

ICT Labor Needs of Hotel Business in Phuket, Thailand¹

Kitimaporn Choochote²

Abstract

The research aimed to study needs of Information and Communication Technology (ICT) labors in response to human resource development among hotel businesses in Phuket Province. It was a quantitative research conducting via a survey. 255 hotel businesses were subjects in this study. A questionnaire was utilized as a research instrument in order to find frequency and percentage. The responses derived from the questionnaire were also analyzed. The findings showed that most hotels outsource to operate the ICT department and there is no permanent ICT staff except EDP (Electric Data Processing). ICT staff is mostly responsible for administering the Internet systems and networks. Additionally, it was found that most hotels do not need full time ICT staff from 2013 to 2015. Most of the hotels require ICT staff to have high competence and good personality. The ICT staff is required to be good at conversation and communication in foreign languages, especially in English. Besides, problem solving skills for clients and colleagues are very necessary for ICT staff in the hotel business.

Keywords: Hotel Business, Information and Communication Technology

¹ Research Fund of the Faculty of Technology and Environment, Prince of Songkla University Phuket Campus, Phuket, Thailand

² Faculty of Technology and Environment, Prince of Songkla University Phuket Campus, Phuket, Thailand
kitimaporn.c@phuket.psu.ac.th

ความต้องการแรงงานด้านเทคโนโลยีสารสนเทศของธุรกิจโรงแรมในภูเก็ต ประเทศไทย³

กิตติมาพร ชูโชติ⁴

บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาความต้องการแรงงานด้านเทคโนโลยีสารสนเทศและการสื่อสารของธุรกิจโรงแรม จังหวัดภูเก็ต เป็นการศึกษาเชิงปริมาณ (Quantitative Research) โดยใช้การสำรวจ ซึ่งกลุ่มของการศึกษาคือธุรกิจโรงแรมในจังหวัดภูเก็ต มีจำนวนกลุ่มตัวอย่าง 255 แห่ง เครื่องมือในการวิจัยใช้แบบสอบถาม (Questionnaire) สถิติที่ใช้ในการวิเคราะห์ ได้แก่ ความถี่ (Frequency) ร้อยละ (Percentage) และการวิเคราะห์เนื้อหา (Content Analysis)

ผลการวิจัยพบว่า ฝ่ายเทคโนโลยีสารสนเทศของธุรกิจโรงแรม ให้นิยามงานภายนอกเข้ามาดูแลมากที่สุด ไม่มีพนักงานด้านเทคโนโลยีสารสนเทศมากที่สุด และหากมีจะเป็นตำแหน่ง EDP (Electric Data Processing) โดยมีสถานะเป็นพนักงานประจำ ความรับผิดชอบของบุคลากรด้านเทคโนโลยีสารสนเทศ คือทำหน้าที่ดูแลระบบอินเทอร์เน็ตและระบบเครือข่ายคอมพิวเตอร์ในโรงแรมมากที่สุด ไม่มีความต้องการพนักงานเทคโนโลยีสารสนเทศในระหว่างปี 2556 - 2558 มากที่สุด คุณสมบัติของบุคลากรด้านเทคโนโลยีสารสนเทศของธุรกิจโรงแรม ด้านความรู้ความสามารถ คือ ความรู้ความสามารถในการปฏิบัติงานมากที่สุด ด้านบุคลิกภาพ คือ บุคลิกภาพในการปฏิบัติงานมากที่สุด ด้านภาษาต่างประเทศ คือการสนทนา การสื่อสารภาษาอังกฤษมากที่สุด และด้านความรอบรู้ คือความสามารถแก้ไขปัญหาแก่ลูกค้าและเพื่อนร่วมงานมากที่สุด

คำสำคัญ: ธุรกิจโรงแรม เทคโนโลยีสารสนเทศ

³ ได้รับทุนสนับสนุนจาก คณะเทคโนโลยีและสิ่งแวดล้อม มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตภูเก็ต

⁴ คณะเทคโนโลยีและสิ่งแวดล้อม มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตภูเก็ต

Introduction

Tourism and Hotel Industries are important for growing economic of a country. Information and Communication Technology has directly related to both of them for customers' convenience and increasing an efficiency of services. With high competition, if the business hotel does not use ICT, it will effect on their business and service policies as well as customers. Customers are a group of people who hotel business has to take care of and make them satisfy.

Nowadays, ICT is developing fast. Many cluster industries depend on ICT which results in existing occupation and ICT jobs continuously. Personnel needs with the right skills are necessary for this kind of industry. Efficient working skills of ICT labors in their responsibility are also important for the position as well. The impact of ICT hotel and hospitality industries has been recognized as important changes. This research seeks to find out the structure and responsibilities of the ICT personnel of hotels business, the employment status of the ICT personnel of hotels business and the needs of numbers and qualifications of the ICT personnel of hotels business in Phuket.

