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Effects of innovation and marketing capabilities on service excellence and hotel performance

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Abstract

This study analyzes the influence of three key factors: speed of innovation, innovation capability, and marketing capability on service excellence and hotel performance, with a specific focus on the mediating role of brand communication capability. A quantitative research design was employed, and data were collected from September to October 2024 in Indonesia through electronic surveys distributed via Google Forms. The sample comprises 440 respondents, consisting of hotel staff and guests who have stayed in 3- to 5-star hotels in Indonesia. These respondents were selected for their firsthand knowledge and experience with hotel services and marketing practices, ensuring the relevance of insights into the studied variables. The data were analyzed using SmartPLS version 4.1.0.8, applying the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The results reveal that the speed of innovation significantly affects both innovation capability (β = 0.551) and marketing capability (β = 0.413). Innovation capability (β = 0.327) and marketing capability (β = 0.432) positively influence brand communication capability, which in turn affects service excellence (β = 0.534) and hotel performance (β = 0.621). The model explains 28.6% of the variance in service excellence and 38.6% in hotel performance. These findings underscore the strategic value of integrating innovation and marketing efforts, with brand communication capability serving as a key lever for enhancing service excellence and performance in the hospitality industry. Hospitality businesses should invest in speeding up innovation processes and refining marketing practices, as these efforts significantly enhance brand communication capability, leading to improved service quality and competitive performance in the market.

Keywords: Communication, Hospitality, Hotel performance, Indonesia, Innovation, Marketing, Service.

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1. Introduction

Indonesia, with its vast archipelago of 17,001 islands, is a country rich in natural beauty and cultural heritage, making it one of Southeast Asia's most prominent tourist destinations [1]. The tourism sector plays a crucial role in enhancing a country's gross domestic product (GDP) by attracting both domestic and international visitors [2]. The "Wonderful Indonesia" campaign, launched in 2011, has been a significant initiative by the Ministry of Tourism to promote the nation's unique attractions [3].

Among the key sectors supporting tourism is hospitality, which encompasses accommodation, food and beverage services, and recreational activities. As tourism flourishes, so does Indonesia's hospitality industry, driven by an increasing middle class and infrastructural improvements [4]. However, the industry is not without its challenges. The hotel industry, in particular, is still recovering from the effects of the COVID-19 pandemic, despite showing signs of growth in recent years [5]. At the same time, the capability to innovate as well as respond quickly to changing market dynamics is crucial for hotels to succeed in a competitive landscape. Innovation capability, particularly in sustainability, helps hotels differentiate themselves and meet evolving customer demands [6]. Additionally, effective marketing strategies, including leveraging digital technologies and social media, are vital for communicating brand messages and attracting tourists [7]. By enhancing their brand communication capabilities, hotels can improve service excellence and strengthen relationships with guests.

To support the development of this research, the study aims to examine several key relationships within the hospitality industry. Specifically, it investigates whether the speed of innovation positively influences both innovation capability and marketing capability. Additionally, the study explores the extent to which innovation capability and marketing capability impact brand communication capability. It also assesses whether brand communication capability contributes to enhancing service excellence, and finally, whether service excellence has a positive effect on overall hotel performance. These objectives provide a comprehensive framework for understanding how organizational capabilities drive service quality and performance in the hospitality sector.

Despite growing interest in strategic capabilities within the hospitality industry, there remains limited understanding of how innovation capability, speed of innovation, and marketing capability collectively influence service excellence and hotel performance, particularly through the mediating role of brand communication capability. While these factors are recognized as critical to competitive advantage, few studies have explored the integrated relationships among them. This research addresses that gap by examining how brand communication capability functions as a mediating mechanism, offering new insights into how these organizational capabilities drive superior service quality and overall hotel performance.

Given the aforementioned research objectives and goals, the following research questions can be derived:

a. Does Speed of Innovation positively influence Innovation Capability in the hospitality industry?
b. Does Speed of Innovation positively influence Marketing Capability in the hospitality industry?
c. Does Innovation Capability positively influence Brand Communication Capability in the hospitality industry?
d. Does Marketing Capability positively influence Brand Communication Capability in the hospitality industry?
e. Does Brand Communication Capability positively influence Service Excellence in the hospitality industry?
f. Does Service Excellence positively influence Hotel Performance in the hospitality industry?

This study is the first to collect evidence on how innovation capability, speed of innovation, and marketing capability affect service excellence and hotel performance, with brand communication capability as a mediating variable. Earlier studies have examined the hospitality sector with various research variables. This research employs new or alternative variables to assess how innovation capability, speed of innovation, and marketing capability influence service excellence and hotel performance in Indonesian hotels. Recognizing the effects of these factors is essential, particularly their impact on service excellence and hotel performance within the hospitality sector, emphasizing the significance of brand communication capability as a mediating variable.

