



THE IMPACT OF INFORMATION TECHNOLOGY APPLICATION ON THE HOTEL PERFORMANCE – A CONCEPTUAL PERSPECTIVE

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ABSTRACT

Information Technology (IT) has been widely recognized in the hospitality industry as one of the most effective ways to communicate with guests and enhanced services delivery to guests. To cope with these complex and energetic business environments, both small and large enterprises require continuous adoption and innovation in the deployment of emerging technologies. However, studies in a developing country context are limited in number, especially in Vietnam. The purpose of this study is to investigate the impact of IT application on the hotel performance by proposing a research model.

Keywords: hotel performance, information technology.

1. Introduction

• *Theoretical aspect*

World Tourism Organization (UNWTO) said that the change in social life along with the technological revolution was an important factor in the rapid development of the tourism industry in recent years. The dramatic increase in the number of guests and young people using the services of online travel agents has dramatically changed the tourist market. Information technology plays a very important role in the growth, socio-economic development and competitiveness of enterprises. IT applications in hotel business not only help improve the management capacity of hotels but also help create the image and brand reputation of the hotel for customers. Many researchers have speculated that the application of information technology in the hotel industry has increased productivity, reduced operation costs, enhanced customer satisfaction, increased market share, and long-term profitability (Law and Jogaratnam, 2005).

Information technology (IT) has become an important strategic asset for the hospitality business. IT is applied with the aim of improving business efficiency and enhancing the strategic competitiveness of enterprises. Investing in IT plays a critical role in managing hotels strategically.

Investing in IT will increase the efficiency of the hotel performance, reduce their costs and at the same time add value to the products and services offered to their customers. Therefore, investments in IT applications in hotels have increased over the past decades. There is a need for extensive research studies that thoroughly examine how investments in IT applications can lead to creating the sustainable competitive advantage for hotel companies (Ham, et al., 2005; Piccoli, 2008).

Law and Jogaratnam, 2005; Piccoli, 2008 demonstrated that “efficient and timely deployment of new IT applications will provide more opportunities for enhanced customer services to better meet increasing customer expectations and improve cost control, more effective marketing strategies, and expand opportunities for hotels”. In fact, the usage of IT in the hotel industry has changed dramatically and brought more experience to customers, such as accommodation facilities as well as dining, entertainment, shopping...IT application has brought many opportunities for the business of the hotel, namely: better communication, improved communication and allow management of transactions as well. Customer relations are more favourable and efficient (Siguaw, et al., 2000). Thanks to IT, customers can access the hotel websites for the purpose of using electronic reservation systems, travel company websites to plan trips. However, according to Sigala (2003), the use of technology will not produce the optimal efficiency when hotels focus on the functions of technology without regard to the ability of technology integration. This study was designed to evaluate the impact of IT application on the hotel performance and propose the best solutions to improve the service quality, satisfy customer satisfaction and enhance the competitiveness of the hotel.

- ***Practical aspect***

The advancement and development in information technology such as Internet, Computer reservations systems (CRS), Global distribution systems (GDS) and other electronic systems have changed the business development strategy of the hotel industry as well as the competitive strategies of each business. Investing in IT not only enhances the capacity of the hotel but also achieves specific results such as lower costs for customers as well as for hotels, improves the value and service rates for customers, renovates the information technology in the hotel and enhances service quality and competitiveness of the hotel. However, hotels also need to be aware that IT application not only brings the competitive advantage for these businesses but that hotels need to offer ways to implement, deploy and integrate IT with areas and other parts of the hotel. Because, the slow grasp of information or technology can be the main reason behind the hotel lagging behind its competitors and resulting in declining profits (Law et al, 2009).

Many hotels in developed countries are leveraging IT to achieve high business efficiency and provide competitive advantage (Li, 2012). For example, CRS can increase cost efficiencies, enabling communication messages to be conveyed between businesses and customers faster. Information exchange and data management will be effective for businesses. The hotel's CRS can be linked to the airline's CRS to form a global booking system that allows tour operators, travel agents, and potential customers to book direct flights. IT has been transforming the hospitality industry globally through the development of a full suite of software applications to achieve operational productivity in hotel revenue, in room occupancy rate, in-seat turnover rate, thus reducing operating costs, improving customer satisfaction, and increasing customer experience (Sirirak et al., 2011).

