THE DEVELOPMENT OF 21ST CENTURY LEARNING SKILLS
TO ENHANCE THE PERFORMANCE EFFECTIVENESS
OF CONVENTION HOTEL STAFF IN THAILAND

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**A Dissertation Submitted in Partial
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ABSTRACT

Title of Dissertation	THE DEVELOPMENT OF 21ST CENTURY LEARNING SKILLS TO ENHANCE THE PERFORMANCE EFFECTIVENESS OF CONVENTION HOTEL STAFF IN THAILAND
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This paper was aimed to present the guideline development of 21st Century Learning Skills for the convention hotel staff's performance and effectiveness in Thailand. The results of the study could help to improve the performance of convention hotel staff, especially at convention hotels in Thailand. Convention hotels are used for meetings and business conventions which generate a lot of benefits to the country such as revenue, employment, cross cultural management and technological development respectively. Thus, it is necessary to understand and seek to improve the convention hotel staff's performance in order to expand the entire scope of meetings and business conventions in Thailand.

The purpose of this study was as follows: 1) to develop each type of 21st Century Learning Skills which is necessary for hotel convention staff in Thailand, 2) to develop a structural equation model between 21st Century Learning Skills and the performance of hotel convention staff in Thailand, and 3) to develop a guideline for hotel convention staff in conjunction with those 21st Century Learning Skills which can enhance the proficiency of hotel convention staff in Thailand.

A mixed research methodology was employed in this study. The research instrument employed was a set of questionnaires distributed to 500 convention hotel customers who regularly use the convention hotel services in MICE cities which are located in the following five provinces: Bangkok, Chiang Mai, Khon Kaen, Pattaya and Phuket. Additionally, a focus group discussion was formulated to gather data from all the participants regarding the convention hotel staff's performance in Thailand. There

were nine participants from relevant fields, i.e. convention hotel staffs, convention hotel managers, government customers, private sector customers and scholars from the hospitality and human resources fields. The coding analysis that was used for the results of the focus group discussion was descriptive statistics (i.e. frequency, percentage, mean, and standard deviation) and a structural equation model was also employed for the analysis of the quantitative data.

The results of the study found that, 1) there were seven 21st Century Learning Skills that could enhance the convention hotel staff's performance and there were four effectiveness components which resulted from those learning skills, 2) structural equation modeling techniques were applied to develop a suitable model for the 21st Century Learning Skills. The findings indicated that there was goodness of fit among the seven learning skills and four outcomes of the effectiveness components, 3) a guideline development was constructed for the convention hotel staff according to the significance level of the learning skill. The self-directed and flexible working skill was the most relevant development skill, along with job rotation and a case study training program, while, communication and collaboration skill was the least relevant development skill along with a job rotation training program.

Therefore, the development guideline for 21st Century Learning Skills to enhance the convention hotel staff's performance and effectiveness in Thailand can be divided into the two sections of on-the-job and off-the-job training programs. However, the significance factor of each learning skill needs a different development guideline in order to best reach its performance development. This can help generate profitability not only to convention hotel businesses, but also to other related businesses and educational institutes which could ultimately produce the right people for the right jobs in the hospitality industry.

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INTRODUCTION

1.1   Statement and Significance of the Study

The provision of business meetings is a significant business activity at present, in particular with tourism, due to their special characteristics business activity can attract not only businessman but also business travelers. Normally, business travelers will use their off-business time or time out of the meeting room, to engage in leisure activities, such as dinner cruises, traveling around the city, visiting a museum or doing some shopping. Therefore, it could be said that business meetings are related to both the travel and service industries.

Business meetings in Thailand are called 'MICE', which stands for the Meeting, Incentive, Convention and Exhibition business (Thailand Convention and Exhibition Bureau, 2014). MICE businesses in Thailand play an essential role in the Tourism Industry in Thailand due to the profitability of the business itself in terms of revenue, for organizers and hotels, attendees and participants, related businesses, and some other communities.

The reporting of significant growth in these sectors is supported by various associations, including the Global Business Travel Association (GBTA) (TCEB, 2014), which forecasted that MICE businesses would have a rapid growth rate of 4.1 percent per year, and a report by The Global Association of Exhibition Industry, which stated that most business meetings were taking place in the region of China and East Asian countries. Another point in agreement is that the World Tourism Organization of the United Nations mentioned that the most powerful travel related business growth would happen in Asia and the Pacific regions (Department of Tourism, 2013).

Therefore, MICE can be seen as an essential business in Thailand from various aspects.

MICE in Thailand has great potential, with a bright picture conforming to the growth of world business in the Asian region. The below figure shows the MICE business in Thailand during 2014:

MICE Category	Number of Visitors	Revenue (Million Baht)	Average Revenue Per Head (Baht)
Meetings	232,736	25,173	108,161
Incentive travels	240,546	27,415	63,497
Conventions	287,886	26,737	92,874
Exhibitions	157,996	61,613	86,179
M+I+C+E	919,164	80,800	87,906

Figure 1.1 Visitor Numbers and Revenue by MICE (2014)
Source: Thailand Convention and Exhibition Bureau or TCEB, 2015

According to the above figure, in 2014 there were 919,164 MICE travelers who generated total revenue of 80.8 billion THB, with the average revenue spent per head of 87,906THB, compared with the spending of leisure travelers of 46,314 THB (Thailand Convention and Exhibition Bureau, 2015). This is clear evidence of the potential and importance of MICE travelers in Thailand

It can also be seen that MICE businesses in Thailand are recognized and popular among MICE travelers around the world, as shown by the report of the International Congress and Convention Association (ICCA), (Thailand Convention and Exhibition Bureau, 2014) which mentioned that in the year 2013 MICE businesses in Thailand were 7th in the Asia Pacific and Middle East region ranking of meetings per country. Moreover, the report stated that the most popular meeting city in Thailand is

Bangkok, which was 4th in the worldwide ranking of meetings per city. These records are proof of how significant and popular MICE businesses are in Thailand.

There is further study of the MICE business and its significance involving the meeting, incentive, convention and exhibition sections, in particular the venue segment. There is a summary of a report from the ICCA for the years 2008-2012 showing that the most popular venues used for meetings were in the form of 'Meeting Facilities in Hotels', as shown in the figure below.

The Association Meetings Market 1963-2012

14. Venues used

Figure 9: Type of venues used for international association meetings

Absolute figures:

Type of congress venue	78-82	83-87	88-92	93-97	98-02	03-07	08-12
Meeting facilities in Hotels	415	895	1,328	1,596	2,510	4,792	12,409
Conference/Exhibition Centre	455	781	1,599	2,078	2,864	4,034	6,816
University	186	403	696	981	1,439	2,163	6,290
Other Venues	191	356	435	485	783	938	2,590
Totals	1,247	2,435	4,058	5,140	7,596	11,927	28,105

Relative figures:

Type of congress venue	78-82	83-87	88-92	93-97	98-02	03-07	08-12
Meeting facilities in Hotels	33.3%	36.8%	32.7%	31.1%	33.0%	40.2%	44.2%
Conference/Exhibition Centre	36.5%	32.1%	39.4%	40.4%	37.7%	33.8%	24.3%
University	14.9%	16.6%	17.2%	19.1%	18.9%	18.1%	22.4%
Other Venues	15.3%	14.6%	10.7%	9.4%	10.3%	7.9%	9.2%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Figure 1.2 The Association Meeting Market 1963-2012
Source: International Congress and Convention Association, 2014

The above figure shows the preference of venue used for MICE businesses in the world according to the Association Meeting Market between 1963 – 2012. It states that during 1978 – 2012, there were four types of congress and convention venues. Among these four different venues used, the meeting facilities in hotels had the most

growth in venues used when compared with other types. During the years 1978-1982, meeting facilities in hotels had only a 33.3% market share in venues used, however, they had a rapid growth rate during 2008-2012 with 44.2% of the market share.

The most logical reason is that most hotels are able to serve all the demands of the meeting business in terms of meeting space and halls, accommodations, food & beverage services, parking lots, meeting facilities, and other activities, such as fitness, swimming pools, business center services and even well-skilled hotel staff to handle all kinds of meetings. Furthermore, it could be seen that meetings in hotels reduce risks in MICE businesses in terms of unexpected situations, for example, unforeseen weather, crowd control and security systems. There are other reasons for using a hotel as a venue which are, ease of access and wide recognition by many because luxury hotels are well-known and have good reputations. Some participants mentioned that when they attended MICE at a hotel their partner or spouse could engage in activities inside the hotel rather than waiting or hanging around some other place. For example, their spouse could have a spa treatment, do fitness, a cooking class, or use the library.

The significance shown above regarding meeting facilities in hotels has led to the concentrated efforts of both the government and private sectors for ways to develop MICE businesses in hotels in Thailand. Attention should be drawn to the Thailand Convention and Exhibition Bureau (2014) who targeted the growth of MICE businesses in Thailand in the year 2015, with a target of 1,036,300 MICE travelers generating revenue of 106.78 billion THB. This target by TCEB was divided between Conventions, with a target of 338,100 people having target revenue of 37.8 billion THB, Meetings, with 255,000 people, Incentives, with 252,800 people and Exhibitions with 190,400 people (TCEB, 2014).

The above aim clearly shows the significance of each MICE sector, and identifies convention business as playing an important role, both in terms of MICE travelers and targeted revenue. The reason is that convention businesses are often international events with special business characteristics: firstly, it the nature of conventions to be prepared between 2-5 years in advance to assist all concerned in

being ready and prepared for the convention. Secondly, the number of participants is often larger than other MICE business activities, bringing higher revenue to businesses both directly and indirectly. Thirdly, the impact of the convention business is more widespread than other MICE businesses, creating reputation and acting as a self-marketing strategy.

These significances and purposes have drawn the attention of concerned departments like the TCEB, which are directly responsible for taking care of MICE businesses. In order to reach target revenue and expected beneficiaries, the TCEB has launched many campaigns and MICE tools to provide assistance to MICE businesses and other concerns. One of the significant tools is the MICE Standard Venue campaign, to keep up the standard of service and venue management. Another campaign of the TCEB launched in parallel with the standards was the development of MICE people under the name of MICE 101 (TCEB, 2014). This campaign was created in order to develop upstream people in the MICE industry, like students in universities and institutes, enabling them to get ready for, understand and get used to the MICE business, in order to achieve excellence when they complete their studies.

However, all these campaigns were only launched as a first step, as the business patterns in the world are continually changing. The challenge for MICE business in this 21st century is that the world is dynamic, so people in this field may require some special characteristics of dynamics and global awareness of the 21st century. There are academic papers regarding the significance of MICE people which deal with the development of people in this field. A study by Suwadee and Kanokkarn (2016) clearly mentioned the development of human resource core competencies in organizing events for MICE, concentrating on a competencies guideline for those professional exhibition organizers, professional convention organizers and destination management companies.

Convention hotels in particular are concerned with people in their diversity, so there are extra skills requirements for people working in these environments. It could

be said that people in the convention business, like convention hotel staff, need to have special skills as mentioned earlier in terms of dynamics and 21st Century Skills.

This leads to interest in the study of how convention hotels can train their staff in order to serve convention travelers well, the more and better services that are provided to customers, the greater the returns to businesses will be.

However, there are very few studies and research is rare on the development of the convention hotel staff's performance, particularly those concerning special skills for the 21st century. Most studies only mention it in the broader sense of the Tourism Industry, for instance, Baum (2015), states that human resource development is significant to the Tourism Industry in this 21st century, and some hotel businesses are on the way to being more dynamic and technological. Another supported study by Alleyne Alleyne, Doherty, and Howard (2005) mentioned that hotel staff performance should directly reflect their efficiency and effectiveness. Hence, hotels are required to train their staff well in order to provide good service for hotel guests and the return to the hotels themselves will be good. Their study also mentioned the importance of the hotel staff's performance, which promotes a good image of the hotel, and therefore, hotels should pay attention to the development of their human resources. Human resources in hotels should not only be considered as staff, but they should be viewed as an asset to the hotel, and the hotel needs to treat them well, as many people have called hotel staff the human capital of business which can ultimately reflect on the performance of the hotel business itself.

This brings us to the main focus of this study, the performance of convention hotel staff, which can be a positive asset of their business. In particular, in this 21st century in which the world is continually changing dynamically, people need to understand those dynamics and be able to adapt themselves to these changes.

Hotel convention staff are people who have to deal with all kinds of customers from various nationalities, cultures, religions, educational backgrounds and who have their own convention hotel experience. Therefore, their performance needs to be competent in order to deal with these diversities and provide customer satisfaction

which, in turn, will benefit the convention hotel. The convention hotel staff's performance can also give hotels a competitive advantage and profitability, displaying the professionalism of the hotel and enabling the hotel to have a worldwide reputation. Therefore, this study puts emphasis on the significance of 21st Century Learning Skills which can improve the performance of convention hotel staff which could improve the effectiveness of their performance and bring profitability to the convention hotels. The results of the study are not only for individuals or businesses themselves but reflect on the total picture of convention hotels and MICE businesses in Thailand.

1.2 Research Questions

1) What type of 21st Century Learning Skills can enhance convention hotels staff in Thailand?
2) Which 21st Century Learning Skills can improve the performance of convention hotel staff in Thailand?
3) What is a guideline for the development of 21st Century Learning Skills to improve the convention hotel staff's performance in Thailand?

1.3 Research Objective

This dissertation intends to generate a guideline for the development of convention hotel staff proficiency. As the business environment is very dynamic, especially in the 21st century, one of the significant tools for this development is 21st Century Learning Skills that can enhance the performance of hotel staff. Therefore, this study is concerned with 21st Century Learning Skills which can improve the performance of convention hotel staff. This leads to the significant objectives of this study, which are:

1) To develop each type of 21st Century Learning Skill which is necessary for hotel convention staff in Thailand.

2) To develop a Structural Equation Model of 21st Century Learning Skills for the performance of convention hotel staff in Thailand.

3) To develop a guideline for convention hotel staff which uses 21st Century Learning Skills which can improve the proficiency of convention hotel staff in Thailand.

1.4   Benefits of the Study

This study has the intention to develop the performance of convention hotel staff in the special context of using 21st Century Learning Skills. In the 21st century, the world has changed, so people in this era need to change and to be able to adapt themselves to those changes. These 21st Century Learning Skills have been compiled in order to assist people in understanding the changes in a dynamic world, and the outcomes of these learning skills could promote inventive thinking, higher productivity, increased global awareness and the proper application of digital technology. Therefore, the outcomes of this study aim to provide the following two benefits:

1.4.1. Benefits of the study in terms of the academic field

1.4.1.1. To generate knowledge of 21st Century Learning Skills

for use by convention hotel staff.

1.4.1.2. To assist scholars and academics in integrating their

learning tools for tourism and hospitality students.

1.4.1.3. To be a guideline for further study or research in this area for

the tourism and hospitality industries.

1.4.2. Benefits of the study in terms of business, entrepreneurs, and industry

1.4.2.1. To stimulate the awareness of entrepreneurs in realizing the

benefit of developing 21st Century Learning Skills for

convention hotel staff.

1.4.2.2. To be a guideline for Human Resource Managers and other concerns to adapt and develop their human capital within their organizations with effective skill

1.4.2.3. To make all convention hotel staff aware of the significance and the relationship of their performance to the proper development of 21st Century Learning Skills.

1.4.2.4. To raise the awareness of both the government and private sectors on the significance of the convention hotel staff's performance to business and industry as a whole.

1.5 Scope of the Study

The 'scope of the study' can be described as the direction of the study in order to reach the objectives of the study. This study's scope in terms of specific content, involves a specific population, a special duration of time and a specific area of study.

1.5.1. Specific Content of the Study

The study emphasizes the significance of 21st Century Learning Skills for the improved performance of convention hotel staff, in particular those staff that interface directly with customers, and who can have both a positive and negative impact on those customers. These hotel convention staff are persons who serve guests, hence, they need to have specific skills in order to serve all guests well. Therefore, 21st Century Learning Skills are the specific skills which can improve the convention hotel staff's performance.

Hence, the contents of the study were divided into two parts which are, 21st Century Learning Skills and components for effectiveness of performance.

For the 21st Century Learning Skills, the researcher grouped the significant learning skills into the 7 aspects of creativity and innovation skills, critical thinking and problem-solving skills, communication and collaboration skills, media and information technology skills, social and multi-culturalism skills, social responsibility skills, and self-directed and flexible working skills.

For the components for the effectiveness of staff performance in convention hotels, effectiveness was based on the guests' experiences and perception. There were four effectiveness components for the convention hotel staff's performance: physical appearance, responsiveness and communication, trustworthiness and problem-solving.

1.5.2. Specific Population of the Study

This research intended to study the improvement of the convention hotel staff's performance with the development of 21st Century Learning Skills. The purpose of this future-directed research was to determine the outcome of the development of something, or the prevention of an unwanted situation or performance (Nittana Pilanthanun, 2013). Therefore, the population in this study were comprised of respondents who had experience with the service provided by convention hotel staff who could give their perception of staff performance, in particular the outcomes of the learning skills of the staff.

1.5.3. Specific Duration of time of the Study

This study was conducted on a 24-month timeline (July, 2015 – June, 2017). The process of the study was accomplished by research design, theory and literature review, research framework, data collection, data analysis and data reports and results.

1.5.4. Specific Area of the Study

The purposes of this study was to evaluate the convention hotel staff's performance and effectiveness in the context of the 21st century, hence, the specific area of the study was convention hotels, especially venue services. As per the record of the convention hotels in Thailand (TCEB, 2014) it was found that there are five MICE cities (Bangkok, Chiangmai, Khon Kaen, Pattaya and Phuket) with a total number of 209 MICE hotels in Thailand.

1.6   Operational Definitions

1.6.1. 21st Century Learning Skills are specific learning skills of people in the 21st century, in which the world is dynamic. In particular, within the specific business context, these 21st Century Learning Skills generated seven essential skills, which consisted of creativity and innovation skills, critical thinking and problem-solving skills, communication and collaboration skills, media and information technology skills, social and multi-culturalism skills, social responsibility skills, and self-directed and flexible working skills.

1.6.2. Effectiveness of hotel convention staff performance means the effectiveness of the performance of convention hotel staff who serves convention guests in various aspects. There are four components of effectiveness which are: physical appearance, responsiveness and communication, trustworthiness and problem solving.

1.6.3. Convention hotel staff is defined as persons who work in the convention hotels in MICE cities by TCEB (2014), which consist of the five cities of Bangkok, Chiang Mai, Khon Kaen, Pattaya and Phuket.

CHAPTER 2

LITERATURE REVIEW AND RELATED VARIABLES

This chapter provides the review of literature, related concepts, theories and researches on 21st century skills and the effectiveness of convention hotel staff performance. The study only focuses on the convention hotel businesses in Thailand. The researcher studied additional information based on the following concepts, theories, and related researches:

    2.1. Concept of tourism with MICE business and the convention hotel

        business in Thailand

    2.2. Concepts and theories of the 21st century skills

    2.3. Approaches and theories regarding the effectiveness of the work

        of convention hotel staff

    2.4. Conclusion and related research

2.1 Concept of tourism with MICE business and the convention hotel business in Thailand

2.1.1. Tourism and MICE business

The Tourism Industry is one of the most popular industries at present, especially, in Thailand where the Tourism Industry can be counted as a priority industry which can generate a lot of employment for the country. The tourism business brings benefits to many businesses, in terms of revenue, employment, business opportunities, technology development and so on.

The characteristics of the tourism business can be divided into two types (TCEB, 2014);

1. Domestic tourism which has the special characteristic of travel limited to within the country itself. The main objective of domestic tourism includes visiting friends, cultural exchange, getting in touch with the local way of life, relaxing and leisure, incentives and others. The one condition is that the tourism only takes place within the country. This type of tourism is supported by many countries that try to encourage their people to travel within their own country in order to avoid any leakage of tourism. One of the big issues of the leakage is about the currency and balance of trade.

