CONTACTLESS SERVICES IN VIETNAM'S HOSPITALITY INDUSTRY: CASE STUDIES OF THE JW MARRIOTT HANOI AND THE NOVOTEL HANOI THAI HA HOTEL

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Abstract: In Vietnam, contactless services in the hotel business are still relatively new. We provide an overview of the research on contactless services and related matters in this study. Following the fishbone or cause and effect diagram first introduced by Kaoru Ishikawa in 1968, the theoretical framework was developed on the five hotel internal factors (5M) that influence the implementation of contactless services in Vietnamese hotels. Our research is grounded in this theoretical framework to investigate the actual condition of providing contactless services at two 5-star hotels, the JW Marriott Hanoi and the Novotel Hanoi Thai Ha. To accomplish the purpose of the research, we used a variety of methodologies, including desk study and analysis; participant observation; questionnaire surveys; and in-depth interviews. Based on the findings of the research, the paper provides discussions and recommendations for the deployment of contactless services in Vietnamese hotels.

Keywords: contactless services, hospitality industry, condition, requirements

1. Introduction

In 2020 and 2021, the COVID-19 pandemic caused significant hurdles to Vietnam's tourism industry. Tourism performance continued to deteriorate in 2021. Domestic tourists reached approximately 40 million in 2021 (52.9% less than in 2019), with just 19 million accommodated tourist arrivals (56.3% less than in 2019). International tourist arrivals to Vietnam fell by 80.6% in 2021, to 3.5 million (Vietnam National Administration of Tourism [VNAT], 2021, p. 1). The percentage of employees who work part-time or leave the industry is increasing. Many hotels in Vietnam have used contactless service solutions to reduce the spread of the coronavirus as a result of the difficult and extended COVID-19 pandemic conditions. Inherent in the hotel business is a focus on direct interaction and service between staff and customers. However, as information technology (IT) advances at a breakneck pace, the application of technology to services is growing in popularity. In addition, the global epidemic situation is still complex. Therefore, a solution of contactless services benefits both the customers and the service providers.

Contactless services fall into three categories: (1) integrating contactless solutions into the hotel's spatial and temporal arrangement; (2) installing applications on smartphones to order services and pay at hotels and restaurants' gates; and (3) utilizing the internet of things (IoT) technology in the form of robots to serve and deliver products to customers. Contactless services in hotels are attracting the attention of academics all around the world. However, almost no research on hotel contactless services has been found in Vietnam. Therefore, the objective of our research is to address the issue of the conditions for deploying contactless services in hotels in Vietnam. We take into account both internal and external factors that affect the contactless services in the hospitality industry. Internal factors include equipment investment, hotel operations, procedures, staff training, and so on. We use 5M model in this study, which can be interpreted as follows: (1) mechanisms and policies of hotels; (2) machinery and supporting divisions; (3) money or financial investment; (4) man power's information technology (IT) capacity; and (5) material or technical facilities to deploy contactless services (Kaufman Global, 2021, p. 1). External factors refer to state and municipal policies and ordinances, among others, which have limited influence. In contrast, internal factors are part of hotels' attempts to introduce contactless services, and they have a direct and significant impact on hotels' operation effectiveness in general and its contactless implementation in particular. Considering these, in this study, we focus on hotels' internal factors.

Using data acquired from our inspections and surveys of hotels in Vietnam, as well as an in-depth examination of the JW Marriott Hanoi and Novotel Hanoi Thai Ha hotels, we discuss the current situation in general and hotels' readiness, and give recommendations for the deployment of contactless services in Vietnamese hotels.

2. Literature Review

For more than three decades, numerous international scholars have been interested in the theory of encountering and contacting in services, most notably Solomon et al. (1985, p. 100); Jo et al. (1990, p. 71); and Guiry (1992, p. 666). Increasingly, academics are focusing on how contactless services may improve businesses' performance. Bordoloi and Fitzsimmons (2018, p. 157) claimed that contactless services can help firms attract new clients and cut costs associated with service delivery. Additionally, numerous scholars, such as Callinan et al. (2017, p. 47); Lee (2018, p. 5); Fonjong and Tian (2019, p. 161); and Reinartz et al. (2019, p. 359), assert that the application of digital technology will result in positive service experiences, enabling businesses and customers to innovate. Furthermore, Lee (2018, p. 5); Amar et al. (2019, p. 5); and Joe et al. (2020, p. 77) claimed that the growth of social networks and mobile technology facilitated the development of contactless services. Even in the future, face-to-face interactions will gradually be phased out in favor of contactless interactions.