2. Literature

2.1. Speed of Innovation

Speed of innovation is the rate at which organizations can move new ideas from conception to market. In the hotel industry, rapid innovation allows businesses to respond to evolving guest preferences and market conditions, leading to enhanced service delivery and satisfaction [8, 9]. Technological advancements such as mobile apps, artificial intelligence-based concierge services, and automated check-in systems exemplify this agility [10, 11]. However, achieving high innovation speed requires an internal culture that promotes experimentation, risk-taking, and cross-functional collaboration [12].

2.2. Innovation Capability

Closely related is innovation capability, which is the organizational capacity to systematically develop, implement, and manage new ideas. It includes both structural aspects, such as knowledge management and resource allocation, and cultural traits, such as creativity and adaptability [13, 14]. In hospitality, innovation capability supports not only technological adoption but also the development of sustainable practices, such as energy-efficient operations or eco-friendly amenities [6]. These capabilities help hotels stand out in a market where guests increasingly value environmental responsibility [15].

2.3. Marketing Capability

In today's digital-first landscape, hospitality businesses leverage marketing capabilities to tailor their services and communicate unique offerings, often using customer analytics to anticipate preferences and guide innovation strategies [16, 17]. Marketing capability refers to a firm's proficiency in understanding customer needs, crafting compelling value propositions, and delivering them effectively across diverse platforms [18, 19]. Marketing capability also enhances brand positioning and allows hotels to attract and retain high-value guests.

2.4. Brand Communication Capability

Brand communication capability is a firm's ability to communicate consistently and meaningfully with its audiences. This includes using social media, personalized email, digital content, and reputation management to reinforce brand values and build trust [20, 21]. For hotels, strong communication capabilities can amplify the impact of innovation and marketing efforts, making them more visible, relatable, and emotionally resonant. It also improves service alignment by bridging the gap between operational changes and guest expectations [22].

2.5. Service Excellence

Service excellence involves exceeding customer expectations through personalized, high-quality service. Service excellence results from a coordinated effort across strategy, operations, and communication, which is vital in an industry driven by guest reviews and loyalty [23]. Investments in employee engagement, innovation, and communication have all been shown to improve service quality and customer satisfaction [24].

2.6. Hotel Performance

Hotel performance is commonly assessed through indicators such as occupancy rates, profitability, and customer retention. Research highlights that service excellence, underpinned by innovation and marketing capabilities, leads to better financial and reputational outcomes [25, 26]. Furthermore, guest loyalty, driven by emotional engagement and brand trust, is a key determinant of repeat visits and positive word-of-mouth [27].

The relationship between organizational capabilities and performance outcomes in the hospitality industry has received increasing attention from researchers. In particular, the interplay between innovation speed, innovation capability, marketing capability, and brand communication is considered a key area for understanding competitive advantage.

2.7. Relationship between Variables

Speed of innovation is often seen as a catalyst that enhances a firm's internal capacity to innovate. Studies suggest that firms that innovate rapidly tend to accelerate their learning processes, enabling them to seize market opportunities more effectively and outperform slower-moving competitors [28]. In the hospitality context, the rapid development and implementation of new services and technologies, such as digital concierge or mobile check-ins, enhance adaptability and responsiveness. The speed of innovation, therefore, creates a feedback loop where organizational learning and market adaptation reinforce each other, ultimately enhancing innovation capability [12]. Moreover, as technological ecosystems mature, speed further facilitates knowledge transfer and innovation adoption across teams [29]. This speed not only impacts innovation; it also plays a vital role in shaping marketing capability. Research shows that when firms quickly bring new offerings to market, they can more effectively align marketing strategies with consumer needs and position themselves advantageously [30]. This agility allows for rapid testing of value propositions, fine-tuning of campaigns, and timely engagement with target audiences. In hospitality, this manifests in marketing innovations such as tailored promotions, real-time content personalization, and adaptive pricing strategies that enhance both competitiveness and guest satisfaction [31]. Innovation capability**,** once developed, serves as a foundation for shaping how a brand communicates its values and innovations. A company's ability to implement new ideas and respond to market trends enhances its brand communication capability**,** particularly when those innovations align with evolving consumer values, such as sustainability [32, 33]. By integrating innovation into branding strategies, firms not only differentiate themselves but also improve brand perception among environmentally aware customers [34]. Similarly, marketing capability underpins brand communication by equipping firms with tools to craft compelling messages and deliver them through the right channels. High-performing firms are adept at using analytics to personalize messages, manage consumer sentiment, and build cohesive brand narratives [35]. These practices lead to clearer, more consistent brand communication and, as a result, greater customer trust and loyalty [36]. Effective brand communication capability, in turn, directly influences service excellence. In the hospitality industry, communication isn't just a marketing tool; it's a service element. Clear messaging ensures alignment between guest expectations and actual service delivery, while responsive communication (e.g., social media, review platforms) enhances the overall guest experience [37, 38]. Furthermore, proactive management of guest feedback and online reputation strengthens loyalty and elevates perceived service quality. Finally, service excellence has been widely associated with improved hotel performance. Research consistently demonstrates that superior service quality fosters customer satisfaction, repeat bookings, and positive word-of-mouth, each contributing to financial and reputational success [27]. Hotels that cultivate emotional bonds with guests through personalized attention and operational excellence are more likely to enjoy sustained competitive advantage and stronger performance metrics [39]. In summary, the literature supports a model where the speed of innovation contributes to both innovation and marketing capabilities. These capabilities, in turn, drive brand communication, which enhances service excellence and ultimately leads to better hotel performance.