2. International tourism is another type of tourism which is travelling from one destination to another destination, particularly from one country to another. In general, there are two types of international tourism, 'Inbound Tourism', where there is a host country and tourists come to travel there and 'Outbound Tourism', where tourists travel to another country and then come back. It can be seen that between these two types of international tourism, most governments prefer Inbound Tourism since Outbound Tourism may cause the country to have a loss of business and income. Nowadays, many governments are trying to promote Inbound Tourism in their countries in order to maximize business; Inbound Tourism can also be viewed as an export business.

The Tourism Industry in Thailand generated revenue of 1,207,145.82 million THB an increase of 22.69 percent over the year 2013 (Department of Tourism, 2014). In addition to the large amount of revenue and business growth for Thailand, it also created competitiveness between regions as well. Many nearby countries are trying to promote their tourism business to the public in order to gain market shares from what Thailand already has. Especially so, since the year 2016 when the ASEAN Economic Community stated that all business and travel will be borderless. Hence, Thailand needs to enhance its own tourism business or initiate alternative tourism patterns in order to attract those repeat tourists and gain new customers as well. The following are some necessary elements of traveling and tourism:

1). Bargaining power and revenue

2). Information and target destinations

3). Logistic systems

4). Supporting facilities systems such as signage

5). Accommodations

6). Food and beverages

7). Tourist attractions

8). Targeting local people and the community

Apart from the above elements of tourism which attract people in the region, the following significant areas need to be addressed by the government and other concerned organizations in order to attract more tourists.

1). Marketing: in the sense of creating tourism marketing

2). Production: the management of tourist attractions and resources.

3). Personnel: human administration, and the participation of capable people at tourism places.

4). Financing: budgeting, value added, and revenue to the region and profitability to all concerned.

All these elements and points of views have created an awareness to the government and private sectors to recognize the importance of trying to find alternative ways to attract tourists to Thailand. MICE business is an alternative tourism business which could attract business travelers to Thailand along with their partners and spouses who would also generate a lot of revenue during their stay.

2.1.2. MICE Business and its Characteristics

MICE business in Thailand consists of these four components, which are meeting, incentive, convention and exhibition.

A business meeting is defined as a meeting held within an organization or company. The participants are people who work in the same organization. Most

business meetings are planned in advance; there are two kinds of business meetings, one is an association meeting, which means a meeting with the purpose of updating and exchanging information and knowledge. Another type of business meeting is a corporate meeting; the purpose of this kind of meeting is to encourage the attendees who are from the same department or company to share ideas together. Normally, corporate meetings would need less preparation than association meetings.

A business incentive is a kind of business meeting for those who reach their target, the majority of incentives happen in the insurance and direct sales business. The participants who attend this kind of event usually travel free with a sponsor who is usually the owner of the particular mentioned business.

A business convention is not like a regular business meeting. Usually, business conventions have to have at least a two year preparation period and there is also a larger number of participants than the normal business meeting, for example, the business conventions of the medical field, rotaries, Boy-Scouts and so on.

A business exhibition differs from the other three components or types of meetings. Business exhibitions are related to a product presentation, an exhibition for a particular customer. Normally, business exhibitions are divided into three types, of trade shows, consumer shows and trade & consumer shows. A trade show exhibition is the way buyers meet other buyers, so there will sometimes be a limited number of participants. Consumer show exhibitions are for the public and the participants will be a great number of people, such as a book fair exhibition. Trade and Consumer show exhibitions are for both trade buyers and consumers but may be split into two segments, for example, the first two days of the exhibition may be limited to only trade buyers in business, while the third and fourth days will be open to the public to buy products.

MICE business in Thailand plays an important role in terms of its positive impact to not only the hotel business, but also to all other related businesses as well. The record of TCEB (2015) stated that MICE business could generate up to 80,800 million THB in the year 2014 with a spending cost per head of 87,906 baht per trip in

Thailand. This confirms that MICE business has great potential as a revenue generating business in Thailand. Moreover, most MICE businesses are related to other tourism businesses in terms of the activities and services provided by the tourism sector, this forms a partnership between the two businesses.

Another evidence of the relationship between these two businesses is that the National Tourism Development Plan of 2015-2017 stated that MICE business was one of the target markets that could assist tourism in Thailand (Department of Tourism, 2015). The Department of Tourism identifies MICE tourists as one target market which needs to be developed as a tourism product and service under the 2ⁿᵈ Strategic Plan of Tourism. The concentration will be on how to create appropriate products and services for the market, especially in the ASEAN community, due to changes in the travel patterns of international tourists in this dynamic century.

Furthermore, MICE business in Thailand is in league with various supporters, in terms of tourist attractions and supported resources. There are many tourist attractions in Thailand with various activities for all MICE tourist to experience rather than just coming for the meeting and going back home, such as a beautiful beaches, good weather for relaxing after wok, rock climbing, trekking, canoeing, kayaking, golfing, and other activities. It can be said that MICE tourists can do a variety of activities in Thailand. Moreover, in terms of supported resources, there are many infrastructures and logistic systems which support all MICE events that happen in Thailand. The most significant strategy is for Thailand to organize the five MICE cities located in Thailand. The hidden agenda for these five MICE cities is that MICE businesses could be firmly established in all regions of Thailand. The five MICE cities consist of Bangkok, Chiang Mai, Khon Kaen, Pattaya and Phuket. For example, if they would like to do MICE business in northern Thailand, we would have Chiang Mai as a hub for MICE business there. At the same time, Khon Kaen would take care of the northeastern region, Pattaya would take care of the eastern region where there are many industrial estates and Phuket would take care of the southern region of Thailand.

In addition, the National Tourism Development Plan works in conjunction with the following five strategic managements for MICE business:

1. Cooperation between the government and private sectors. The intention of TCEB is to motivate all concerned sectors to work together and cooperate in order to promote MICE business to the public, especially, the government and private sectors where both parties need to work together in order to way find solutions to remove the obstacles to MICE business in Thailand.

2. The promotion of the TCEB image to the public. One of the most powerful and popular tools that can create a good image of MICE business in Thailand is 'the Digital MICE' campaign. This is an idea by TCEB to create a media tool that all MICE businesses and tourists can contact, update information, find products and services, and in some situations, even form business partnerships. In this way all MICE businesses would be able to locate suitable partners, services, hotels, and products for their customers.

3. Bidding on mega-projects for MICE business in Thailand. This is a significant part where the government and some organizations would have to work hard in order to get mega-projects. The purpose of getting mega-projects is not only to get the revenue from MICE business in Thailand, but also to create jobs and other benefits, directly and indirectly, to businesses along with establishing a good reputation for MICE in Thailand as well.

4. An Intensive marketing strategy. One of the most powerful marketing strategies in MICE business that Thailand is trying to get a target market is the 'OptiMICE Pass Package'. This package involves cooperation between TCEB and Thai Airways International for a joint marketing strategy, for instance, promotions, special MICE packages, barter trade and all-inclusive MICE campaigns etc. This would be a kind of one stop service

package which would make it more convenient for MICE tourists to bring MICE business to Thailand.

5. The development of a MICE intelligence center. The purpose of a MICE intelligence center is to encourage people to look for and locate necessary information on MICE business in Thailand. In addition, this MICE intelligence center would also assist newcomers to MICE who would like to establish their MICE business in Thailand or even to find the right market for their product.

The goal of the above five management strategies for MICE business in Thailand is to upgrade MICE business in Thailand to become worldwide. Moreover, these strategies could also help to establish a tourism business sector in Thailand as well. In particular, to allow those who come for MICE business to also enjoy their leisure time, this could lead to good word of mouth publicity.

Furthermore, TCEB did an in-depth study on each component of MICE business in Thailand, in terms of popularity and potential business. The record is shown in the figure below.

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%	
Total	895,224	1,013,502	13.21%	79,770	88,485	10.93%	

Figure 2.1. The comparison of MICE business in terms of revenue and tourists during 2012-2013

Source: Thailand Convention and Exhibition Bureau or TCEB, 2014

The above figure shows that during 2012 – 2013, Thailand attracted a substantial amount of MICE business to the country with a large number of tourists and revenue. Most of the MICE tourists were from the convention business with 315,961 tourists or an 8.19% growth rate. This information is related to the total revenue from convention business which was the highest, generating 31,254 million THB or a 10.74% increase. In summary, the convention business is the component with the greatest potential for growth in terms of both tourists and revenue for the country. These figures show the significance of doing a study of the convention business.

The report by the International Congress and Convention Association, 2014 stated that the most popular venue used for all meetings and convention business took place in hotels, which occurred 12,409 times or 44.2% (ICCA, 2014). This is the reason the convention hotel business is one of the most interesting and remarkable, MICE businesses in Thailand.

2.1.3. Convention Hotel Business

The convention hotel business is one of the sectors of MICE business which, nowadays, is becoming more and more popular among MICE tourists. There are many reasons why the convention hotel business has become a favorite among MICE tourists, for instance, there are many facilities and activities within the hotel, a security system, an easy logistic system, along with crowd control management which reduces unforeseen situations.

This is supported by a report by the ICCA (2014) that mentioned that meeting facilities in hotels had a growth rate of 44.2% or almost half of the rest of the other venues used in the world combined. In Thailand as well, MICE business in the hotel sector, like convention hotel business, plays an important role, accounting for a good amount of business. The record by the TCEB shows that there are almost 209 convention hotels businesses in the five MICE cities in Thailand. One of the significant figures is that most convention hotels ~~was~~ were located in Bangkok which

had 99 convention hotels; followed by Phuket with 56 hotels, Chiang Mai, 36 hotels, and 9 hotels in both Khon Kaen and Pattaya. The high number in Bangkok is because Bangkok is the capital city and can provide all concerns with suitable facilities such as, logistic and technology usage.

This is related to the report by the ICCA (2014) that Bangkok ranks 7th in the Asia Pacific and Middle East in meetings per country, 2013. Not only do convention hotels support MICE business, but there are other venues such as, universities and convention halls that support them as well. As reported by the TCEB (2014), there are about 10 convention places (other than convention hotels) in Thailand that support MICE business. However, the reason for the small amounts when compared with convention hotels, with 209 places, is due to the lack of meeting facilities and other necessary things which are popular among MICE tourists.

Because of the popularity of convention hotels among MICE tourists, in 2014 the TCEB issued a handbook for standardization of convention hotels in Thailand in order for the convention hotels in Thailand to be at the world class level

2.2 Concepts and Theories of 21st Century Skills

It is has been said that 21st century skills are necessary for educational progress and instructional development in this 21st century due to the changed environment which is more dynamic, along with globalization, and the connectivity of information technology. In other words, 21st century skills are needed to apply the principles of learning to education, especially at the university level. However, 21st century skills do not only apply to the educational system, but also apply to other related subject matters that are increasingly important for human resources and the human capital in industry.

21st century skills or learning refers to the transmission of knowledge gained through process, change, and interpretation as well as self-reflection. Nowadays, 21st century skills are being recognized because they can meet the needs of humans under change. 21st century skills have different definitions. Partnership for 21st Century

Skills (2008), for example, states that 21st century skills refers to the essential skills for students to make a living in this age of economic progress, whereas Perreault (2004 cited in Mitchell et al., 2010) points out that these skills are the qualities or the personal characteristics of people that are different from those who have similar skills and experiences.

Moreover, 21st century skills can refer to the learning skills in the 21st century. These skills encompass a person's skills and knowledge, and the ability to learn by developing, self-adjusting, using existing resources effectively, and applying gained knowledge to everyday work and life as for survival. Education Testing Service-ETS (2007) mentioned that 21st century skills are the individual's ability to gather knowledge, to apply that body of knowledge, and to use that body of knowledge and existing resources most effectively. This definition conforms to Mitchell's (2010) noting that 21st century skills refer to the individual's ability to live and work, with professional characteristics such as cooperation skills, communication skills, critical thinking skills, responsibility skills, social and multi-cultural skills, and social responsibility skills. Thus, it can be said that 21st century skills are important characteristics of an individual in learning other skills for the sake of applying acquired knowledge most effectively in a dynamic environment.

Additionally, it was found that there are vital components that can help such learning skills to be more complete. NCREL (2003) and Hunter (2011) said that 21st century skills refer to the learning achievement of 21st century skills through digital-age literacy, the process of inventive thinking, effective communication, and high productivity. At present, it has been found that many organizations and related agencies have made attempts to set up a framework of 21st century skills differently according to educational and analytical contexts. However, the most important and recognized conceptual framework of 21st century skills is Partnership for 21st Century Skills (2008), which conducted research and revealed an interesting conceptual framework consisting of 21st century skills with a focus on the results of the

knowledge of compulsory subjects and new century skills, which resulted to the students, especially the ones at the university level. That is, these skills are considered the instruments that humans need to use for ascending the economic ladder. Nevertheless, traditional rigidity only has the same meaning as content excellence, which is insufficient for this age of dynamic knowledge and information. Students need to have knowledge in contents and skills for applying and adapting acquired knowledge to achieve beneficial and creative goals as well as continuous learning, as shown as in the figure below.
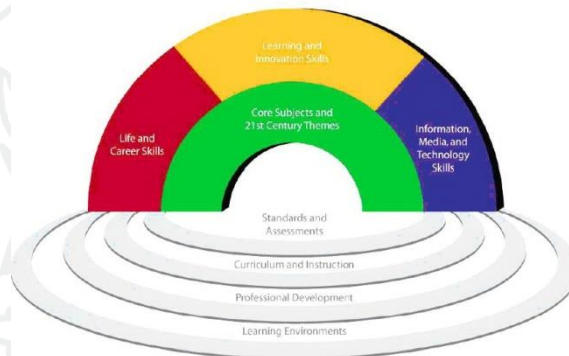
Figure 2.2 Conceptual Framework of 21st Century Learning Skills
Source: Partnership for 21st Century Skills (2008)

Partnership for 21st Century Skills (2008) points out that vital learning skills indicate integration of three main components comprising 1) core subjects and 21st century themes, 2) 21st century skills consisting of three groups of the skills namely learning and innovation skills, information, media and technology skills, and life and career skills, and 3) supporting systems. Additionally, Partnership for 21st Century Skills relates that the students with good 21st century skills can probably contribute positive effects to develop an organization or society, and then accomplish the set goals. The three important skills for learning development are detailed as the follows.

Skill 1: Learning and Innovation Skills

To analyze the students' preparation for working and living in the 21ˢᵗ century is quite different from the past. In particular, they need to use creative thinking skills, critical thinking skills, communication skills, and collaboration skills. With more complicated lifestyles and working environments at the present time, creative thinking skills are considered the most essential skill of all Kay and Greenhill (2011). These skills are implemented and interpreted in different meanings such as positive thinking, originality, and thinking for instructional benefit. Kriatsuk Charoenwongsuk (2002) points out that creative thinking can be prioritized into three stages, which teachers can apply as a guideline for carrying out learning activities.

1. Setting goals for thinking is a way to set purposes for thinking. In case there are problems, think about how to solve them and produce results.

2. Seeking new concepts refers to brainstorming. At this stage, it focuses on original methods for solving problems regardless of practicability.

3. Evaluation and concept selection consist of evaluating rationally with practical criteria, and selecting an evaluated concept by asking whether it meets the objective, is it practical or does it still have a problem, and can it be integrated to benefit other concepts.

According to Kriengsak Charoenwongsak (2002), this concept provides creative thinking stages that are easy for teachers to understand, apply and to carry out the activities in the classroom. However, teachers need to prepare the lessons in advance so that the learning process goes smoothly. In addition, teachers should encourage students to practice the sub-skills of thinking, for examples comparing, sorting, identifying, reasoning, connecting, analyzing, applying knowledge, predicting, setting the criteria, and evaluating. Moreover, students should practice the process of problem-solving as a base for solving problems creatively.

Besides the above-mentioned concept, there is another concept that is typically implemented in instruction and used as research at the graduate level. It is also

embedded in the basic education core curriculum B.E. 2551 and prescribed as a learning area for occupations and technology for many grades. It can probably be embedded in other learning areas but is not easily found.

Williams Cube CAI Model (1970)

The objectives of this instructional model are to train the teachers and to be a model of the curriculum and for instructional development to improve learners' creative thinking. This model consists of three dimensions or elements. It is suggested that all of the elements of the model be implemented.

Dimension 1: Subject matter content

Subject matter or content is essential for thinking. Williams suggests that six subjects: languages, Mathematics, Social Studies, Science, Music, and Art can teach creative thinking because these subjects can encourage students to think creatively along with the teacher's teaching strategies.

Dimension 2: Teacher behavior

This element provides seventeen teaching strategies that the teacher can employ to encourage the students' creative thinking with regard to the appropriate subject matter, nature of the students, and certain situations. It is believed that the more teaching strategies the teacher selects to teach the students, the more the students will think differently and become more skilled. The terms used in this study are taken from the textbook 'Learning Theory for Developing the Thinking Process' (Office of the National Education Commission, 2000).

Dimension 3: Learner behavior

Williams describes the behaviors of the students who have been treated with a variety of the teacher's teaching strategies in learning the subject matter. Generally, the learners will express two domains of creative thinking, cognitive and affective.

Table 2.1 Williams Taxonomy for Creative Thinking (1970)

Learner behavior	Meaning
1. Cognitive	
1.1 Fluent Thinking	Thinking continuously and instantly with a focus on the amount of answers that suit the stimuli, for example listing as many advantages of bamboo as possible.
1.2 Flexible Thinking	Giving various kinds of answers and trends. This quality of thinking can be classified by grouping, systemizing, expanding, and generating. For example, the students may list twenty advantages of bamboo, but with flexible thinking these things can be analyzed and categorized into five groups such as a toy, equipment, a musical instrument, an ingredient, and a construction material.
1.3 Originality	Creating or composing something new, unique and different from other people,s concepts. It may not be able to solve the problem but it still makes sense.
1.4 Elaboration	Thinking in details or procedures, explaining or embellishing existing ideas to be more elaborate and complete.
2. Affective	
2.1 Curiosity (Willingness)	Being curious, eager, and willing to investigate and adopt unknown information and experiences.
2.2 Risk Taking (Courage)	Daring to try out new things that may not have been tried before. Daring to guess, predict, and examine abilities.
2.3 Complexity (Challenge)	Needing stimuli to challenge ideas and abilities which are complicated, ambiguous, and difficult to understand.
2.4 Imagination (Intuition)	Being able to fantasize or visualize what does not yet exist, has not yet occurred, or be viewed as impossible. People need to make use of existing information and their opinions, and then apply them in new concepts or invent new things from intuition.

Moreover, the important skills of learning and innovation can be demonstrated in accordance with William's Taxonomy in terms of creative thinking, critical thinking for solving problems, and cooperation, as detailed below:

1. Creativity and innovation refer to the ability where students can think creatively, work creatively with others, and implement innovations. The details are described as follows.

    1.1 Thinking creatively

    Involves thinking independently in designing techniques, creating new things that have value, elaborate planning, making adjustments, analyzing, and evaluating ideas for improved creativity.

    1.2 Working creatively with others

    Refers to conceiving new ideas in developing management, communicating effectively, acquiring and responding to new techniques and later applying them to professional development. In addition, it can refer to the way to express originality and creativity, perceiving the limitations of the real world to support new ideas, recognizing failure, and providing opportunities for long-term creativity and innovation.

    1.3 Implementing innovations

    Involves implementing creative thinking in authentic situations with beneficial conditions through the scope of innovation.

It can be stated that creativity and innovation, and creative thinking are being popularized and implemented. NCREL (2003) is an outstanding study which determined that the framework of essential 21st century skills consists of the important domain of creative thinking. To gain the most benefit, learners need to think carefully and creatively, reduce risks that may occur, and develop ideas more systemically. This study conforms to Dede (2005) and the International Society for Technology in Education (2007), which pointed out that creativity and cognition are important learning skills.

2. Critical thinking and problem-solving refers to the ability of an individual to reason effectively, to ask interactive questions and solve problems, to analyze and evaluate outstanding alternatives of concepts, and to reflect the analysis of decision and process as detailed below:

2.1 Reasoning effectively is the ability to reason differently and appropriately for particular situations.

2.2 Using systemic thinking means making an analysis of the relationship of each portion that affects the overall image and results or all outputs in a complicated system.