Literature Review

Nowadays, the application of ICT can be used in many fields such as studies, business industries, medical, sciences and technology, in order to facilitate the business, working and learning, resulting in a better quality of people' life in the society.

A. Hotel Business and Information Technology

In addition, many government agencies utilize the information technology and computer systems to facilitate the people for communicating with the government. Besides, the private sectors in the hotel and tourism business provides information and services to customers via the Internet very quickly and immediately. Personnel with ICT skills are necessary for organizational development of hotel business. Therefore, the researcher is aware to study ICT Labor Needs in Response of hotel business in Phuket.

Advances in technology and communication lead the lifestyles of people, including consumer behaviour changing to a greater reliance on technology. Consequently, now both the public and private sectors are awakened to bring various forms of information technology to assist in business operation, service industry as well. The information system has also greatly influence on both of them as said that "Information is the lifeline of the tourism industry". Then, the system has been spread throughout the travel industry. No one in the tourism industry has not been affected by technology. The information technology effectively helps businesses in the service industry resulting in having a high competitive advantages in the global market.

Information technology is important to the service industry, which can be summarised into six aspects. Firstly, Information technology helps businesses to enlarge the tourist

market. Secondly, information technology allows visitors to make a decision in purchasing goods and services. Thirdly, information technology helps reduce production costs for tourism operators. Fourthly, information technology enhances effectiveness of tourism business and serves customers conveniently. Fifthly, information technology builds good relationships among businesses in different networks. Finally, information technology is used as a tool for training staffs in business tourism.

B. Information and Communication Technology

Nowadays, there is a usability trend in using information technology in a service industry. Currently, there is a high use of information technology in a service industry, which can be called as a condition of business competition. This can be summarized as follows. First, the Internet is used to do higher order. Second, it is more common to deliver information through the media. Moreover, all airlines use an electronic system to reduce paper use to replace tickets. Furthermore, travel agencies use GDS (Global Distribution System) to book air tickets, hotels, a car rental and others. Additionally, tour agencies, airlines and hotels use technology as a tool in their work flexibly and efficiently. Lastly, there is much more use of Social Media as a strategy in public relation and marketing.

Information and Communication Technology policies in Thailand (IT 2010: e-Thailand) are for developing the country on the basis of knowledge of Thailand in 10 years during 2000 - 2010 (IT- 2010: National Information Technology Policy) in order to have a strong, sustainable economy to compete in the international arena. Meanwhile, in order to make the society a better quality of life with minimal overlap, these are the three main elements.

- To invest human resources to strengthen basis knowledge.
- To promote an innovation in the economy and society.
- To invest in information infrastructure and information technology industries.

Development strategies using information technology leading Thailand to a wisdom society and learning can be divided into five major components.

- ICT for developing government sector (e-Government).
- ICT for developing commerce sector (e-Commerce).
- ICT for developing industry sector (e-Industry).
- ICT for developing the education sector (e-Education).
- ICT for developing social sector (e-Society).

These five elements are aligned and linked to each other very well resulting to provide many benefits to the country in various aspects such as reducing overlap of investment and establishing private markets, and a link creation of Thai wisdom. This has been done in accordance with the three pillars of the IT 2000, leading to an economy and knowledge-based society, which composed of human resource, innovative promotion and supporting information infrastructure and information technology industries.

Purposes of the study

1. To study the structure and responsibilities of the Information and Communication Technology (ICT) personnel of hotels business in Phuket.
2. To study the employment status of the Information and Communication Technology (ICT) personnel of hotels business in Phuket.
3. To study the needs of numbers and qualifications of the Information and Communication Technology (ICT) personnel of hotels business in Phuket.

Framework and Research Design

The researcher used the concept of research in needs in Information and Communication Technology (ICT) labours of Hotel Business in Phuket as follows.

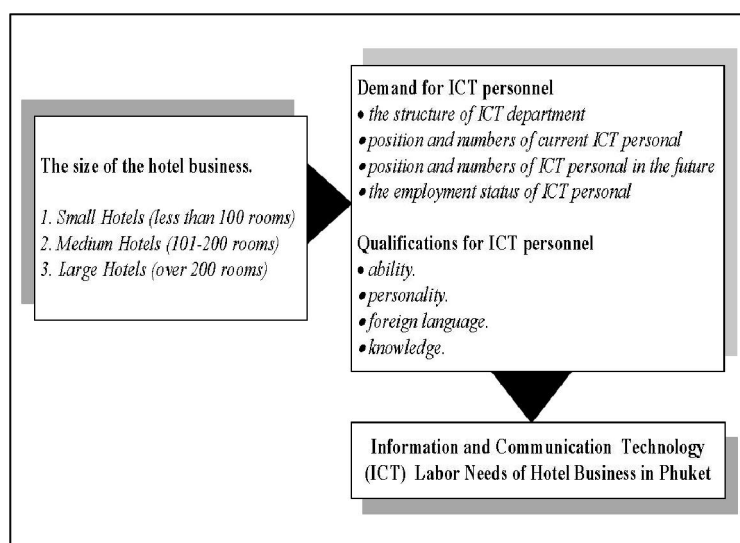


Fig. 1. Information and Communication Technology (ICT) labours of Hotel Business in Phuket framework

