market Orientation	0.822
		PMO-6 → Proactive Market Orientation	0.629

The results indicate that, at the dimension level, all indicators from seven dimensions meet widely accepted criteria for Cronbach's Alpha and Composite Reliability (>0.70) and have an Average Extracted Value (AVE) exceeding 0.50 (Table 4).

Table 4 Summary of Cronbach's Alpha, Composite Reliability, and AVE- Dimension Level

Dimensions	Cronbach's Alpha	Composite Reliability	AVE
Sensing	0.890	0.924	0.753
Coordinating	0.893	0.933	0.823
Learning	0.902	0.932	0.775
Integrating	0.849	0.908	0.768
Reconfiguring	0.723	0.878	0.783
Responsive Market Orientation	0.865	0.903	0.650
Proactive Market Orientation	0.862	0.901	0.645

In the last step for the lower-order dimension level, the Discriminant validity was assessed using Fornell-Lacker, confirming discriminant validity at the dimension level (Table 5).

Table 5. Discriminant Validity (Fornell Lacker) – Dimension Level

Dimension	Dynamic Capabilities-Sensing	Dynamic Capabilities-Coordinating	Dynamic Capabilities-Learning	Dynamic Capabilities-Integrating	Dynamic Capabilities-Reconfiguring	Market Orientation-Responsive Market Orientation	Market Orientation-Proactive Market Orientation
Dynamic Capabilities -Sensing	**0.868**						
Dynamic Capabilities-Coordinating	0.867	**0.907**					
Dynamic Capabilities-Learning	0.844	0.832	**0.880**				
Dynamic Capabilities-Integrating	0.801	0.862	0.823	**0.876**			
Dynamic Capabilities-Reconfiguring	0.628	0.666	0.709	0.730	**0.885**		
Market Orientation-Responsive Market Orientation	0.691	0.705	0.706	0.740	0.512	**0.806**	
Market Orientation-Proactive Market Orientation	0.704	0.725	0.729	0.708	0.642	0.611	**0.803**

Dynamic Capabilities, Market Orientation, and Business Model Innovation constructs were examined in the higher-order testing. Outer loadings at the variable level exceeded 0.70, signifying their validity (Table 6). Cronbach's alpha and composite reliability values are above 0.70, and AVE values demonstrated convergent validity at the variable level, all-surpassing 0.50 (Table 6). Thus, the Discriminant validity at the variable level using Fornell Lacker confirms that Discriminant Validity is undetectable (Table 7).

Table 6 Outer Loading – Variable Level

Variables	Dimension and Indicators to Construct	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Dynamic Capabilities	Sensing → Dynamic Capability	0.917	0.945	0.959	0.823
	Coordinating → Dynamic Capability	0.935			
	Learning → Dynamic Capability	0.933			
	Integrating → Dynamic Capability	0.931			
	Reconfiguring →Dynamic Capability	0.813			
Market Orientation	Responsive Market Orientation → Market Orientation	0.911	0.758	0.892	0.805
	Proactive Market Orientation → Market Orientation	0.883			
Business Model Innovation	BMI-1 → Business Model Innovation	0.721	0.883	0.915	0.683
	BMI-2 → Business Model Innovation	0.878			
	BMI-3→ Business Model Innovation	0.855			
	BMI-4→ Business Model Innovation	0.857			
	BMI-5 → Business Model Innovation	0.812			

Table 7 Discriminant Validity Fornell Lacker-Variable Level

Variable	Business Model Innovation	Dynamic Capabilities	Market Orientation
Business Model Innovation	**0.827**		
Dynamic Capabilities	0.725	**0.907**	
Market Orientation	0.712	0.844	**0.897**

Result for Inner model (Structural Model)

The inner model evaluation consists of the multicollinearity test (Variance Inflated Factor), the determination coefficient (R2), the adjusted R2, and the Predictive Relevance (Q Square). The multicollinearity test results show that the inner VIF values are below/less than 5 (Table 8).

Table 8 Variance Inflated Factor (VIF)

Variable	Business Model Innovation
Dynamic Capabilities	3.478
Market Orientation	3.835

The determination coefficient (R2) shows the influence of Dynamic capability and Market Orientation on Business Model Innovation is 0.560, and the value of R Square adjusted is 0.559. The Q square value yields a value above 0, which is 0.554. All the results are summarized in Table 9.

Table 9 R Square, R Square adjusted and Q Square

Variable	R Square	R Square Adjusted	Q Square
Business model Innovation	0.560	0.559	0.554

Further, Table 10 shows a standardized coefficient (Beta) value of 0.429, or 42.9%, for the contribution of Dynamic Capability to Business Model Innovation and 0.350, or 35%, for Market Orientation to Business Model Innovation.