2.3 Making judgments and decisions refer to effective analysis and evidence evaluation, discussions, claims, beliefs, analysis and evaluation of perspectives, objectives, synthesis and connectivity between the information and evidence, interpretations and conclusions based on the best analysis, and reflection on analyzing the experiences and procedures.

2.4 Problem-solving means solving new problems systemically and creatively through new methods, identifying obstacles and asking questions, and having clear objectives of perspectives that can identify the best method for solving the problem.

3. Communication and collaboration refers to the ability of an individual to communicate clearly through speaking, writing and using non-verbal language to collaborate with others, and to take responsibility. The details are described as follows.

3.1 Communicating clearly means thinking clearly and effectively through speaking, writing, and communicative skills with non-verbal language in a variety of modes and contexts, effective listening, interpretation, knowledge, values, attitudes, and objectives.

Additionally, it can refer to the way to communicate the scope of the objectives such as reports, suggestions, encouragement, and persuasion, and to utilize useful technology and media for making

decisions for effective communication in different circumstances as well as a polyglot.

3.2 Collaborating with others represents the ability to work effectively and respect the differences of others, to perform work capably and willingly, and to compromise if needed for achieving goals, taking responsibility, and assisting team members.

In reference to learning and innovation skills, it can be said that overall, the essential skills comprise creative thinking, systematic critical thinking that can solve problems, communication, and working with others, respectively. However, some organizations have set an additional framework of creative learning skills which is considered a crucial notion of integrated acquisition. Education Testing Service (2007) and the American Association of Colleges and Universities (2007) introduced an interesting conceptual framework of creative and systemic thinking. Education Testing Service (2007) stated that it is most essential that students have ability in integrated acquisition, which is considered an important notion, while the American Association of Colleges and Universities (2007) pointed out that one of the most important and essential skills in the 21st century is integrated learning. In other words, nowadays it is extremely essential for the learners to be able to learn diversely, to have the ability to learn through gathering and applying integrated learning, and to have the ability to correctly harmonize the contents and body of knowledge. Thus, it can be said that not only creative thinking skills, but integrated learning skills are also considered essential skills in the 21st century.

Skill 2: Information, Media, and Technology Skills

These skills refer to ways to express a broad range of skills, to think critically through the media and developed technology, to access information independently, to change rapidly with technological devices, the ability to assist the population

effectively, and to demonstrate the essential skills (Partnership for 21ˢᵗ Century Skills, 2008) that follow.

1. Information literacy refers to the ability to identify, evaluate, and utilize needed information effectively.

    1.1 Accessing and evaluating information means accessing information effectively and efficiently, evaluating the information, and analyzing it.

    1.2 Using and managing information means using information to solve problems accurately and creatively, managing the distribution of information derived from the various kinds of information resources, and understanding, applying, accessing and using the information ethically.

2. Media literacy refers to an individual's ability to design and present media efficiently. Learners need skills in evaluating, analyzing, and creating media.

    2.1 Analyzing media is a way to understand the objectives of the media and how to produce media. It also involves investigating and describing the differences of the texts, evaluating the objectives and attitudes in integrating and separating media, examining the effects on beliefs and behaviors from the media, and applying and understanding the ethics of accessing and using media.

    2.2 Creating media products is a way to understand and make use of appropriate media for designing instruments, characteristics, and protocols. It also refers to understanding and making the media effective in order to accurately express and describe the large variety of environmental and cultural differences.

3. Information, communication and technology literacy

    3.1 Applying technology effectively means using technology as a tool for conducting research, managing, evaluating, and connecting information, with the use of digital technology such as a computer or

GPS. The appropriate use of social communication devices for successfully accessing, managing, gathering, evaluating, and designing information in a knowledge-based economy, and application and comprehension of the virtues of accessing and utilizing information technology.

As a matter of fact, it can be clearly seen that all three aspects of information, media, and technology skills are extremely important in the 21st century. Partnership for 21st Century Skills (2008) pointed out the needs of studying the media, the ability to access and evaluate information, and the ability to effectively utilize technology, especially at the present time, since technology definitely plays an immense role in our lives. In other words, technology has becomes a part of the everyday life of students who have to use instructional media. The conceptual framework of information, media, and technology skills is accredited with many important educational institutes. Education Testing Service (2007), for instance, describes that having the ability to use information communication technology (ICT) is a requisite for students to be able to apply both cognitive and technical skills. Students should utilize technology efficiently for learning and innovation, and individual and social change. Moreover, it can be said that the conceptual framework of basic digital knowledge is necessary for all people in this century.

Skill 3: Life and career skills

These skills refer to the ability to evaluate, make guidelines for complicated life, and to work in a competitive world. They also refer to the individual's ability to collaborate efficiently with others, to be open-minded to acknowledge different ideas, to meet the goals of managing projects efficiently, to take responsibility for all results, to behave based on ethics and accept individual, social, and environmental responsibility. Nowadays, people need other skills beyond thinking skills and knowledge of subject matters in living and working. Additionally, life and career skills

can refer to the ability to conform to the working environment and complicated life. In this competitive world, students need to pay attention to progressive development. The necessary skills are detailed as follows.

1. Flexibility and adaptability means being able to adapt to change, and give feedback efficiently.

   1.1 Adapting to change is being able to perform various roles, to take responsibility for work, schedules, and your environment, and to work efficiently under social ambiguity and change.

   1.2 Being flexible means being able to give effective feedback, while performing being able to accept praise, setbacks, and positive criticism, and being able to be balanced in understanding and managing various attitudes.

2. Initiative and self-direction refers to the ability of autonomous learning, setting goals efficiently, and working independently. This ability consists of the following skills.

   2.1 Managing goals and time which involves successfully setting goals with criteria that can be realistic or unrealistic, balancing goals and strategies in the short-term and long-term, and managing time and workload usefully and efficiently.

   2.2 Working independently which refers to fully controlling, explaining, and managing work without mistakes.

   2.3 Being a self-directed learner means being able to learn the basic skills and curriculum, to be skilled in exploring and expanding learning and opportunities, and to self-develop advanced skills.

3. Social and multi-culturalism skills represent the ability to collaborate with colleagues, demonstrate personal proficiency, and to respect and acknowledge social and cultural differences. The details are described as follows.

3.1 Interacting effectively with others which means knowing when is the proper time for listening and speaking, behaving respectfully, and being graciously courteous.

3.2 Working effectively on diverse teams involves respecting cultural differences, working effectively, being willing to accept different opinions, values, and social and cultural influences in designing concepts, and integrating innovations with quality work.

4. Productivity and accountability is the management and handling of goals, prerequisites, and time management.

4.1 Managing projects involves setting goals when faced with obstacles and pressure, planning and managing to achieve the anticipated results.

4.2 Producing results refers to the relationship between personal characteristics and the quality of work production. It can also refer to the ability to work ethically, to manage time and projects effectively, to work using different techniques participating in creditable activities, being punctual, effectively collaborating with the team, respecting and giving praise to the team, and interpreting results.

5. Leadership and responsibility refers to the individual's ability to work and take an interest in society, to encourage others, to evaluate the strengths of others towards the accomplishing of goals.

5.1 Guiding and leading others means using interpersonal relationship and problem-solving skills to assist others in achieving their goals, taking advantages of other people's strengths to accomplish goals, encouraging others to achieve their best by examples, and displaying virtue and good moral behaviors with the right balance of power.

5.2 Being responsible to others means taking responsibility for society.

The five above-mentioned aspects of life and career skills are considered as important and necessary skills for this dynamic age. Thus, people need to be trained

how to learn these important skills for adjusting themselves and building a more flexible life. Besides the ability to learn, people need to develop ability in emotional management or the so-called 'emotional quotient'. At the same time, they need to understand and be aware of the importance of society and the environment as can be seen in the conceptual framework in the 21st century skills handy manual of Thailand Educational Reform B.E. 2554. The Subcommittee on Social Communication Affairs, 2011 indicated that essential skills in awareness of national and global citizenship are needed skills for this century (Nutteerat Pheeraphan, 2014)

Regarding the previous studies and academic articles about 21st century skills, it can be seen that it is extremely necessary for learners to have these important learning skills in this changing environment. The results of the previous studies conform to all three broad concepts of Partnership for 21st Century Skills (2008), pointing out that there are other skills that are essential but in different contexts or circumstances. Those skills can be categorized into the following main issues.

The Subcommittee on Social Communication Affairs, 2011 (Ongardwanich, Kanjanawasee, & Tuipae, 2015) contributed interesting and vital concepts of 21st century skills under the context of educational reform. There are ten necessary skills starting with creativity, which is important because it allows people to get away from their normal thoughts and routine in order to enhance their potential. Another skill is systemic thinking. It deals with thinking analytically and solving problems systemically in order to help work proceed fluently. The third skill is communication and collaboration. It has been noted that learners need to have more interaction with others. Thus, the learning and collaborating process is important to help them be prepared to work in the real world. Information literacy is one of those necessary skills, especially in the age of the Internet. This skill is essential for life-long learning in this ever-changing age. In accordance with information literacy skill, media literacy is another skill that learners need to understand and apply, since the media has considerably influence on people and society at present. The sixth skill is information

communication technology, which is considered an important tool in connecting working, learning processes, and communication with third parties accurately and instantly. The seventh skill is the acknowledgement of the diversity of people, which is very important at the present time, particularly for learners who are excellent and an only-child. Thus, contributing to the emotional quotient and acknowledging differences are important skills for survival in today's society. The eighth skill is self-direction. It is an important skill for learners to be able to reach set goals through two types of plans, a master plan and a counterplan. Civil literacy involves learning how to be a good citizen, being patriotic, and showing national respect through creative expression. The last necessary skill is world civil literacy. It is a vital component that can brings peace to the world and help people to live happily.

According to previous important studies and research, the main issues regarding 21st century skills as detailed in the following.

J. Zhang, Scardamalia, Lamon, Messina, and Reeve (2007), and Fong Fong, Sidhu, and Fook (2014), studied about 21st century skills. They found that the highest priority of necessary skills was for creativity, the ability to do systemic analysis, and the ability to communicate and collaborate with others. In addition, Zhang et al., (2007) pointed out that learners need to have creativity to broaden their vision in solving problems in conjunction with systemically critical thinking. This study revealed results conforming to other related studies. Larson, Miller and Ribbie (2010), Elrold (2010), Mitchell et al. (2010), Sukor, Osman and Abdullah (2010), Larson and Miller (2011), Greiff et al. (2014), and Ngan, Yunus and Hashim (2015) mentioned that learners need to be able to communicate with, convince, and work with others by using the process of systemic thinking in order to accomplish set goals. This concept is embedded in the conceptual framework of the main management system for the 21st century skills of the International Society for Technology in Education (2007) and Organization from Economic Co-operation and Development (2005) with regard to interpersonal relations and personal interaction. As considered in the context of

Thailand and neighboring countries, there are similar studies that investigated creativity. For example, the study of Abdullah and Osman (2010), investigated creativity and problem-solving in a Malaysian setting, while Quieng , Lim and Lucas (2015) investigated creativity in a Filipino setting.

Hakkarainen et al. (2000) studied students' learning processes. It was found that knowledge skills and competence can help learners develop learning processes quickly and they can utilize media and information technology accurately. Likewise, Wenglinsky (2006) and Barnes (2005) added that necessary skills for children in the digital age include the ability to learn media, to utilize information technology, and to be able to acquire information, this can encourage learners to have a well-rounded body of knowledge, and be able to apply it. Similarly, Barcy and Barcy (2008) studied about acquiring information and interestingly stated that it is essential for the learners to acquire and use information by means of being aware of media literacy, and using information accurately. Backing up the above concept, Suto (2013) and Baum (2015) pointed out that the information-selection process is essential for learners in the digital age. This can help learners get an accurate understanding of the learning process.

Moreover, Kellner (2001) and Izzo, Yurick, Nagaraja, and Novak (2010), investigated utilizing new information technology for present-day learners and those in the future, for example, in the millennium age. These studies were carried out in an American setting. Technological study needs to be embedded in the structure of an educational system and in a formal instructional curriculum. In addition, it needs to be standardized for the education system. Similar to the above studies, Claro et al. (2012) and Gunn and Hollingsworth (2013) highlighted the importance of information, media, and technology skills, and indicated that these skills are also necessary for education at the present time. As considered in studies in a Thai setting, Pheeraphan (2013), Suthat (2014), Makaramani (2015), and Nutteerat (2014) introduced a crucial guideline for developing needed information technology skills, noting that it was a guideline for developing learners' skills at the present time because the learning management

system, registration, and people's routines are all unmistakably connected to information technology. Thus, learners need to have a well-rounded knowledge and ability in the above-mentioned skills in order to be properly prepared.

Dede (2005) placed importance on 21st century skills noting that learners need to be responsible for working. This perspective is derived from the conceptual framework of North Central Regional Educational Laboratory (2003) and Partnership for 21st Century Skills (2008), which claims that learners unquestionably need to take responsibility for their careers. With regard to the studies of Lambert and Gong (2010), Gutsche (2011), and Wright and Lee (2014), all three studies focused on the importance of the learning process of accepting accountability, accomplishing the task in the allotted time, and being honest to the task. These areas need the important skills of initiative and self-direction (Dede, 2005; Somkiat Pornpisuttimas, 2013). Besides accountability, learners need to take responsibility for society and have proper social skills. Larson L. C. Larson and Miller (2011) indicated that learners need to take responsibility for society. This skill is conducive to accountability, initiative, and self-direction, and helps to accomplish the assignment. Likewise, Voogt and Roblin (2012), Kaufman (2013), and Caruana and Mcpherson (2015) focused on social and multi-culturalism skills. These skills can help learners to be responsible for their assignments; Osman, Soh, and Arsad (2010) revealed that learners need more than just responsibility skills but they also need information technology skills to easily accomplish their assignments.

All of the above-mentioned abilities are learning skills that are important for learners to successfully acquire knowledge necessary in this century, and they must also apply these vital skills to properly develop themselves and their organizations in the future. The results of the previous relevant studies can be categorized into seven main facets of 21st century skills as shown in the table below.

Table 2.2 Variables and Indicative Publications Regarding 21st Century Leaning Skills

No	Authors/ 21st Century Learning Skills	Creativity and innovation skills	Critical Thinking and Problem-solving Skills	Communication and Collaboration Skills	Media and Information Technology Skills	Social and Multiculturalism Skills	Social Responsibility Skills	Self-directed and Flexibility Skills
1	Hakkarainen et al., (2000)				X			
2	Kellner (2000)				X			
3	Pillay & Elliott (2001)		X					
4	NCREL (2003)	X		X	X			
5	Barnes (2005)							
6	Dede (2005)	X		X				X
7	OECD (2005)			X				X
8	Partnership for 21st Century Skills (2008)	X	X	X		X	X	X
9	Wenglinsky (2006)				X			
10	American Association of Colleges and Universities (2007)		X			X	X	X

Table 2.3 Variables and Indicative Publications Regarding 21st Century Learning Skills

No	Authors/ 21st Century Learning Skills	Creativity and innovation skills	Critical Thinking and Problem-solving Skills	Communication and Collaboration Skills	Media and Information Technology Skills	Social and Multiculturalism Skills	Social Responsibility Skills	Self-directed and Flexibility Skills
11	Anderson & Maninger (2007)				X			
12	Bovee (2007)				X			
13	Education Testing Service (2007)	X			X			
14	International Society for Technology in Education (2007)	X	X	X				
15	Zhang et al., (2007)	X	X	X				
16	Barcy & Barcy (2008)				X			
17	Formanack (2008)	X	X					
18	Larson et al., (2009)		X	X		X	X	
19	Silva (2009)	X	X					
20	Abdullah & Osman (2010)	X	X	X				

Table 2.4 Variables and Indicative Publications Regarding 21st Century Learning Skills

No	Authors/ 21st Century Learning Skills	Creativity and innovation skills	Critical Thinking and Problem-solving Skills	Communication and Collaboration Skills	Media and Information Technology Skills	Social and Multiculturalism Skills	Social Responsibility Skills	Self-directed and Flexibility Skills
21	Elrold (2010)		X	X				
22	Izzo et al., (2010)				X			
23	Lambert & Gong (2010)				X			
24	Lewis et al., (2010)	X	X					
25	Mitchell et al., (2010)		X	X		X	X	
26	Osman et al., (2010)	X		X				
27	Sukor et al., (2010)		X	X		X	X	
28	Gutsche (2011)	X		X				
29	Larson & Miller (2011)		X					
30	Claro etal., (2012)		X		X			

Table 2.5 Variables and Indicative Publications Regarding 21st Century Learning Skills

No	Authors/ 21st Century Learning Skills	Creativity and innovation skills	Critical Thinking and Problem-solving Skills	Communication and Collaboration Skills	Media and Information Technology Skills	Social and Multiculturalism Skills	Social Responsibility Skills	Self-directed and Flexibility Skills
31	Voogt & Roblin (2012)			X		X	X	
32	Fong et al., (2013)	X	X	X		X		
33	Gunn & Hollingsworth (2013)				X			
34	Kaufman (2013)	X	X	X		X	X	
35	Ngan et al., (2013)		X	X		X	X	
36	Pheeraphan (2013)			X	X			
37	Somkait (2013)		X	X				X
38	Suthat (2013)	X	X	X	X	X	X	
39	Suto (2013)		X	X	X	X		
40	Greiff et al., (2014)		X	X				

Table 2.6 Variables and Indicative Publications Regarding 21st Century Learning Skills

No	Authors/ 21st Century Learning Skills	Creativity and innovation skills	Critical Thinking and Problem-solving Skills	Communication and Collaboration Skills	Media and Information Technology Skills	Social and Multiculturalism Skills	Social Responsibility Skills	Self-directed and Flexibility Skills
41	Ming et al., (2014)	X		X		X	X	
42	Nutteerat (2014)			X	X			
43	Wright & Lee (2014)	X	X	X				
44	Ariratana et al., (2015)					X	X	
45	Baum (2015)		X	X	X	X		
46	Caruana & Mcpherson (2015)	X	X	X		X	X	
47	Hosu (2015)	X	X	X				
48	Makaramani (2015)		X	X	X			
49	Ongardwanich et al., (2015)	X	X	X	X	X	X	
50	Quieng et al., (2015)	X	X	X		X		

The above table lists publications that identify the essential variables of 21st Century Learning Skills from different points of view. Their aspects as detailed in the related literature have been categorized into the following seven variables.

1) Creativity and innovation skill is what is used by hotel employees who have creative and inventive ideas, it is an initiative to use knowledge in unique ways, and includes skills which can produce positive changes in an organization.

2) Critical thinking and problem-solving skill enables one to be able to think carefully; it is the process of thinking in a step-by-step way in order to solve problems, it is the use of rational reasoning in making decisions. This ability to evaluate a situation and make decisions is of great benefit to an organization.

3) Communication and collaboration skill can be defined as the ability of employees in dealing with others in business (both colleagues and guests). This involves the language and communication ability of employees to do their assignments of work well. Employees also need to have the ability to work along with people in different situations in a friendly way.

4) Media and information technology skill is the way employees show the media and information technology skill that they have. They should be able to analyze, estimate, collect and adapt it properly.

5) Social and multi-culturalism skill is defined as when employees can accept the diversity of other people, understand, respect and adapt themselves with multi-culturalism. This includes their emotional quotient in dealing with both colleagues and guests.

6) Social responsibility skill is the capability of employees in taking care of those nearby in a social context; it also includes professional ethics and the ability to keep a proper balance between business performance and morality.

7) Self-directed and flexibility skills can be defined as the ability of employees to work with self-reliance in a dynamic environment. Employees must be flexible in their work, goals and time given to the organization. Hospitality employees should also have leadership skills and be able to process work effectively.

2.3 Approaches and Theories regarding the Work Effectiveness of Hotel Staff

2.3.1. Convention Hotels in Thailand

Due to the fact that in these days the environment is shifting to a dynamics one, business and industry are struggling to survive. This situation increases the emphasis of the role and importance of 'effectiveness'. In this matter, 'effectiveness' includes that of the staff in terms of work, operation, and an organization's effectiveness resulted from the work of the staff; this is so especially in the convention hotel business in Thailand which emphasizes the importance of service. Service, in this case, means what customers receive and perceive through the expressions and operations conveyed and made by the service persons in the business. That is to say, effectiveness resulted from the staff's operation can affect that of the organization. Nowadays, there are many academics and advocates who describe and emphasize the idea of effectiveness, including that of organizations and employees.