According to the Vietnam Tourism Association, the hotel system, especially high-end hotels, as well as international brands hotels and airlines applying IT in business operations quite successful. The application of modern technologies in advertising and business activities not only help businesses improve competitiveness but also promote the establishment of accommodation business access to IT in various ways to enhance the brand and increase sales. For example, by lively ads that provide full information on interactive TVs, smart TVs or on mobile devices, hotels save on printing costs, hotel information boards, menus, and advertising brochures, thereby helping to save on hotel management costs. Or the use of integrated interactive TV and software systems will help the management, maintenance, receptionist update information, report work, contact with customers right on television, which will save operating costs (Tran Thi Huyen Trang and Tran Van Hung, 2016). Moreover, the application of IT in hotel business not only helps to connect customers before, during and after the holiday but also helps the hotel interact and keep in touch with customers at all times and everywhere. At the same time, thanks to state-of-the-art technology, customers will experience enjoyable and enhanced customer satisfaction on holiday stays, thereby encouraging customers to return to the hotel and introduce this to their friends, and relatives.

However, studies related to the application of information technology in the performance of the hotel are limited in number, especially in the context of the hotel business in Vietnam. Therefore, research related to the application of IT in hotel performance will meet the needs of theoretical and practical. For the above reasons, the author has selected the topic "**The impact of information technology application on the hotel performance – a conceptual perspective**" to study to help hotel managers and policymakers have the best solutions that contribute to improving the service quality for the customer and enhancing the competitiveness of the hotel.

2. The impact of Information Technology application on the Hotel Performance

Hotel industry is one of the fastest growing industries in the world and it has contributed greatly to the economic development of the country. Every year, the hospitality industry generates a lot of jobs and brings great revenue to hotel corporations as well as global hospitality businesses. This is evidenced by the increase in international tourist arrivals over the past two decades, more than doubling from 525 million visitors in 1995 to 1186 million arrivals by 2015, Travel from destinations has tripled from \$ 415 billion in 1995 to \$ 1260 billion by 2015 (UNWTO 2016). An important part of this success is mainly due to the application of IT in the design of products and services and the substantial improvement of hotel operations each year (Sirirak et al., 2011). For example, the Sheraton Hotel has introduced a customer satisfaction rating system that improves customer service and helps increase customer returns.

Applying IT in hotel businesses is an important factor in improving the efficiency of the hotel business through internal measures such as increased productivity, improved market share, as well as enhanced customer satisfaction (Sirirak et al., 2011). This research holds that IT has become a source of sustainable competitive advantage and a strategic plan for businesses because it is seen as a strategic resource that provides business value, increases the hotel's core competence and enhances the hotel's competitiveness in the market. In addition, Aziz, Bakhtiar, Syaquif, Kamaruddin, & Ahmad, 2012 also demonstrated that thanks to the application of IT, hotels have reduced costs, increased labor productivity, improved quality of service and customer satisfaction.

Due to the fierce competition in the market along with the increasing expectations of customers for the quality of service of hotels has led many hotels to discover the most innovative ways to gain competitive advantage (Sirirak et al., 2011). As a result, some hotels have responded that they have invested a considerable amount of money into the latest technologies in room reservation, procurement and inventory systems, revenue management and Wireless internet, telecommunications, email, electronic transactions, hotel websites, and customer experiences (Sirirak et al., 2011; Aziz et al., 2012).

These studies also suggest that the application of IT in the hotel industry brings many benefits to the business such as reducing operating costs, improving customer satisfaction, increasing market share and improving staff performance (Sirirak et al., 2011). The hotel has applied IT in the areas of hotel operations, such as reception, room department, restaurant department, technical department...(Sigala, 2003). In addition, Sigala, (2003) defines factors that measure the level of IT adoption in the hotel business including availability of IT elements; integration of IT elements and intensity of IT usage.

Most studies investigating the relationship between the application of IT and the performance of a hotel business are built in the context of developed countries and some

researchers have pointed out that investing in IT will increase employee productivity and improve the efficiency of the hotel business (Sigala, 2003; Sirirak et al., 2011; Aziz et al., 2012). Therefore, these studies will provide a more comprehensive and insight into the issue. In addition, research in the context of a developing country is still limited in quantity, and studies in this context will be very useful for hotel management, especially in the countries in Asia.

