

# Conference Program

Waseda University

Tokyo Japan

July 22-24, 2015



# 2015

3rd International Conference on Hospitality, Leisure, Sports, and Tourism

2nd International Conference on Engineering and Natural Science

3rd International Symposium on Economics and Social Science

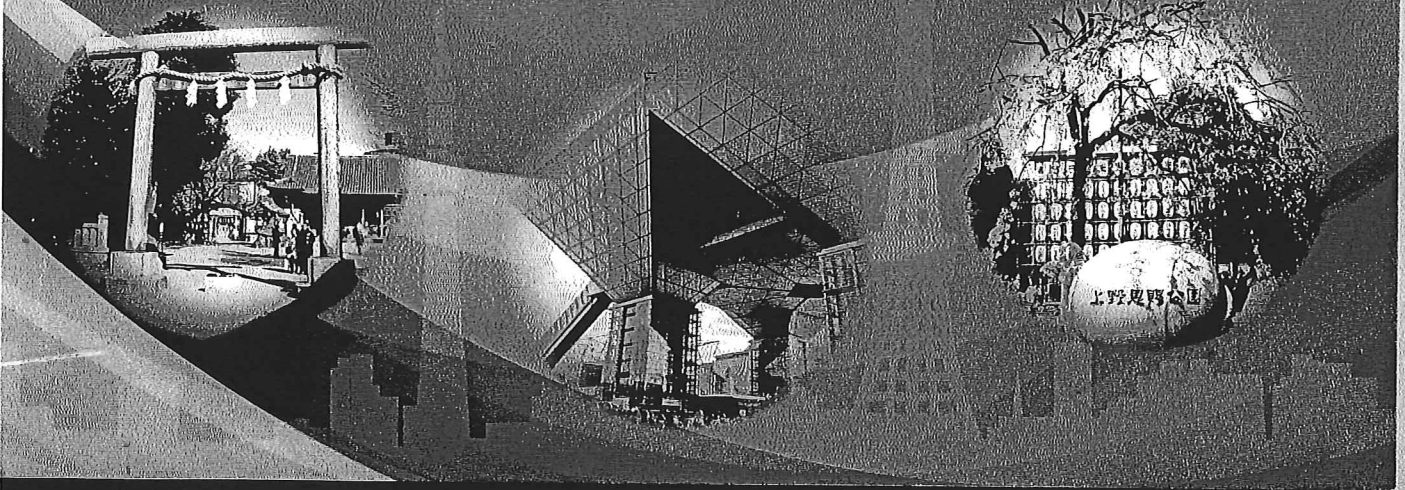
Global Conference on Logistics, Transportation, and Traffic

## Organized by

Waseda University

Tamkang University

International Academy Institute



Waseda University, Tokyo, Japan || July 22-24, 2015

# 3<sup>rd</sup> ICHLST

3rd International Conference on Hospitality,  
Leisure, Sports, and Tourism

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## Message from the 3rd ICHLST Conference Chair



We take great pleasure in welcoming you to the 3rd International Conference on Hospitality, Leisure, Sports and Tourism (3<sup>rd</sup> ICHLST) which will be held in Waseda University, Tokyo, Japan. The aim of this conference is to bring forth all professionals and academicians around the world expert in fields related to Hospitality, Leisure, Sports and Tourism and create a valuable and inspiring forum which ideas and research results will be exchanged and discussed. We would be happy to provide any assistance you may require if needed, and look forward to your active participation during this conference.

The 3<sup>rd</sup> ICHLST is jointly held with "2015 International Symposium on Economics and Social Science (3<sup>rd</sup> ISESS)", "2<sup>nd</sup> International Conference on Engineering and Natural Science (2<sup>nd</sup> ICENS)", and "Global Conference on Logistics, Transportation, and Traffic (LTT 2015)". There were more than 500 submissions and 270 excellent papers among them were accepted and published.

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Dr. Chiung-Tzu Lucetta Tsai is an Associate Professor of Leisure & Sport Management in the Business School Department of National Taipei University in Taiwan. Dr. Tsai is also president of the Taiwan Leisure Association and an interim board member for the World Leisure Organization Commission on Women and Gender. Moreover, she is currently serving as a member of the board of directors for the World Leisure Organization. Dr. Tsai was granted the "Academic Research Award" in 2009, 2010, 2012 and 2013 in Taiwan. To date, she serves on a number of journal reviewers, including the Journal of the National Institute for Compilation and Translation, Journal of Women's and Gender Studies, Journal of Sports Knowledge, Taiwan Labour Review, World Leisure Journal, Leisure Studies (SSCI), Journal of Taiwan Aquatic Sport, The Sociology of Sport Journal (SSCI), International Review for the Sociology of Sport (SSCI), Recreation and Society in Africa, Asia and Latin America, NCKU Sport Journal, Taiwan Sports Forum, Journal of Research in Education Sciences (TSSCI), International Leisure Review, The International Journal of the History of Sport, and Social Indicators Research (SSCI). She is editor-in-chief of International Leisure Review.