2.3.2. Definition and Significance of Effectiveness

Many definitions of 'effectiveness' have been given; however, the meanings are similar in the matter of the results from the operation and management of the particular organization or business. For instance, the Royal Institute Dictionary A.D. 1999 defined effectiveness as success or outcomes (Office of Royal Society, 2016). In addition, in Paranee Mahanon (1986) words, effectiveness is the balance between the adaptability and sustainability of an institute. This idea conforms to Rung Rung Kaewdang (2001) that effectiveness results from the relationship between the work

done and the goal or objective set. These are significant definitions of effectiveness which many academics have given. The word 'effectiveness' means success or work that can reach the set goal or yield the most benefits to the particular organization or business (Sermsak Visarnlaporn, 2007; Thongchai Suntiwong, 1998). Meanwhile, some academics gave definitions of effectiveness with the focus on resource use. For example, Rungnapa Lertpatcharapong (2007) and Siriwan Sereerat (2010) described effectiveness as the use of an organization's limited resources that yields the most benefits and leads to its specified goals. This use is considered an efficient resource management method of which the waste is at a minimum level while the benefits are at the highest.

That is to say, effectiveness means success resulted from the organization's actions in order to reach the goals of such an organization or business. Such effectiveness is considered to be a balance between the internal organization management, the allocation of the available resources, and the goal of the particular organization.

2.3.3. Significance of Effectiveness

Generally, effectiveness is important for individuals, organizations, and involved industries both directly and indirectly, especially in the tourism and service businesses of which effectiveness can be used as an indicator of success. Effectiveness can be divided into three important levels by Cheab Thaiying in 1998 (Rungnapa Lertpatcharapong, 2007) as follows:

Level 1 Organizational Effectiveness involves all the investments and specifications made by a team or a group of people which normally lasts about five years. Moreover, this level of effectiveness is related to the return on assets, profitability, competitive positioning, business growth, products, flexibility, levels of technology used and its suitability with the size of an organization, personnel development courses, government relationship, etc.

Level 2 Group Effectiveness involves supports among corporates in the particular organization or business. The main action is to join the organization with expertise, ability, skillfulness, and management on an individual level.

Level 3 Individual Effectiveness is related to persons in terms of their leadership, management skills, working skills, and operations that can affect other levels including on an organizational level and a group level.

That is to say, effectiveness is highly important to an organization. Such importance not only affects the organization but also involves the relationships within the organization including those on an individual level and a group level. This is because of the outcomes of work, and such work finally has an impact on the organization. It is possible to say that it is important and necessary to study effectiveness in every level of an organization that clearly has a strong connection with one another.

In addition, effectiveness can be assessed by various means and methods. According to Simon (1960) cited in Siriyapa Chantapirak (2003), the difficulty in implementing administrative theory is to select which criteria to indicate which theory should be used in a particular situation. Different effectiveness analysis is due to different indicators proposed by different academics. Pittiya Bawonwattana (1998) stated that effectiveness can be assessed and evaluated using the following indicators:

1. Statistics or opinions that are related to the organization and can be analyzed into statistical values and figures

2. Products in the individual, group, and organizational levels whether they increase or not

3. Efficiency – by comparing the ratio of a work unit and the marginal cost

4. Organization's profits or net income excluding costs of sales and services

5. Quality of products and services of the organization

6. Accidents – by counting the frequency of accidents occurring during work

7. Growth of an organization – by comparing its past and present states

8. Absence from work

9. Employees' Resignation

10. Employees' satisfaction

11. Stress or conflicts that occur during coordination

12. Adjustment of the organization in changing situations or when facing pressure to see whether the organization is able to gain control over such an environment or not.

13. Employees' persistence and acceptance of the organization's goals

14. Simultaneousness of employees' work

15. Use of environment by considering coordination with other organizations in order to obtain the demanded resources

16. Personnel evaluation done by third parties who are connected with the organization

17. Long-term existence of the organization

From the above, it can be seen that assessment and evaluation can be explicit or difficult to measure and ambiguous. Later, Paranee Mahanon (1986) expressed the significant idea of organization assessment, whether it will survive in the long run or not, may be from failure to respond to persons related to the organization. Therefore, she developed methods for considering the service industries' organizational effectiveness as follows:

1. Productivity, including quantity, quality, and efficiency

2. Adjustability

3. Flexibility with unexpected events

However, organizational effectiveness of other kinds of organizations (Friedlander and Pickle, 1968 cited in Paranee Keerabut, 1986) can be assessed by the following:

1. Profits

2. Employees' satisfaction

3. Organizational value towards society as the organization is a part of society. This includes the consideration of system maintenance and growth of the organization.

Simultaneously, McGregor (1969) (cited in Pittiya Bawonwattana (1998) pointed out that Group Effectiveness can be depicted by the following situations:

1. The atmosphere is likely to be informal.

2. Every person takes part in a discussion.

3. The group accepts the objectives and the power of discretion, listen to one another, and are not afraid of sharing their opinions although they may be wrong.

4. If a conflict arises the problem is likely to be solved rather than being covered over.

5. Work assignments are clear and the group accepts them.

It can be seen that effectiveness is important and should be emphasized at all levels. This is because it could yield the ability to reach the particular goals of the organization—either concrete or abstract. Especially, such as in the hotel business where specific features are generally keep going along in a changing environment.

2.3.4. Organizational Effectiveness

Nowadays, many organizations place importance on Business Operational Effectiveness or Organizational Effectiveness and come up with clear processes and various operations based on types of business and the set goals. Typically, organizational effectiveness can be divided into many aspects. For example, Paranee Mahanon (1986) defined organizational effectiveness as the extent to which the organization is able to proceed according to the goals by making the most of available resources. Each organization has different criteria for assessment and evaluation. This conforms to Thongchai Suntiwong (1998) who stated that organizational effectiveness depends on the conditions of each organization which would like to use the available

resources as beneficially as possible. More importantly, high effectiveness should be developed in order to increase the potential to make the most of available resources. This is an important condition for the organization's survival.

At the same time, there are foreign academics who have given interesting definitions to 'organizational effectiveness'. For example, Schein (1970) stated that organizational effectiveness is the capacity of the particular organization which can create opportunities to survive and has the ability to adapt to a changing environment, to maintain the organization's status, and to create growth of the particular organization. In such success, there is the organization's ability to create effectiveness. This idea conforms to that of Robbins (1990) that organizational effectiveness is the levels of the organization's ability to proceed until it reaches the goals—whether they are short-term or long-term and whether the procedures or results are considered, etc. Meanwhile, Cameron (1981) stated that organizational effectiveness is the demand for improvement of the effectiveness of a particular organization. This includes the needs for searching for the cause of organizational effectiveness. Moreover, Steers (1977) had a different point of view, that organizational effectiveness generally can be divided into two significant aspects which are 1) the organization's ability to use available resources as beneficially as possible and 2) the organization's ability to survive in a changing environment.

It can be seen that academics have proposed different points of view and various definitions of 'organizational effectiveness' according to different contexts or study areas. However, such differences lead to the significant idea of organizational effectiveness. In summary, organizational effectiveness is the achievement, as a result of the operation, of a particular organization under different conditions and objectives. In this case, the achievement is organizational performance. To develop high organizational effectiveness, the organizational performance can be divided into four factors as follows:

1) Organizational Characteristics consist of a structure and technology which the organization uses to benefit the work.

2) Environmental Characteristics consist of an external and internal environment; that is, an organizational atmosphere which is a component that has a strong impact on the success or failure of the organization.

3) Employees' Characteristics consist of the operations and relationships within the organization, especially organizations where human resources are the heart of the business such as hotels and tourism industries. Human resources are also a mechanism that powers an organization where there is a lacks of machines or technology.

4) Managerial Policies and Practices consist of clear goals, resource provisions and use, working environment development, communicative processes, leadership and decision-making, adjustability, innovation skills, and creativity in an organization.

The consistency of the four factors can be found in convention hotel business operations. In such businesses, the staff are crucial for moving the organization forward and building preferable organizational effectiveness in terms of their characteristics and operations which are in connection with one another and can affect the overall image of the organization.

2.3.5. Significance of Organizational Effectiveness

These days, organizational effectiveness is considered one of the important components which moves an organization forward to meet with success or failure. Generally, organizational effectiveness is important for three groups of people.

1) Customers or consumers

Customers or consumers in this matter are the first group of people who are affected by organizational effectiveness through the products and services they receive, especially in the service and tourism industries such as hotel businesses and so on. The products and services occur simultaneously and are passed on to customers

at the same time. The customers can be consumed or are affected by the organization. At the same time, the customers can be an indicator for assessment and evaluation of organizational effectiveness.

From this aspect, customers are highly important to organizational effectiveness as consumers, or as persons who receive an impact and also as evaluators of effectiveness.

2) Employees or Staff

Employees or staff are the operators in a particular organization who are influenced by the business operations. At the same time, they are representatives of effectiveness (presented through work and duty) and their work yields an outcome as organizational effectiveness. Similarly, in the tourism and service businesses, organizational effectiveness is important for staff whether it is positive or negative. However, the staff are the ones who have to solve problems, improve, and develop in order to raise the degree of effectiveness of the organization or lead the organization to reach its goals.

3) Entrepreneurs or proprietors

Organizational effectiveness is highly important for entrepreneurs especially for the groups of private businesses of which organizational effectiveness can lead to business goals or the ones that were set by the organization, for example, turnover, income, profits, reputation, etc. Therefore, organizational effectiveness is crucial for entrepreneurs in making a business propulsion policy and planning the strategies which are relevant to one another.

2.3.6. Principals of Organizational Effectiveness

The definitions and significance of organizational effectiveness lead to their possible patterns in the success of an organization. Nowadays, organizational effectiveness can be presented in various forms, depending on the different goals or desires that the organization expects. In the past, the principals of organizational effectiveness were not complicated because of the business conditions. At the

beginning of assessment and evaluation, one significant principal proposed by Campbell (1973 cited in Paranee Keerabut, 1986) showed belief in Ultimate Effectiveness Measures which consist of 19 criteria. Later, many academics shared their opinions and raised their arguments against the idea. Up until A.D. 1977, Campbell had developed the criteria for measuring effectiveness and divided them into 30 points as shown in the table below:

Table 2.7 Campbell's criteria for Ultimate Effectiveness Measures, 1977

Campbell's Criteria for Ultimate Effectiveness Measures (1977)		
1. **Planning and goal setting**	11. Use of environment	21. Accidents
2. **Productivity**	12. Growth	22. Motivation
3. **Efficiency**	13. Willpower	23. Work satisfaction
4. **Profits**	14. Conflicts – Unity	24. Understanding of the organization's goals
5. **ICT and communication management**	15. Quality	25. Agreement on goals
6. **Stability**	16. Emphasis on development and trainings	26. Consistency with norms and roles
7. **Control**	17. Human resources value	27. Interpersonal management skills
8. **Readiness**	18. Overall effectiveness	28. Work management skills
9. **Flexibility – Adjustment**	19. Collection and circulation	29. Participation and mutual influence

Campbell's Criteria for Ultimate Effectiveness Measures (1977)		
10. Evaluation from third parties	20. Absence from work	30. Emphasis on achievement

Source: Paranee Mahanon (1986)

From the table, Campbell presented the idea of Ultimate Effectiveness Measures by showing the belief that most organizations have the same goals. This idea brought about academic arguments and the principal of Multivariate Effectiveness Measures. The principal is the idea of the effort to create a model or prototype that is used to build a hypothesis by conducting an experiment or finding the correlation between the key variables that may affect the success of the organization. For instance, Quinn and Rohrbaugh (1983) pointed out that organizational effectiveness will change according to an individual's values or that of a particular organization. Mostly, the evaluations depend on who become the evaluators or who are being evaluated. Therefore, it is impossible to tell which is the best or the worst way to evaluate, it is as if it is a matter of different affective domains. Quinn and Rohrbaugh (1983) studied Multivariate Effectiveness Measures using the Competing-Values Approach with the perspective of alteration of the value of individuals in the organization. This idea has continually been developed until it is now formed into three sets of values: structure, focus, and means and ends. The sets consist of four kinds of models which are the Human Relations Model, Open System Model, Rational Goal Model, and Internal Process Model.

However, this changing environment has developed into globalization. Human beings have also changed in their behavior and so on. These changes are key variables that arouse businesses or organizations to adjust and change themselves. The changes also affect the models of organizational effectiveness. At the same time, Thailand's economic environment has changed and has had an impact on business sections, organizations, and industries—forcing them to adjust to the conditions. Tourism and

service industries have expanded roles. Government and related corporations put more interest in those industries. Business conditions therefore need to be adjusted at the same time, such as in terms of strategy planning, goal setting, and dealing with changing policy following the government's policies. This situation has also caused the organizational effectiveness of the businesses in the tourism and service industries to change. With business attributes that are different from other kinds of businesses, tourism and service industries have changed the image of their operation and administration. The characteristics of their business products are different from those of other industries. This causes the entrepreneurs and involved sectors to strive to make the organization or business successful. Therefore, the approach to increasing organizational effectiveness in tourism and service industries needs to be different due to the different kinds of products and services. The effectiveness in the form of turnover in such businesses, such as the hotel business, may not be sufficient anymore. The organization's personnel development and service development may be equally important as they are both possible ways to create sustainability for businesses and industries in general.

2.3.7. Significance of Work Effectiveness

Work effectiveness of employees is considered very important as it is linked to other levels of the effectiveness in an organization which affects the overall image of a particular organization. At the present, the heart of business operations is the service, as found in tourism and service businesses such as the convention hotel business in Thailand, which is a service industry. The service comes from the staff's intention to pass it on. The effectiveness of the hotel staff is therefore important and connected with the overall image of the business.

The components related to work effectiveness are from the perspective of an "Internal Approach". This perspective focuses on processes within the organization which cover productivity and satisfaction of the employees in the organization. The approach emphasizes system management and internal processes. Systems and

processes which are well-managed and can be verified in different forms can be seen from many aspects, for example, employees in the organization are united and well-coordinated; information in the organization is well-circulated; and the staff have satisfying work, are content with their job, and are attached to the organization's success. The organization that has well-managed systems and processes is a preferable place to work. Nowadays, the common approach to evaluation of efficiency is to assess job satisfaction including employees' personal satisfaction. Job satisfaction reflects work efficiency while employee satisfaction manifests individual efficiency. Radnor and Barnes (2007) separated assessment and evaluation of staff or individuals into two groups: efficient and effective.

For effectiveness related to the evaluation of relationship, productivity and used resources are viewed equally. Any organizations who have greater productivity are considered to have a higher degree of effectiveness. At the same time, the effectiveness evaluation focuses on the suitability of the output of the process which is wider than the effectiveness evaluation that only emphasizes quantity. Nevertheless, in the past two decades, the focus has been moved to an effectiveness evaluation as the perspectives towards the organization's activities and processes have shifted from the focus on mechanism to behavioral perspectives. This raises the awareness of the process results such as innovations, work motivation, and customer satisfaction.

Nowadays, tourism and service businesses such as convention hotels in Thailand place considerable importance on work effectiveness. That is because they believe that work effectiveness can bring about organizational effectiveness. This idea is relevant to Holjevac's (2003) study which found that it is necessary for tourism industries and hotels in the 21st century to give precedence to human resources management, which means the staff of the business. Holjevac stated that hotel staff are valuable assets of the hotels. Whether or not the business will become successful depends on the work of the staff, which is the service that the customers are aware of. This idea conforms to that of Whitla et al. (2007) whose study found that whether or

not hotel businesses become successful, customers are the key component, and the evaluation of their satisfaction has both a direct and indirect impact on the business. Accessing customers and building success is done by the hotel staff who provide the services. This idea is considered a world-class strategy in hotel industries where many of them may overlook or place less importance on it than on other external components such as technology, buildings, or decorations. In hotel businesses, the persons who directly interact with customers are individuals who use the technology; that is, the hotel staff. Therefore, if a hotel has insight in such significance and is able to set key strategies, its staff can be the propellers who create their own effectiveness; also, the organization will obtain success in the same manner.

2.3.8. Work Effectiveness Index

Different key concepts of assessment and evaluation of organizational effectiveness from past to present are important and they have been shifting according to different business contexts, society, and the environment in general. These change affects employees' work effectiveness. From the study of concepts and theories, it has been found that the work effectiveness of staff also changes, especially in the tourism and service industries such as convention hotel businesses in Thailand. It was found that most of the concepts place emphasis on work effectiveness affected by customers. This is based on the fact that hotel staff are working on giving service to the customers. Therefore, the effectiveness and evaluation come from the customers who use the service. Moreover, the customers or service users are a valuable mechanism of the business's success in terms of income, profit, turnover, reputation, image, and by words of mouth publicity.

Quinn and Rohrbaugh's (1983) study of the Multivariate Effectiveness Measures using the Competing-Values Approach with the perspective of alteration depending on the value of each individual in the organization is a key idea for work effectiveness evaluation which is clear and can be adjusted to a changing environment. Meanwhile, the idea maintains the key models of a particular

organization in terms of the structure, focus, approach, and expected results. It is also flexible with different characteristics of business. Differently, Parasuraman et al. (1985) placed emphasis on service quality to make sure that customers are satisfied so they can bring about success to the organization. In this matter, the staff are a key mechanism for driving the business to success. The researchers' study conforms to that of Holjevac (2003) and of Whitla et al. (2007) in the aspect of importance of staff management that affects customers in the business. The key issues of evaluation of the hotel staff's work effectiveness can be summarized into the following aspects:

(1) *Physical Appearance* describes the employees' work and operations that can be seen or touched physically. According to Jasinskas et al. (2016), customers in hotel businesses are aware of the staff's work effectiveness through their service, grooming, clothing, and overall environment. Such appearances can affect customer satisfaction and leads to the success of a particular hotel. Their findings conforms to that of Hosseini et al. (2015) which showed that the result of the hotel staff's operation can lead to work effectiveness that customers receive and it leads to positive experiences and loyalty.

In addition, physical appearance includes visible and touchable facilities gained through the hotel staff's operation, for example, grooming; tools, equipment, and documents used for communications; and an environment that makes the customers who receive the service aware of the care-taking, concern, and attention that the staffs give to them (Chu and Choi, 2000; Najafi et al., 2013; Roshnee, 2007; Zhang, Li & Law, 2015). Rhee and Yang (2015) also added that the physical appearance of hotel business staff is different from that of other kinds of business. Therefore, it is necessary for them to be well-presented through their physical appearance, superior operation, and great service (Akbaba, 2006; Chand, 2010; Gonzalez and Gidumal, 2016)

(2) *Responsiveness and Communication are* what the staff express to their customers to show their readiness and willingness to take care of the customers who

use the services. It also includes speed in responsiveness. This also means key communicative expressions in terms of verbal communication such as using the English language and international languages is a major aspect in hotel businesses and it is considered one of the key components for evaluation of work effectiveness of the staff from the customers' perspective. Chen's (2011), Chen et al.'s (2014), and Ren et al.'s (2015) studies stated the significance of the communication of hotel staff in the same directions.

Shafiq et al. (2013), Wu and Liang (2009), Lu and Feng (2010), and Grissemann , Plank & Brunner-Sperdin (2012) presented the important idea that the hotel staff's responsiveness can lead to customers' satisfaction. They studied the hotel businesses in Pakistan and found that most of the customers saw the hotel staff's work effectiveness as important, as it is considered as the ability to respond to their different demands. Their studies conform to that of Subramanian, Subramanian, Gunasekaran, and Gao (2016)) which found that ready responsiveness to customers' demands is considered a key innovation which hotels should develop and adjust regularly. That is because customer behavior and care-taking demand has changed. The idea was also supported by Mohsin & Lengler (2015). They pointed out that even budget hotels considerably emphasize the responsiveness of their staff. They added that one key effectiveness of a business is the ability of the staff to respond to all customers in any class.