A statistical bootstrapping analysis is performed on each constructed hypothesis to determine the significance level of each independent variable on the dependent variable. For the first hypothesis, there is a positive and significant direct effect of Dynamic Capabilities on Business Model Innovation, where the result of the T-statistic value is 7.020 with a significance level of 0.000 (Table 10 and Figure 2). Since the t count value is greater than the t table for a one-tailed test, it means that, theoretically, Dynamic Capabilities significantly directly affect Business Model Innovation.

Table 10 Summary of Direct Effect, T-Test, and P-Values

Hypothesis	Path	Standardized β	T Statistic	P Values	Result
H_1	Dynamic Capabilities -> *Business Model Innovation*	0.429	7.020	0.000	Supported
H_2	*Market Orientation -> Business Model Innovation*	0.350	5.500	0.000	Supported

The second hypothesis is that there is a positive and significant direct impact of Market Orientation on Business Model Innovation, where the result is presented in Table 10 and Figure 2, with a T-statistic value of 5.500 with a significance level of 0.000. Since the t count value is greater than the t table for a one-tailed test, it means that, theoretically, Market Orientation has a significant direct effect on Business Model Innovation.

Result of Important Performance Matrix Analysis (IPMA)

Finally, The Importance-Performance Map Analysis (IPMA) results are summarized in Table 11.

Table 11 IPMA Results

Variables	Dimensions	Importance	Performance	Category
Dynamic Capabilities	Sensing	0.095	81.585	Low Importance - High Performance
	Coordinating	0.096	80.626	Low Importance - High Performance
	Learning	0.103	80.030	Low Importance - High Performance
	Integrating	0.095	76.942	Low Importance - Low Performance
	Reconfiguring	0.083	72.122	Low Importance - Low Performance
Market Orientation	Responsive Market Orientation	0.208	82.230	High Importance – High Performance
	Proactive Market Orientation	0.182	72.372	High Importance – Low Performance

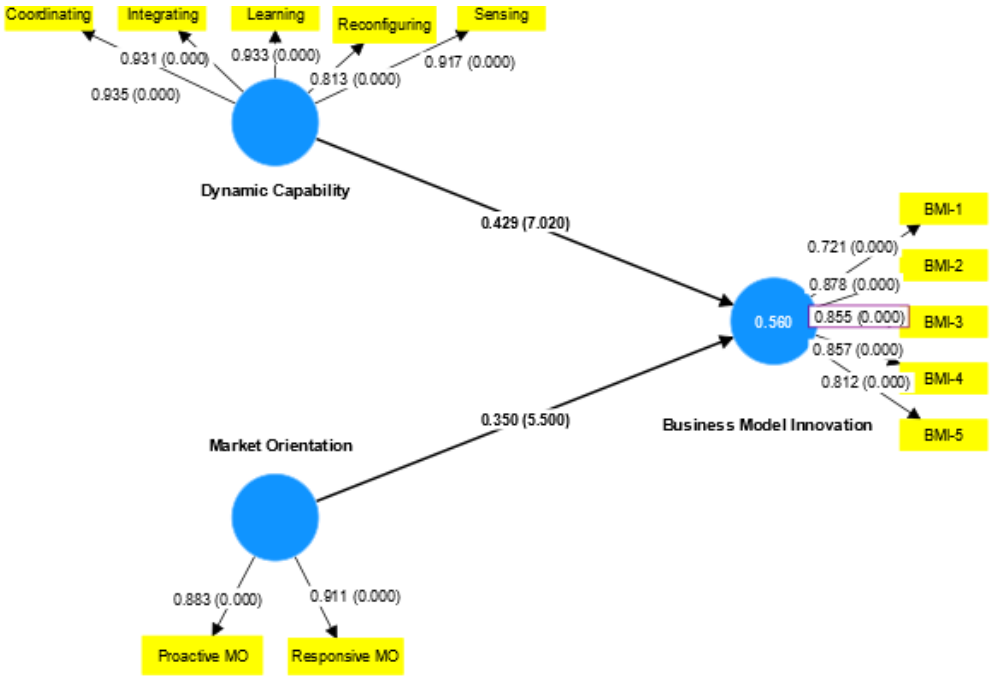

Figure 2
Path Coefficient, T-Values and P Values

This research explores the role of a firm's capabilities toward business model innovation within the Indonesian hotel industry after the pandemic. The inferential statistical analysis in this study has unveiled the impact of the firm's capabilities for developing a business model innovation. The two firms' capabilities, which are dynamic capabilities and market orientation, significantly influence the innovation of the business model of hotels in Indonesia.