2.8. Hypotheses

This study aims to determine the influence of the speed of innovation, innovation capability, marketing capability on service excellence and hotel performance, with brand communication capability as the mediating variable. Referring to the aim of this study and based on a comprehensive literature review, this study posits the following hypotheses:

H_1: *Speed of Innovation positively affects Innovation Capability.*
H_2: *Speed of Innovation positively affects Marketing Capability.*
H_3: *Innovation Capability positively affects Brand Communication Capability.*
H_4: *Marketing Capability positively affects Brand Communication Capability.*
H_5: *Brand Communication Capability positively affects Service Excellence.*
H_6: *Service Excellence positively affects Hotel Performance.*

3. Methods

This study adopts a quantitative research design based on a positivist epistemological approach, which emphasizes objectivity, empirical observation, and scientific analysis. The aim is to determine causal relationships between innovation-related capabilities and hotel performance through the lens of service excellence and brand communication [40].

Although innovation capability, speed of innovation, and marketing capability are widely recognized as key drivers of competitive advantage in the hospitality sector, limited research has explored how these capabilities jointly influence service excellence and hotel performance through the mediating role of brand communication capability. Existing studies have primarily examined these variables in isolation or without accounting for the mediating mechanisms that translate strategic capabilities into tangible performance outcomes. To address this gap, the present study employs a quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.1.0.8 to analyze data collected from hotel staff and guests in 3- to 5-star hotels across Indonesia. This methodological approach allows for the simultaneous testing of relationships among the variables, offering a more holistic and robust understanding of how strategic organizational capabilities contribute to service excellence and performance in the hospitality industry.

Quantitative research systematically gathers and analyzes numerical data to identify patterns and test hypotheses. This approach supports large-scale studies and the application of statistical techniques. Hypotheses, as testable predictions, are central to this process and come in directional and non-directional forms. Quantitative research often uses deductive reasoning and experimental design, starting with problem identification, formulating hypotheses, collecting data, and applying statistical methods to test these hypotheses [41]. Data was collected through an online questionnaire distributed from September to October 2024. This period was strategically selected as the post-pandemic hospitality industry in Indonesia was stabilizing and showing renewed consumer engagement and operational consistency [5]. The setting provided a timely context to assess how organizational capabilities translate into service delivery outcomes.

The research design, which includes gathering, measuring, and analyzing data, is essential for answering research questions. The design involves selecting a research strategy, setting, and unit of analysis based on the study's objectives. Descriptive research, often used to explore relationships between variables, is appropriate for this study. The objective is to provide detailed insights into how variables interact within the specific context under investigation [40].

This research employed a quantitative research methodology using an individual unit of analysis, with data collected through electronically distributed questionnaires targeting respondents aged 15-40, including people who have stayed at 3-5 5-star hotels or hotel marketing staff. A total of 440 valid responses were gathered using judgment sampling. This non-probability sampling technique ensured that participants had firsthand experience relevant to hotel marketing, innovation efforts, and service performance, aligning the sample with the research objectives [40].

To address ethical considerations, informed consent was obtained from all participants. Respondents were informed about the purpose of the study, assured of their anonymity, and advised that participation was voluntary. No personally identifiable information was collected. The study protocol received formal approval from the Ethics Committee of Universitas Pelita Harapan (Pelita Harapan University), ensuring compliance with research ethics for studies involving human subjects. Data were then analyzed using SmartPLS version 4.1.0.8, applying the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique. This method was appropriate due to the model’s complexity and its focus on predictive analysis [42]. Analytical procedures included descriptive statistics, validity and reliability tests (including AVE and composite reliability), and discriminant validity assessment via cross-loading and HTMT [43]. Common method bias was assessed using the variance inflation factor (VIF), with all values below the threshold of 5, indicating no multicollinearity [44].

The use of a 5-point Likert scale serves as an effective method for measuring respondents' agreement or disagreement with the provided statements. Primary data were collected through questionnaires, while secondary data were obtained from relevant literature, ensuring a comprehensive analysis.