Nasution and Mavondo (2008) and Serrat (2011) stated that the accessibility and convenience that occurs as a result of the hotel staff's operation will lead to satisfaction which is considered important in operational responsiveness. This idea is supported by Briggs, Sutherland & Drummond's (2006) study. It concluded that staff being able to access and respond to customers and give them convenience is characteristic of expressive ability and work effectiveness of the particular staffs and businesses.

(3) *Trustworthiness* in this matter is the ability of hotel staffs to be expressive in their operation. Customers will be aware of their sincerity and trust the services

provided. Narangajavana and Hu (2008), Yilmaz (2009), Grobelna and Marciszewska (2013), and Rauch et al. (2014) studied the quality of service that customers received from the hotel staffs' operation, especially from the groups of staff who need to directly work with or serve the customers. Grobelna and Marciszewska's (2013) study was conducted in the Republic of Poland. It was found that customers gave precedence to that issue. In their view, the key component of practice ability measurements of the staff's operation or effectiveness was the ability to build customers confidence and trustworthiness in their service and the ability to keep their words to provide service to the customers.

That is to say, trustworthiness can be defined as expressions of staffs in convention hotels in Thailand which make customers aware of their quality service, trustworthiness, and consistency of operation. It includes the ability to serve customers with the same quality that the organization promised to the customers (Gil, Hudson & Quintana, 2006; Giritlioglu, Jones & Avcikurt, 2013; Salazar, Costa & Rita, 2010).

(4) *Problem solving* is considered one of the key features of hotel staff, which is to be able to fix problems in different situations. This idea is supported by the studies of Prayag and Hosany (2015), Wu and Ko (2013), Dortyol, Varinli & Kitapci (2014), and Zhou, Pearce & Wu (2014). The researchers similarly stated that the problem-solving ability of the hotel staff is a key criterion and standard of their operation since there are different customers' demands and any of them can occur at any time. Such a standard is also concerned with specific business features which require service for customers.

Therefore, problem-solving ability is necessary for hotel staff in most of the departments in order to make customers satisfied and finally, to bring success to the business. Xie, Peng, and Huan (2014) tested the problem-solving ability of the staff while they were dealing with customers. Their study found that the customers put emphasis on problem-solving ability and this made them repeat customers.

Moreover, So and King (2009) added that the staff's problem-solving ability used with customers affected the customers' check-in experience both in positive and negative ways. Therefore, Human Resources Managers need to emphasize such skills. This idea is supported by Dortyol et al. (2014) who studied groups of international customers. They found different issues of the staffs' problem-solving ability which led to different degrees of service quality. That is to say, problem-solving here is the ability of the staffs in convention hotels in Thailand to solve problems which include suitable customer assistance. This action represents the staff's operation and interaction with customers in different situations.

The above are the concepts, theories, and studies related to work effectiveness of the staffs in convention hotels and other tourism and service businesses. This level of effectiveness is a key index to personnel development in the organization. From the studies, work effectiveness of convention hotel staff can be categorized into four major aspects as follows:

Table 2.8 Variables and Indicative Publications Regarding Convention Hotel Staff Performance

No	Authors/ 21st Century Learning Skills	Physical Appearance	Responsiveness and Communication	Trustworthiness	Problem solving
1	Chu & Choi, (2000)	X			
2	Akbaba (2006)	X	X	X	
3	Briggs, Sutherland & Drummond (2006)		X		X
4	Gil, Hudson & Quintana (2006)	X	X	X	
5	Ramsaran (2007)	X	X	X	
6	Whitla, Walters & Davies (2007)		X		
7	Wilkin, Merrilees & Herington (2007)	X	X	X	
8	Narangajavana & Hu (2008)	X	X	X	
9	Nasution & Mavondo (2008)	X	X		
10	Kam Fung So & King (2009)				X
11	Yilmaz (2009)	X	X	X	
12	Wu & Liang (2009)	X	X	X	
13	Chand (2010)	X	X	X	
14	Lu & Feng (2010)	X	X		

Table 2.9 Variables and Indicative Publications Regarding Convention Hotel Staff Performance

No	Authors/ 21st Century Learning Skills	Physical Appearance	Responsiveness and Communication	Trustworthiness	Problem solving
15	Salazar, Costa & Rita (2010)	X	X	X	
16	Chen (2011)				
17	Serrat (2011)	X	X	X	
18	Chen et al., (2012)	X	X		
19	Dortyol, Varinli & Kitapci (2013)	X		X	X
20	Giritlioglu, Jones & Avcikurt (2013)	X		X	
21	Grissemann, Plank & Brunner-Sperdin (2013)	X	X		
22	Grobelna & Marciszewska (2013)	X	X	X	
23	Hon (2013)		X		
24	Horng & Lin (2013)	X	X		X
25	Wu & Ko (2013)	X	X		X
26	Najafi et al., (2013)	X			X
27	Shafiq et al., (2013)	X	X	X	
28	Rauch et al., (2014)	X	X	X	

Table 2.10 Variables and Indicative Publications Regarding Convention Hotel Staff
Performance

No	Authors/21st Century Learning Skills	Physical Appearance	Responsiveness and Communication	Trustworthiness	Problem solving
29	Xie et al., (2014)				X
30	Zhoua, Pearce & Wu (2014)	X			X
31	Hosseini et al., (2015)	X			X
32	Mohsin & Lengler (2015)	X	X		
33	Prayang & Hosany (2015)	X	X		X
34	Ren et al., (2015)	X	X		
35	Rhee & Yang (2015)	X			
36	Zhang, Li & Law (2015)	X	X		
37	Gonzales & Gidumal (2016)	X	X		
38	Jasinskas et al., (2016)	X	X	X	X
39	Subramanian, Gunasekaran & Gao (2016)	X	X		

The above table explains all the important variables of the effectiveness of convention hotel staff's performance from different points of view, aspects and related literature which can be classified as the following four essential components.

1) Physical appearance refers to the special characteristic of convention hotel staff which customers are made aware of by their image, such as their hotel uniform, personality, gestures, and grooming. This includes their activities and performance.

2) Responsiveness and communication refers to the readiness and promptness to willingly serve all guests. This responsiveness includes the speed of service, prompt accessibility to guests, and the comfort that guests feel from service given by the convention hotel staff. Communication refers to language ability, body language and also verbal and non-verbal language.

3) Trustworthiness is the sincerity and trust provided by the convention hotel staff's performance. All guests should recognize that the good service provided with trusts is consistent and the guarantee of service provided was what was promised to them earlier.

4) Problem-solving means the ability of convention hotel staff to successfully address problems that occur to all in-house guests. This includes handling all unforeseen situations, face to face encounters, and problems in any situations properly.

2.4 Conclusion and Related Research

Convention hotels are a significant business, particularly for the meeting, incentive, convention and exhibition businesses, due to their special characteristics. There are many important reasons which make convention hotels significant, i.e. convention hotels can provide participants with good venues and meeting facilities, reduced logistics costs, easy accessibility, and a hotel image that has a good appearance. These positive outcomes are persuading many business owners and

involved people to enter the convention hotel business; this has also created competitiveness in this field in terms of both direct and indirect business.

Hotels business in Thailand has also been affected by this competitiveness from current competitors and new-comers as well. Therefore, in order to survive in this competitive environment, Thailand has realized the significance of human resource development as a key factor in generating a competitive advantage in this uncomfortable situation. Human resources rely on key persons in the service businesses, like the hotels business, obtaining both positive and negative feedback to determine the good or bad performance of the hotel staff. Therefore, good hotel staff performance could lead to guest satisfaction which ultimately leads to a good and positive outcome to for the business. Particularly in this 21st century, where the whole world is changing, tourists᾽ behavior has changed along with the implementation of new technology and greater accessibility, causing the business environment to become more dynamic with global awareness issues and so on.

The significant issue regarding human resources in business in this 21st century has led to the awareness of the need for development of human resources in business in this century. Therefore, in order to provide outstanding service in this 21st century where the world has become more dynamic, the human resources in the hotels businesses must have appropriate 21st Century Learning Skills so they can care for the needs of guests effectively. This will create a good outcome for the perception of both the hotel staff and the hotel business. With the reviewing of many relevant researches, text books, articles and other documents, it has been noticed that there are many related researches concerned with the development of human resources of hotels and the MICE business. For example, Baum (2005) studied about the vision of the Tourism and Hospitality industry in the 21st century, he found that human resource management was significant and necessary in a dynamic business environment. He also compared his study with those in the past and found that human resources in the Tourism and Hospitality industry have becomes much more important and complex.

Human resources play a key role in running the business and even to the survival of the business itself.

Another research paper that supports Baum's idea is the study by Kim, Kim, Seo & Hyun (2011) on hotel employees' competencies and qualifications in the Hotel Division. Kim et al., (2011) mentioned what is essential to the human resources of a hotel. Human resources is are assets of hotels who need to have competency in order to run the business properly, especially, those who need to interface directly with guests, such as room service, food & beverages, marketing & sales and so on. The study indicated that those staff needs to have special competency which consist of six facets: 1) operational competency, 2) environment adaptable competency, 3) career path competency, 4) interpersonal skills competency, 5) social participation competency, 6) and learning and time management competency. This study reveals that there are some competencies which are relevant to 21st century skills, however, it also can be seen that those competencies have not yet been fully applied in the business context.

Therefore, it is necessary for business development administration in the hotel business to have the same goal of human resource development of 21st century skills; this will be a great supportive tool for the human resources in hotel businesses to effectively improve their performance which could lead to the progressive development of both the hotel staff and the business as a whole.

Therefore, the researcher did an in-depth study on the significance of 21st Century Learning Skills in conjunction with the convention hotel business, especially, in Thailand. The findings identified the following research paper, the most relevant research paper by Ruzic (2015) who supported the idea of human resource development as an important element of business development. Ruzic (2015) further mentioned that human resource management could create both positive and negative impacts to staff performance and hotel business growth. He stated that efficiency skills of the hotel staff's performance consisted of participation skill, hotel professional skill, attitude skill and confidence of organization skill. Hotel staff who

can work with these mentioned skills display the development of their performance, which guests also perceive with satisfaction. Guests' satisfaction could also produce loyal repeat customers and good word of mouth advertising for the hotel business.

As mentioned earlier, human resource plays a significant role in the success of the hotel. This concept was supported by the paper of Cho, Woods, Jang, & Erdem (2006) that studied the impact of human resources to the hospitality firm staff's performance. Cho et al., (2006) found that the good performance of human resources reflected well on the overall hotel business. Good staff performance generates a higher income to the business, hotel guests' loyalty, and good public relations, without cost, by word of mouth advertising. On the other hand, they noticed that there were negative impacts from bad hotel staff performance as well. Therefore, good hotel staff management builds a good reputation for the business in this present-day competitive business environment.

Today's competitive environment can generate either gain or loss in business, especially in the hotel business where service is the key factor. Phillip (2007) did a study and confirmed the importance of the performance of hotel staff in the proper way to the success of the business. He mentioned that hotel business performance could be evaluated from four different points of view from the Balance Scorecard Model or BSC model. This model was created by Kaplan and Norton (1996) and states that business performance can be judged from the following four perspectives: customers' perspective, financial perspective, internal operational perspective and business growth perspective. Phillip (2007) did further study on this model in terms of its relationship to the hotel business, and the results show that this Balance Scorecard model can be an efficient model for evaluating hotel business performance. Particularly in the competitive environment of the 21st century, therefore, the convention hotel business may need to apply these concepts. He also mentioned that in terms of convention hotel businesses, there are some particular elements to develop

and judge by this model. One of these essential elements is knowledge management in reference to human resource management in hotel businesses.

All of these studies point to and emphasize the significance of the development of human resource management, especially in the 21st century where business has become much more competitive and dynamic. This has led to a research gap in how 21st Century Learning Skills can be developed in order to improve the effectiveness of the performance of convention hotel staff in Thailand.
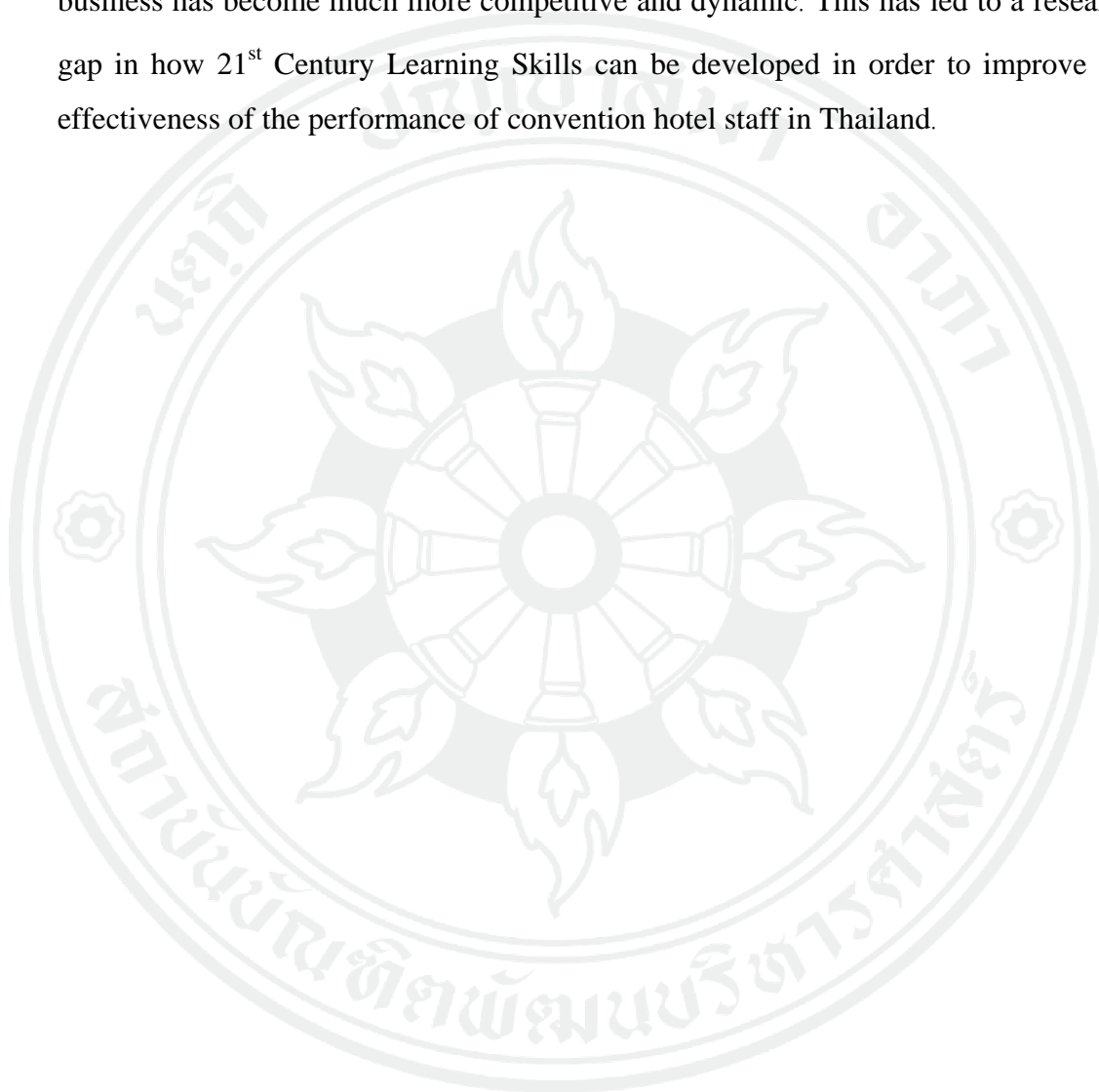
CHAPTER 3

RESEARCH METHODOLOGY

This study was done for the development of 21st Century Learning Skills which could improve the effectiveness of the convention hotel staff's performance in Thailand. Qualitative and quantitative research methods were employed in this study in order to reach the objectives of the study (Punch , 2005). The aims of this study are described in the development guideline for convention hotel staff using of 21st Century Learning Skills. Moreover, the scope of this study included only MICE cities in Thailand which consisted of five cities, Bangkok, Chiang Mai, Khon Kaen, Pattaya and Phuket respectively.

This chapter describes the research methodology that was used in the following sections: research process, research conceptual framework, definition operations, and research methodology.

3.1. Research Process

3.2. Research Conceptual Framework

3.3. Definition Operations

3.4. Research Methodology

    3.4.1. Quantitative Research

        3.4.1.1. Population and Sample Size

        3.4.1.2. Research Tools

        3.4.1.3. Reliability Tests

        3.4.1.4. Data Collection

        3.4.1.5. Research Assumptions

        3.4.1.6. Data Analysis and Statistics Used

3.1   Research Process

For this study, the researcher decided to layout the research process into two significant steps in order to generate the outcome of the development of 21st Century Learning Skills to improve the convention hotel staff's performance and effectiveness in Thailand.

Quantitative research was launched in order to generate 21st Century Learning Skills to improve the effectiveness of the convention hotel staff's performance in Thailand. The first quantitative step was to determine the typology of each 21st Century Learning Skills that could be used to improve convention hotel staff performance in Thailand. Then, the second step of the quantitative methodology was to determine the relationship and influence of those 21st Century Learning Skills on the effectiveness of the convention hotel staff's performance by structural equation modeling. Closed-ended questionnaires were distributed and collected in order to compare the relationship of 21st Century Learning Skills to the hotel convention staff's performance.

The qualitative research method was used to construct a significance guideline for convention hotel staff development using 21st Century Learning Skills to improve the proficiency of hotel convention staff in Thailand. A focus group discussion was conducted in order get ideas to create a development guideline for the convention hotel staff's performance in Thailand. This focus group provided significant information because it was composed of key informants who were involved with

convention hotel business, for instance, human resource managers, government customers, private sector customers, general managers of convention hotels, and academic scholars in the hospitality field.

