

Structural Equation Model Analysis of Factors Affecting Management Efficiency in the Resort Industry

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ABSTRACT

The study aimed to achieve three primary objectives: 1) to study the factors influencing the success of resort hotel management after the pandemic of coronavirus 2019, 2) to compare the before and after attitudes of the recipients of knowledge transfer on factors influencing the success of resort hotel management after the pandemic of coronavirus 2019, and 3) to analyze and follow up on the implementation of knowledge into practice after knowledge transfer. This research employed both quantitative and qualitative methodologies. For the quantitative aspect, a random sample of 441 individuals was selected through multi-stage random sampling. Data collection used observational tools with a reliability coefficient of 0.961. Statistical analysis included percentage, mean, standard deviation, t-value, and structural equation modeling. The findings revealed that natural factors surrounding the hotel, local culture and traditions, community/hotel activities, and nearby tourist attractions significantly influenced the hotel's identity and management success. Cultural and traditional factors substantially impacted the hotel's identity, followed by community/hotel activity factors. Tourist attractions positively influenced hotel management success, followed by cultural and traditional factors, all statistically significant at the 0.01 level. The structural equation model representing factors influencing hotel management success aligned well with empirical data (Chi-Square=63.207, Chi-Square/df=1.340, df=47, P=0.063, GFI=0.991, CFI=0.984, RMR=0.031, RMSEA=0.028). These factors collectively explained 79% of the variance in hotel management success. Additionally, comparing mean attitude scores before and after the knowledge transfer revealed a statistically significant improvement at the 0.05 level. Finally, follow-up results showed that 11 resort hotels implemented the acquired knowledge, with an 84.62% success rate in applying it to practical management strategies. This study underscores the critical role of local cultural and environmental factors in enhancing the identity and success of resort hotels, emphasizing their importance in strategic post-pandemic hotel management. Eventually, enhancing management efficiency in this industry should improve and adjust the technological infrastructure up-to-date with multifunctional uses.

Keywords: Key Success, Structural Equation Modeling, Resort Industry, Management Efficiency, Technological Infrastructure

1. INTRODUCTION

The government previously incorporated the National Economic and Social Development Plan No. 4 (1977–1981) through the Department of Tourism Promotion, explicitly stating that by the end of 1981, the country would have received 22 million tourists, generating a tourism income of 11,700 million baht (Department of Tourism Promotion, 1982). In 1998, Thailand hosted the 13th ASEAN Games and the 6th Birthday Anniversary of His Majesty King Rama IX. The government approved the event as part of the 1998-1999 Thai Tourism Year and the Amazing Thailand 1998-1999 campaign,

aiming to attract foreign tourists. At least 17 million visitors were projected to contribute not less than 600,000 million baht to the economy, while domestic tourism was expected to reach 122 million trips, generating 415,000 million baht (Department of Tourism Promotion, 2000). In 2000, Thailand continued with the Amazing Thailand campaign. The government designated it as the Year of Amazing Thailand 2000, and from that point onward, tourist arrivals consistently increased. The Ministry of Tourism and Sports reported that in 2019, Thailand welcomed the highest number of foreign tourists, reaching 39,916,251, or approximately 40 million (Ministry of Tourism and Sports, 2022).

However, tourist arrivals sharply declined in December 2019 due to the outbreak of COVID-19, which was first identified in Wuhan, Hubei Province, China. The virus quickly spread worldwide, and Thailand's first confirmed case was a Chinese tourist who arrived on January 12, 2020. Within two weeks, by January 31, 2020, a taxi driver became the first locally infected Thai patient (Department of Disease Control, 2021). The COVID-19 had a negative impact on human well-being, health and safety, economy and business, especially tourism (Channuwong & Rusksat, 2022). To curb the virus's spread, governments globally imposed lockdown measures, significantly reducing international travel. Thailand's foreign tourist numbers declined drastically from 6,725,193 in 2020 to just 427,869 in 2021. The country officially reopened to international tourists on September 1, 2022, resulting in a surge to 11,153,026 visitors (Ministry of Tourism and Sports, 2022). According to the Bank of Thailand, projections suggest over 30 million foreign tourists will visit Thailand by 2027, while domestic tourism turnover is expected to exceed 140 million trips. Hotels remain closely tied to tourism, with the highest registration concentration in the southern region (52.85%), followed by the central region and Bangkok (22.45%), the northern region (20.52%), and the northeastern region (20.52%). This study focuses on accommodations in Chiang Mai Province, a key tourism hub in northern Thailand (National Bureau of Economic Statistics, 2021).

Chiang Mai Province, located in northern Thailand, features mountainous terrain and spans 20,107.057 square kilometers (1,566.911 rai), making it the country's largest province. It consists of 25 districts and houses 11,080 hotel accommodations, comprising 2,109 general hotels (small, medium, and large) and 8,971 registered resorts (Hotel Registration Work, Chiang Mai Province, 2022). During the COVID-19 pandemic, 90% of hotels and resorts temporarily ceased operations. Upon easing of lockdown measures, only 3,159 of 8,971 resorts (35.21%) resumed business, while 5,812 resorts (64.79%) remained closed, leading to significant financial losses for Chiang Mai's tourism sector. Business owners noted the need for renovations and stronger branding to attract tourists, while some expressed interest in permanently closing their establishments. Additionally, external environmental factors, such as infrastructure development and changing landscapes due to government projects, have altered the natural appeal of resort locations.