As for the questionnaires, Speed of innovation has 6 indicators, based on Munawar and Tarmidi [45]. Innovation capability has 6 indicators, based on Hariandja and Sartika [46] and Cheng, et al. [15]. Marketing capability has 6 indicators, based on Sayed and Dayan [16], Cortez and Hidalgo [47], and Cao and Weerawardena [48]. Brand communication capability consists of 6 indicators as well, based on Hariandja and Sartika [46] and Wicaksono and Hadiprawoto [48]. Service excellence has 14 indicators, based on Hariandja, et al. [7]. Lastly, hotel performance has 6 indicators, tested based on Hariandja and Sartika [46] and Rodríguez and Taha [49]. All of these are tested using a Likert scale, in which 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree, and 5 represents strongly agree.

4. Result

This study has collected 440 data points from Indonesian citizens, comprising 69.3% female and 30.7% male participants. Furthermore, the distributed questionnaire yielded more responses from people aged between 20 and 24 years, with 246 participants. According to the respondents, the majority are college students, numbering 217 or 49.3% of the total respondents. Most of them are unmarried, accounting for 368 respondents or 83.6% of the total. Additionally, most respondents have stayed at a hotel at least once or twice a year, typically at a 3-star hotel. Table 1 below shows the respondent profile from the questionnaire that has been distributed.

Table 1.
Description of the respondents

Category	Information	Amount	Percentage
Gender	Male	135	30.7%
	Female	305	69.3%
Age (years)	15-19	61	13.9%
	20-24	246	55.9%
	25-29	61	13.9%
	30-24	38	8.6%
	35-39	18	4.1%
	>40	16	3.6%%
Profession	College student	217	49.3%
	Student	44	10%
	Employee	108	24.5%
	Entrepreneur	58	13.2%
	Others	13	3%
Marital Status	Single	368	83.6%
	Married	66	15%
	Widower/Widowed	6	1.4%
Frequency Stay at Hotels	1-2 times a year	268	60.9%
	3-4 times a year	107	24.3%
	5-6 times a year	48	10.9%
	>6 times a year	17	3.9%
Hotel’s Star	3 star	227	51.6%
	4 star	168	38.2%
	5 star	45	10.2%

Ideally, standardized factor loadings should meet or exceed 0.7 to be considered valid [50]. To evaluate convergent validity, researchers utilize the average variance extracted (AVE), which can be derived by averaging the squared factor loadings of all related indicators. This involves summing the squared factor loadings and then dividing the total by the number of corresponding indicators. According to Hair et al., an AVE value of 0.50 or higher is generally regarded as acceptable [51]. The outcome of the convergent validity test, based on the values of the loading factor, reveals that 20 out of the 44 indicators used to assess latent variables are valid. The composite reliability (rho_c) serves the objective of ensuring the precision and coherence of the indicators' results. Additionally, the assessment guideline recommends a value of more than 0.7 for reliability. The results show that all variables' composite reliability exceeds 0.7, indicating that they are reliable. These results are displayed in Table 2.

Table 2.
Constructs and measuring items.

Items	Construct Items	Mean	Factor Loadings
Brand Communication Capability (AVE = 0.562; Composite Reliability = 0.837)			
BCC1	This hotel brand's advertising and promotion positively impact me	4.205	0.726
BCC4	The hotel brand's ads and promotions are interesting	4.304	0.773
BCC5	I like seeing this hotel brand's ads and promotions	4.214	0.759
BCC6	The content displayed on the hotel's social media is fun to look at	4.281	0.740
Hotel Performance (AVE = 0.531; Composite Reliability = 0.819)			
HP1	I believe that this hotel is a leading hotel in the industry compared to other hotels that I have stayed in	4.327	0.721
HP2	This hotel has a great reputation compared to other hotels that I have stayed in	4.355	0.747
HP4	I am delighted to be staying at this hotel	4.472	0.706
HP5	This hotel's performance meets my expectations for staying necessities	4.463	0.740
Innovation Capability (AVE = 0.577; Composite Reliability = 0.803)			
IC2	The hotel continuously introduces new products and services	4.104	0.776
IC3	This hotel is an innovative brand in the hospitality industry	4.233	0.792
IC4	This hotel provides a fresh approach to services in the hospitality market	4.187	0.708
Marketing Capability (AVE = 0.546; Composite Reliability = 0.783)			
MC3	The hotel constantly interacts with customers on social media and websites	4.164	0.748
MC4	The hotel generates content on its social media and website	4.251	0.729
MC5	The hotel responds to customers' messages on social media and websites	4.247	0.740
Service Excellence (AVE = 0.597; Composite Reliability = 0.816)			
SE11	I tend to spread positive word-of-mouth about the hotel	4.242	0.760
SE12	The hotel is quick to respond to customer inquiries	4.376	0.793
SE13	The hotel provides a variety of services	4.498	0.765
Speed of Innovation (AVE = 0.633; Composite Reliability = 0.838)			
SOI4	This hotel is faster in the innovation process than its competitors	4.152	0.792
SOI5	This hotel has faster innovation than its competitors	4.147	0.823
SOI6	New products launching in hotels are faster than competitors	4.094	0.772