The results of these two processes of quantitative and qualitative research methodology can aid in the development of human resources for the convention hotel staff's performance in Thailand that relies on the development of 21st Century Learning Skills as shown in the following figure.
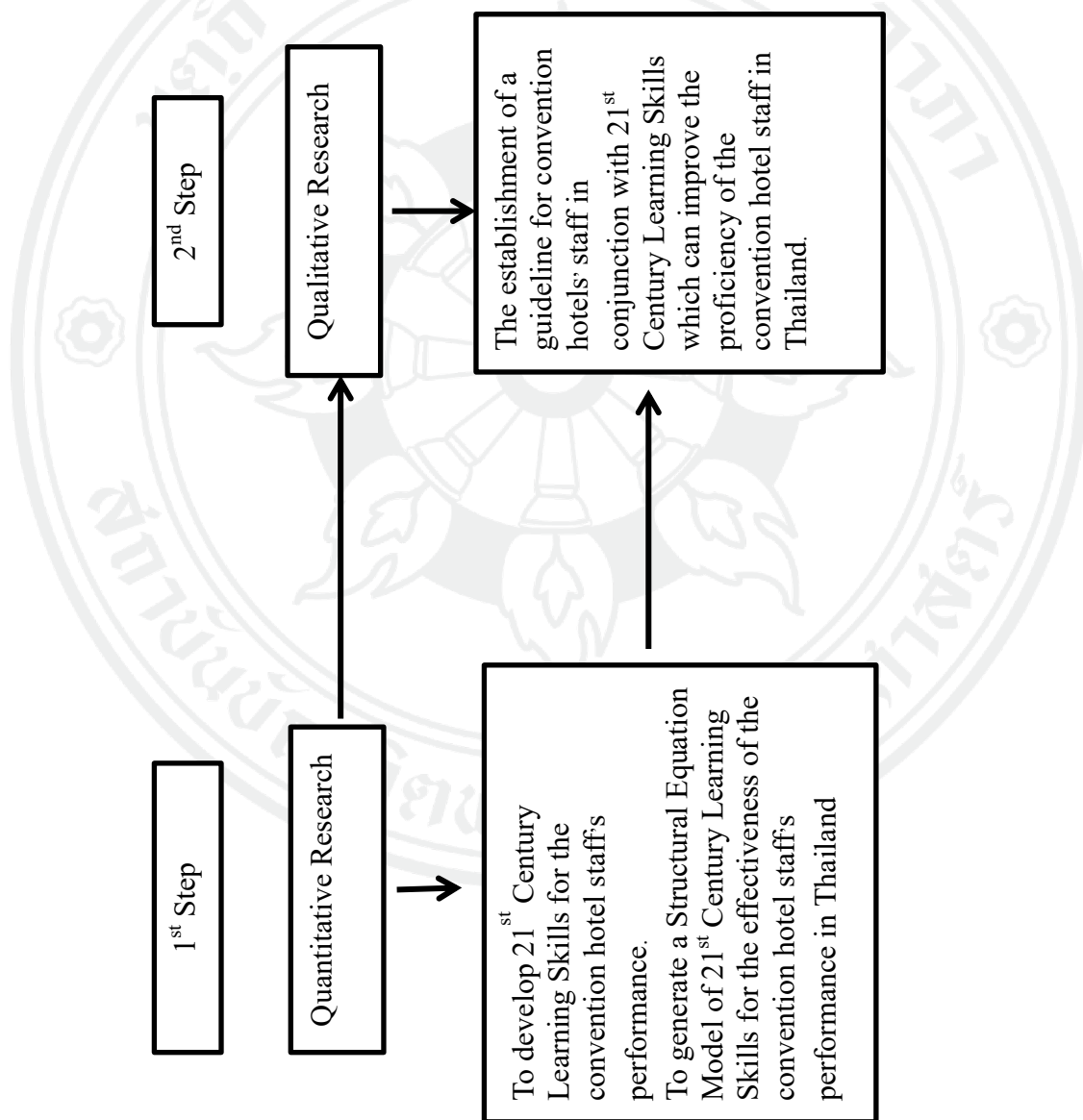
Figure 3.1. The Research Process

The above figure identifies the essential steps of the research process into the following two steps:

The first step of the study deals with the concept of significance, theories and relevant researches. In order to develop the 21st Century Learning Skills that are necessary for the convention hotel staff's performance and effectiveness in Thailand, quantitative research methodology with data collection and analysis with survey administration were used. Then, to show the relationship between 21st Century Learning Skills and the convention hotel staff's performance and effectiveness in Thailand, a structural equation model was used. This structural equation model was employed in order to test the impact of 21st Century Learning Skills and the effectiveness of the convention hotel staff's performance in Thailand. This step of the quantitative research was conducted in order to determine the relationship between 21st Century Learning Skills and the effectiveness of the convention hotel staff's performance in Thailand.

The last step used the qualitative research process. For this process, the researcher used a focus group in order to establish a guideline for the development of 21st Century Learning Skills to improve the effectiveness of the convention hotel staff's performance in Thailand. This step was conducted by gathering accurate information from only those key informants who have a connection with this research. The researcher sought out individuals familiar with convention hotel staff performance, such as customers in both the government and private sectors, scholars who are familiar with 21st Century Learning Skills and hospitality in the academic field, and those people who are members of convention hotels' staff. The findings collected from this step can help those people in the hospitality business to have an in-depth understanding of their significance to the entire industry.

3.2   Research Conceptual Framework

This study identified the essential variables that could lead to the development of 21st Century Learning Skills to improve the convention hotel staff's performance and effectiveness in Thailand. The result of the study could determine the significance guideline of the development of convention hotel staff's performance under the context of convention hotel business in Thailand only. Therefore, the research conceptual framework could be describes as shown in figure below.

The Effectiveness of the Convention Hotel Staff's Performance in Thailand:
1) Physical Appearance Component
2) Responsiveness and Communication Component
3) Trustworthiness Component
4) Problem Solving Component

Qualitative

The Development of 21st Century Learning Skills to Improve the Convention Hotel Staff's Performance and Effectiveness in Thailand

Qualitative & Quantitative

21st Century Learning Skills:
1) Creativity and Innovation Skills
2) Critical thinking and Problem-Solving Skills
3) Communication and Collaboration Skills
4) Media and Information Technology Skills
5) Social and Multi-culturalism Skills
6) Social Responsibility Skill
7) Self-Directed and Flexible Working Skills

Figure 3.2. The conceptual framework of the study

The above figure separates the key variables into the following two groups:

      3.2.1. The Independent Variables were the majority of variables in the study that could produce results. They consist of the following seven 21st Century Learning Skills.

       1)   Creativity and Innovation Skills

       2)   Critical Thinking and Problem-Solving Skills

       3)   Communication and Collaboration Skills

       4)   Media and Information Technology Skills

       5)   Social and Multi-culturalism Skills

       6)   Social Responsibility Skill

       7)   Self-Directed and Flexible Working Skills

      3.2.2. The Dependent Variables were components that resulted from the independent variables. The following components represent the effectiveness of the hotel convention staff's performance in Thailand.

       1)   Physical appearance

       2)   Responsiveness and Communication

       3)   Trustworthiness

       4)   Problem Solving

The results of this study can help to create a development guideline of 21st Century Leaning Skills to improve the effectiveness of the convention hotel staff's performance in Thailand.

3.3 Definition Operations

The terminology of this study was defined according to the objectives of the study; the development guideline of 21st Century Learning Skills to improve the effectiveness of the convention hotel staff's performance. Hence, the definitions are indicated by the following variables.

3.3.1. The 21st Century Learning Skills variables were the key variables of the study which could improve the learner's (convention hotel staff) performance. These variables were arranged into the following seven important learning skills:

3.3.1.1. Creativity and Innovation skills refer to inventive ideas, an initiative to use knowledge in unique ways, creative ideas which can change operational processes, the ingenuity and originality of people to advance their organization.

3.3.1.2. Critical Thinking and Problem-Solving skills refer to the skills that enables one to be able to think carefully; the process of thinking in a step-by-step way in order to solve problems, the use of rational reasoning in making decisions. This ability to evaluate a situation and make decisions is of great benefit to an organization.

3.3.1.3. Communication and Collaboration skills are defined as the ability of employees in dealing with others in business (both colleagues and guests). This involves the language and communication ability of employees to do their assignments of work well. Employees also need to have the ability to work along with people in different situations in a friendly way.

3.3.1.4. Media and Information Technology skills refer to the ability of employees to analyze and classify appropriate

data or information. They should be able to analyze, estimate, collect and adapt it properly.

3.3.1.5. Social and Multi-culturalism skills are defined as when employees can accept the diversity of other people, understand, respect and adapt themselves with multi-culturalism. This includes their emotional quotient in dealing with both colleagues and guests.

3.3.1.6. Social Responsibility skill is the capability of employees in taking care of those nearby in a social context; it also includes professional ethics and the ability to keep a proper balance between business performance and morality.

3.3.1.7. Self-directed and Flexible working skills are defined as the ability of employees to work with self-reliance in a dynamic environment. Employees must be flexible in their work, goals and time given to the organization. Hospitality employees also should have leadership skills and be able to process work effectively.

3.3.2. The effectiveness of the hotel convention staff's performance can be recognized by their component. Physical Appearance involves the special characteristic of hotel convention staff that impresses customers by their look and performance, such as their hotel uniform, personality, gestures, and grooming. This also includes the activities and the performance of the hotel convention staff.

3.3.2.1. Responsiveness and Communication refers to the readiness and promptness to willingly serve all guests. This could refer to their use of polite language, body language, verbal and non-verbal language, their speed of service, the prompt attention given to guests, and the

overall comfortableness that guests feel from the service given by the convention hotel staff as well.

3.3.2.2. Trustworthiness is the sincerity and trust provided by the convention hotel staff. All guests should perceive their good and trustworthy service, the consistency of service provided, and that the service provided was what was originally promised to the guests.

3.3.2.3. Problem-Solving refers to the ability of the convention hotel staff to solve problems that occur to all in-house guests. This includes unforeseen situations, face to face problems, and problems in any given situations.

3.3.3. Hotel Convention staff refers to persons who work in convention hotels in Thailand. Moreover, these staffs are also persons who have the responsibility to serve and interface directly with convention hotel guests. The scope of convention hotels in Thailand only included those in the five MICE cities, (according to the definition of the Thailand Convention and Exhibition Bureau Public Organization or TCEB) which consist of Bangkok, Chiang Mai, Khon Kaen, Pattaya and Phuket.

3.4   Research Methodology

3.4.1. Quantitative Research

The purpose of the quantitative research method was to determine the research objectives. The first objective was to provide the typology of 21st Century Learning Skills to improve the convention hotel staff's performance. The second objective is was to test the relationship of 21st Century Learning Skills with the convention hotel staff's effectiveness. Documentary research and structural equation modeling were employed in order to answer the research questions. The results from the quantitative research methodology accomplished the following research objectives:

1st Objective: To develop each type of 21st Century Learning skills necessary for convention hotel staff in Thailand.

2nd Objective: To a construct structural equation model of 21st Century Learning Skills with the effectiveness of the convention hotel staff's performance in Thailand

The above research objectives can better explain the relationship of the independent and dependent variables for constructing a 21st Century Learning Skills model. Therefore, the research hypothesis of this study was that "21st Century Leaning Skills can impact the effectiveness of the convention hotel staff's performance outcomes as depicted in the conceptual model"

3.4.1.1. Population and Sample Size

The population in this study was comprised of convention hotel guests who were provided with service by convention hotel staff in Thailand. Hotel guests that were the population of this study were from the government and private sectors. In order to get the most accurate data, the researcher decided to use the idea of Cochran (1963) of a sample size with a 95% confidence level and precision level at 5. An approximate sample of 384 respondents was required. In order to collect the proper data for this study and to minimize any incomplete data, the researcher chose 500 respondents as the sample size which would reduce errors and incomplete data.

According to the dispersion of data, the convention hotels were only hotels registered with the Thailand Convention and Exhibition Bureau in 2014. Hence, there were 209 hotels in total which were located in five different MICE cities. These convention hotels provide full service for meetings and have convention facilities along with accommodations for guests. Therefore, to make all sample sizes equal, the questionnaires were distributed to the five MICE cities of TCEB (2014) per the following table.

Table 3.1 List of the distribution of questionnaires to convention hotels in Thailand

MICE City Hotel	Hotel (s)	Percentage	Questionnaire(s)
Bangkok	99	47.37	236
Chiang Mai	36	17.22	86
Khon Kaen	9	4.31	22
Pattaya	9	4.31	22
Phuket	56	26.79	134
TOTAL	209	100	500

3.4.1.2. Research Tools

Research tools were used in the quantitative part of the research in order to collect all relevant data. The awareness of issues related to organizational commitment was presented by means of closed-ended questions. The questionnaire consisted of the following three sections:

The first section considered the 21st Century Learning Skills necessary for the convention hotel staff's performance. The Likert scale comprises five levels based on seven independent variables, i.e., creativity and innovation skills, critical thinking and problem-solving skills, communication and collaboration skills, media and information technology skills, social and multi-culturalism skills, social responsibility skill, and self-directed and flexible working skills.

The second section measured the effectiveness of the convention hotel staff's performance in Thailand. The Likert scale questionnaire comprised five levels based on the components of the four dependent variables, i.e., physical appearance, responsiveness and communication, trustworthiness and problem-solving.

The third section included the personal information of the respondents; for example; personal demographic information including gender, age, educational background, and monthly income. This provided a rough idea of the respondents' demographic information regarding convention hotels in Thailand.

3.4.1.3. Testing the reliability of the data

A study was conducted to test the content validity after which the questionnaires were compiled. Three qualified research experts examined the validity of the content and the appropriateness of the language used. All five of the experts were from the hospitality fields which consisted of two scholars from a Tourism School and Hospitality Institute, and three experts from the hotel businesses, as mentioned below.

1) Assistant Professor Dr. Kessara Sukpatch, a lecturer at the Graduate School of Tourism Management, the National Institute of Development Administration. She also has responsibilities in the Center of Government System Reform and Project Evaluation Research. She has expertise in the field of management and the Hospitality Industry.

2) Dr. Supaporn Prasongthan, a lecturer in the Department of Career Sciences, Faculty of Humanities, Kasetsart University. She is a subject specialist and human capitalist in the Hospitality Industry.

3) Mr. Watcharapong Kunplem, an executive assistant manager of Bangsaen Hotels Group and the managing director at the Tide Resort one of the well-known five star hotels in eastern Thailand. He is an expert in the field of human resource management and employee engagement.

4) Ms. Piyaporn Hongthong, the Cluster Director of Human Resources at InterContinental Hotels Group (InterContinental Hua Hin Resort's and Holiday Inn Vana Nava Hua Hin). She is an expert in the field of human resource development and talent management.

5) Mr. Wittanu Chumsuwan, the Director of Human Resources, Management and Staff of Centara Grand Beach Resort Villas Hua Hin. He has good experience in human resource management of hotels

business. His has expertise in human resource development and employee engagement.

The five experts were requested to evaluate the questionnaire on its clarity of language use and the clarity of the instructions related to the objectives of the study. The researcher contacted each member to explain the details of the study and their role in inspecting this instrument and requested suggestions to improve the instrument. Normally, the standard of the Item Objective Congruence (IOC) requires a score of more than 0.5 which indicates a good content validity. The results of this research questionnaire found that most questions scored above the average of 0.5. This shows the consistency of language use, and the clarity and objectives of the study (See appendix of IOC result).

Moreover, in order to check the reliability test of the questionnaire, a try out process was done with the use of 30 sample questionnaires to respondents made with a pilot test of the α-Coefficient (Kallaya Wanichbuncha, 2011). The Cronbach Alpha result of equal to and more than 0.7 was considered as reliable. This reliability test helped the researcher to better understand the consistency of measurement scores by using the pilot test of 30 questionnaires given to convention hotel guests. The results of this pilot test found that the Cronbach Alpha had a result of 0.960, which proves the reliability of the questionnaires. (See appendix of reliability test).

3.4.1.4. Data Collection

Data collection in the quantitative research method. The questionnaires were given directly to all hotel convention guests in both the government and private sectors. An appointment was set to have the questionnaires returned. With support from the Thailand Convention and Exhibition Bureau, all contact persons at the convention hotels were coordinated. Each of the convention hotels at the various destinations (Bangkok, Pattaya, Chiang Mai, Phuket and Khon Kaen) had a variety of convention hotel guests. For instance, from the government

sectors, private sectors, nonprofit organizations and so on. This was a great opportunity for the researcher to gain the data from both the government and private sectors as mentioned earlier.

In addition to gathering the data mentioned above, the next steps of coding and analyzing the data were done. The detailed questionnaire clearly stated the study's objectives and scope.

3.4.1.5. Research Assumption

The assumption of this study was that the effectiveness of the convention hotel staff's performance would be different from those gained by using 21st Century Learning Skills.

The 21st Century Learning Skills of convention hotel staff which have a direct bearing on the performance of their services are listed below:

1) Creativity and Innovation Skills

2) Critical Thinking and Problem-Solving Skills

3) Communication and Collaboration Skills

4) Media and Information Technology Skills

5) Social and Multi-culturalism Skills

6) Social Responsibility Skill

7) Self-Directed and Flexible Working Skills

The effectiveness of convention hotel staff in carrying out their duties is enhanced by the following components:

1) Physical appearance

2) Responsiveness and Communication

3) Trustworthiness

4) Problem-solving

The impact of the above 21st Century Learning Skills on the effectiveness of the convention hotel staff's performance points to the research hypothesis that "All the 21st Century Learning Skills were influential in improving the effectiveness of the

convention hotel staff's performance as depicted in the conceptual model". For this hypothesis the researcher used the structural equation model as a testing procedure.

3.4.1.6. Data Analysis and Statistics Used

To examine the data analysis, the researcher decided to use relevant statistics which could be classified into two groups: a) descriptive statistics and b) inferential statistics.

a) Descriptive statistics refer to the ideas or general information from the respondents of this study, in terms of total amount, percentage, and mean and standard deviation which were the basic statistics of the study.

b) Inferential statistics are defined as an assumption statistic test under the objectives of the study to find the connection between variables and an in-depth study on latent variables that are measured by one or more indicators using structural equation modeling (SEM).

3.4.2. Qualitative Research

The purpose of the qualitative research was to answer and sort out the research objectives of the development guideline of 21st Century Learning Skills that were necessary to improve the convention hotel staff's performance and effectiveness in Thailand in conjunction with the following research objective.

3rd Objective: To develop a guideline for hotel convention staff in the context of 21st century learning skills which enhance the proficiency of hotel convention staff in Thailand.

3.4.2.1. Key Informants

The intention of this research objective was to construct a guideline to improve the convention hotel staff's performance, therefore, the key

informants for this part should be those persons involved specifically in the field of 21st Century Learning Skills and the convention hotel business. A total of nine members were chosen, of which the primary or key informants were within the appropriate number range of from six to ten, and these were used to support the data acquisition (Yin (2009) as shown below.

a) Human Resource staff, experienced in working in the convention hotel business in Thailand with a minimum of five years experiences, two members.

b) Hotel convention guests, who had experience in using services provided by convention hotel staff, as both government and private guests, four members.

c) Scholars in the field of human resources management and hospitality management, two members.

d) Management level staff of the convention hotel business, who was experienced in the management of convention hotel policy with a minimum of five years experiences, one person.

3.4.2.2. Research Tool

A focus group discussion with semi-structured questions was conducted for this section. The results of the study shaped the development guideline for the convention hotel staff's development in conjunction with 21th Century Learning Skills in Thailand. The ideas of this focus group were processed in order to answer research objective no. 3 of the study, then, the researcher asked questions to the participants in order to get the result. After the various ideas and experiences were offered, the researcher concluded and made known the results to the participants so that everyone was in agreement.

3.4.2.3. Testing the reliability of the data

The reliability of the data was checked (Trustworthiness) using the steps described below.

1) An impartial moderator was chosen for the focus group to help all participants build trust and establish a rapport, which could affect the accuracy and veracity of the information obtained.

2) The accuracy of the information was verified (Member Checking) by the quality of the data obtained. The moderator recorded all findings in detail and clearly explained them. Feedback was given by the interviewees to confirm the accuracy of the information so that it matched the ·feelings· of the participants.

3) The reliability of the data was checked (Dependability) by presenting the information to the advisor of the research project to verify the accuracy and the desired objectives.

4) The research results were applied (Transferability) by recording the method data analysis and examining whether the context was clear to increase the reliability and to ensure that the results had a similar context.

5) The results of the study were confirmed (Conformability) by the researcher by collecting various related documents involving related education as well. The information was then distributed to all participants in order for them to agree with all the points.

3.4.2.4. Data Collection

Data collection for this research was divided into two parts, documentary research and focus group method. The focus group method was drawn up as a response to the third research objective of the study, to employ a focus group discussion with qualified key informants so that the information was reiterated. The discussion did not produce any new information and no further questions arose. The

saturated data (Data Saturation) offered evidence of the quality of the qualitative research and once obtained, the discussion was ended.

3.4.2.5. Data Analysis

The study analyzed the data converted by step analysis of the collected qualitative data (Colaizzi, 1978), which is a recognized and widely used coding analysis technique in phenomenological research as described below.

1) Once the focus group discussions were completed, the study used the information derived from a transcription of the recorded audio version. This was repeated many times to achieve a complete understanding of the overall data and the key issues involved.

2) The data was read again to extract an accurate text interpretation focusing on the relevant key phrases to ensure the same meaning or close to the same intended meaning. The ideas were used to identify relevant data. The code labeled every message and every sentence and then indicated the key words. This helped to identify the major issues (Themes) and subtopics under the definition of the main issues (Subthemes) to better understand that the information from the interview was already unique.

3) The researcher provided continuity and harmony between the texts and single sentences. At this stage definitions and topics were determined and any unnecessary information and topics were eliminated.

4) The researcher described their findings clearly and in copious detail. No theories existed to control the phenomenon. The examples of important words included significant keywords to clearly confirm that the incidents described actually occurred.