Given these challenges, this study explores key factors influencing the success of resort hotel management following the COVID-19 pandemic. The researchers, as stakeholders in the service industry, seek to identify these factors and leverage them for strategic planning and policy-making within hotel operations. The findings will be disseminated to resort hotel operators to enhance management strategies and operational success. Furthermore, the study will provide valuable insights to government agencies for policy development, ensuring holistic regional growth that aligns with environmental sustainability and the needs of local communities, and resort operators, including domestic and international tourists.

The research objectives are:

1. To study the factors influencing the success of resort hotel management after the pandemic of Coronavirus 2019.
2. To compare the before and after attitudes of the recipients of knowledge transfer on factors influencing the success of resort hotel management after the pandemic of coronavirus 2019.
3. To analyze and follow up on the implementation of knowledge into practice after knowledge transfer regarding factors influencing the success of resort hotel management after the pandemic of coronavirus 2019.

2. LITERATURE REVIEW

2.1 Concepts and Theories

2.1.1 Structural equation modeling (SEM), also known as causal modeling, is a statistical technique used to test theories by evaluating whether the developed model aligns with real-world data. In SEM analysis, hypotheses are formulated to determine if the proposed model is consistent with empirical data: H_0 states that the developed model aligns with empirical data, while H_1 suggests inconsistency. This method involves collecting empirical data from samples and converting it into quantitative data for analysis. Based on the research conceptual framework, SEM examines regression relationships between variables and factors simultaneously within the model. Originally developed by Karl G. Joreskog in 1960 (Wiratchai, 2005), SEM evolved from multiple regression (MR) and path analysis (PA), making it a more sophisticated tool for analyzing complex relationships. Similar to Multivariate Analysis of Variance (MANOVA), SEM can handle multiple dependent variables, but its ability to analyze all variables in the model simultaneously reduces error values, improving accuracy. This analysis is conducted using the AMOS (Analysis of Moment Structure) technique, allowing analysts to control error values by modifying the model and identifying relationships between error terms in different matrices, based on the highest modification index (M.I.) or highest parameter change value (Par Change). If a pair has a high M.I. but does not significantly alter χ^2 (chi-square), the program does not permit adjustments, necessitating prioritization based on Par Change. Adjustments and reanalysis do not retain previous outputs, preventing confusion in the iteration process. Additionally, the SEM model allows for modifications such as resizing, repositioning, renaming variables, and altering parameter values, making it a flexible and efficient method for structural equation analysis.

2.1.2 Factor analysis: It is a statistical technique used in research to reduce the number of existing variables by identifying and grouping those with similar characteristics, thereby simplifying data interpretation. Since some variables share common traits in describing data, factor analysis eliminates or clusters them into meaningful groups, known as factors, to maximize data explanation. The analysis examines the relationships between variables, which may be positively or negatively correlated, ensuring that the resulting factors maintain statistical relevance. The variables used in factor analysis should be either quantitative or binary (0 and 1), to minimize the number of components needed to explain the data's variability. Unlike regression analysis, factor analysis does not distinguish between independent and dependent variables; rather, it studies variable groupings in a linear combination. Factor analysis provides several key benefits: first, researchers can generate factor scores by grouping related observable variables into new components, allowing for further statistical analysis such as regression, variance analysis, classification, and comparison. Second, it helps address multicollinearity in multiple regression analysis, a problem where highly correlated independent variables distort their impact on the dependent variable. This is resolved by consolidating correlated independent variables into a single factor that influences the dependent variable (Wanichbancha, 2006). Lastly, factor analysis facilitates the prioritization of components by determining which elements are most significant in explaining data variation, and enhancing the precision of statistical models and research findings. Factor analysis techniques help identify the underlying structures within datasets, enabling researchers to understand complex relationships among variables while improving the accuracy and efficiency of data interpretation (Wanichbancha, 2006, Kaiyawan, 2009). Factor analysis is categorized into two main types: Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). EFA is used when researchers have underlying concepts or theories related to a topic but aim to identify new variables or elements under pre-specified variables, ultimately resulting in a set number of new factors or components. This analysis is commonly performed using statistical software such as SPSS and Minitab. On the other hand, CFA is employed to validate and confirm the factors or elements identified in previous studies or exploratory analyses. Researchers define the CFA model based on a thorough review of literature, related research, or prior EFA findings. The process involves incorporating original or observed variables into a statistical program and defining latent variables to clarify their underlying structure as

accurately as possible (Muliak, 1972). CFA is typically conducted using AMOS or LISREL software; however, in this research, the AMOS program is utilized for factor confirmation and validation.