Numerous scholars have examined contactless services in the hotel industry, including Lee (2018) with the article "Innovation: from small "i" to large "I" (p. 9); Joe et al. (2020) with the article "*Effects of Social Influence and Perceived Enjoyment on Kiosk Acceptance: A Moderating Role of Gender*" (p. 6); Lee et al. (2020) with the study *"Untact": A New Customer Service*

Strategy in the Digital Age" (p. 13); Lee et al. (2020) introduced the article "*Optimal Capacity and Operation Design of a Robot Logistics System for the Hotel Industry*" (p. 76). According to studies, the application of contactless services in hotels can be classified into three categories: (1) incorporating contactless service solutions into hotel spatial and temporal arrangements: including room service, takeaway lunch box, massage, shuttle bus, reserving a time slot for a walk in the garden, reserving a private room at the bar... A success story in this category is Shilla Seoul and Lotte Seoul hotels (Korea) which increased room service deliveries to 40%...; (2) installing applications on smartphones to order services and pay at hotel and restaurant gates. For instance, the "Taobao" application is used by the Alibaba group's Tao Café restaurant chain in China; the "Siren Order" application is used by the Starbucks shop chain in Korea to book an item and pay at the

shop exits; and (3) utilizing IoT technology in the form of robots to serve and deliver products to customers. Examples include the Ambassador hotel group (Korea) which uses mobile devices to administer hotel rooms; the Novotel hotel (Korea) which uses robots to provide services such as delivering items to guest rooms. (S. M. Lee, 2018; W. J. Lee et al., 2020; S. M. Lee & D. H. Lee, 2020). This type of execution is common around the world, but it is not widely used in Vietnam yet.

Academics who are interested in examining the conditions that would be required for the implementation of contactless services in hotels can be summarised as follows: As Grant Thornton Vietnam (2015) points out, it's about the customers' needs, hotel mechanisms and policies, and their financial potential and investment in contactless services (p. 2).

Figure 1

Grant Thornton Vietnam's Research Model on the Requirements for Contactless Service Implementation (2015)
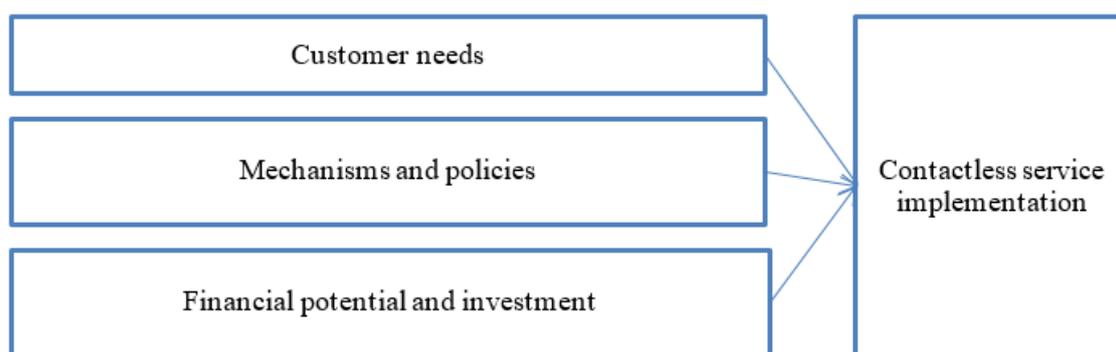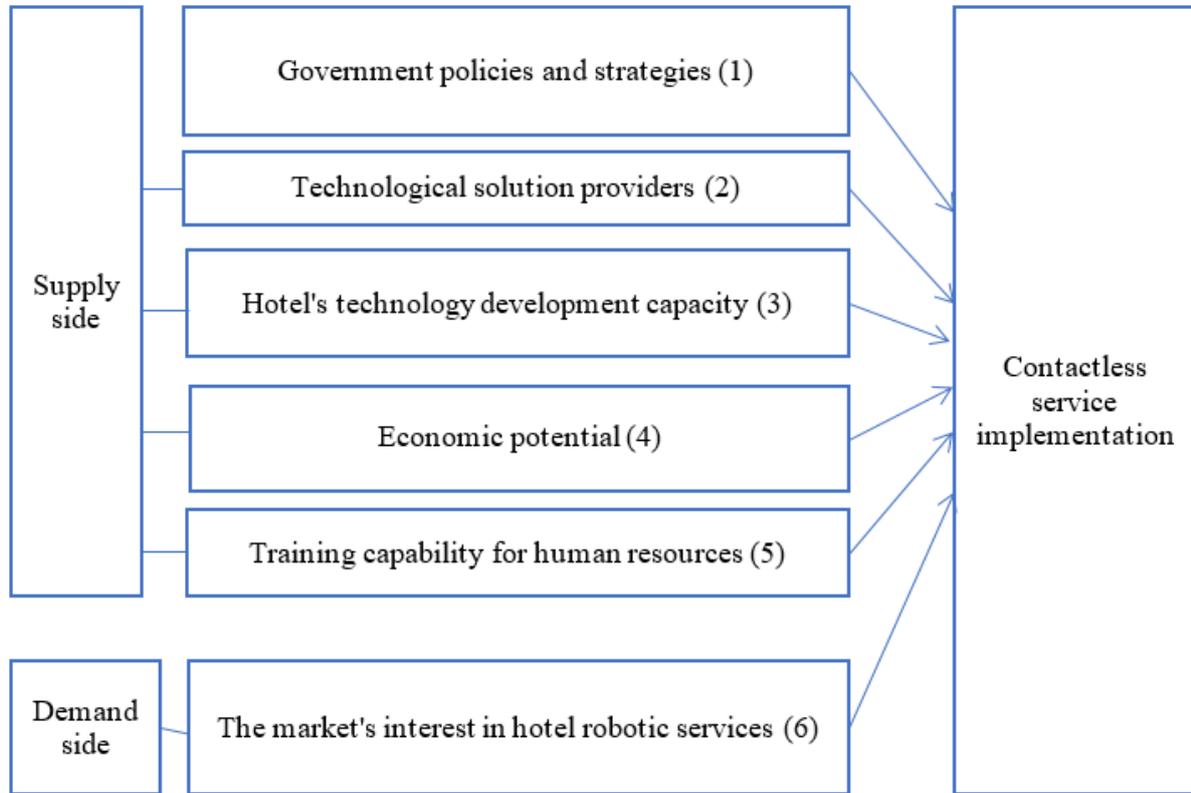