5) The validity of information was rigorously checked. The conclusions determined whether the information was true or false as described and explained. The need existed to acquire a complete and final conclusion from the findings of verified facts from the information provided. Then the information was checked by the research advisor, team members and specialists again.
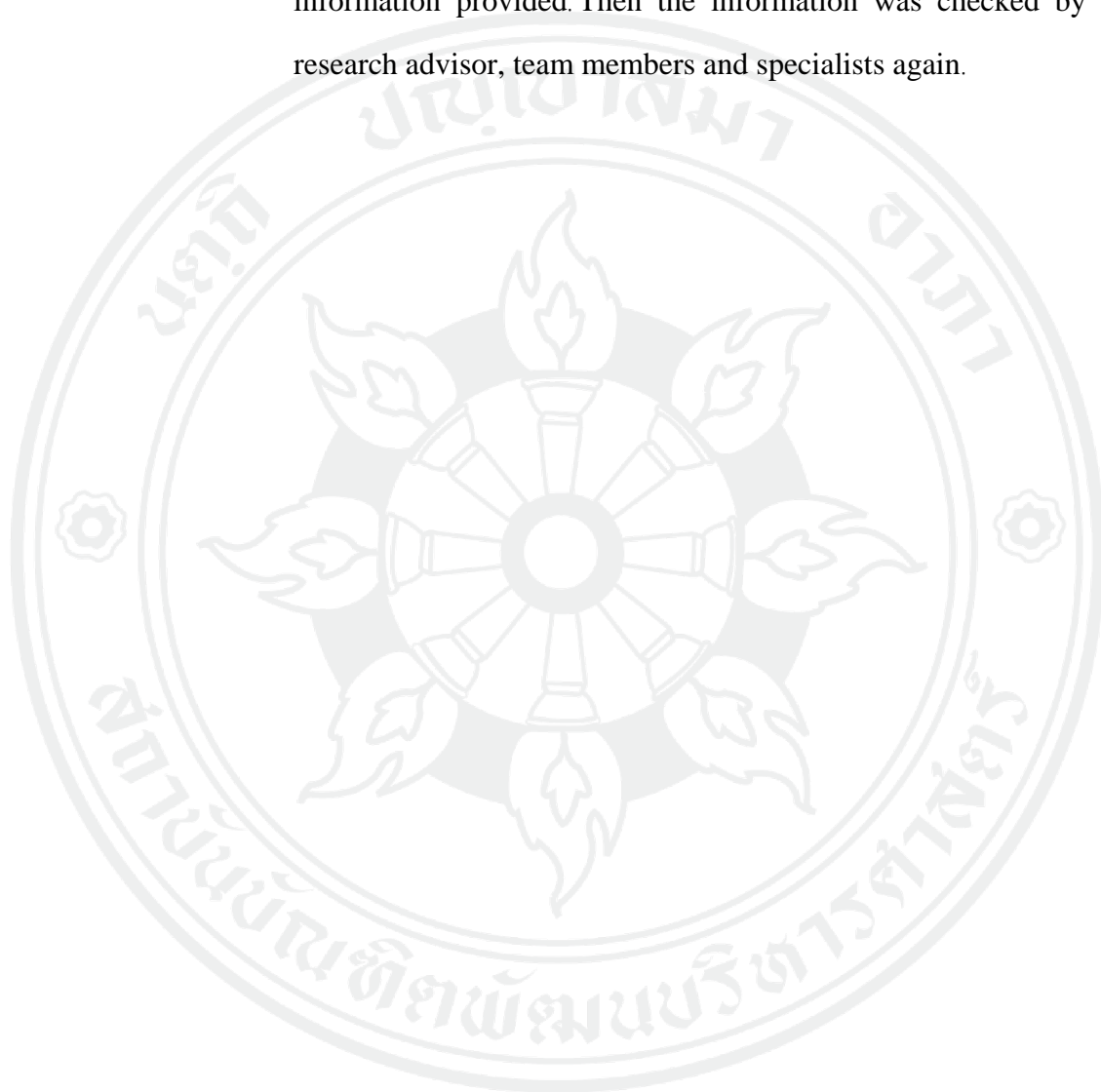
CHAPTER 4

DATA ANALYSIS AND RESEARCH FINDINGS

The purpose of this chapter is to present the findings of the study along with a discussion based on the research objectives in the previous chapter. The results of the study could help explain the significance of 21st Century Learning Skills on convention hotel staff's performance and effectiveness in Thailand. The results will be described in both parts of the quantitative and qualitative research methods in response to the research objectives.

The findings and discussion in this study of 'The development of 21st Century Learning Skills to enhance convention hotels staff's performance and effectiveness in Thailand' are divided into four parts: 4.1) Descriptive results, 4.2) Typology of 21st Century Learning Skills and the development of 21st Century Learning Skills on convention hotels staff's performance in Thailand and 4.3) A guideline development of 21st Century Learning Skills to enhance convention hotels staff's performance and effectiveness in Thailand.

4.1 Descriptive Results

Chapter three uses a mix of research methodologies, both quantitative and qualitative methods, hence, the descriptive results of this chapter will generate information of both the quantitative and qualitative results as per the following:

4.1.1 Quantitative Descriptive Results

There were 500 questionnaires surveys distributed to respondents who have used the services provided by convention hotel's staff. The results of the descriptive statistics are shown in the demographic characteristics of the respondents, which

consist of gender, age, educational background and average monthly income as shown in the table below.

Table 4.1 Details of respondents based on demographic profiles

Demographic Data of the Respondents	Frequency	Percentage (%)
Gender		
Male	192	38.4
Female	308	61.6
Age		
Generation Y (1980-1997)	179	35.8
Generation X (1965-1979)	294	58.8
Generation Baby Boomer (1946-1964)	27	5.4
Educational Level		
Below Bachelor Degree	11	2.2
Bachelor Degree or equivalent	342	68.4
Master's Degree	141	28.2
Doctoral Degree	6	1.2
Monthly Income (THB/THB)		
Below 15,001 THB	15	3
15,001 - 20,000 THB	106	21.2
20,001 - 25,000 THB	102	20.4
25,001 - 30,000 THB	88	17.6
30,001 - 35,000 THB	49	9.8
35,001 - 40,000 THB	30	6
40,001 - 45,000 THB	59	11.8
45,001 THB and above	51	10.2

The above mentioned table presents data collected from 500 respondents, in which 192 were male and 308 were female, accounting for 38.4% and 61.60%, respectively. The respondents' ages ranged from Generation X (1965-1979) at 294 or 58.8%, Generation Y (1980-1997) at 35.8% and the Baby Boomer Generation (1946-1964) at 5.4% consecutively.

The educational level of these 500 respondents were as follows: Bachelor Degree or equivalent was the greatest amount with 342 respondents (68.4%), next was

the Master's Degree with 141 respondents (28.2%), below a Bachelor Degree had 11 respondents (2.2%) and Doctoral Degree had 6 respondents (1.2%) respectively.

In reference to the monthly income of the respondents, it could be concluded that the majority of them had an average monthly income of 15,001 - 20,000 THB (106 respondents or 21.2%) next were those with an average monthly income of 20,001 - 25,000 THB (102 respondents or 20.4%). Next were those respondents who earned an average monthly income of 25,001 - 30,000 THB (88 respondents or17.6%), followed by those with an average monthly income of 40,001 - 45,000 THB (59 respondents or 11.8%) then the those with an average monthly income of 45,001 THB and above (51 respondents or10.2%) and next those with an average monthly income of 30,001 - 35,000 THB (49 respondents or 9.8%). Followed by 30 respondents or 6% who had an average monthly income between 35,001 - 40,000 THB and finally, 15 respondents or 3% who had an average monthly income below 15,001 THB.

4.1.2. Qualitative Descriptive Results

As mentioned in the research design of this study, the qualitative methods was also used as a part of the mixed research methodology. Therefore, the process of collecting data used of focus group discussion techniques. This focus group discussion was arranged in order to obtain significant data under the main objective of the study. Those respondents in the focus group were those who had greater knowledge and more experience in the field of Convention Hotel Business, hospitality and related areas. The focus group discussion size was between 6-12 respondents as per the following table:

Table 4.2 Respondents, Profile from focus group

Informant(s)	Gender	Age	Education	Position	Organization
1	Female	40-50	Doctoral Degree	Scholar	Education
2	Female	30-40	Doctoral Degree	Scholar	Education
3	Female	40-50	Bachelor Degree	Manager	Tourism Business
4	Male	40-50	Master's Degree	Manager	Hospitality Business
5	Female	50-60	Bachelor Degree	Manager	Government
6	Female	40-50	Bachelor Degree	Senior Staff	Government
7	Female	30-40	Bachelor Degree	HR Manager	Convention Hotel
8	Female	20-30	Bachelor Degree	HR Staff	Convention Hotel
9	Male	50-60	Bachelor Degree	General Manager	Convention Hotel

From the above table it can be concluded that the majority of respondents profiled were people associated with convention hotels and related fields and all concerned parties had a measure of experience in their individual areas. With their expertise and experience a better outcome could be achieved in relation to the objectives of the study. In summary, there were three areas of focus, the customers, the convention hotels and the educational institutes respectively.

4.2 The development of 21st Century Learning Skills on the convention hotels staff's performance in Thailand

This section is divided into two objectives 1) to develop each type of 21st Century Learning Skill which is necessary for improved convention hotel staff performance in Thailand and 2) to develop a structural equation model from 21st Century Learning Skills and to use it to improve the performance of convention hotels staff in Thailand. This chapter presents the results of the study according to those objectives by using the quantitative method. The findings of this study consist of: 1) descriptive statistics regarding each variable of the study, and 2) inferential statistics regarding a structural equation model.

In order to understand all findings and statistical tests, listed below are some symbols and their meanings to help in clarification.

Symbol	Meaning
n, N	Number of samples
$\overline{X}$	Mean
%	Percentage
S.D.	Standard Deviation
P	Probability
Sig.	Significance
*	Statistical Significance at .05 Level
**	Statistical Significance at .01 Level
df	Degree of freedom
B	Beta Coefficient
CMIN/df	Chi-square/ degree of freedom
GFI	Goodness of Fit Index
RMSEA	Root mean Square Error of Approximation
CFI	Comparative Fit Index

NFI	Normed Fit Index
AGFI	Adjusted Goodness of Fit Index

4.2.1. General Information of the Descriptive Results

In conjunction with the purpose of this study some assumptions were made between variables. Independent variables and dependent variables were collected per the following: creativity and innovation skills, critical thinking and problem solving skills, communication and collaboration skills, media and information technology skills, social and Multi-culturalism skills, social responsibility skill, self-directed and flexible working skills, ability to present an appealing physical appearance, communication and responsiveness, trustworthiness and problem solving. To describe the variables in this study, the interpretation of the mean scores of each variable were determined using the table below.

Table 4.3 Measurement scale level of variables

Measurement Scales	Scores
Very low	1.00-1.80
Low	1.81-2.60
Moderate	2.61-3.40
High	3.41-4.20
Very high	4.21-5.00

The processes of the independent and dependent variables were analyzed in order to collect related data from 21st Century Learning Skills and the effectiveness of convention hotel staff's performance. There were 500 respondents used to generate and present descriptive statistics in the form of frequency, percentage, mean and standard deviation (S.D.) as shown in the table below:

Table 4.4 Means and standard deviation of all aspects of the 21st Century Learning Skills concept

21st Century Learning Skill(s)	Levels of Opinion			
	$\overline{X}$	S.D.	Level of evaluation	No.
1. Creativity and Innovation Skills	4.49	0.60	Very high	2
2. Critical Thinking and Problem-solving Skills	4.56	0.52	Very high	1
3. Communication and Collaboration Skills	4.36	0.54	Very high	6
4. Media and Information Technology Skills	4.37	0.55	Very high	5
5. Social and Multi-culturalism Skills	4.44	0.56	Very high	4
6. Social Responsibility Skill	4.30	0.63	Very high	7
7. Self-directed and Flexibility Skills	4.47	0.55	Very high	3
Total	4.43	0.44	Very high	

The above table shows that the significance of 21st Century Learning Skills of convention hotel staff was very high ($\overline{X}$=4.43); an in-depth study indicates that from the most significant to the least significant of learning skills were as follows: Critical Thinking and Problem-solving Skills was the most significant ($\overline{X}$=4.56), followed by Creativity and Innovation Skills ($\overline{X}$=4.49), Self-directed and Flexibility Skills ($\overline{X}$=4.47), Social and Multi-culturalism Skills ($\overline{X}$=4.44), Media and Information Technology Skills ($\overline{X}$=4.37), Communication and Collaboration Skills ($\overline{X}$=4.36), and the least significant Social Responsibility Skill ($\overline{X}$=4.30).

Moreover, with a detailed study of each of the variables of the 21st Century Learning Skills factors, there were various results in terms of the level of opinions of the respondents, the averages, standard deviation, the level of evaluation and the significance level of each skill. The purpose of this elaboration is to provide the significant levels along with specific details of the opinions of the respondents regrading each skill that reflects on the effectiveness of the convention hotel staff's performance which is presented in the data below:

Table 4.5 Means and standard deviation of creativity and innovation skills included in the 21st century learning skills concept

Creativity and innovation skills	Levels of Opinion					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1.The ability of originality can help enhance the performance and effectiveness of the convention hotel staff.	343 (68.60)	118 (23.60)	37 (7.40)	1 (0.20)	1 (0.20)	4.60	0.65	Very high	1
2.The ability of inventiveness can help enhance the performance and effectiveness of the convention hotel staff.	248 (49.60)	212 (42.40)	31 (6.20)	8 (1.60)	1 (0.20)	4.40	0.70	Very high	4
3.The ability of ingenuity can help enhance the performance and effectiveness of the convention hotel staff.	272 (54.40)	174 (34.80)	45 (9.00)	6 (1.20)	3 (0.60)	4.41	0.75	Very high	3
4.The ability to change the operational process can help enhance the performance and effectiveness of the convention hotel staff.	323 (64.60)	137 (27.40)	33 (6.60)	4 (0.80)	3 (0.60)	4.55	0.71	Very high	2
Total						4.49	0.60	Very high	

The above findings reveal that the significance of creativity and innovation skills had an average of $\overline{X}$ =4.49. It can be seen from the table that the ability of originality to help enhance the performance and effectiveness of the convention hotel staff was the highest skill ($\overline{X}$=4.60). The ability to change the operational process ($\overline{X}$ =4.55), ingenuity process ($\overline{X}$=4.41) and inventiveness process ($\overline{X}$=4.40) of learning skills appeared to be less significant.

Table 4.6 Means and standard deviation of critical thinking and problem-solving skills included in the 21st century learning skills concept

Critical Thinking and Problem-solving Skills	Levels of Opinion					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1. The ability of critical thinking to solve problems can help enhance the performance and effectiveness of the convention hotel staff	304 (60.80)	168 (33.60)	23 (4.60)	4 (0.80)	1 (0.20)	4.54	0.64	Very high	3
2. The ability to follow the procedures for solving problems can help enhance the performance and effectiveness of the convention hotel staff.	319 (63.80)	154 (30.80)	22 (4.40)	5 (1.00)	-	4.57	0.63	Very high	2
3. The ability to assess situations well can help enhance the performance and effectiveness of the convention hotel staff.	339 (67.80)	136 (27.20)	23 (4.60)	2 (0.40)	-	4.62	0.59	Very high	1
4. The ability to make decisions under the authorized powers can help enhance the performance and effectiveness of the convention hotel staff.	315 (63.00)	143 (28.60)	31 (6.20)	9 (1.80)	2 (0.40)	4.52	0.73	Very high	4
Total						4.56	0.52	Very high	

The above table shows that the overall mean scores of all aspects of critical thinking and problem-solving skills of the 21st Century Learning Skills were rated very high ($\overline{X}$=4.56). Correspondingly, the ability to assess ~~the~~ situations well can help enhance the performance and effectiveness of the convention hotel staff was rated very high ($\overline{X}$=4.62), followed by the ability to follow procedures for solving problems ($\overline{X}$=4.57), the ability of critical thinking to solve problems ($\overline{X}$=4.54), and ability to make decisions under the authorized powers ($\overline{X}$=4.52).

Table 4.7 Means and standard deviation of communication and collaboration skills included in the 21st Century Learning Skills concept

Communication and Collaboration Skills	Levels of Opinion					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1. The ability to communicate well in English can help enhance the performance and effectiveness of the convention hotel staff.	213 (42.60)	239 (47.80)	41 (8.20)	5 (1.00)	2 (0.40)	4.31	0.70	Very high	3
2. The ability of non-verbal language and expressions with others can help enhance the performance and effectiveness of the convention hotel staff.	184 (36.80)	270 (54.00)	41 (8.20)	5 (1.00)	-	4.27	0.65	Very high	4
3. The ability of clear interpersonal communication can help enhance the performance and effectiveness of the convention hotel staff.	242 (48.40)	207 (41.40)	44 (8.80)	7 (1.40)	-	4.37	0.70	Very high	2
4. The ability of doing team work can help enhance the performance and effectiveness of the convention hotel staff.	295 (59.00)	164 (32.80)	36 (7.20)	5 (1.00)	-	4.50	0.67	Very high	1
Total						4.36	0.54	Very high	

Most of the opinions of the respondents regarding communication and collaboration skills of the convention hotel staff were rated very high with an average of $\overline{X}$=4.27. When sorting the items according to each communication and collaboration skills, it was found that the ability of doing team work can help enhance the performance and effectiveness of the convention hotel staff was the highest skill ($\overline{X}$ =4.50), followed by clear interpersonal communication ($\overline{X}$=4.37), and communicating well in English ($\overline{X}$=4.31 respectively.

Table 4.8 Means and standard deviation of media and information technology skills
included in the 21st Century Learning Skills concept

Media and Information Technology Skills	Levels of Opinion					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1. The ability to access and analyze media and information technology can help enhance the performance and effectiveness of the convention hotel staff.	209 (41.80)	238 (47.60)	46 (9.20)	7 (1.40)	-	4.30	0.69	Very high	3
2. The ability to utilize media and information technology accurately can help enhance the performance and effectiveness of the convention hotel staff.	171 (34.20)	295 (59.00)	29 (5.80)	5 (1.00)	-	4.26	0.61	Very high	4
3. The ability to select media and information technology can help enhance the performance and effectiveness of the convention hotel staff.	266 (53.20)	196 (39.20)	31 (6.20)	5 (1.00)	2 (0.40)	4.44	0.69	Very high	2
4. The ability to apply media and information technology can help enhance the performance and effectiveness of the convention hotel staff.	286 (57.20)	175 (35.00)	32 (6.40)	7 (1.40)	-	4.48	0.68	Very high	1
Total						4.37	0.55	Very high	

The 21st century learning skills of the convention hotel staff's performance
found in media and information technology skills, presented in the table above
indicates that most of the opinions rated the ability to apply media and information
technology to help enhance the performance and effectiveness of the convention hotel
staff as the highest ($\overline{X}$=4.48), followed by the ability to select media and information
technology ($\overline{X}$=4.44); while the ability to access and analyze data and to utilize media
and information technology came after with $\overline{X}$=4.30 and $\overline{X}$=4.26 respectively.

Table 4.9 Means and standard deviation of social and multi-culturalism skills included in the 21st century learning skills concept

Social and Multiculturalism Skills	Levels of Opinion					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1. The ability to learn and understand an individual can help enhance the performance and effectiveness of the convention hotel staff.	221 (44.20)	238 (47.60)	36 (7.20)	2 (0.40)	3 (0.60)	4.34	0.68	Very high	4
2. The ability to acknowledge individual differences and diversity can help enhance the performance and effectiveness of the convention hotel staff	265 (53.00)	197 (39.40)	31 (6.20)	6 (1.20)	1 (0.20)	4.44	0.68	Very high	3
3. The ability to serve customers equally can help enhance the performance and effectiveness of the convention hotel staff.	300 (60.00)	158 (31.60)	36 (7.20)	6 (1.20)	-	4.50	0.68	Very high	1
4. The ability of having emotional intelligence based on cultural diversity can help enhance the performance and effectiveness of the convention hotel staff.	275 (55.00)	183 (36.60)	40 (8.00)	-	2 (0.40)	4.46	0.68	Very high	2
Total						4.44	0.56	Very high	

The findings presented in the above table reveal an overall average of 4.44 on opinions regarding social and multi-culturalism skills of the convention hotel staff's performance. Further, it was found that the majority of opinions showed that the ability to serve customers equally would help enhance the performance and effectiveness of the convention hotel staff ($\overline{X}$=4.50). This was followed by having emotional intelligence based on cultural diversity ($\overline{X}$=4.46), and being able to acknowledge individual differences and diversity ($\overline{X}$=4.44), and finally, being able to learn and understand individuals ($\overline{X}$=4.34).