2.1.3 Concept related to destinations, as discussed by Dickman (1996: 141-145), highlights five key elements that influence travelers' decisions to visit a destination, known as the 5A theory. These include Attractions, which serve as the primary motivation for travel and may consist of natural, cultural, and social or community attractions; Accessibility, which ensures that destinations are easily reachable through safe and efficient transportation systems and up-to-date travel information; Amenities, referring to infrastructure and utilities such as bathrooms, hospitals, and banks, and also the overall atmosphere and facilities within accommodations, including parking, walkways, and surrounding natural beauty; Accommodation, emphasizing the importance of proximity to tourist attractions such as temples, historical sites, and scenic nature spots like forests, waterfalls, and caves; and Activities encompass a variety of engaging experiences offered by the destination, including bird watching, diving, running, cultural events, and local festivals such as Boon Bang Fai, Loi Ruea Fai, and candle processions. Additionally, Mayo and Jarvis (1982) described tourism attractions in two dimensions: Physical Attributes, which include tangible elements such as forests, waterfalls, and cultural heritage, and Image Perception of a Destination, which refers to tourists' mental image formed through media, advertising, and word-of-mouth, encompassing an attraction's organization, products, and services. Beerli and Martin (2004) further classified tourist destinations into cognitive, which relates to tourists' knowledge and understanding of a place, such as lush mountains, white sandy beaches, or pristine waterfalls, and affective, which refers to the emotional connection or expectations tourists have toward a destination, such as the excitement of witnessing Naga fireworks or experiencing a cultural festival. Based on these theoretical perspectives, the researcher concludes that tourists' intention to visit a destination is primarily driven by the desire to experience both tangible elements, such as natural landscapes and cultural heritage, and the intangible aspects of local traditions and lifestyles. Furthermore, an increase in tourism naturally correlates with a rise in hotel stays, demonstrating the strong link between destination attractiveness and accommodation demand.

2.2 Related Research

Litvin and Dowling (2016) identified critical factors contributing to a hotel's success, emphasizing that the hospitality industry extends beyond merely offering accommodations. Successful hotels provide guests with a combination of unique aesthetics, well-integrated surroundings, and contextual harmony that enhances the overall experience. These attributes allow travelers to derive maximum value from their stay, as the distinctiveness of the hotel environment fosters a sense of exclusivity. Additionally, the management process must be predictable, ensuring that guests have consistent and positive expectations regarding their stay. Su-puen et al. (2019) reinforced these findings, highlighting that a hotel's success is interconnected with its reliance on the surrounding community, nature, culture, traditions, management efficiency, and modernity. The characteristics of the hotel influence how these factors are integrated, particularly in the case of resort hotels, which are deeply connected to their natural surroundings, local traditions, and cultural activities. These components are essential for drawing tourists, combined with contemporary amenities and a unique personality. Since these interconnected elements influence visitor happiness and support the long-term viability of the hospitality sector, resort hotel management success hinges on their integration. The natural environment surrounding a hotel significantly impacts its appeal to travelers. According to Thai PBS (Thai PBS Podcast), nature encompasses various phenomena of the physical world, including soil, water, wildlife, plants, wind, air, rocks, forests, beaches, and minerals, all of which are essential for sustaining life. Tourism, in its broadest sense, involves traveling for leisure, recreation, or education, encompassing cultural experiences, technological advancements, and human creativity. In Thailand, tourism development dates back to 1924 under His Royal Highness Prince Kamphaengphet Akharayothin, then the commander of the State Railway of Thailand, who facilitated travel for people to experience nature through railway journeys. Ten years later, the World Tourism Organization (WTO) categorized tourism into three types: natural-based tourism, cultural-based tourism, and special interest tourism (Dickman, 1996). Within nature-based tourism, there are five key categories, each of which enhances a hotel's ability to attract nature-seeking travelers. Marine ecotourism includes

activities such as island visits, beach excursions, and coral reef explorations, emphasizing environmental preservation and sustainable tourism management. Geological tourism, or geotourism, focuses on unique natural landscapes such as cliffs, caves, and rock formations, offering insights into earth sciences and mineralogy. Ecotourism is another form of nature tourism that incorporates local cultural sites and ecosystems, allowing travelers to engage with nature and local traditions. Agro-tourism, which involves visits to agricultural sites such as flower fields, livestock farms, and herbal gardens, is designed to enhance the economic value of rural areas by promoting seasonal tourism. Astrological tourism provides opportunities for visitors to observe astronomical phenomena such as meteor showers, eclipses, and stargazing activities, enriching their scientific knowledge while creating memorable experiences. Chittangwatana (2005) emphasized that nature is a powerful force in attracting travelers seeking relaxation and rejuvenation. Inkong (2020) found that Thai tourists prioritize accommodations in natural settings such as mountains, forests, and rivers, highlighting the importance of location in the decision-making process. Similarly, Barsky (2013), in his study of 45,000 travelers from Europe, America, and Asia, found that 30.20% of respondents selected hotels based on their natural surroundings, with pricing being the second most important factor at 15.70%. These studies confirm that a resort hotel's connection to nature significantly influences its success, as guests seek tranquil environments away from urban noise, prioritizing relaxation, privacy, and immersion in nature.