Kuo et al. (2017) modeled the supply and demand side dynamics affecting the

deployment of contactless services (p. 1309).

Figure 2

Kuo et al. Research Model on The Requirements for Contactless Service Implementation (2017)


Furthermore, when researching the application of new technologies in the hotel industry, Lau (2020) believes that hotel directors must consider both internal factors such as return on total investment, training activities, and job opportunities as well as external factors such as state rules and legislation (p. 498). Lau only addressed one external factor: state rules and legislation. The author is primarily concerned with the remaining five internal factors that affect hotel operation.

Figure 3

Lau Aurthur's Research Model on the Requirements for Contactless Service Implementation (2020)
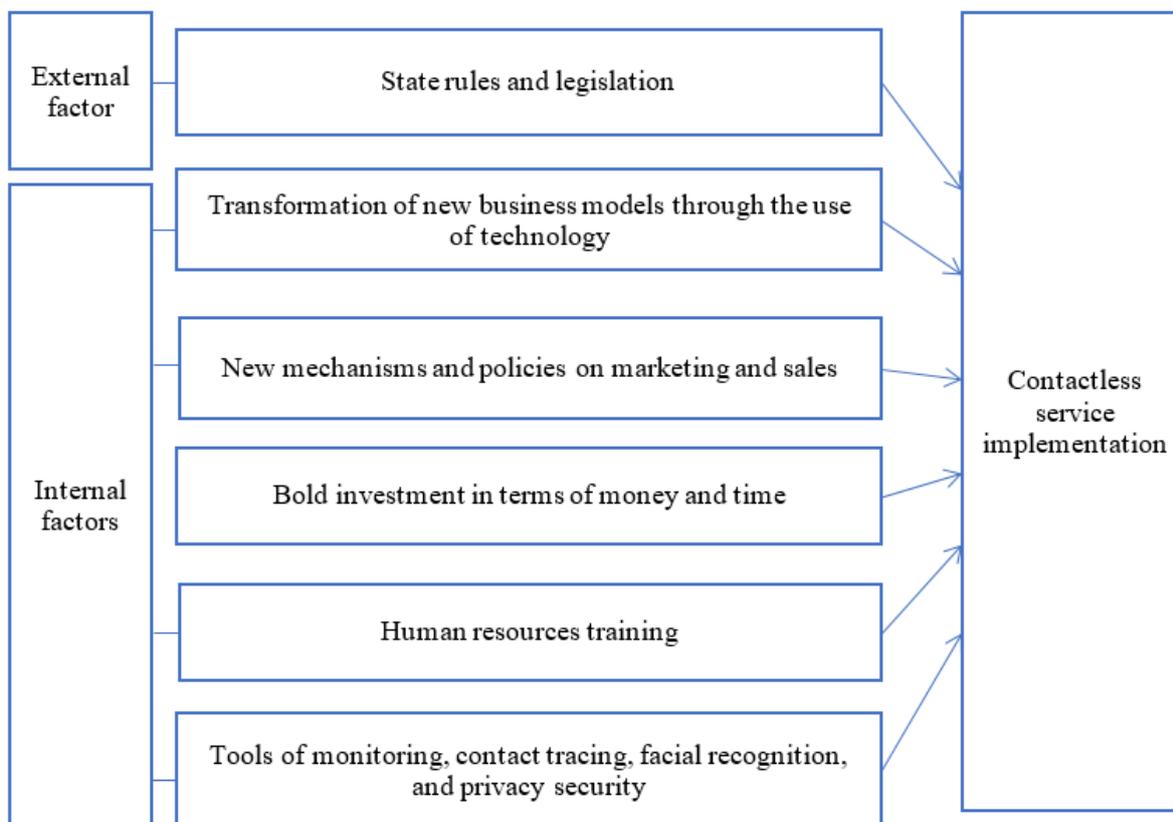
There is almost no research on hotel contactless services in Vietnam yet, although in recent years, many studies have examined hotel management's effectiveness and customer satisfaction. Nguyen and Pham (2015) noted that service quality has a direct and beneficial impact on customer satisfaction in hotels (p. 171). Nguyen and Bui (2019) identified innovation as an element with the greatest and most comprehensive influence on hotel business performance in Vietnam (p. 142). In a study on the impact of information technology on hotel business performance, Tran and Nguyen (2019) confirmed that the use of IT in the reception, food and beverage, and housekeeping divisions will help hotels reduce their operating costs, improve productivity, service quality, and market share. Hotels, on the other hand, need to improve the IT aspect of the above divisions (p. 92). Due to the absence of research on hotel contactless services in the country, this study is well justified.