The study by Tran Thi Huyen Trang and Tran Van Hung, 2016 analyzes the impact of IT on the hotel business, evaluates the usage of IT in the business areas of the hotel. This study also makes predictions about changing trends of technologies in the near future and provides ways to respond to them. It would help hotel executives and researchers in assessing the impact of IT on the business of the hotel. However, this study has not provided a complete theoretical model to assess the impact of IT application to the hotel performance.

Research by Luong Thanh Nam, 2016 offers the best options for hotels with the desire to increase the competitiveness in the market is the application of modern technology. Interestingly, IT can create the guest experience, enhance guest satisfaction and increase hotel productivity or performance. For example, some hotels choose smart technology systems that will bring convenience to guests during their stay at the hotel such as finding information about hotel amenities and services, tourist information center, weather forecasting... In addition, thanks to the application of smart technology, the hotel has additional revenue from fees for watching movie services bridge, internet TV, advertising fees on the television from the hotel partners; In addition, live advertising and online shopping add-ons on your TV or mobile device will increase your hotel's sales, other services (revenue). However, this study has only stopped at assessing some current trends of hotel corporations that make subjective judgments about the application of modern technology to bring about the experience. This helps to improve customer satisfaction, thereby increasing the efficiency of the hotel's operations such as increasing sales, operating costs and management costs.

Through the overview of national and foreign scientific research, in order to further expand the research context, especially in developing countries including Vietnam, the author has based on the study of Sirirak et al., (2011) and defined the factors influencing the application of IT in hotel performance, (in terms of the availability of IT, integration of IT and intensity of IT usage).

3. Information Technology Application in Hotel Divisions and Departments

There is a great deal of research in the hospitality industry that focuses on the usage of IT in functional areas of the hotel, such as finance and accounting, human resources management, sales, and marketing. Hotels not only apply IT to the front-office but also to

the back-office. In addition, IT can be applied for customers, managers, and staff in specific departments in the hotels such as reservation management, room management, and revenue management. The deployment of IT in the departments not only brings valuable experience and quality to the customer but also promotes employee performance in the department, resulting in achieving higher efficiency.

According to the study of Ham et al. (2005), the hotel information system is divided into four main categories, including (i) Front-Office systems; (ii) Back-Office systems; (iii) Room division systems; and (iv) In-room systems. Whereas, the research of Sirirak et al. (2011) has identified three basic components of an IT system, namely: (i) the availability of IT components; (ii) the integration of IT components; and (iii) the intensity of IT component usage.

However, in the context of developing countries, the author has divided the IT systems for the hotel industry into two main categories: room division systems, and food and beverage systems.

3.1. Room division systems

Room division is the focal point of the hotel as this department generates the most receipts in the hotel. Room division consists of front-office, housekeeping, maintenance, and security. The main focus of the hotel is a revenue goal in which the majority of revenue comes from the selling rooms.

** Front-office department*

Front-office operation is one of the most effective parts of applying IT in managing and networking computer reservation systems. This system allows customers to book hotels through the Internet anywhere, at any time. This is one of the most effective applications that bring satisfaction to customers. Law et al. (2005) conducted a study to determine the number of hotel reservations online on the websites of different travel agencies across the region. This study considered the effective website of travel companies will affect the number of online reservations.

The front-office department of the hotel plays an important role in supporting the customer's smooth transactions and services from guest arrival until the guest leaves the hotel. The front-office department is conducting customer management through electronic systems. The front-office systems not only provides information for employees in the hotels and supports a fast and secure transaction time with the intention of reducing time spent on the system and increasing time spent on customer service (Aziz et al., 2012).

IT is being increasingly used in the front-office department, as it facilitates the work of the receptionists more quickly and easily.

IT is used in a front-office operation of hotels to create invoices and bills, to check-in and check-out guests, to monitor bookings and reservations, to record guest expenditure and share information within and across the hotel. By using IT, customers can communicate with the front-office staff via the Internet or telephone to make and confirm reservations while staying at the comfort of their private places and homes (Ansah et al., 2012).

In addition, customers can make payment for their booking online to conveniently facilitate their reservation without having to spend time queuing at the front office. Therefore, using debit and credit card payments through appropriate hardware and software has become a fundamental part of front-office operation.