Cultural and traditional elements also play a vital role in the success of the hotel industry, particularly in a country like Thailand, which ranked as the top global tourism destination in 2023, attracting 22.78 million visitors, surpassing Paris, France (Manager Online). The diversity of Thai culture, traditions, and heritage remains a major attraction for international tourists, as cultural tourism allows visitors to explore experiences unavailable in their home countries. Thambut (2006) defined tourism as an activity that highlights cultural and traditional significance, with travelers drawn to historical sites, local crafts, and artistic performances. The economic benefits of cultural tourism extend to local communities, creating employment opportunities, supporting handicraft industries, and boosting the hospitality sector. Chittawattana (2005) emphasized that cultural tourism enables visitors to appreciate diverse cultural expressions while providing financial benefits to local communities through hotel stays, souvenir purchases, and craft-based employment opportunities. The objectives of cultural tourism include preserving the value of local heritage, ensuring the sustainability of cultural practices, providing meaningful experiences for visitors, and improving the quality of life in host communities (Jittawattana, 2005). These objectives align with the principles of cultural tourism, which emphasize the study of historical and cultural resources, the promotion of cultural awareness, and the respectful engagement of tourists with local traditions (Noppaket, 1999). Several forms of cultural tourism contribute to a hotel's success, including historical tourism, which involves visits to archaeological sites such as temples, palaces, and ancient ruins. Cultural and traditional tourism focuses on events like the Loi Krathong festival, Phi Ta Khon, and other local celebrations that immerse visitors in the cultural fabric of Thailand. Rural or village tourism allows travelers to experience the everyday lives of local communities, participate in craft-making, and explore agricultural practices. Sports tourism, which includes adventure activities like scuba diving, cycling, and golf, appeals to tourists seeking physically engaging experiences. Additionally, cultural health tourism integrates wellness-focused experiences such as meditation, herbal steaming, and traditional Thai massage, further enhancing the holistic appeal of the tourism industry. In analyzing natural and cultural factors, it is evident that resort hotels thrive by aligning their services with the surrounding environment and heritage. Natural elements such as mountains, rivers, and forests serve as major attractions for travelers seeking relaxation and tranquility. Cultural attractions, including traditional festivals, historical sites, and local craftsmanship, further enhance the value proposition of resort hotels. Chittawattana (2005: 15-16) emphasized that tourists prioritize accommodations that offer immersive experiences in nature and culture, reinforcing the importance of integrating these elements into hotel management strategies. Studies by Inkong (2020), Barsky (2013) and Channuwong et al. (2025) highlighted the direct correlation between a hotel's natural surroundings and its market appeal, demonstrating that travelers consciously choose accommodations that provide an escape from urban life. The success of resort hotels, therefore, depends on a multifaceted approach that combines natural

beauty, cultural richness, modern amenities, and sustainable tourism practices. Hotel operators must recognize the value of these factors in shaping visitor experiences and employ strategic planning to enhance their market competitiveness. By aligning business strategies with environmental conservation efforts and cultural heritage promotion, resort hotels can foster long-term sustainability and attract domestic and international travelers. The integration of nature, culture, and modern hospitality practices ultimately creates a unique and compelling destination experience, ensuring the continued growth and success of the resort hotel industry in Thailand.

3. METHODOLOGY

Population and Sample: With the quantitative data collection section, the researchers determined the population and groups used in this research as follows:

The population used in this research includes executives who own resort hotels or individuals or resort hotel managers, including general staff, and heads of finance of resort hotels in 25 districts in Chiang Mai Province. These resort hotels have announced the opening of business after the relaxation of the lockdown, and there are a total of 3,159 resort hotels (Hotel registration work Chiang Mai Province, 2022).

This research sample is an analysis of the consistency of the Structural Equation Modeling (SEM) research computed Covariance Matrix: $\Sigma(\theta)$ with empirical data; Empirical Samples Covariance Matrix: Σ obtained from observation (Vongprechakorn et al., 2023). The AMOS program is a ready-made program that has legal copyright from the Faculty of Industrial Technology, Muban Chom Bueng Rajabhat University according to the copyright, License Code: c8681bc495c98763b299 and Amos: c6695dc82d43d20f7d80.

The sample size is determined according to the ratio of observed variables or manifest variables to latent variables 1:25 according to the criteria of Nick (2004), Goldstein (1987), and Hair, Black, Babin, and Anderson (2010). Besides, to analyze the structural equation model relevant to the empirical data has to do model specification, model identification, parameter estimation of the model, measures of the model fit, and model modification (Rusmee et al., 2022), and then set the sample size from the number of variables. There were 18 observable variables in this research, so the researchers used a sample size of 450 samples in the research (Unit of Analysis), with 3 people providing information by observing: (1) people who own resort-type hotels or people who serve as a resort hotel manager, (2) general staff, and (3) heads of finance. The researchers used sampling techniques to select samples from the target population using a 3-step multi-stage random sampling method as follows:

Step 1: Select 25 districts randomly in the areas of Chiang Mai Province using the simple random sampling technique, resulting in 18 districts (Krejci & Morgan, 1970).

Step 2: Use purposive random to select resort hotels from 18 districts, resulting in 150 resort hotels.

Step 3: Determine the observers who provide information in the research: (1) those who are owners of resort hotels or persons who act as resort hotel managers, (2) general employees, and (3) the heads of the financial department. Select 3 people from each resort hotel, resulting in a total sample size of 450 people. Population proportions and sample samples are shown in Table 1.

4. RESEARCH RESULTS

The results of the structural equation model analysis when adjusted according to the program's recommendations found that the values Chi-Square= 63.207, Chi-Square/df= 1.340, df= 47, $p = 0.063$, GFI= .991, CFI= .984, RMR= .031, RMSEA= .028, NFI= .993 as shown in Figure 2, Table 1, and Table 2.