3. Methodology

We conducted the research in 2020 and 2021. Data was collected using secondary documents, participant observation, a questionnaire, and in-depth interviews. Secondary research includes gathering and analysing domestic and foreign-published studies, papers, reports, and statistics. Those areas of research relate to smart tourism, virtual tourism, service encounters, and untact or contactless tourism. The purpose of reading papers is to integrate concepts, identify research issues, and discover gaps. We conducted a field

survey at a selected number of hotels in Hanoi to examine the status of the application of contactless services. Activities included observation, recording, and preliminary assessment at certain hotels. Following that, we create frameworks to investigate the elements influencing the deployment of contactless services in hotels. We found that a survey utilising a questionnaire was required to establish which components of the study framework were most important. As a result, the questionnaire-survey approach was adopted. Furthermore, the questionnaire survey aimed to better grasp the staff's impression of contactless services. After collecting survey data, we interviewed experts to discuss solutions for implementing contactless services in hotels.

The survey sample size was determined using the following formula:

$$n = z^2_{1-\alpha/2}P(1-P)/d^2$$

(Ryan, 2013, p. 111)

Wherein:

P: expected prevalence is 50% (=0.5)

d: desired precision (confident limit around the point estimate), is 5% (= 0.05)

z: the value for 95% confidence intervals (= 1.96)

We specifically administered surveys to 384 hotel personnel. The questions test their contactless services' readiness and effectiveness. We asked hotel staff about their perception of contactless services and customer satisfaction to bolster our case. We used the Likert scale with five levels, from "completely agree" to "completely disagree." 1 = Totally unready; 2 = Unready; 3 = Neutral; 4 = Slightly ready; and 5 = Absolutely ready (Susan, 2004, p. 3). We draw conclusions about hotel contactless service readiness based on the mean scores

of internal factors. The data is then analysed, summarised, and evaluated. We use a linear regression model to determine the relationship between hotel factors and contactless service implementation.

4. Results

4.1. Analysis of Using 5M Model for This Article's Research Framework

Through our literature review and examination of good contactless service management, we found Kaoru Ishikawa's (1968) resource management framework (5M). The introduction fits corporate governance in general and includes elements impacting the implementation of contactless services, specifically 5 internal factors. It is hard to ignore the two elements of clients and favorable policies while examining external issues. We tried to understand the customer's perspective through the employees' opinions. According to the Strategy for the Development of Key Products in the Tourism Industry (Ministry of Culture, Sports and Tourism [MCST], 2017, p. 11), and the Master Plan for the Application of Information Technology in the Tourism Sector from 2018 to 2020, with Orientations to 2025 (Prime Minister, 2018, p. 1), the tourism and hotel industry is encouraged to apply and deploy smart tourism services. Similarly, the mechanism and policy factor is the most crucial inside the hotel. The hotel's suitable organization of equipment, financial investment resources, and acceptable human resource development will be influenced by clearly identifying the development path and objective. As a result, the 5M framework's resource management features are reasonably complete. Thus, we confirm that the 5M framework is appropriate for this research.