* *Housekeeping department*

Housekeeping department has a critical and indispensable role in the hotel as it contributes to 60% of the hotel revenue. This department not only ensures the quality of each room in the hotel but also helps maintain and develop the quality of room service, thereby helping to bring satisfaction to customers. In order to ensure work activity is being performed correctly, each position in the housekeeping department must be coordinated with each other in a smooth and accurate manner. The room is the main concern of both the front-office department and the housekeeping department. The major implication of IT for the housekeeping department is to continuous exchange information on room status. Sigala, 2003 demonstrated that the purpose of a room status system is to connect the front-office department of reservations, reception and cashier with the housekeeping department so that all concerned know whether rooms are occupied or not.

In particular, the front office must provide lists for expected arrivals and departures for the day in advance, and notify housekeeping of actual arrivals and departures as and when they occur. Moreover, the front office is not allowed to assign guestrooms until the rooms have been cleaned, inspected and released by the housekeeping department. Housekeeping ensures that these rooms are given top priority in servicing, so that clean rooms are available for sale. To ensure efficient rooming of guests, both housekeeping and front-office must inform each other of changes in a room's status (Sigala, 2003).

The computerized system allows the housekeeping department to update directly room status into the central memory so that reception is made aware of room availability, which enables the reception staff to know exactly which rooms are prepared for the arriving guests (Sigala, 2003). The housekeeping department can print off lists of arrivals and departures in order to schedule staff along the most effective lines, whilst coping with sudden changes and requests. Overall, the housekeeping package eliminates tedious maid scheduling and allows for more efficient scheduling of housekeeping services. The productivity implication of this technology is that hotels would enjoy a more efficient, cost efficient use of their staff's time, while hotel's relationships with customers can also enhance as guests would be protected from being disturbed by hotel staff.

* *In-room systems*

Hotels are more likely to adopt modern technologies in order to provide rooms services to bring comfort, convenience, and safety to their guests. The technologies that hotels apply to in-room services include electronic keys and safes, alarm clocks, entertainment systems, temperature control systems, fire annunciator, security systems, and minibars. The hotels have invested some money in guestroom technologies with the goal of increasing sales for the hotel and enhancing the guest services, thereby improving the business efficiency of the hotel (Sirirak et al., 2011). As the in-room technologies will help increase the value-added services provided to customers and meet the customers' expectations, thus enhancing customer experiences. In particular, the authors found that in-room technologies had positive impacts on customer satisfaction, such as voice over internet protocol, telephone services, pay-per-view movies, voicemail/messaging, game systems and universal battery chargers.

The type and size of the hotel may have influenced the different rates of in-room technologies. Hotel companies have intentionally deployed different types of technology based on their financial and human resources and customer expectations.

The hotel sector, type of accommodation and size of the property influenced the number and type of technologies adopted. Hotels in high value-added sectors such as upscale and luxury are likely to embark on technological improvements to increase the quality of service delivered to the guest. On the other hand, hotels in low value-added segments, such as the economy and midscale, are likely to implement technologies to increase hotel productivity (Siguaw et al., 2000).

3.2. *Food and beverage systems*

Hotels with restaurants can choose the restaurant management systems to provide for these restaurants the complementary business operations. Aziz et al., (2012) posited that "Restaurant Management Systems are particularly designed to facilitate the operations of the restaurant and/or catering facilities by enabling the input, storage, and retrieval of data about customer preferences. These systems may include kitchen display systems, kitchen labour management systems and/or alarm systems for different incidents". Besides, restaurant management systems may conduct individually or they can be interconnected to the property management systems for smooth information flow throughout departments. "These systems can produce reports that support managerial decision-making, improving service quality, reducing food delivering times, generating forecasts that help managers in planning ordering, food production and scheduling labour (Aziz et al., 2012)".

Hotels with Conference and/or Banqueting facilities can also adopt IT systems particularly designed to support their daily operations. "Like restaurant management systems, these conference and banqueting management systems can operate individually,

or they can be interconnected to the property management systems to let sales agents to flawlessly book bedrooms that matched conference dates (Aziz et al., 2012)". Furthermore, these systems can store guest preferences and event information for subsequent direct marketing opportunities.

4. Research Framework

Framework refers to the chief structure that not only gives form and shape to the whole system but also supports and holds together all the other components in a logical configuration. In this research, the independent variables include the availability of IT components; the integration of IT components; and the intensity of IT component usage while the dependent variable is hotel performance.