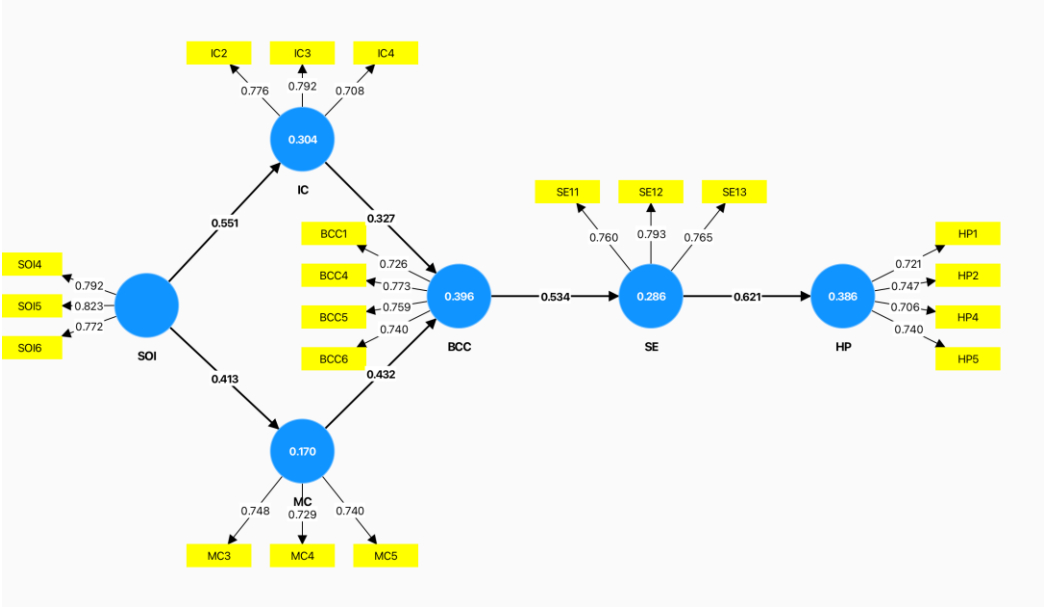

Figure 1.
Outer model.

The acceptable threshold for Heterotrait-monotrait ratio (HTMT) correlation is less than 0.9. Consequently, Table 3 displays HTMT values that are acceptable, as they fall under the 0.9 limit. Thus, the discriminant validity test is considered valid [52].

Table 3.
Discriminant validity: Heterotrait-monotrait ratio (HTMT).

Variables	Brand Communication Capability	Hotel Performance	Innovation Capability	Marketing Capability	Service Excellence	Speed of Innovation
Brand Communication Capability						
Hotel Performance	0.709					
Innovation Capability	0.709	0.633				
Marketing Capability	0.833	0.584	0.602			
Service Excellence	0.760	0.898	0.616	0.727		
Speed of Innovation	0.700	0.516	0.820	0.638	0.536	

When the research outcomes are influenced because the information for both the predictor and outcome variables is gathered using an identical approach, this phenomenon is known as common method bias (CMB). This can make the relationship between the variables appear stronger or weaker than it actually is [44]. In PLS-SEM, the Variance Inflation Factor (VIF) is used to check for CMB. The VIF indicates how much the variance of a variable's coefficient is influenced by other independent variables. If the VIF is high, it suggests that the independent variables are highly correlated, which is known as multicollinearity [34]. When there are two or more independent variables that are strongly linked to each other, this condition is known as multicollinearity. Normally, a VIF over 5 suggests a problem [53]. To show there is no bias or multicollinearity, the VIF should stay under 5. In Table 5, all the VIF values are less than 5, which means no issue with bias or multicollinearity.

Table 4.
VIF values.

Speed of Innovation		Innovation Capability		Marketing Capability	
Indicator	**VIF**	**Indicator**	**VIF**	**Indicator**	**VIF**
SOI4	1.411	IC2	1.324	MC3	1.206
SOI5	1.458	IC3	1.315	MC4	1.148
SOI6	1.324	IC4	1.161	MC5	1.210
Brand Communication Capability		**Service Excellence**		**Hotel Performance**	
Indicator	**VIF**	**Indicator**	**VIF**	**Indicator**	**VIF**
BCC1	1.393	SE11	1.324	HP1	1.361
BCC4	1.486	SE12	1.397	HP2	1.413
BCC5	1.424	SE13	1.220	HP4	1.235
BCC6	1.331			HP5	1.318