Research Methodology

This research used a quantitative research method by using a survey to study Information and Communication Technology (ICT) Labor Needs of Hotel Business in Phuket. The details of the study were described as follows.

A. Population

The population of this research was hotel business, which was classified by the number of hotel rooms in Phuket. There were totally 703 rooms (data from the Tourism Authority of Thailand, 2011).

TABLE I. Number and percentage of hotels in phuket

Hotel rooms	Number of hotels	Percentage
1. Less than 50 rooms	486	69.13
2. 51-100 rooms	98	13.94
3. 101-150 rooms	42	5.97
4. 151-200 rooms	20	2.84
5. More than 200 rooms	57	8.11
Total	703	100

B. Sample

The sample of this research were 255 hotels in Phuket, which were classified according to the number of rooms.

TABLE II. Number and percentage of samples hotel in phuket

Hotel rooms	Number of hotels	Percentage	Sample size
1. Less than 50 rooms	486	69.13	176
2. 51-100 rooms	98	13.94	36
3. 101-150 rooms	42	5.97	15
4. 151-200 rooms	20	2.84	7
5. More than 200 rooms	57	8.11	21
Total	703	100	255

Yamane(1967) equation was used for sample selection based on the calculation of the sample during field survey as shown below. Sample selection was chosen by the number of rooms.

$$\text{Yamane(1967)} \quad n = \frac{N}{1 + Ne^2}$$

Where, n = sample size
N = Elements of population: 703
E = Error of sampling in this study was 0.05 proportion

Therefore:

$$\begin{aligned} n &= \frac{703}{1 + 703(0.05)^2} \\ &= 254.94 \\ &\approx 255 \end{aligned}$$

In this wise, 255 becomes the sample size for this study.

C. Instruments

A questionnaire was utilized as a research instruments used in this research to collect data, which was generated and consistent with the objectives of the research framework of the study. The questionnaire was divided into five parts as shown below.

Part 1: General profile on gender, age, religion, education level, major of education, monthly income and the period of work.

Part 2: Information about the hotel

Part 3: Information of the structure and responsibilities of ICT personnel

Part 4: Requirements and qualifications of ICT personnel data on which is four major factors, ability, personality, the foreign language and the knowledge.

D. Data Analysis

The data were analysed using a computer software. The statistics used in this study included frequency, percentage and content analysis.

Conclusions

The findings of the research on ICT labor needs of hotel business in Phuket were:

1. The structure and responsibilities of ICT personnel of hotel business in Phuket

The results showed that most hotels hire the agencies which are not from the Department of ICT to work and take responsibilities for information technology. Most hotels do not have the ICT personnel, or there is only one position as the Manager: Electronic Data Processing (EDP) and / or the Computer Operator whose the task is to take care of the Internet and computer network in the hotel. The Human Resources Department considers that the current organizational structure is appropriate. The details were according to the size of the hotel as followed:

- Most hotels in Phuket are small and are 3 star hotels. Most of them outsource the agencies which are not from the ICT Department to take responsibility for information technology. Most of the personnels are not ICT or if there is only one person, the majority of the ICT personnel position is Computer Operator. They are responsible for the Internet and computer network. The Human Resources Department considers that the current organizational structure is good.
- Some medium hotels are 3 star hotel. ICT personnel are affiliated with the IT department directly, there is only one person who is responsible for the task, and some don't employ ICT personal as well as small hotels. Currently, the majority of the ICT personnel position is Computer Operator. They are responsible for the Internet and computer network. The Human Resources Department considers that the current organizational structure is good.
- Most of the 4 star hotels are large, ICT personnel is assigned to the Accounting Department. Staff of ICT Department is the only one person in the current position as the Data Base Administrator. The task is to take care of the Internet and computer network in the hotel. The Human Resources Department considers that the current organizational structure is good.

2. The employment status of ICT personnel of hotel business in Phuket

The results showed that if the employer have to hire a full time employee status, most hotels will have to hire the agency from outside to oversee the operation of the ICT Department. The detail is according to the size of the hotel:

- Small hotels: employment status, most are hired by the agency outside. They're responsible for ICT.
- Medium hotels: Employment status, most of the hotel staff is a full time employee.
- Large hotels: Employment status, most of the hotel staff is a full time employee.