Figure 4

*Cause and Effect Diagram (Ishikawa, 1968, p. 19)*
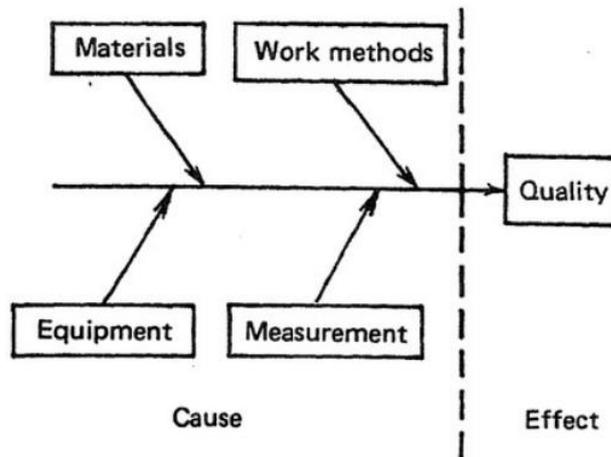
4.2. Influencing Factors in the Implementation of Hotel Contactless Services

We find that internal factors always outweigh external factors in all of the study models on the criteria for implementing contactless services discussed above. Kuo et al. (2017) underline the hotel's mechanisms and policies (1) and IT capacity (5). Both Kuo and Lau (2020) believe that hotels must consider the following factors: an effective business model (2); economic potential, financial investment for contactless services (3); and the ability to train and foster talents (4). In addition, Kaufman Global (2021) recommended the 6Ms of effective production (p. 1). Based on the above-mentioned experts' concepts for implementing contactless services, we synthesise and generalise five internal factors as conditions for contactless service implementation, which are illustrated as follows:

Figure 5

Factors Influencing the Implementation of Contactless Services
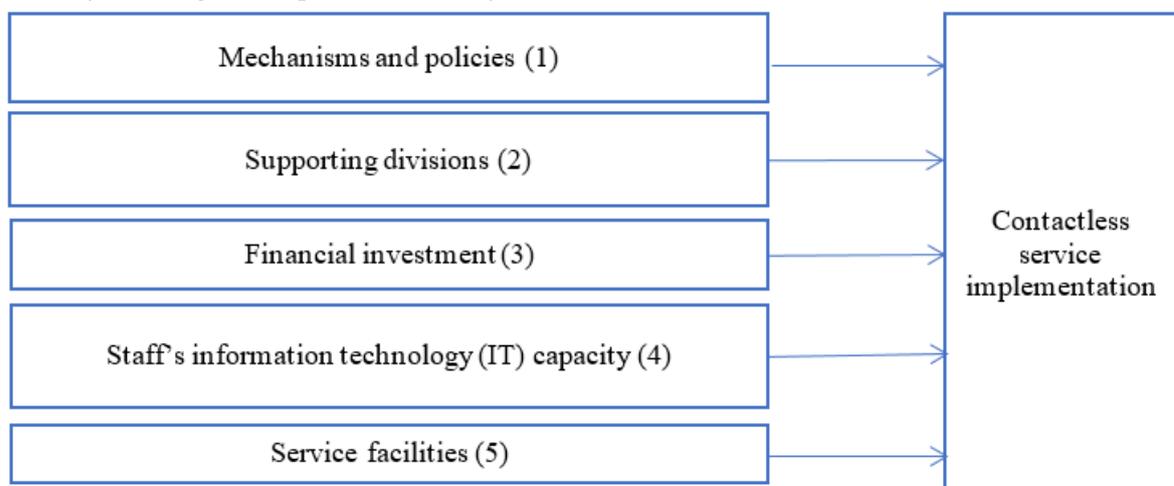
4.3. The Current Situation of Contactless Service Implementation at the JW Marriott Hanoi and Novotel Hanoi Thai Ha

4.3.1. The Readiness for Contactless Services

We examine two 5-star hotels in Vietnam as case studies based on the theoretical framework of factors influencing the implementation of hotel contactless services, including mechanisms and policies, supporting divisions, financial investment, staff IT capacity, and service facilities. We surveyed hotel staff to learn about contactless service implementations. The results of the survey are analysed using the theory of interval values. The interval value on a 5-level Likert scale is calculated using the following formula:

Interval value = (Maximum score – Minimum score)/ number of scores:
n = (n-1)/n = (5 -1)/ 5 = 0.8 (Susan, 2004, p. 3)

As indicated in the research methodologies section, the mean score range corresponds to five levels. The readiness for implementation will be determined using the levels of interval values. In particular, they are 1.00-1.80 (totally unready), 1.81-2.60 (unready), 2.61-3.40 (neutral), 3.41-4.20 (slightly ready), and 4.21-5.00 (absolutely ready). On the basis of the mean values of each internal factor, it is clear that there is a high probability of the contactless services being implemented.