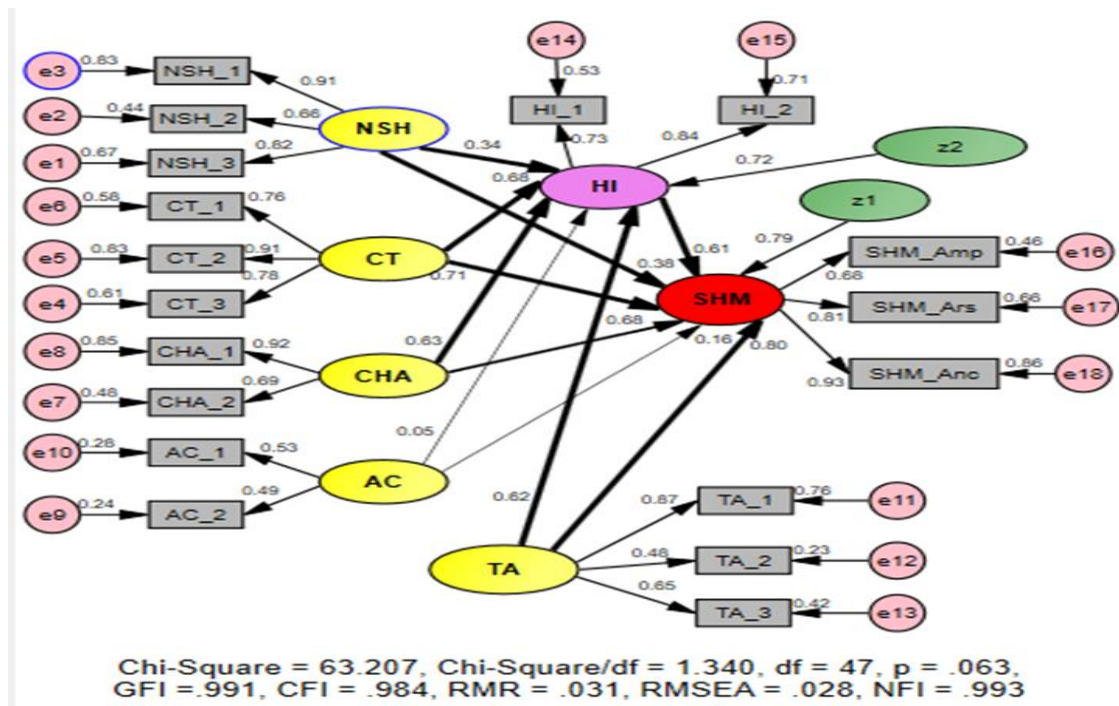


Figure 2 Structural equation model analysis of factors influencing the success of resort hotel management

Abbreviation used in the SEM model:

NSH - Nature Surrounding the Hotel Location

NSH_1 – Natural Perfection

NSH_2 – Transportation Routes

NSH_3 – Natural Learning Resources

CT – Culture & Tradition

CT_1 – Buildings and Construction Styles

CT_2 – Traditions, Rituals and Beliefs

CT_3 – Community Way of Life

CHA - Community/Hotel Activities

CHA_1 – Participating in Community Activities

CHA_2 – Activities in the hotels

AC – Convenience

AC_1 – General Conditions in the Hotels

AC_2 – Technology and Facilities

TA – Tourist Attractions Around the Hotel Area

TA_1 – Hotel Location and Reputation of Tourist Attractions

TA_2 - Number of Tourist Attractions in the Surrounding Area

TA_3 - Creation of Tourist Attractions

HI - Hotel Identity

HI_1 – Architectural Identity

HI_2 – Cultural Identity

SHM – Success of Hotel Management Services

SHM_Amp – Average %age of Profit Per Month

SHM_Ars – Average Number of Rooms Serviced Recipients Stay Per Night

SHM_Anc – Average Number of Customers Per Night (Annual Report)

Table 2 The results of the analysis of the relationship between regression coefficients of factors influencing the success of resort hotel management

External latent variables	Factor loading matrix							
	HI				SHM			
	Factor loading	S.E.	t	R ²	Factor loading	S.E.	t	R ²
NSH	0.34	0.05	5.56**	0.72	0.38	0.05	5.94**	0.79
CT	0.68	0.03	6.05**		0.71	0.09	6.49**	
CHA	0.63	0.06	7.16**		0.68	0.05	10.03**	
AC	0.05	0.05	2.36		0.16	0.04	2.54	
TA	0.62	0.06	9.43**		0.80	0.08	13.65**	
HI	-	-			0.61	0.12	7.02**	

Chi-Square = 63.207, Chi-Square/df = 1.340, df = 47, P = 0.063, GFI = 0.991, CFI = 0.984, RMR = 0.031, RMSEA = 0.028, NFI = 0.993

**p-value ≤ .01

Table 3 The relationship between the influence of variables in the analytical model

Internal latent variable	R ²	External latent variables					
		NSH	CT	CHA	AC	TA	HI
Influence on HI	0.81	0.34**	0.68**	0.63**	0.05	0.62**	-
Influence on SHM	0.79	0.38**	0.71**	0.68**	0.16	0.48**	0.61**

**p-value ≤ .01

Table 3 shows the results of the analysis of the relationship between factors that influence the success of resort hotel management. It is found that the nature surrounding the hotel location (NSH) influences the hotel identity (HI) with the weight of the elements equal to 0.34 and has an influence on the success of hotel management (SHM) with a component weight of 0.38 with statistical significance at the .01 level.

The culture and tradition factors (CT) significantly influence hotel identity (HI) and the success of hotel management (SHM), with component weights of 0.68 and 0.71, respectively, both statistically significant at the .01 level.