The bootstrapping results for each proposed hypothesis show that two of the firm's capabilities influence the formation of business model innovation implemented by hotels after the pandemic. Dynamic Capabilities have the most significant impact, with a 42.9% contribution to business model innovation, while Market Orientation contributes 35% of innovation in business models. These findings can serve as a reference for hoteliers in setting priorities and focusing

their strategies on developing dynamic capabilities to enhance their innovation capabilities in their business models when facing crises and market uncertainties. The result is theoretically supported by (Breier et al., 2021), who state that the degree of innovation in the business model will influence a firm's flexibility to adapt to a changing environment. Therefore, a company must have a flexible business model, which serves as a driver of innovation, and alongside their function in innovation, business models themselves are subject to innovation (Schneider & Spieth, 2013).

The first hypothesis, which is that there is a significant direct effect of Dynamic Capabilities on Business Model Innovation, is supported in this study. The finding aligns with what was demonstrated in research by Vu (2020), which emphasizes the vital role of a company's dynamic capabilities in adapting to dynamic environmental conditions. In addition, the strength of dynamic capabilities is crucial for sustaining a company's long-term profitability. Dynamic capabilities enable a company to design and engage in all activities involving resources to achieve competitive advantage through business model innovation (Arranz et al., 2020; Pundziene et al., 2021; Teece, 2018b), which in this study contributes 42.9% influence on business model innovation generation. Dynamic capabilities influence innovation in the business model by creating different value propositions, value creation, and value capture. To create value propositions, value creation, and value capture, companies leverage their dynamic capabilities in sensing new opportunities, coordinating functions within the organization to exploit these opportunities, continuous learning, integrating all resources, and reconfiguring them to deliver value to customers. The result emphasizes that dynamic capabilities, accounting for 42.9%, is the key contributor to business model innovation within hotel management in Indonesia. This means that dynamic capabilities drive the level of innovation in the business model at 42.9% and 35% from market orientation, while the balance is contributed to by other variables not studied in the research.

The finding is in line with the previous studies that the dynamic capabilities of an organization affect the level of business model innovation as a crucial component of the value creation architecture in the business model itself (Franco et al., 2021; Heider et al., 2021; Sharma et al., 2021; Velu, 2017). The stronger a company's dynamic capabilities in managing its resources, the higher its ability to innovate through its business model to achieve competitive advantage and cope with dynamic environments. All the dimensions of Dynamic capabilities studied theoretically supported the capabilities of sensing, coordinating, learning, integrating, and reconfiguring by hotel management, affecting the business model innovation they implemented post-pandemic. However, from the Importance Performance Map Analysis (IPMA) results, all dimensions, which are the capability of Sensing, Coordinating, Learning, Integrating, and Reconfiguring, are considered as either Low Importance but High Performance and both Low Importance and Low Performance. Therefore, hoteliers can exert little effort on activities in each dimension. The reason is regardless of the dynamic capabilities contributing to business model innovation, the current dynamic capabilities implemented by the hotel have been evaluated to successfully sustain the innovation generation in the business model operated by the company.

The second hypothesis that there is a significant direct effect of Market orientation on Business Model Innovation is supported in this study, where market orientation contributes 35% of innovation in business models. The supporting research with the same result conducted by(Yuki & Kubo, 2023) indicates that market orientation can predict innovation. In creating business model innovation, understanding customer needs is the foundation for generating value and is a crucial component of the business model innovation itself (Amit & Zott, 2012a, 2015). The market orientation is the company's ability to ascertain what customers want currently and predict potential needs in the future. Understanding the current needs and predicting potential needs require hoteliers to implement Responsive and Proactive market orientation. Another study also suggests that both dimensions of market orientation, which are Responsive Market Orientation and Proactive Market Orientation, have positive impacts and are necessary for business model innovation by defining novel business approaches (Yang et al., 2020). Using the Importance-Performance Map Analysis (IPMA), Proactive Market Orientation is considered highly important but low in performance. This means that proactive market orientation is the area

that needs to be improved by hoteliers to increase their ability to innovate their business models in uncertain environments. The respondents evaluated that hotel management's ability to predict consumers' potential needs from behavioral patterns still needs to be improved. Therefore, hotels can do market research and analysis by investing in extensive research and analysis to understand emerging trends, changing customer preferences, and finding opportunities for new market segments. The implementation can involve regular surveys, competitor analysis, and data analytics to identify potential opportunities. Another possible implication is continuous learning, which encourages a culture of continuous learning and adaptation within the organization. Staying informed about industry trends, attending conferences, and fostering innovation through cross-functional teams can help project future demands.