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## **The Use of Information Technology under a Green Economy Concept for Sustainable Convention Hotels in Thailand**

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### **ABSTRACT**

This paper aims to define the integration between information technology and the green economy concept, in order to develop sustainable business eco-tourism, for convention hotels. Convention hotel business in Thailand has played an important role as an alternative hospitality resource, generating numerous benefits to the business tourist industry. The Thailand Convention and Exhibition Bureau (TCEB, 2014) determined that convention business generated revenue of 31,254 million Thai baht in the year 2013, an increase of 10.74 percent over the previous year. Hence, the importance of convention hotels within this segment of the tourist and hospitality industry is evident. Convention hotel business is concerned with many service sectors, both in and out of the hotel; as well as with persons outside of, or in addition to the actual convention participants (such as an accompanying spouse). The hotel (hosting the convention) may create various aspects of consumer consumption; such as accommodation, food and beverage, function rooms, meeting facilities, activities, external excursions (for a spouse or family), transportation, and souvenir products. In an era where technology has become significant to human life, so too has the consumption of technology within convention business tourism. Over consumption creates an overload on hotel resources, and may cause a leak in energy within the convention hotel. Therefore, the idea of how to secure business productivity through technological consumption while reducing the potential of an energy leak, or a loss in natural consumption; becomes important. The phrase green economy was established in order to maximize the benefits of business tourism within the convention hotel, and safeguard technology while reducing any potential losses. The purpose of this study, as a model for business development, is to establish the integration between information technology and green economy concepts, as a guideline for convention hotels, in which to promote sustainable business eco-tourism.

Key words: Information Technology, Green Economy, Convention Hotel

## Introduction

The convention hotel business plays an important role in today's MICE (Meeting, Incentive, Convention and Exhibition) industry. Many related documents have shown that convention business is crucial to Thailand's economy. For example, the Thailand Convention and Exhibition Bureau (TCEB, 2014) determined that in 2013 convention business generated revenue of 31,254 million Thai baht, an increase of 10.74 percent over the previous year. Hence, the importance of convention hotels within this segment of the tourist and hospitality industry is presented. Convention hotel business is concerned with many service sectors, both in and out of the hotel. Therefore, to survive in business, it needs some development of information technology. However, for long term sustainability, businesses have paired information technology with the concept of a green economy. Nevertheless, there is some question of how the convention hotel business can manage the integration of information technology and green economy concepts. Therefore, this study aims to explore the use of information technology under the green economy concept for sustainable convention hotel businesses in Thailand.

The purpose of this study is to understand the significance of convention hotel business in Thailand, and to enhance the business in a sustainable way; under the green economy concept, in three parts:

1. To study the current situation and significance of Thailand's convention hotel business.
2. To study an appropriate and sustainable way of business development.
3. To generate the I-Green concept in a Green Economy way for sustainability.

## The Convention business and significance of Convention Hotel

Convention business, as a part of the MICE (Meeting, Incentive, Convention, and Exhibition) industry in Thailand, generates numerous benefits to the whole country. In general, *conventions* differ from *meetings*; in terms of the number of participants, duration of stay, and preparation and event management. Many countries try to present their country as a convention destination, in order to attract more tourists. The International Association of Professional Congress Organizers, or IAPCO (Pacific Asia Travel Association, or PATA, 2011) defines the convention as *a general and formal meeting of a legislative body or a social or economic group; in order to provide information and deliberation about a particular situation, and to establish the consent of policies among the participants*. A convention is usually of limited duration, with set objectives, but with no determined frequency (IAPCO, 2013). Therefore, it could be said that a convention is a gathering of people from the same profession, participating together in an event; for instance, a convention of doctors from around the world (World Jamboree in Thailand, 2012). The primary purpose of the convention business is to benefit, in terms of revenue, both the direct and indirect businesses. Convention business generates several fruitful opportunities to the country as a whole. Convention business maintains many special relationships with numerous indirect businesses; including meeting rooms, exhibition halls, accommodations (hotel rooms), food and beverage, logistics, incentives, and recreation. Studies have shown that most MICE businesses and events took place within the hotel setting.