Community/hotel activities factor (CHA) influences hotel identity (HI) and influences the success of hotel management services (SHM), with component weights of 0.63 and 0.68, respectively, with statistical significance at the level of .01.

Convenience factors (AC) influence hotel identity (HI) and success of hotel management (SHM), with component weights of 0.05 and 0.16, respectively, and it is not statistically significant.

Factors regarding tourist attractions around the hotel area (TA) significantly influence the identity of the hotel (HI) and influence the success of hotel management (SHM), with component weights equal to 0.62 and 0.80, respectively, and it is statistical significance at the .01 level, with all five factors: NSH, CT, CHA, AC, and TA. It can explain the mutually influential relationship on hotel identity (HI) by 72% ($R^2 = 0.72$).

The hotel identity (HI) factor influences the success of hotel management (SHM) with a component weight of 0.61, with statistical significance at the .01 level, with all 6 factors including NSH, CT, CHA, AC, TA, and HI able to explain the mutually influential relationship on the success of hotel management (SHM) by 79% ($R^2 = 0.79$).

Table 4 Comparing attitudes before and after knowledge transfer

Score	N	\bar{X}	SD	t
Before receiving knowledge transfer	18	43.667	10.777	23.426*
After receiving knowledge transfer	18	80.500	5.770	

* Statistically significance at the .05 level

Table 4 shows the results of comparing attitudes before and after knowledge transfer. It was found that the mean after receiving knowledge transfer was higher than before receiving knowledge transfer statistically significant at the .05 level.

The results of the analysis follow up on the implementation of knowledge into practice after the knowledge has been transferred. The number of participants in the knowledge transfer was 18 people from 13 resort hotels. Knowledge regarding factors influencing the success of management of 11 resort hotels was used, accounting for 84.62%. The remaining 2 hotels have not taken any action, accounting for 15.38%.

The structural equation model (SEM) describes how different factors contribute to the Success of Hotel Management Services (SHM) to hotel characteristics, cultural influences, and environmental surroundings. Below is a detailed explanation of each equation and its significance within the model.

1. Latent Variable Equations

Latent variables are unobservable concepts inferred from multiple observed indicators.

1.1 Hotel Identity (HI) Equation: $HI = 0.34 \cdot NSH + 0.66 \cdot CT + 0.63 \cdot CHA + 0.05 \cdot AC + \epsilon_{HI}$

Hotel Identity (HI) reflects the unique characteristics of a hotel, shaped by: the Nature Surrounding the Hotel (NSH) (Natural Perfection, Transportation Routes, Natural Learning Resources) with a weight of 0.34, indicating that the hotel's surrounding environment contributes moderately to defining its identity. Culture & Tradition (CT) (Buildings and Construction Styles, Traditions, Rituals, and Beliefs, Community Way of Life) with a weight of 0.66, suggesting that cultural and traditional aspects are highly influential. Community/Hotel Activities (CHA) (Community Participation, Hotel-Based Activities) with a weight of 0.63, emphasizing the importance of engaging activities. Convenience (AC) (Hotel General Conditions, Technology, and Facilities) with a very low impact of 0.05, indicating that basic conveniences play a minimal role in shaping a hotel's identity.

1.2 Success of Hotel Management Services (SHM) Equation: $SHM = 0.38 \cdot HI + 0.61 \cdot CT + 0.68 \cdot CHA + 0.16 \cdot AC + 0.80 \cdot TA + \epsilon_{SHMS}$

SHM represents the overall success of hotel operations, measured by financial performance and customer occupancy rates. Hotel Identity (HI) influences SHM with a weight of 0.38, meaning a strong architectural and cultural identity improves management success. Culture & Tradition (CT) contributes 0.61, emphasizing the impact of cultural and heritage factors on hotel success. Community/Hotel Activities (CHA) is highly influential with 0.68, indicating that engaging with the local community and offering unique hotel activities attracts more guests. Convenience (AC) contributes 0.16, which implies that basic facilities and technology play a role but are less significant compared to cultural and environmental factors.

Tourist Attractions (TA) is the most influential factor at 0.80, demonstrating that a hotel's proximity to renowned tourist spots greatly impacts its business success.

1.3 Tourist Attraction (TA) Equation: $TA=0.62 \cdot AC + \epsilon_{TA}$

Tourist Attractions (TA) around the hotel depend on: Convenience (AC), which weighs 0.62, meaning that accessibility, infrastructure, and facilities are crucial for making tourist attractions more appealing.

2. Measurement Equations (Observed Variables)

Observed variables (rectangles in the diagram) serve as indicators for each latent variable.

2.1 Measurement of NSH (Nature Surrounding the Hotel)

$$NSH1=0.91 \cdot NSH + \epsilon_{NSH1}$$

$$NSH2=0.86 \cdot NSH + \epsilon_{NSH2}$$

$$NSH3=0.82 \cdot NSH + \epsilon_{NSH3}$$

Natural Perfection (NSH_1) has the highest loading (0.91), showing that pristine natural surroundings significantly impact hotel appeal.

Transportation Routes (NSH_2) and Natural Learning Resources (NSH_3) contribute 0.86 and 0.82, respectively, emphasizing the role of accessibility and educational tourism.