Table 1

Descriptive Statistics of Internal Factors and the Implementation of Contactless Services (Survey Data Processing Findings, 2021)

	Mean	Standard deviation
Contactless service implementation	4.29	0.64599
Mechanisms and policies	4.47	0.58415
Supporting divisions	4.09	0.93882
Financial investment	4.22	0.91932
Staff's IT capacity	4.62	0.58898
Service facilities	4.32	0.80888

The mean values of the variables show that only one factor in the supporting division is at level 4 of the interval value, and all the others are at level 5, indicating they are ready to provide contactless services.

4.3.2. The Extent to Which Contactless Services are Implemented

Extent of implementation of contactless services: 41.3% of respondents said their hotels will continue to use contactless services after the COVID-19 outbreak (4.08/5). Positive ratings ranged from 4.08 to 4.43. Using contactless services to improve high-tech utility gets 4.43/5.

Table 2

Findings on the Hotels' Implementation of Contactless Services (Survey Data Processing Findings, 2021)

No.	Statement: We are now implementing contactless services…	Lowest – Highest score	Mean	Standard deviation (SD)
1	as a must during the COVID-19 outbreak	2 – 5	4.31	0.77
2	and will keep them on-going even after the COVID-19	1 – 5	4.08	0.98
3	with enhancing high technology utility	2 – 5	4.43	0.76
4	with selecting foreign hosting service providers	1 – 5	4.35	0.86
	Average	*2.25 – 5.00*	*4.29*	*0.65*

46.7% believe it is a must to provide contactless services during the COVID-19 pandemic, 41.3% believe their hotel will keep them even after the pandemic, 53.3% select foreign hosting service providers to better secure customers' personal information, and 56% believe their hotel must use artificial intelligence technology applications.

More than 40% of respondents said contactless services boost labour productivity and customer satisfaction, but they can't replace traditional service, which requires more attention and dedication. 61.9% of respondents thought installing software to deploy contactless service solutions in hotels was a good idea.

52.4% of customers are satisfied

with personalization, 38.1% with technology-supported services, and 33.3% are eager to use contactless services again. Customers are satisfied with tech-enabled services, say 44.1% of staff.

4.3.3. Correlation Between Internal Factors Influencing the Implementation of Contactless Services

The regression model shows that the correlation between the two hotels' internal factors for actual implementation is greater than 0.3 and Cronbach's Alpha is over 0.6. The scale is reliable. Service facilities to organise contactless services (5) has a strong correlation with hotel mechanisms and policies (1), supporting divisions (2), and financial investment (3).

Table 3

Correlation Between the Internal Factors and the Implementation of Contactless Services (Survey Data Processing Findings, 2021)

Factors	(1)	(2)	(3)	(4)	(5)	(6)
Mechanisms and policies (1)	1					
Supporting divisions (2)	0.546**	1				
Financial investment (3)	0.688**	0.702**	1			
Staff's IT capacity (4)	0.499**	0.616**	0.655**	1		
Service facilities (5)	0.729**	0.709**	0.871**	0.639**	1	
Contactless service implementation (6)	0.674**	0.509**	0.445**	0.322**	0.522**	1

*Note: ** $p < 0.01$ has statistical significance with a correct probability of 99.9%.*

Brian C. Cronk's (2020) level scale determines the extent of correlations among variables as follows: Strong correlations are defined as having an absolute value greater than 0.7. Correlations with absolute values less than 0.3 are regarded as weak. Correlations with absolute values ranging from 0.3 to 0.7 are considered moderate (p. 53). As a result, the five internal factors have a moderate to strong correlation with the implementation of contactless services (6), with the strongest correlation being the hotel's mechanisms and policies (0.674) and the weakest correlation being the staff's IT capacity (0.322). Thus, it can be seen that the five internal factors

affecting the implementation of the contactless services have a moderate or strong correlation; there is no weak correlation.