Sirirak et al., (2011) indicated that "Availability of IT components was measured by the number of items available in the hotel. Increased number of available IT components should lead to higher level of hotel performance". These components are grouped according to the three hotel operational domains: hotel front-office division; Food and Beverage division; and in-room (Siguaw et al., 2000; Ham et al., 2005; Law and Jogaratnam, 2005).

"Integration of IT components was evaluated using the number of IT linkages between a specific operational domain and other operational domains or to the main server system (Sirirak et al., 2011)". For example, room division IT integration was determined by the IT linkages of room division to the food and beverage division, to the in-room section and to the main server. Thus, in total, there are three possible linkages in each operational domain.

Sirirak et al., (2011) said that "Intensity of IT component uses reflects how frequently the hoteliers/customers use the available IT components. Thus, the intensity of IT component usage was measured by the percentage of hotel operations carried out through ITs". For example, the intensity of web site system usage was measured by the percentage of room reservations by customers occurring through web site channels.

Operational productivity is the most important performance indicator in the hotel industry as it indicates the efficiency level of business operations. "Operational productivity is defined as a function of the ratio of operational outputs to inputs over a period of time where inputs include materials, equipment, and staff costs and outputs include revenue, number of goods or services sold, and number of customers processed (Sirirak et al., 2011)". Operational output includes yearly hotel revenue; room occupancy rate; and seat turnover rate for food and beverage.

The proposed research model is based on the identification of factors that influence the relationship between IT application and hotel performance. The author draws on studies by Sirirak et al (2011); Chevers (2015). This research identified three key elements of IT applications impacting on the hotel performance (in term of operational productivity) consists of (1) availability of IT elements, (2) integration of IT elements, and (3) intensity of IT usage.

Several studies of Sigala (2003); and Ham et al., (2005) have focused on analyzing the impact of information technology on hotel productivity by using the approach of collecting and analyzing data from the employee and management characteristic factors. As a result, these studies have demonstrated that there was a significant relationship between information technology adoption and hotel performance. When measuring hotel performance, Sirirak et al., (2011) not only collected data from employee and management characteristics but also expanded to customer satisfaction based on two criteria: the level of customer satisfaction with the hotel products and services; and the intended level of the customer to repurchase or recommend to others. The findings indicated that information technology adoption influences operational productivity more than customer satisfaction and information technology adoption does not have any significant relationship with customer satisfaction. Due to the findings from these studies above and the limited research conditions, the author merely focuses on employee and management characteristics in room division systems, and food and beverage system in order to provide valuable insight for IT components on operational productivity.