To measure how well two sets of data fit together, use the Goodness of Fit (GOF). It also acts as an indicator, highlighting the degree of similarity between predicted outcomes and actual observations for a particular variable. Additionally, GOF is utilized to evaluate whether a model is suitable, especially when it effectively represents real-world scenarios. This measure ranges from 0 to 1, where values of 0.10 indicate it is weak, 0.25 indicate it is moderate, and 0.36 indicate it has strong overall validity in the path model [54]. The formula for GOF is obtained by square rooting the product of average variance extracted (AVE) and the mean R2 value [55] expressed as:

$$GOF = \sqrt{\overline{Communality} \times \overline{R^2}}$$

By incorporating both the average communality and the mean R^2 into the formula, the resulting Goodness of Fit (GOF) value is calculated as:

$$GOF = \sqrt{\overline{0.574} \times \overline{0.308}} = 0.177$$

The GOF value of 0.177 shows that there is a weak to moderate alignment between the data and the model. However, with recent developments in PLS-SEM, the Goodness of Fit (GoF), which is now primarily employed, is used to assess the overall effectiveness of the PLS-SEM model [56].

Table 5.
Model fit.

Model Fit	Estimated
SRMR	0.107
NFI	0.653

The Standardized Root Mean Square Residual (SRMR) serves as a metric to assess how well the proposed model aligns with the actual data. It measures the difference between the observed correlations and those predicted by the model, essentially capturing the average size of these discrepancies. A model is typically deemed a good fit if the SRMR is below 0.1 [56]. In this instance, although the SRMR exceeds the acceptable limit by 0.007, the model is still considered to fit well.

Meanwhile, the Normed Fit Index (NFI) functions as an incremental fit measure, derived by comparing the Chi-square model value to a baseline. For the NFI to indicate a good fit, it must be greater than 0.9 [57]. However, with an NFI of 0.653, well below the desired threshold, it is not enough to conclude that the data aligns well with the model. Furthermore, NFI is not very commonly used [57].

Predictive relevance is a method used to evaluate research models, functioning similarly to how R-squared estimates model strength, but instead using the Q^2 value. The Q^2 criterion is recommended for assessing whether a conceptual model can forecast endogenous latent variables [54]. A Q^2 value above 0 indicates that the model has predictive relevance, while a value below 0 indicates it does not. In this study, the blindfolding method was used to assess predictive relevance, and the dependent variable exceeded the Q^2 threshold, demonstrating the model's predictive capability. Predictive relevance in structural models is classified by Q^2 values of 0.02, indicating weak relevance; 0.15, indicating moderate relevance; and 0.35, indicating strong relevance [58].

Table 6.
Predictive relevance.

Variables	Q^2
Brand Communication Capability	0.217
Hotel Performance	0.199
Innovation Capability	0.173
Marketing Capability	0.090
Service Excellence	0.166

Hypothesis testing is a statistical technique employed to assess the reliability of results in research. It is a common method in scientific studies where trials are conducted to verify whether a proposed explanation for a certain phenomenon is valid under real-world circumstances [59]. This process typically concludes the research, which aims to uncover whether a significant relationship or connection exists between variables, thereby addressing the research hypotheses. The standard rule for hypothesis testing is that the T-statistic should exceed 1.65, while the P-value should be below 0.05 to confirm the significance of the hypothesis [43].

Table 7.
Hypothesis testing.

Relationship	Original Sample (O)	T statistics	P-values	Result
H1: Speed of Innovation positively affects Innovation Capability.	0.551	11.960	0	Supported
H2: Speed of Innovation positively affects Marketing Capability.	0.413	8.215	0	Supported
H3: Innovation Capability positively affects Brand Communication Capability.	0.327	6.468	0	Supported
H4: Marketing Capability positively affects Brand Communication Capability.	0.432	7.741	0	Supported
H5: Brand Communication Capability positively affects Service Excellence.	0.534	9.803	0	Supported
H6: Service Excellence positively affects Hotel Performance.	0.621	13.955	0	Supported

H_1: Speed of Innovation positively affects Innovation Capability.

According to Table 4, the H1 hypothesis shows a T-statistic of 11.960, surpassing the required threshold of 1.65, as well as a "P value of 0.000, falling below the 0.05 mark. The original sample value is 0.551". confirming that Speed of Innovation positively influences Innovation Capability.

H_2: Speed of Innovation positively affects Marketing Capability.

Table 4 reveals that the T-statistic for H2 is 8.215, again exceeding the 1.65 threshold, while H2 has a P value of 0.000, under 0.05. The 0.413 original sample value indicates that Speed of Innovation positively impacts Marketing Capability.

H_3: Innovation Capability positively affects Brand Communication Capability.

In Table 4, the T-statistic for H3 stands at 6.468, above the required value of 1.65, and the P value is 0.000, which is still less than 0.05. The 0.327 original sample value confirms that Innovation Capability positively affects Brand Communication Capability.