2.2 Measurement of CT (Culture & Tradition)

$$CT1=0.83 \cdot CT + \epsilon_{CT1}$$

$$CT2=0.78 \cdot CT + \epsilon_{CT2}$$

$$CT3=0.71 \cdot CT + \epsilon_{CT3}$$

Buildings and Construction Styles (CT_1) have the highest contribution at 0.83, showing that architectural uniqueness attracts tourists.

Traditions, Rituals, and Beliefs (CT_2) and Community Way of Life (CT_3) contribute significantly at 0.78 and 0.71, highlighting their importance in cultural tourism.

2.3 Measurement of CHA (Community/Hotel Activities)

$$CHA1=0.92 \cdot CHA + \epsilon_{CHA1}$$

$$CHA2=0.69 \cdot CHA + \epsilon_{CHA2}$$

Participating in Community Activities (CHA_1) is highly important (0.92) in linking hotels with local culture.

Activities in the Hotels (CHA_2) have a slightly lower influence (0.69) but remain significant.

2.4 Measurement of AC (Convenience)

$$AC1=0.53 \cdot AC + \epsilon_{AC1}$$

$$AC2=0.49 \cdot AC + \epsilon_{AC2}$$

General Conditions in Hotels (AC_1) and Technology and Facilities (AC_2) have moderate influences (0.53 and 0.49, respectively), indicating that convenience plays a role but is not the dominant factor.

2.5 Measurement of HI (Hotel Identity)

$$HI1=0.73 \cdot HI + \epsilon_{HI1}$$

$$HI2=0.84 \cdot HI + \epsilon_{HI2}$$

Cultural Identity (HI_2) has a higher loading (0.84) than Architectural Identity (HI_1) (0.73), showing that tourists are more drawn to cultural uniqueness than just architecture.

2.6 Measurement of SHM (Success of Hotel Management Services)

$$SHM_Amp=0.68 \cdot SHM + \epsilon_{SHM1}$$

$$SHM_Ars=0.81 \cdot SHM + \epsilon_{SHM2}$$

$$SHM_Anc=0.93 \cdot SHM + \epsilon_{SHM3}$$

Average Number of Customers Per Night (SHM_Anc) has the highest contribution (0.93), making it a key performance indicator for hotel success.

Average Number of Rooms Serviced (SHM_Ars) (0.81) and Average % Profit Per Month (SHM_Amp) (0.68) also contribute significantly.

2.7 Measurement of TA (Tourist Attractions Around the Hotel)

$$TA1=0.76 \cdot TA + \epsilon_{TA1}$$

$$TA2=0.23 \cdot TA + \epsilon_{TA2}$$

$$TA3=0.65 \cdot TA + \epsilon_{TA3}$$

Hotel Location and Reputation of Tourist Attractions (TA_1) (0.76) is the most important factor in determining the tourist appeal of a hotel.

Several Tourist Attractions (TA_2) (0.23) is the least significant, implying that the quality and reputation of attractions matter more than quantity.

The creation of New Attractions (TA_3) (0.65) also plays a significant role in maintaining tourist interest.

Therefore, Tourist Attractions (TA) and Community/Hotel Activities (CHA) are the strongest predictors of SHM, with TA having the highest impact (0.80). Hotel Identity (HI) is largely shaped by cultural and traditional factors (CT = 0.66) and local activities (CHA = 0.63). Hotel success (SHM) is directly tied to cultural identity, tourist attraction appeal, and operational efficiency. Convenience (AC) plays a minor role compared to nature, culture, and traditions. This model emphasizes the interconnectedness of hotel success with cultural, environmental, and tourism-based factors, reinforcing the importance of holistic tourism strategies.

5. THE APPLICATION OF THE SEM MODEL FOR ENHANCING MANAGEMENT EFFICIENCY IN THAILAND'S RESORT INDUSTRY

The Structural Equation Model (SEM) analysis in this study provides a comprehensive understanding of the key factors influencing the efficiency and success of resort hotel management in Thailand. The model evaluates the relationships among various latent variables, including Nature Surrounding the Hotel Location (NSH), Culture and Tradition (CT), Community/Hotel Activities (CHA), Convenience (AC), Tourist Attractions Around the Hotel Area (TA), and Hotel Identity (HI), with their combined influence determining the Success of Hotel Management Services (SHM). The results indicate that the tourist attractions surrounding the hotel (TA) are the most significant predictor of SHM, with a factor loading of 0.80, demonstrating that proximity to well-known tourist destinations strongly influences a hotel's success. Culture and tradition (CT) and community/hotel

activities (CHA) also play vital roles, contributing factor loadings of 0.61 and 0.68, respectively. This suggests that tourists prefer hotels that integrate cultural heritage, local traditions, and immersive activities, as these factors enrich their travel experiences. In contrast, convenience (AC), which includes technology, facilities, and infrastructure, has a lower but still relevant impact (0.16) on hotel success. This reflects the idea that while modern amenities are necessary, they are not the primary motivators for tourists choosing resort hotels in Thailand. Furthermore, the study found that hotel identity (HI) mediates the relationship between external factors and SHM, with a significant loading of 0.38, emphasizing that well-defined cultural and architectural characteristics contribute to management success. Overall, the SEM model explains 79% of the variance in hotel management success ($R^2 = 0.79$), confirming its robustness in predicting key success factors.