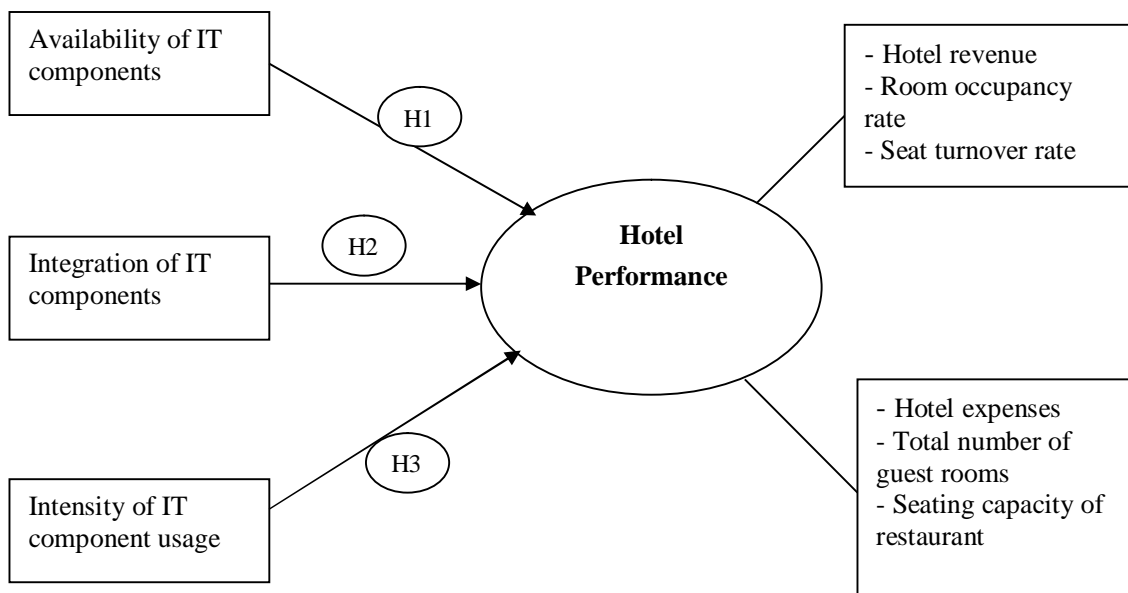


Figure 1.1. Research framework

Source: Adapted from Chevers, 2015

Hypothesis	Contents
H1	Availability of IT components positively affects the operational productivity in hotel performance
H2	Integration of IT components positively affects the operational productivity in hotel performance
H3	Intensity of IT component usage positively affects the operational productivity in hotel performance

There are many benefits of IT application in hotel industry, which influence hotels to adopt IT in their organization. The level of IT application in hotel industry is determined by three dimensions: the availability of IT components, the integration of IT components and the intensity of IT component usage (Sigala, 2003). The availability of IT application in a hotel is measured in terms of IT components that hotels were presently using. These IT components offered the hotel various possibilities for increasing employee productivity, enhancing revenue and improving guest service (Siguaw et al., 2000; Ham et al., 2005). The integration of IT components is measured from the number of the integration of IT applications with property management systems and amongst each other (Sigala, 2003). The intensity of IT usage is measured by the percentage of the operational activity carried out by using IT. For example, the IT utilization in reservation process can be measured from percentage of the transaction done through hotel website reservation system (Sahadev and Islam, 2005). Vietnam is a developing country and the factors affecting the IT application on the hotel performance are different from those that drive application in developed world. This research seeks to fill this knowledge gap through investigating the factors influencing application of information technology in performance of hotels.

5. Conclusion

The advancement and development in information technology have changed the business as well as the business development strategy of the hotel industry. Information technology such as the Internet, central reservations systems and other electronic distribution systems can be seen as a relatively new competitive resource for increasing the business development strategy of the hotel industry. Investing in IT not only enhances the capacity of the hotel but also achieves specific results such as increased productivity, reduced operation costs, enhanced customer satisfaction, increase market share, improved service quality and long-term profitability (Law and Jogaratnam, 2005; Piccoli, 2008, Siguaw, et al., 2000; Sirirak et al., 2011). However, hotels also need to be aware that in order to enhance the competitive advantage for these businesses and improve hotels performance, hotels need to offer ways to implement, deploy and integrate IT with areas

and other parts of the hotel like room division, food and beverage division, back office, in-room and so on. The main reason why the hotel lags behind its competitors is that the hotel does not identify information technology as a critical success factor for attaining performance.

According to some authors, “not many studies have researched the relationship of competitiveness factors, including IT and performance, in the hotel industry and there is a need for more studies investigating the impact of IT on hotel performance in general, and in developing countries in particular (Sirirak et al, 2011)”. The main purpose of this paper is to provide a theoretical framework to help hotel executives and researchers in assessing the impact of IT on hotel performance. It also attempts to contribute to the understanding of how IT can support the competitiveness of hotel firms in developed countries through some researchers. In particular, IT application can achieve operational productivity in hotel revenue, in room occupancy rate, in seat turnover rate, thus reducing operating costs, improving customer satisfaction, and increasing customer experience. The limitation of this study is that the author only focuses on the impact of IT application on hotel performance in term of operational productivity measure except for customer service measure.

The finding of this research has significant management implications. Based on literature review from studies, the author realized that applying information technology in the front-office division, food and beverage division and in-room division will help hotels make profits and benefits like reducing operation costs, enhancing greater productivity, improving service quality and increasing market share. In order to improve operational productivity, managers in hotels need to increase the number of IT elements in room division, enhance the integration and the intensity of IT usage of front-office division, food and beverage division and in-room division.

In order to compete in today's business environment, hotel managers need to understand the advantages and potential of using information technology in the hotel businesses, and to spend more time and effort to be able to take advantage of new technologies. To achieve this goal, hotel managers should maintain good relationships with existing customers by using appropriate information technology, integrating information technology into their development strategies. It also improves staff knowledge as well as the ability to utilize and master new information technologies and regularly updates future IT trends that affect hotel performance (Law et al., 2009).