H_4: Marketing Capability positively affects Brand Communication Capability

The results for H4, as shown in Table 4, include a T-statistic of 7.741, the value is greater than the 1.65 standard, and the P value is 0.000, falling under 0.05. With 0.432 as the original sample value, it is clear that Marketing Capability positively influences Brand Communication Capability.

H_5: Brand Communication Capability positively affects Service Excellence.

For the H5 hypothesis, Table 4 presents a T-statistic of 9.803, surpassing the required value of 1.65, and the P value is 0.000, less than 0.05. With 0.534 as the original sample value, it shows that Brand Communication Capability positively impacts Service Excellence.

$H_{6:}$ Service Excellence positively affects Hotel Performance.

Lastly, Table 4 displays a T-statistic of 13.955 for the H6 hypothesis, well above the 1.65 mark, with a P value of 0.000, under 0.05. With 0.621 as the original sample value, confirming that Service Excellence has a positive effect on Hotel Performance.

5. Discussion

The main research phase involved a sample of 440 respondents, selected based on specific criteria. Data collection was conducted through questionnaires. The outer model was initially tested for convergent and discriminant validity, as well as reliability. Adhering to established standards, convergent validity was confirmed based on factor loading values and AVE scores. Discriminant validity was verified using cross-loading and HTMT values, while reliability testing, conducted through composite reliability, confirmed the consistency of the variables.

After completing the validity and reliability assessments, the inner model was analyzed using various metrics, including Goodness of Fit, Common Method Bias, VIF, R-squared (R^2), predictive relevance (Q^2), and hypothesis testing. Although the SRMR value exceeded the threshold by 0.007, it was still considered a good fit since it only slightly surpassed the 0.1 guideline. This was further supported by acceptable values from other fit indices such as GOF and SRMR. The R^2 analysis indicated that the model had a moderate level of fit. Predictive relevance was also evaluated, and it met the required standard with a Q^2 value greater than 0. Lastly, hypothesis testing was carried out, with T-statistics and P-values confirming the validity of all hypotheses based on established guidelines.

The first hypothesis suggests a connection between the speed of innovation and innovation capability. The results confirm this, showing that the faster a 3-5 star hotel innovates, the more it enhances its innovation capability from the customer's perspective. This supports the idea that companies that innovate quickly tend to learn faster and can take advantage of market opportunities before their competitors. This cycle of quick innovation strengthens their capabilities and makes them more adaptable in global markets [28]. A faster pace of innovation often results from well-organized companies that make decisions and complete projects efficiently. Being able to implement innovation projects more quickly can lead to an overall improvement in innovation capability [12]. Additionally, when a company uses technology to manage knowledge effectively, employees can share and access information more quickly. This helps them respond faster to market demands and technological changes, giving the company a competitive edge [29].

The second hypothesis suggests a connection between the speed of innovation and marketing capability. The results confirm that the faster a 3-5 star hotel innovates, the more it enhances its marketing capability from the customers' perspective. Rapid product innovation is essential for improving marketing capabilities. Quick adaptation to market and product changes plays a vital role in boosting marketing performance when coupled with innovation. Companies that innovate more rapidly are better equipped to differentiate themselves from competitors, thereby improving their market position [30]. Innovation success is not just about developing new products; it also involves effectively promoting those innovations through channels such as in-store promotions and mass media. Businesses that can quickly introduce innovative products into the market are more likely to attract consumer attention ahead of their competitors, increasing market share and building brand awareness [60]. Accelerating product development allows companies to adjust their marketing strategies to align with changing market conditions. This flexibility provides them with a competitive advantage, helping them respond more effectively to customer needs and ultimately enhancing their overall marketing performance [31].

The third hypothesis suggests a link between Innovation Capability and Brand Communication Capability. The results support this connection, indicating that when a 3-5 star hotel enhances its Innovation Capability, it also improves how it communicates its brand to customers. By combining innovative approaches with clear communication, a hotel can significantly improve its overall brand performance [32]. Customers often view companies that solve challenges creatively as more innovative, and brands that continuously offer fresh solutions tend to attract higher levels of customer engagement. Effectively showcasing a brand's innovations increases the chances of expanding its customer base, as innovation becomes an essential factor in influencing consumer choices [33].

The fourth hypothesis suggests a link between Marketing Capability and Brand Communication Capability. The findings support this link, showing that when 3-5-star hotels improve their marketing abilities, they also strengthen how they communicate their brand from the perspective of their guests. Successful marketing strategies, especially in content creation, increase customer engagement and enhance metrics like brand recognition and customer loyalty, thereby boosting the effectiveness of brand communication [35]. Additionally, using technology to constantly track and analyze customer behavior across different platforms allows hotels to adjust their messages in real-time. This data-driven method underscores how better marketing capabilities, especially through analytics, can greatly improve brand communication tactics [19]. In the hospitality industry, providing tailored experiences to visitors is a key feature of marketing capability, as it not only promotes the hotel but also enhances communication between the brand and its customers [36].