3. The number and qualification requirements of the ICT personnel in hotel business in Phuket

The results showed that in the year 2013-2015 quarter, there's also unnecessary to employ ICT personnel if they need only one position. The qualifications of the personnel in this field in order of the priority of the issue are

- 1st issue: the ability part; the first is the knowledge and ability to perform. (not computer professional knowledge and skill)
- 2nd issue: in personality part; the first is behavioural performance.
- 3rd issue: in foreign language part; the first is able to communicate in English.
- 4th issue: in knowledge part; the first is the ability to solve problems for customers and colleagues.

The details categorized by the size of the hotel:

- A. The small hotels;* in the year 2013-2015 quarter, it is unnecessary to employ more ICT personnels. If there is a need to hire more staff, here are the qualifications: 1) the potential in term of work 2) the personality, 3) the ability to communicate in English, and 4) the ability to solve problems for customers and colleagues.
- B. The medium hotel:* in the year 2013-2015 quarter, there is also unnecessary to employ more ICT personnels. If there is a need to hire more staff, here are the qualifications: 1) the potential in term of work 2) the personality, 3) the ability to communicate in English, and 4) the ability to solve problems for customers and colleagues.
- C. The large hotels;* in the year 2013-2015 quarter, there is also unnecessary to employ more ICT personnels. If there is a need to hire more staff, here are the qualifications: 1) the potential in term of work 2) the personality, 3) the ability to communicate in English, and 4) the ability to solve problems for customers and colleagues.

Recommendations

According to the findings of the study, the suggestions are as follows.

1. *To work with ICT in the hotel business in Phuket,* ICT personnel should have knowledge of the network and the Internet services. They also should be good at English and interpersonal communication.

2. *Academic institutions, which produce graduates to work in a hotel business, should be aware of service, attitudes, personality, interpersonal, mind service, English, and basic knowledge of information technology.*

Acknowledgment

This work was supported by the Research Fund of the Faculty of Technology and Environment, Prince of Songkla University Phuket Campus, Phuket, Thailand

References

- Ali Yousaf. (2011). *The impact of ICT in the eyes of hotel managers*. Sodertorns University, Department of Business Studies.
- Association of Thai Travel Agents. (2012). *Project development plan to support the liberalization of travel services*. Retrieved from http://www.atta.or.th/Upload/News/228/Chapter_4.pdf.
- Community development Department, Ministry of Interior. (2012). *The eleventh national economic and social Development Plan*. Retrieved from [http:// www.cdd.go.th](http://www.cdd.go.th).
- Denney G. Rutherford. (1990). *Hotel management and operations*. New York: Van Nostrand Reinhold.
- Department Of Skill Development. (2005). *Direction and the need for skilled labor industry of Thailand (2004-2009)*. Planning and Information Technology Division, Ministry of Labour.
- National Electronics and Computer Technology Center.(n.d.). *Executive summary: the second Thailand information and communication technology (ICT) master plan (2009-2013)*. National Science and Technology Development Agency. Ministry of science and technology.
- Office of the National Economic and Social Development Board.(2011). *The eleventh national economic and social development plan B.E. 2555-2559(A.D. 2012-2016)*. Office of the Prime Minister, 2011. Retrieved from <http://www.nesdb.go.th/Portals/0/news/plan/p11/plan11.pdf>.(2012).
- Pimravee Taharnkrawe, and Jirawat Samitsant. (2011). *Information technogy for hotel*. Suan Dusit Rajabhat University. M & M Laser Printed.

- Ranee Hisichaikun. (2003). *Tourism management information system (unit 1 basic knowledge about the tourism industry)*. Sukhothai Thammathirat Open University.
- Rodolfo Baggio. (2004). *Information and communication technologies in the hospitality industry: the Italian case*. e-Review of Tourism Research (eRTR), Vol.2, No. 5. Retrieved from <http://ertr.tamu.edu>.
- Sirawit Sirirak. (2012). *Relationship between information and communication technology (ICT) adoption and hotel productivity: the case of Phuket, Thailand*. Faculty of Technology and Environment, Prince of Songkla University, Phuket.
- Steadmon, C. E. & Kasavana, M. L.(1988). *Managing front office operations*. East Lansing, MI: The Education Institute of the American Hotel & Motel Association.
- Supanee Sengsee, (2003). *Information and communication technologies for education*. Faculty of Education: Naresuan University.
- Tanja Mihalic,. Dimitrios Buhalis. (2012). *ICT as a new competitive advantage factor-case of small transitional hotel sector*. Economic and Business Review. Vol.15. No. 1 (33-56).