4.3.4. Participant Observation in the Two Hotels

The JW Marriott Hotel Hanoi promotes the Marriott Bonvoy app and encourages Vietnamese participation. Customers are accustomed to using the app and want to maximise its benefits. Most Vietnamese prefer traditional room booking and check-in over mobile apps. The contactless service is implemented by the

Security, the Front Office, the Sales, and the Hotel Management Board. The Front Office communicates with guests and responds to Marriott Bonvoy requests. Receptionists are trained to use the Marriott Bonvoy app to access the hotel's loyalty database. If a guest doesn't have the app, the staff recommends it. Hotel receptionists know "mobile request and chat." Mobile apps can be used to notify guests about available rooms and fulfil requests. The Reception, the Operator, and Shift Managers use computers and smartphones to organise contactless services. The internet system functions properly, ensuring fast transmission speeds.

The Novotel Hanoi Thai Ha Hotel emphasises online customer communication. Successful strategies include ALLSAFE. Websites, social media, and hotel confirmation emails feature the tool. All consumers and potential customers are aware of the service, which reduces customer-staff contact. Customers who use online check-in and check-out will receive forms, electronic invoicing, etc. via email. IT, sales, marketing, and the Hotel Management Board are involved in contactless service. Online customer service includes exchanging, supplying, and answering information, conversing with guests, and responding to guest requests via the guest feedback system. Hotel division heads train and administer staff training programmes according to Accor Hotels' standards. The hotel staff is IT- and equipment-savvy. The hotel's staff is well-versed in IT and equipment operation.

4.3.5. Evaluation of Contactless Service Implementation in the Two Hotels

The implementation of contactless services in the two case-study hotels is shown in the research model as involving five factors, with the most influencing factor in turn being as follows: (1) mechanisms and policies; (2) supporting divisions; (3) financial investment; (4) service facilities; and (5) staff's IT capacity.

The two hotels have implemented contactless services very well in terms of categories 1 and 2, specifically: (1) integrating contactless service solutions into the hotel's spatial and temporal arrangements; and (2) installing an application on the smartphone to order services and pay at the hotel or restaurant's gates. However, hotels have not yet implemented category 3 solutions, which include the use of IoT technology to serve and deliver products to consumers via robots.

The two hotels have policies in place to expand the use of technology in service delivery in order to reduce physical contact points, such as mobile check-in, online booking, cashless payment, QR codes for surveys, or service introduction.

The majority of customers of Marriott International and AccorHotel Group participate in programmes that make use of technology, such as mobile check-in or express check-in and check-out, since the hotels have systems in place to maintain customers' personal information, including institutions; guest authorizations for credit card payment; room type preferences; room location; and so on.

Hotel staff can still show their readiness to help by remaining visible in places where customers can see them, allowing customers to choose between technology-based services and staff-communicating experience.

However, hotels have not invested in high-tech applications such as artificial intelligence (AI), facial recognition, or door locks using PIN passwords. The replacement of the hotel digital lock system necessitates a large and uniform investment, but present financial resources are limited due to the impact of the COVID-19 outbreak. This predicament will likewise necessitate significant efforts on the part of the hotels in the future.

4.3.6. In-Depth Interview

We consulted experts for the article's recommendations. Ms. Nguyen Thanh Binh, Deputy Director of VNAT's Hotel Department, and Mr. Nguyen Quang, Chairman of the Vietnam Housekeeping Club, were interviewed.

Ms. Nguyen Thanh Binh focused on businesses that need to implement contactless services with the following conditions: a regularly updated customer database; the most appropriate software for the hotel's key market based on the use of language; the process of providing services; association and cooperation with reliable partners that provide smart service management software; and internal communication and smart service dissemination. Loyal guests are rewarded with smart services first.

Mr. Nguyen Quang promotes contactless hotel services. Contactless services require a necessary infrastructure. It's the result of smart investing. Many trustworthy technology solution providers can be partners in developing a hotel's technical infrastructure. Mr. Quang said the following factors affected the adoption of contactless services: (1) mechanisms and policies; (2) supporting divisions; (3) financial investment; (4) service facilities; and (5) staff's IT capacity.

5. Discussions

In terms of the conditions for deploying contactless services, external factors such as state regulations and laws, or technology providers, are important for the development of the country's digital transformation and smart tourism, while internal factors are important to improve the efficiency of contactless services in the hotel. These factors must be strengthened concurrently and according to the hotel's customer-attraction strategy.

In terms of the status of implementing contactless services, hotels are doing well in arranging time and space for contactless services. Some hotels are using smart locks, face recognition, online booking, e-commerce, cashless payment, and so on. However, not many hotels use AI technology or robots in their hotel services. Integrating robots or AI into hotel services improves competitiveness without reducing guest friendliness. The people behind the scenes and the front-line staff are constantly increasing contact with customers in novel ways. Traditional service will continue to be an important component in the hotel industry for observing and recognising situations that necessitate subtlety in behaviour.