The fifth hypothesis suggests a connection between Brand Communication Capability and Service Excellence. The results support this, indicating that as 3-5 star hotels enhance their Brand Communication Capability, their Service Excellence also improves from the customers' perspective. When a hotel effectively communicates its brand, it establishes clear expectations and fosters a deeper relationship with its guests, leading to better service outcomes. Brand communication plays a vital role in improving service quality by promoting a culture of continuous improvement and focusing on customer satisfaction. By emphasizing regular staff training, gathering feedback, encouraging collaboration, and maintaining high service standards, businesses can excel in delivering top-quality service. This strategy not only ensures smooth service delivery but also leaves customers with a lasting and consistent impression [37]. Additionally,

managing user-generated content (UGC) and electronic word of mouth (e-WOM) as part of their marketing efforts can enhance a hotel's service quality and competitiveness. Hotels that actively engage with UGC and respond to online reviews are more adept at meeting customer expectations, fostering loyalty, and elevating service excellence [24].

The sixth hypothesis suggests a relationship between Service Excellence and Hotel Performance. The findings support this, revealing that when a 3-5-star hotel raises its level of service, it significantly enhances its performance. As service quality improves, customer satisfaction rises, directly influencing critical performance measures like guest loyalty, favorable reviews, and revenue increases. Service excellence is measured by how well the hotel services are and how satisfied customers are after their stay. Elements such as facilities, ease of use, customer assistance, and pricing all contribute to guest satisfaction. High levels of satisfaction typically lead to positive reviews, repeat visits for future stays, and spread positive word-of-mouth, all of which contribute to better overall hotel performance [27]. Customer experience refers to how guests feel about their interactions with hotel services and marketing. Excellent service is key to turning positive experiences into lasting loyalty. In the hotel industry, offering outstanding service at important touchpoints, such as the hotel website, elevates the customer experience. This, in turn, strengthens guest loyalty, leading to repeat bookings and increased positive recommendations, thereby driving improved hotel performance [39]. This study concludes that the pace of innovation, marketing, and brand communication effectiveness affects a hotel's service excellence and hotel performance.

6. Conclusion

This research aims to explore the relationships between the speed of innovation, innovation capability, marketing capability, brand communication capability, service excellence, and hotel performance within Indonesia's hospitality sector. The findings demonstrate that the speed at which innovation occurs plays a pivotal role in driving both innovation capability and marketing capability. These elements, in turn, enhance brand communication capability, which has a direct influence on service excellence. High levels of service excellence are crucial, as they lead to improved overall hotel performance. The results underscore the importance for hotels to invest in fostering innovation and refining their marketing strategies, as both aspects are key drivers of competitive advantage. Furthermore, the research highlights that effective brand communication and maintaining high service standards are essential for sustaining long-term performance. By understanding and leveraging these relationships, hospitality businesses in Indonesia can optimize their strategies to meet the evolving needs of the market, improve customer satisfaction, and ultimately enhance their performance in a highly competitive industry. This study not only contributes to academic understanding of the dynamics between these variables but also offers practical implications for hotel managers and industry stakeholders, suggesting that a focus on innovation and service excellence is crucial for achieving sustained success in the hospitality sector.

6.1. Implications

- SOI4: To attract more customers, hotels must have a faster innovation process than their competitors.
- IC1: It is important for hotels to offer unique and standout facilities that differentiate them from other competitors.
- MC2: Strong public relations efforts are crucial for hotels to effectively market themselves.
- BCC4: The necessity of having engaging and interesting branding, advertisements, and promotions.
- SE14: It is important to serve customers wholeheartedly to improve the service excellence of a hotel.
- HP4: Customers who are satisfied with the hotel's service are delighted to stay in that hotel.

6.2. Limitations

This study has several limitations. First, the respondents were predominantly university students, which may limit the generalizability of the findings. Second, the research was conducted exclusively in Indonesia and focused solely on hotels within the country, potentially restricting the applicability of the results to other geographical or cultural contexts. Lastly, the study employed a relatively new conceptual model, for which relevant theories and supporting literature are still limited, presenting challenges in establishing a comprehensive theoretical foundation.

6.3. Future Research Suggestions

This research model has only been tested in Indonesia, with sources and data limited to the local context, which may affect the broader applicability of the findings. To validate the hypotheses and assess the model's relevance in other settings, future studies should be conducted in different countries. Additionally, the study's scope should account for local perceptions of 3- to 5-star hotels, as familiarity with hotel brands and their origins can vary among respondents. Broadening this perspective could increase the number of respondents and enhance the generalizability of the results.

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