The International Congress and Convention Association reported that from 1963-2012, meeting facilities in hotels were the most popular venue for convention businesses. Beginning in 2008, an increase of 44.2% took place over the previous period. It may be

implied that the hotel is still the favorite gathering place for MICE and Convention business arrangements. One of the main reasons of this popularity is the ease and smoothness of arrangements made within the hotel, compared with other venues. Hotels satisfy nearly all customer requirements; such as room accommodations, food and beverage services, a business (IT) center, lobby and function room design, and numerous other facilities. Customers could also save in logistics costs, if they decided to hold their event at a convention hotel. Furthermore, any accompanying persons, outside of the meeting, may plan activities within the hotel as well. Therefore, the hotel is the best solution for all.

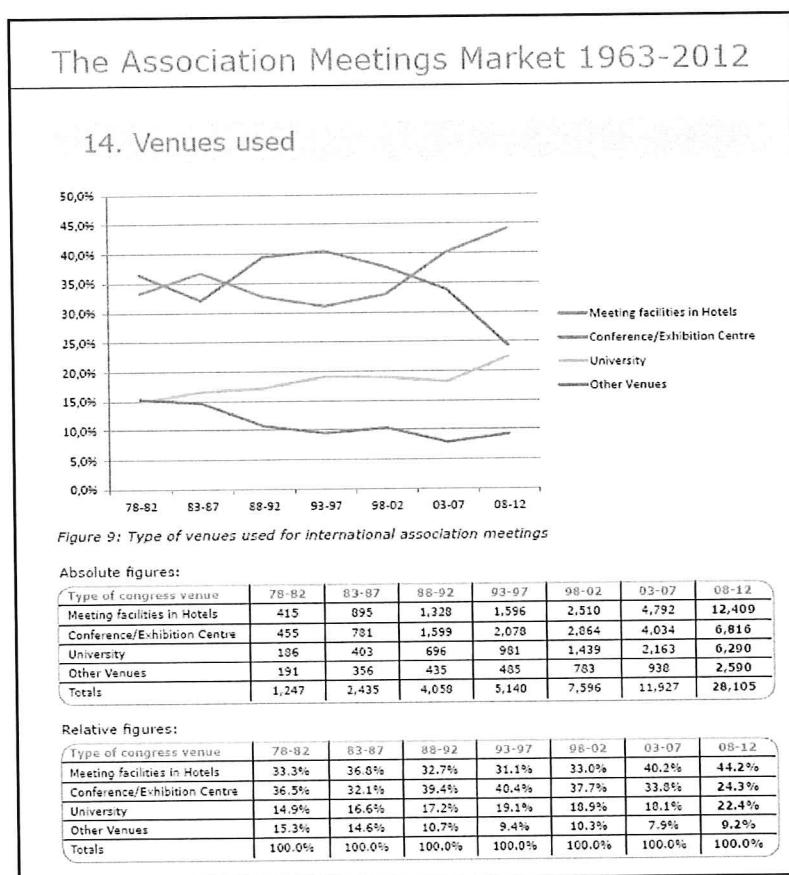


Table 1. Source: International Congress and Convention Association, 2014.

In Thailand, where tourism and MICE business play an important role, the above information has led to the awareness of many concerned groups, such as the Thailand Convention and Exhibition Bureau (TCEB). The TCEB's major role; is to push, promote, and develop MICE businesses, and convention businesses in particular, in Thailand. Moreover, the TCEB has stated that in 2013; convention related businesses have grown to 31,254 million Thai baht, a 10.74% increase over the previous year. As seen in Table 2, Thailand's industry performance chart shows the upward growth and revenue from 2012 to 2013.

Industry Performance 2012 VS 2013							
Industry	MICE Travellers			Revenue (THB million)			
	2555	2556	Growth	2555	2556	Growth	
Conventions	292,038	315,961	8.19%	28,224	31,254	10.74%	
Incentives	218,808	247,936	13.31%	14,423	15,816	9.66%	
Meetings	220,042	258,286	17.38%	24,412	26,891	10.15%	
Exhibitions	164,336	191,319	16.42%	12,711	14,524	14.26%	
<b>Total</b>	<b>895,224</b>	<b>1,013,502</b>	<b>13.21%</b>	<b>79,770</b>	<b>88,485</b>	<b>10.93%</b>	

Table 2. Source: Thailand Convention and Exhibition Bureau, 2014.

The convention business in Thailand, therefore, has the strong potential to provide successful levels and attract more benefits to the country. At present, there are many convention venues in Thailand; most of which are stand-alone properties which lack some of the other services and facilities which support many events, such as rooms, proper restaurants, leisure facilities, and other services. Convention hotels were established in order to serve all the various needs of the consumer. With the development of convention hotels, comes the requirement for tools necessary to assist the hotels, in order to survive. One such essential tool is Information Technology, which may also create a competitive advantage for the convention hotel. Large function rooms, quality food and beverage, and variety of hotel facilities attract participants to the convention hotel. The hotel would need some type of technology in order to attract participants, especially in today's era of technological significance.