The field of contactless services in the hospitality industry is not affected by the hotel's size. A large hotel may have the economic potential to be the leader in this field, but small hotels may have advantages in implementing contactless services synchronously and completely.

6. Recommendations

From the research results above, including the survey data analysis, participant observation, and in-depth interview, we suggest the recommendations below for implementing contactless services in Vietnam's hospitality industry:

6.1. At the State Level

- Invest resources in the next five years to pilot the development of contactless services in hotels in major cities across the country;

- Encourage the use of contactless services in small and medium-sized businesses.

- The tourism industry collaborates with other sectors, like information and communication technology and security, to increase the adoption of contactless services in hotels.

- The National Tourism Promotion Agency conducts market research to determine how to increase market interest in the development of contactless services in hotels.

6.2. At the Hotel Industry Level

- Hotel management boards should have a policy and orientation toward implementing digital technology to deploy contactless services;

- Develop software for customer interactions on mobile devices that is optimised for their hotel's primary markets;

- Strengthen research and investment in sync with the hotel's strategy for attracting potential customers in terms of facilities, equipment, software, etc. to facilitate the deployment of contactless services.

- Train staff on visitor security, safety, and privacy. Smart services are primarily introduced through hotel reward programmes.

- Improve coordination among hotel divisions, especially IT, sales and marketing, front office, food and beverage, housekeeping, security, and human resources, in the delivery of contactless services;

- Invest in IoT-based services that maximise customer conveniences, such as smart hotel applications, IoT locks, check-in kiosks, facial recognition devices, chatbots, and robots that deliver luggage, bring products to the room, etc.

- Have a division oversee contactless service operations. Specifically, monitor the attraction of customers who prefer contactless services, maintain an updated customer database, and gather customer feedback.

7. Conclusions

The hotel industry in Vietnam is well-versed in contactless technology. This study shows that contactless services are feasible in hotels in Vietnam. Hotels in Vietnam are using existing resources to adopt contactless services like mobile check-in, private time booking at the bar, restaurant, or garden promenade, room service, on-the-spot delivery, takeaway, or express check-out. Technology-based devices can support contactless services such as QR codes for hotel information, facial recognition cameras, and smart door locks opened by PIN codes sent to customers' mobile phones. Chatbots, product and luggage delivery robots, and mobile devices that can control hotel room status have not yet been used in contactless services in Vietnam hotels. Contactless services offer customers new and exciting experiences. With the advancement of new technologies, contactless services will become increasingly important in the hotel business for providing safety, convenience, and enjoyment to customers and staff.

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DỊCH VỤ KHÔNG TIẾP XÚC
TRONG NGÀNH KHÁCH SẠN VIỆT NAM: NGHIÊN CỨU
TRƯỜNG HỢP KHÁCH SẠN JW MARRIOTT HANOI
VÀ KHÁCH SẠN NOVOTEL HANOI THÁI HÀ

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Tóm tắt: Tại Việt Nam, dịch vụ không tiếp xúc trong các doanh nghiệp khách sạn còn khá mới mẻ. Trong bài viết này, chúng tôi nghiên cứu tổng quan dịch vụ không tiếp xúc và những vấn đề liên quan. Chúng tôi dựa vào mô hình 5M của Kaoru Ishikawa (1968) để xây dựng khung lý thuyết gồm năm yếu tố bên trong của khách sạn có ảnh hưởng tới việc triển khai dịch vụ không tiếp xúc trong khách sạn ở Việt Nam. Căn cứ vào khung nghiên cứu này, chúng tôi thực hiện điều tra các điều kiện thực tế về cung cấp dịch vụ không tiếp xúc tại hai khách sạn 5 sao, gồm JW Marriott Hanoi và Novotel Hanoi Thái Hà. Để đạt được mục tiêu nghiên cứu, chúng tôi đã sử dụng nhiều phương pháp nghiên cứu khác nhau, gồm nghiên cứu thư viện, phân tích dữ liệu; quan sát có sự tham dự; điều tra bằng bảng hỏi và phỏng vấn sâu. Qua các kết quả nghiên cứu, bài viết đưa ra thảo luận và khuyến nghị đối với việc triển khai dịch vụ không tiếp xúc trong các khách sạn ở Việt Nam.

Từ khóa: dịch vụ không tiếp xúc, ngành khách sạn, điều kiện, yêu cầu