The findings also reveal significant relationships between hotel identity (HI) and its contributing factors. Culture and tradition (CT) have the strongest impact on hotel identity, with a loading of 0.68, followed closely by community/hotel activities (CHA) at 0.63. This highlights the importance of maintaining cultural authenticity and offering local engagement opportunities to enhance a hotel's distinctiveness. Tourist attractions (TA) also significantly influence hotel identity (0.62), confirming that a hotel's reputation is closely tied to its surrounding attractions. However, convenience (AC) has a minimal impact (0.05), indicating that aspects such as technological infrastructure and basic amenities do not strongly define a hotel's identity in the context of resort tourism. The analysis further supports the causal link between HI and SHM, with HI contributing 0.61 to SHM, demonstrating that a well-established brand identity strengthens hotel management efficiency. Additionally, a comparative study on knowledge transfer before and after implementing SEM-based strategies showed a statistically significant improvement in hotel management approaches ($p < 0.05$). A follow-up assessment revealed that 11 out of 13 participating resort hotels (84.62%) successfully adopted the findings, implementing changes in cultural integration, activity planning, and destination marketing strategies. This underscores the practical applicability of the SEM model in guiding resort managers toward evidence-based decision-making. In conclusion, these results emphasize the critical role of cultural and environmental factors in shaping the long-term sustainability of Thailand's resort industry, advocating for strategic development that aligns with local heritage, nature, and tourism trends.

However, enhancing technological infrastructure is essential for improving management efficiency in Thailand's resort industry, enabling better customer experiences, streamlined operations, and increased profitability. Modern travelers expect digital convenience, and resorts integrating smart technologies such as mobile check-in/check-out, keyless room entry, and AI-powered chatbots significantly enhance guest satisfaction. For example, Banyan Tree Phuket utilizes a mobile concierge service to offer seamless bookings and requests. Additionally, Property Management Systems (PMS) like Opera Cloud PMS optimize reservations, housekeeping, and billing, reducing errors and improving operational efficiency, as seen at Anantara Chiang Mai Resort. Digital marketing strategies incorporating SEO, social media engagement, and online travel agency (OTA) integration help resorts expand their reach, with Four Seasons Resort Koh Samui using virtual reality (VR) tours and AI-driven ads to attract bookings. Furthermore, AI-driven revenue management systems (RMS) enable resorts like Dusit Thani Hua Hin Resort to adjust pricing dynamically based on demand and competitor trends, maximizing occupancy and revenue. Strengthening cybersecurity through secure payment gateways, biometric access control, and encrypted transactions protects guest data, as implemented at Rosewood Phuket. Moreover, technology-driven sustainability efforts, such as smart energy systems, IoT-enabled sensors, and AI-powered waste management, contribute to environmental conservation while lowering costs, with Six Senses Yao Noi leading in smart thermostats and automated lighting solutions. By embracing these advancements, Thailand's resort industry can enhance operational efficiency, elevate guest satisfaction, and maintain a competitive edge in the global tourism market.

6. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The findings of this research emphasize that factors such as nature, culture, traditions, and nearby tourist attractions play a significant role in the success of resort hotel management in Thailand. The structural equation model (SEM) analysis revealed that hotel identity, which is largely shaped by cultural and natural elements, is a key determinant of management efficiency and overall business success. While cultural authenticity and environmental sustainability are fundamental drivers of tourist satisfaction, the study also acknowledges the role of technological infrastructure and basic amenities in improving operational efficiency. Even though technological infrastructure and basic amenities do not strongly define a hotel's identity in the resort tourism context, they remain essential for enhancing customer experiences, streamlining hotel operations, and supporting sustainable tourism development. Digital transformation, such as integrating smart booking systems, AI-driven customer service, and automated revenue management tools, can significantly boost the efficiency of resort operations, ensuring a seamless experience for both domestic and international travelers. The research findings suggest that while nature and culture are the primary motivators for tourist engagement, modern travelers also expect a level of digital conveniences, such as mobile check-ins, digital concierge services, and smart energy management systems. For instance, leading resort chains in Thailand have successfully incorporated AI-powered guest service chatbots, mobile app-based room control, and contactless payment solutions to cater to evolving consumer preferences. Furthermore, investment in digital marketing strategies, cybersecurity measures, and online travel agency integration can further strengthen the market competitiveness of resort hotels. Although traditional factors such as location, natural surroundings, and cultural heritage will continue to shape hotel identity, technology-driven innovations serve as complementary enhancements that improve service quality, optimize resource management, and increase profitability. Ultimately, this research underscores the importance of a balanced approach in resort hotel management—one that embraces both cultural and technological advancements to ensure long-term sustainability and success in Thailand's highly competitive tourism industry.

6.2 Recommendations

This study examined key factors influencing the success of resort hotel management based on theoretical frameworks and empirical research. The findings revealed that natural surroundings, cultural traditions, community and hotel activities, nearby tourist attractions, and hotel identity played a significant role in shaping management success, while general conditions and convenience factors had little impact. Among these, tourist attractions emerged as the most influential factor, followed by cultural traditions, community and hotel activities, and natural surroundings. These results confirm that theoretical factors continue to shape resort hotel management, providing valuable academic insights into the industry. Based on these findings, future research should explore the development of one-day trip tourism routes that connect hotels, create predictive models for management success, examine management components that influence guests' accommodation choices, and study the impact of the hospital-hotel (Hospitel) model on service decisions. These recommendations can contribute to refining hospitality strategies and enhancing the overall success of resort hotel management.

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