### Information Technology and the Convention Hotel Business

Information technology is the application of computers and telecommunication equipment to store, retrieve, transmit, and manipulate data, often in the context of a business or other enterprise (Wikipedia, 2014). This has been supported by the Information Communication and Technology Center (ICTC, 2014), demonstrating the significance of information technology in life, through social media and business development. Information technology has become a part of every business, including convention hotel business. In today's competitive environment, convention hotels use information technology to strategically create a difference or advantage over competitive hotels. There are many applications of information technology in the convention hotel business in order to attract participants and customers. For instance, the availability of WIFI, advanced audio visual equipment, an electronic business center, some auxiliary guest services, and even a check-in kiosk. These are only samples of how information technology has become a necessary part of convention hotels. Moreover, numerous researches and studies have documented the importance of information technology in business. For example, Sahadev and Islam, (2005) found that information and



communication technology for hotel development, was especially useful in the areas of sales and marketing. Another supportive idea from Bilgihan et al., (2011) suggests that information technology (in convention hotels) may bring about a competitive advantage in the areas of business strategy, types of technological applications, intended benefits of technological decisions, and decision-making styles. They further found that the applications of information technology could provide hotels with lower costs, agility, innovations, and value added customer service. More recently, Ozturk and Hancer (2014) studied the adoptive relationships between information technology and decision making characteristics within the hotel industry. The result of their study revealed that larger hotels tended to adopt information technology very quickly. This provided encouragement to the various departments within the convention hotel, including sales and marketing, room division, engineering, food and beverage, conventions and catering, security, and administration.

The utility of information technology within the convention hotel business may be summarized as follows:

- ❖ Information Technology may enhance customer/participant satisfaction,
- ❖ Information Technology may reduce operating costs.
- ❖ Information Technology may expand existing opportunities.
- ❖ Information Technology may assist in the creation of marketing strategies.
- ❖ Information Technology may provide greater value added services.
- ❖ Information Technology may be applied to all convention hotel departments.
- ❖ Information Technology may create a competitive advantage for the business.

However, information technology may also generate negative impacts within the industry, such as reducing the amount of human resources, and increasing energy consumption (on both local and global levels). Therefore, the need for *sustainability* was created.

### **I-Green: Use of Information Technology under the Green Economy concept for sustainable Convention Hotel Business**

The issue of sustainability exists in order to maximize benefits within the business itself. Therefore, the concept of a Green Economy was established. The definition of a Green Economy by the United Nations Environmental Program or UNEP, (2013) is an economy which results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. Other characteristics of a Green Economy include low carbon usage, resource efficiency, and socially inclusive responsibility. Moreover, UNEP further pointed out that the green economy concept would be a concept that could sustain all of the concerns of the industry. One such concern examines the development and increase in income and employment, while reducing carbon emissions and pollution. In other words, enhancing energy and resource efficiency by preventing the loss of biodiversity and ecosystem services. The special characteristics of the convention hotel business, within the Green Economy concept, impact the environment in both positive and negative ways. For example, consumption of natural resources increases during a convention, as does the amount of pollution generated. The marriage of information technology and the convention hotel results in three major impacts:

#### 1) Economic Impact

Through the use of information technology in the convention hotel business, a great deal of revenue is generated. This revenue could spread

throughout the nearby community as a money *flow* or *multiplier* phenomenon. Information technology may also reduce excessive costs within the hotel; such as, paper, food and beverages, and human resources. In addition, the economic impact in this context could also refer to the hotel's image and branding in the public eye. However, information technology may also lead to greater unemployment within the labor force, leading to further economic issues in the community.

2) Environmental Impact

The many wastes and pollution which occur during the convention also create both a loss of natural resources and a negative impact to the business; for example, the consumption of paper and pencils, leftover food and beverages, and electrical consumption (which leads to the loss of energy). These impacts have generated negative impacts to the environmental surroundings and people within the community.

3) Socio-cultural Impact

Convention hotel business may generate socio-cultural impacts, especially for those who are working within the industry. Different cultures may have the ability to cross, or even to merge. Therefore, the development of information technology within the convention hotel business, may lead to a loss of culture, in the end.

With the above elaboration of the significant impacts of information technology and convention hotels, the creation of the Green Economy concept is formed; which could sort out all negative impacts. However, in a successful business model, where economic prosperity (revenues) and gaining a competitive advantage in the business are crucial; long term sustainability comes in the form of balance, as shown in the figure below.