Concerning Responsive Market Orientation, based on the Importance-Performance Map Analysis (IPMA) result, the respondents considered this dimension as both high importance and high performance. Meaning that currently, hotel management in Indonesia is successfully implementing the Responsive Market Orientation to influence the Business Model Innovation generation. Keeping the satisfaction of the customers is evaluated as the best strategy implemented by the hotel management in facing the crisis instead of exploring potential needs as part of the Proactive Market Orientation approach. Therefore, management must focus on strengthening and optimizing their Responsive Market Orientation to further enhance customer satisfaction and meet current needs effectively.

However, technology implementation in the hotel industry has received little attention because the competition among hotels has traditionally not been focused on technological innovation. (Tsai et al., 2009) suggested that a Proactive Market Orientation is practical when high levels of technological turbulence and competitive intensity exist. They argue that a Proactive Market Orientation is unnecessary when these levels are low (Yuki & Kubo, 2023). In contrast, the result of this study shows the opposite result, as the Proactive Market orientation is required to capture potential future needs from customers as it is now still considered as an area to be improved in Indonesia's hotel management. Therefore, understanding the turbulence in the market may allow hotel management to choose between implementing a responsive market orientation, which focuses on current needs, or being proactive in predicting potential market needs in the future using advanced technology. Theoretically and empirically, both dimensions of the market orientations can influence the degree of innovation in the current business model.

CONCLUSION

To be able to compete and sustain the business, especially in facing a crisis or a dynamic environment, the hotel industry must have flexibility and adaptability to use the resources and capabilities they possess. The empirical findings highlight the importance of firm capabilities, which are dynamic capabilities and market orientation, in influencing business model innovation within the hotel industry post-pandemic. The research reveals that Dynamic capabilities and Market orientation positively have significant direct and positive effects on business model innovation generation. Increasing the dynamic capabilities and market orientation will affect the degree of innovation in the business model for the hotel industry. The finding empirically contributes to the conceptual framework that strong Dynamic Capabilities and Market Orientation are necessary for innovation development in business model as part of business strategy. These capabilities are essential for sensing business opportunities, reconfiguring the resources, and transforming the resources into an adjusted business model innovation after a crisis or in a rapidly changing environment.

Dynamic capabilities enable companies to design and engage in resource-related activities to achieve competitive advantages through their business model innovation. Furthermore, the dynamic capabilities of an organization play a crucial role in shaping the level of business model innovation, which is a fundamental component of the value creation architecture in the business model itself. While all dimensions of Dynamic Capabilities theoretically support the capabilities of sensing, coordinating, learning, integrating, and reconfiguring by hotel management, the study also revealed that these activities are considered of low importance and either high or low

performance. Therefore, hoteliers may not need to exert significant effort in these activities, as the current dynamic capability they have in place seems sufficient to sustain innovation in the current business model operated by the company. This suggests that, while dynamic capabilities are crucial, their optimization and focus should be balanced based on their specific importance and performance in the hotel's context.

Market orientation encompasses the company's ability to discern customer desires and anticipate future needs. In this regard, either Responsive or Proactive market orientation is essential for hoteliers, while Responsive Market Orientation is both highly important and high in performance, emphasizing it is crucial for meeting current customer needs effectively and maintaining the current activities to sustain guest satisfaction. Hoteliers are advised to focus on strengthening and optimizing their Responsive Market Orientation to enhance customer satisfaction further. On the other hand, proactive market orientation was proven to be highly important but low performance in this study. This dimension represents an area for improvement for hotel management in increasing their ability to innovate their business models in uncertain environments. The ability to predict potential customer needs based on behavioral patterns can be enhanced through market research and analysis, investment in research and data analytics, and fostering a culture of continuous learning and adaptation within the organization. While the traditional focus of competition in the hotel industry may not have been on technological innovation, the study suggests that Proactive Market Orientation can be vital for capturing potential future customer needs. Contrary to some previous research, this study adds the importance of Proactive Market Orientation in preparing for changes happening in the market. In summary, both Responsive and Proactive market orientations can influence the degree of business model innovation, and a balanced approach to these orientations can enhance a hotel's adaptability and competitiveness in volatile environments.

While the findings offer an initial contribution, further research in various industries or with a more specific focus on hotel classifications could provide deeper insights. First, each hotel classification might have different principles and orientations when dealing with a crisis or uncertain market. Future research could segregate specific hotel categories (e.g., only three or four-star, or five hotels) to accurately represent the conditions within those categories. Second, an area for improvement is the need for research literature providing measurement scales for other firms' capabilities, such as Service Innovation Capability, which constrained the study's scope in hospitality. Therefore, future research opportunities exist to develop measurement scales specific to Service Innovation Capability within the Indonesian hotel industry, enriching the service industry literature, particularly in hospitality.

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