❖ **Conflict of Interest:** *Authors have no conflict of interest to declare.*

REFERENCES

- Ansah, A.K., Blankson, V.S. and Kontoh, M. (2012). The use of Information and Communication Technologies (ICT) in front office operations of chain hotels in Ghana. *International Journal of Advanced Computer Science and Applications*, 3(3), 72- 77.
- Aziz, A.A., Bakhtiar, M., Syaquif, M., Kamaruddin, Y. and Ahmad, N. (2012). Information and communication technology application's usage in hotel industry. *Journal of Tourism, Hospitality, and Culinary Arts*, 4(2), 34-48.
- Chevers, D.A. (2015). Evaluating the impact of ICT usage on the performance of Jamaican hotels: a conceptual perspective. *Journal of Tourism and Hospitality Management*, 3(1-2), 22-31.
- Ham, S., Kim, W.G. and Jeong, S. (2005). Effect of information technology on performance in upscale hotels. *International Journal of Hospitality Management*, 24(2), 281-294.
- Law, R. and Jogaratnam, G. (2005). A Study of Hotel Information Technology Applications. *International Journal of Contemporary Hospitality Management*, 17(2), 170-180.
- Law, R., Leung, R. and Buhalis, D. (2009). Information technology applications in hospitality and tourism: A review of publications from 2005 to 2007. *Journal of Travel and Tourism Marketing*, 26(5-6), 599-623.
- Li, Y. (2012). ICT, the single greatest force affecting change in the hospitality industry. Available from: <http://jhuyili.blogspot.co.uk/2012/04/ict-single-greatest-force-affecting.html>.
- Lương Thanh Nam (16/09/2016). Ứng dụng công nghệ trong ngành công nghiệp khách sạn, *Tạp chí Du lịch*. Truy cập từ <http://www.vtr.org.vn/ung-dung-cong-nghe-trong-nganh-cong-nghiep-khach-san.html>
- Piccoli, G. (2008). Information technology in hotel management: A framework for evaluating the sustainability of IT-dependent competitive advantage. *Cornell Hospitality Quarterly*, 49(3), 282-296.
- Sahadev, S. and Islam, N., (2005). Why hotels adopt ICTs: A study on the ICT adoption propensity of hotels in Thailand. *International Journal of Contemporary Hospitality Management*, 17(5), 391-401.
- Sigala, M. (2003). The information and communication technologies productivity impact on the UK hotel sector. *International Journal of Operation and Production Management*, 23(10), 1224-1245.
- Siguaw, J.A., Enz, C.A. and Namasivayam, K. (2000). Adoption of information technology in U.S. hotels: Strategically driven objectives. *Journal of Travel Research*, 39(2), 192-201.
- Sirirak, S., Islam, N. and Khang, D.B. (2011). Does ICT adoption enhance hotel performance?. *Journal of Hospitality and Tourism Technology*, 2(1), 34-49.
- Tran Thi Huyen Trang and Tran Van Hung (2016). *Application of information and communication technology in hotel management*. National Conference on Training, Researching and Using Information technology in socio-economic development, 211-224.
- World Tourism Organization (2016). UNWTO Tourism highlights. 2016 Edition, 1-16.

**ẢNH HƯỞNG CỦA CÔNG NGHỆ THÔNG TIN
ĐẾN HIỆU QUẢ HOẠT ĐỘNG KINH DOANH KHÁCH SẠN
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TÓM TẮT

Công nghệ thông tin (CNTT) được chấp nhận rộng rãi như một trong những cách thức mới giúp các khách sạn kết nối với khách hàng đồng thời gia tăng chất lượng dịch vụ cung ứng cho khách hàng. Để đối phó với môi trường kinh doanh phức tạp và năng động hiện nay, các doanh nghiệp cần có sự chấp nhận và đổi mới liên tục trong việc triển khai các công nghệ mới. Tuy nhiên, vẫn còn thiếu các nghiên cứu trong bối cảnh của các nước đang phát triển, đặc biệt là ở Việt Nam. Vì vậy, bài viết này nhằm đánh giá tác động của áp dụng CNTT đến hiệu quả hoạt động kinh doanh khách sạn thông qua việc đề xuất mô hình nghiên cứu.

Từ khóa: hiệu quả hoạt động kinh doanh khách sạn, công nghệ thông tin.