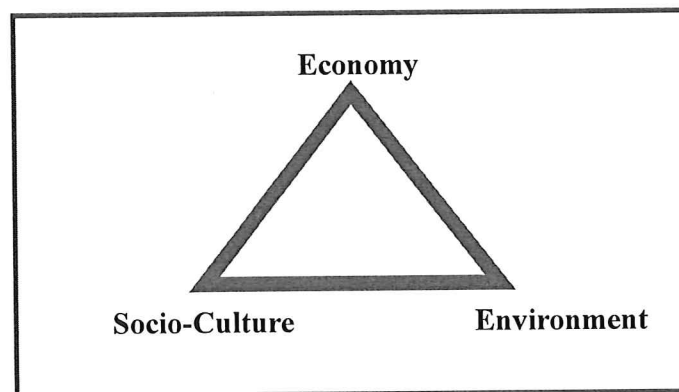


Figure 1. The balance of Economic, Socio-Cultural, and Environmental impacts.

This need for balance has established the I-Green concept. I-Green concept is an integration of information technology and the Green Economy concept, in such a way as to create both the competitive advantage desired as well as long term sustainability. The concepts of information technology and a green economy, while seemingly in contrast; must also find a way to become supportive of one another. This idea was supported by Kleinrichert et al., (2012) in their research on the use of technology under the two contexts of hotel business and environmental responsibility. They studied the Green hotel, in term of standards as well as shades of green. They then confirmed the usage of information communication technology in the area of environmental sustainability for business activities. This could reduce the consumption of non-durable goods, energy, water, and various waste emissions released into the environment. Therefore, it may be concluded that the use of information technology under the context of a Green Economy, may be the one method of sustaining the convention hotel business. I-Green concept could be referred to as the following signage of sustainability:

1) I concept of Innovation

A convention hotel business needs to create innovation in order to attract participants. Information technology could assist those hotels, in creating innovation. Employing innovative teleconferencing during a convention, may save the customer both time and money. For example, a famous guest speaker who has the challenge of exhaustive travel, might instead use teleconference during a session of the convention.

2) G concept of Guest Satisfaction

No one would deny that guest satisfaction is the heart of any hotel business. There are many uses of information technology that may assist in satisfying the participant, such as the electronic questionnaire (where guest do not need to interface) and the check-in kiosk (where a large group of participants would not be waiting in a long line during the check-in process).

3) R concept of Reduce Costs

The use of information technology under the Green Economy concept could assist the convention hotel business (and the participants) in substantially reducing costs. For example, the use of an electronic signboard rather than a foam signboard, or the use of drinking water in glass cups, rather than instead of plastic (where water could be refilled).

4) E concept of Energy

During the hotel convention, there is a great deal of light and sound consumption, which creates a loss of energy. The use of information technology could control such losses with resources, such as power control, time management sensors, and even the use of a solar cell.

5) E concept of Expansion Business

The expansion of the business itself may occur with the management of information technology. The use of information technology could save guest expenses and lead to further satisfaction, which in turn may result in repeat business. Additional expansion of convention hotel business may occur through customer word of mouth.

6) N concept of Natural Resource Awareness

The use of information technology can reduce the consumption of natural resources effortlessly, for instance, in the use of an i-pad instead of paper during the convention. Teleconferencing, again, may reduce the cost of the guest speaker, and reduce the carbon footprint of airline business, as well as food and

beverage consumption within the hotel, and so on. Therefore, it may be concluded that information technology under a Green Economy could create an awareness of the consumption of natural resources.

### Conclusion and Recommendation

Within the competitive environment of the convention hotel business, many entrepreneurs have tried to survive, through creative strategic management set up. One of the essential tools involved in attracting (and keeping) participants in the convention hotel, is information technology. The innovative and successful use of information technology within the convention hotel persuades people to consume their products and services, which may provide a competitive advantage within the field. Gaining an advantage in business is difficult. Maintaining this advantageous environment is even more challenging. This has formed the thought of how to sustain the convention hotel business over time; which has established the concept of the Green Economy.

I-Green concept was set up under the premise of integration between information technology and Green Economy for convention hotel business. I-Green concept creates a competitive advantage, and also to secure business with concerned parties in a sustainable way. Guidelines may be created for the convention hotel business to be followed, in terms of innovation, guest satisfaction, reducing costs, saving energy, business expansion, and awareness of natural resources awareness; which are the core concepts in the of balancing of economic, environmental, and socio-cultural impacts of the business and industry.

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