Table 4.10 Means and standard deviation of social responsibility skills included in the 21st century learning skills concept

Social Responsibility Skills	Levels of Opinion					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1. The ability to be aware of surrounding society can help enhance the performance and effectiveness of the convention hotel staff.	163 (32.60)	247 (49.40)	85 (17.00)	5 (1.00)	-	4.14	0.72	high	4
2. The ability to have global consciousness can help enhance the performance and effectiveness of the convention hotel staff.	201 (40.20)	218 (43.60)	72 (14.40)	9 (1.80)	-	4.22	0.75	Very high	3
3. The ability to develop professional ethnics can help enhance the performance and effectiveness of the convention hotel staff.	264 (52.80)	173 (34.60)	54 (10.80)	9 (1.80)	-	4.38	0.75	Very high	2
4. The ability to, by performance, display responsibility to the customers and to society can help enhance the performance and effectiveness of the convention hotel staff.	282 (56.40)	169 (33.80)	42 (8.40)	7 (1.40)	-	4.45	0.71	Very high	1
Total						4.30	0.63	Very high	

The above table shows that respondents were less concerned about the social responsibility skill of the convention hotel staff's performance with an average of 4.30 when compared with other 21st Century Learning Skills. Under the concept of social responsibility skill, it was found that the most significant task was the ability to, by performance, display responsibility to the customers and to society could help enhance the performance and effectiveness of the convention hotel staff ($\overline{X}$=4.45), whereas, the least significant task was the ability to be aware of surrounding society (

$\overline{X}$=4.14). This could be interpreted that customers did not have many expectations regarding social responsibility in the performance of the convention hotel staff

Table 4.11 Means and standard deviation of self-directed and flexibility skills included in the 21st century learning skills concept

Self-directed and Flexibility Skills	Levels of Opinion					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1. The ability to achieve set goals can help enhance the performance and effectiveness of the convention hotel staff.	263 (52.60)	209 (41.80)	25 (5.00)	3 (0.60)	-	4.46	0.62	Very high	2
2. The ability to adjust themselves to change can help enhance the performance and effectiveness of the convention hotel staff.	268 (53.60)	197 (39.40)	32 (6.40)	1 (0.20)	2 (0.40)	4.46	0.66	Very high	3
3. The ability of leadership can help enhance the performance and effectiveness of the convention hotel staff.	249 (49.80)	216 (43.20)	28 (5.60)	7 (1.40)	-	4.41	0.66	Very high	4
4. The ability to work under pressure and time constraints can help enhance the performance and effectiveness of the convention hotel staff.	315 (63.00)	152 (30.40)	23 (4.60)	6 (1.20)	4 (0.80)	4.54	0.71	Very high	1
Total						4.47	0.55	Very high	

The opinions of the respondents regarding self-directed and flexibility skills were very interesting with a very high average value ($\overline{X}$=4.47). The findings found that among self-directed and flexibility skills, the ability to work under pressure and time constraint tasks was very high ($\overline{X}$=4.54). Followed by the ability to achieve set goals

and adjust themselves to change in a dynamic environment ($\overline{X}$ =4.46); while, of lesser importance was leadership which had a mean score of $\overline{X}$ =4.41.

There are many details of 21st Century Learning Skills which indicate the significance of each learning skill's impact on the performance of the convention hotel staff in Thailand. However, in order to get a clearer picture of the overview of the convention hotel staff's performance, the effectiveness of each component is another variable of the study in this research.

The findings of the study show that most respondents who replied on the questionnaire surveys agreed with and realized that the significance of the convention hotel staff's performance could be determined by the quality of service in their work. This could also promote satisfaction to convention hotel customers which would leads to many benefits to the convention hotel business' success and good reputation. There are four effective components in this study which consist of: physical appearance, communication and responsiveness, trustworthiness and problem solving. The results show that most respondents rated all these components with a very high value ($\overline{X}$ =4.44). The most essential effectiveness component of the respondents' opinions was physical appearance as this is a first impression. All facets of the convention hotel staff's performance should be viewed from the point of view of the customer. The least essential component was trustworthiness; the reason for this is that the process to build trustworthiness may take longer than the other components.

The above mentioned information is described in the following tables regarding the effectiveness of each component.

Table 4.12 Means and standard deviation of the 21st Century Learning Skills reveal
the effectiveness of the convention hotel staff's performance in Thailand

The Effectiveness of The Convention Hotel Staff's Performance	Levels of Opinion		
	$\overline{\mathrm{X}}$	S.D.	Level of evaluation
1. Effectiveness of Physical Appearance	4.45	0.68	Very high
2. Effectiveness of Communication and Responsiveness	4.45	0.67	Very high
3. Effectiveness of Trustworthiness	4.44	0.68	Very high
4. Effectiveness in Solving problems	4.47	0.64	Very high
Total	4.45	0.67	Very high

The opinions of the respondents regarding all components of the effectiveness
of the convention hotel staff's performance was very high. The findings show that the
effectiveness in solving problems was the highest with $\overline{\mathrm{X}}$ =4.47, followed by the
effectiveness of physical appearance and the effectiveness of communication and
responsiveness with $\overline{\mathrm{X}}$ =4.45. Of lesser importance was the effectiveness of
trustworthiness, which was still high, with a mean score of $\overline{\mathrm{X}}$ =4.44.

Table 4.13 Means and standard deviation of the component, the effectiveness of the convention hotel staff's performance regarding physical appearance

Effectiveness of Physical Appearance	Level of Opinion(s)					$\bar{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1. The development of 21st Century Learning Skills can help the convention hotel staff to have a better personality in working.	258 (51.6)	207 (41.4)	30 (6.0)	5 (1.00)	-	4.44	0.65	Very high	3
						4.36	0.69		
2. The development of 21st Century Learning Skills can better help the convention hotel staff to have attire as in a standardized uniform.	237 (47.4)	215 (43.0)	43 (8.6)	3 (0.6)	2 (0.4)			Very high	4
3. The development of 21st Century Learning Skills can help the convention hotel staff to have better body language.	295 (59.0)	155 (31.0)	43 (8.6)	7 (1.4)	-	4.48	0.71	Very high	2
						4.52	0.68		
4. The development of 21st Century Learning Skills can help the convention hotel staff to give better delivery service.	306 (61.2)	157 (31.4)	32 (6.4)	3 (0.6)	2 (0.4)			Very high	1
Total						4.45	0.68	Very high	

The above table presents the opinions of the respondents regarding the component of the effectiveness of convention hotel staff in terms of physical appearance. It was found that delivery service as a component of physical appearance had a very high significance of 4.52, whereas, the other components i.e. better body language and personality were lower, 4.48 and 4.4 respectively.

Table 4.14 Means and standard deviation of the component of the effectiveness of the convention hotel staff's performance regarding communication and responsiveness

Effectiveness of Communication and Responsiveness	Level of Opinion(s)					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1.The development of 21st Century Learning Skills can help the convention hotel staff to have a readiness and willingness to serve	257 (51.4)	199 (39.8)	41 (8.2)	3 (0.6)	-	4.42	0.67	Very high	4
						4.45	0.66		
2. The development of 21st Century Learning Skills can better help the convention hotel staff to give prompt service	264 (52.8)	200 (40.0)	31 (6.2)	5 (1.0)	-			Very high	2
3. The development of 21st Century Learning Skills can help the convention hotel staff to have better access to the customers	288 (57.6)	172 (34.4)	35 (7.0)	3 (0.6)	2 (0.4)	4.48	0.69	Very high	1
						4.45	0.65		
4. The development of 21st Century Learning Skills can help the convention hotel staff to develop a standardized process in serving the customers	262 (52.4)	205 (41.0)	27 (5.4)	6 (1.2)	-			Very high	3
Total						4.45	0.67	Very high	

The above table shows the component of the effectiveness in terms of communication and responsiveness. It found that the overall opinions were very high (

$\overline{X}$ =4.45). Of this the component, ability to have better access to the customers was the most significant with an average of 4.45, while, the least significant was the readiness and willingness to serve at 4.42.

Table 4.15 Means and standard deviation of the component of the effectiveness of the convention hotel staff's performance regarding trustworthiness

Effectiveness of Trustworthiness	Level of Opinion(s)					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1.The development of 21st Century Learning Skills can help the convention hotel staff to be able to provide better service	252 (50.4)	214 (42.8)	27 (5.4)	5 (1.0)	2 (0.4)	4.42	0.68	Very high	4
						4.45	0.68		
2. The development of 21st Century Learning Skills can better help the convention hotel staff to give service according to the customers' expectations	273 (54.6)	180 (36.0)	44 (8.8)	3 (0.6)	-			Very high	2
3. The development of 21st Century Learning Skills can help the convention hotel staff to cultivate loyalty and serve customers with safety in mind	266 (53.2)	198 (39.6)	31 (6.2)	3 (0.6)	2 (0.4)	4.45	0.67	Very high	3
						4.46	0.71		
4. The development of 21st Century Learning Skills	285 (57.0)	171 (34.2)	37 (7.4)	5 (1.0)	2 (0.4)			Very high	1

Effectiveness of Trustworthiness	Level of Opinion(s)					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
can help the convention hotel staff to give the customers service with consistency.									
Total						4.44	0.68	Very high	

The findings presented in the above table reveal an overall average of 4.44 from opinions regarding the component of the trustworthiness of the convention hotel staff's performance. Further, it found that the majority of respondents concentrated on the consistency of service performance with 4.46. The other components that dealt with expectations of customers and serving with safety in mind, were higher than the component of delivery with better service ($\overline{X}$ =4.42).

Table 4.16 Means and standard deviation of the component of the effectiveness of convention hotel staff's performance regarding problem solving

Effectiveness of Solving problems	Level of Opinion(s)					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
1.The development of 21st Century Learning Skills can help the convention hotel staff to prioritize and evaluate problem situations.	302 (60.4)	172 (34.4)	23 (4.6)	3 (0.6)	-	4.55	0.61	Very high	1
						4.49	0.66		
	286 (57.2)	176 (35.2)	36 (7.2)	-	2 (0.4)			Very high	2
2. The development of 21st Century Learning Skills can better help the convention hotel staff to handle problems under									

Effectiveness of Solving problems	Level of Opinion(s)					$\overline{X}$	S.D.	Level of evaluation	No.
	5	4	3	2	1				
time constraints.									
3. The development of 21st Century Learning Skills can help the convention hotel staff to solve problems by following the procedures of the hotel.	227 (45.4)	234 (46.8)	37 (7.4)	2 (0.4)	-	4.37	0.64	Very high	4
						4.48	0.65		
	282 (56.4)	178 (35.6)	37 (7.4)	3 (0.6)	-			Very high	3
4. The development of 21st Century Learning Skills can help the convention hotel staff to solve unexpected problems involving customers' needs.									
Total						4.47	0.64	Very high	

Most of the opinions of the respondents regarding problem solving were rated very high with an average of $\overline{X}$=4.47. When sorting the items according to each component, it was found that prioritizing and evaluating problem situations was the highest ($\overline{X}$=4.55), whereas, the least was following the procedures of the hotel at ($\overline{X}$=4.37).

4.2.2. Results of Hypotheses Testing

This section of the study presents the statistical analysis according to research hypothesis which were already set in the earlier chapters. The process that the researcher used as a hypothesis was imposed by use of a structural equation model for testing the relationship between the independent and dependent variables. This structural equation model (or SEM) could generate the multivariate technique incorporating observed (measured) and unobserved variables (latent constructs) that could be evaluated by model to fit to multiple tests.

The Structural Equation model (SEM) is an appropriate tool for the multivariate analysis technique that studies the casual relationship among constructs. In addition, this structural equation model also integrates the measurement and hypothesized casual paths into a simultaneous assessment. Hence, in this study, as the data was multivariate, the structural equation model was used in the form of a model.

The concept of 21st Century Learning Skills was created based on theory, concept papers, concerned research papers, academic journals and a focus group; the results of these learning skills toward the convention hotel staff's performance are shown in the figure below.
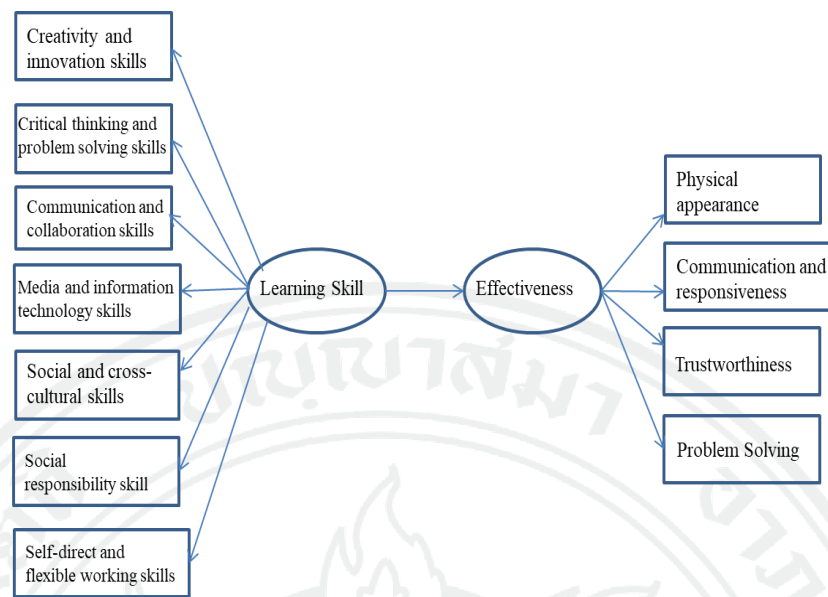
Figure 4.1. Hypothesis and Conceptual Framework of 21st Century Learning Skills

The above figure clearly displays seven factors of independent variables which consist of creativity and innovation skills, critical thinking and problem solving skills, communication and collaboration skills, media and information technology skills, social and Multi-culturalism skills, social responsibility skill, and self-directed and flexible working skills respectively. Other dependent variables that go along with the four components are the components of physical appearance, communication and responsiveness, trustworthiness and problem solving, accordingly. These can be set up as seven independent variables, and four dependent variables which were the components used in the structural conceptual model.

To examine the hypothesis, the researcher analyzed the data with a statistical package for Social Sciences (SPSS) and with AMOS (version 22). Hair et al., (2010) and Suksawang (2013) stated that this statistical software is an appropriate method to use for research questions proposed and structural equation modeling. They also recommends that there be a process for this structural equation modeling which could be summarized for this study as, the confirmatory factor analysis of each variable and

the structural model assessment along with the re-specified structural model consecutively.

As mentioned in the above paragraph, the confirmatory factor analysis should be examined in order to confirm the relationship between a set of variables. This also supports the theoretical concept under the area of study. The stage of confirmatory factor analysis (CFA) of each variable was established for this study, which is divided into two sets of variables; one is a the set of 21st Century Learning Skills and the other is the effectiveness of the convention hotel staff's performance. The results of the study for each confirmatory factor analyses needs to match with the overall model fit and the criteria for construct validity which is described in the table below.

Table 4.17 Goodness of Fit Statistics for Measurement Model

Index	Acceptable Level	Source
Chi-square/df	< 3.0	Kline (2005)
Goodness of Fit Index (GFI)	0 (no fit) to 1 (perfect fit)	Schumacker & Lomax (2016)
Adjusted Goodness of Fit Index (AGFI)	0 (no fit) to 1 (perfect fit)	Schumacker & Lomax (2016)
Comparative Fit Index (CFI)	> 0.92	Hair et al (2010)
Normed Fit Index (NFI)	> 0.90	Hair et al (2010)
Root Mean Square Error of Approximation (RMSEA)	< 0.05	Byrne (1998)

The measurement model of 21st Century Learning Skills is structured according to the seven factors acknowledged by the literature review and focus group of experts. The visual diagram of this confirmatory factor analysis (CFA) was carried out to following a multi-dimensionality construct of the 21st Century Learning Skills that consist of seven variables: creativity and innovation skills (skill 1), critical thinking and problem solving skills (skill 2), communication and collaboration skills (skill 3), media and information technology skills (skill 4), social and Multi-culturalism skills (skill 5), social responsibility skill (skill 6) and self-directed and

flexible working skills (skill 7). The results of testing this measurement model theory was an overall model fit based on the criteria as shown below.
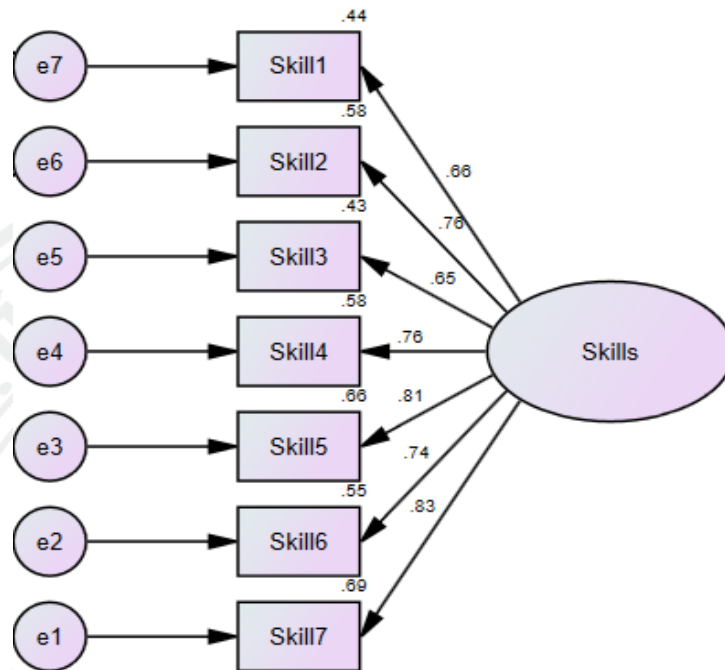

Figure 4.2. The Measurement Model of 21st Century Learning Skills

The above figure represents the model fit of the first confirmatory factor analysis of 21st Century Learning Skills with significance levels after the researcher readjusted the model according to the model fit criteria. Then, the goodness of fit measures show the good results of each criteria of the Chi-square/df at 1.533 which is an acceptable level. The other criteria are as follows: Goodness of Fit Index (GFI) at .992, Adjusted Goodness of Fit Index (AGFI) at .976, Comparative Fit Index (CFI) at .998, Normed Fit Index (NFI) at .993 and Root Mean Square Error of Approximation (RMSEA) at .033.

This means that the measurement model of these 21st Century Learning Skills are fit and can be used for a structural model evaluation. In addition, the below table summarizes the total five largest modification indices computed by AMOS for factor loading and covariance that are fixed to zero in the original model.

Table 4.18 Modification Indices for the seven factors of 21st Century Learning Skills

Path			MI
1.	e6<->e7	Creative-Critical	96.646
2.	e4<->e7	Media-Self-Direct	30.272
3.	e2<->e4	Critical-Media	23.161
4.	e2<->e6	Critical-Social Responsibility	8.622
5.	e3<->e4	Communication-Media	6.622

The above table clearly shows the modification indices of all 21st Century Learning Skills. The largest modification index was creativity and innovation skill (skill 1) and the critical thinking and problem solving skill (skill 2) with a significance modification index of 96.646. Followed by the modification index between media and information technology skills and self-directed and flexible working skills with an MI of 30.272, while having the least change was communication and collaboration skills and media and information technology skills with an index of 6.622.

The next measurement model shows the effectiveness of the convention hotel staff performance in Thailand. The visual diagram of this confirmatory factor analysis (CFA) was carried out following a multi-dimensionality construct of the four effectiveness components which consist of physical evidence (perform 1), communication and responsiveness (perform 2), trustworthiness (perform 3), and problem solving (perform 4) as shown below.
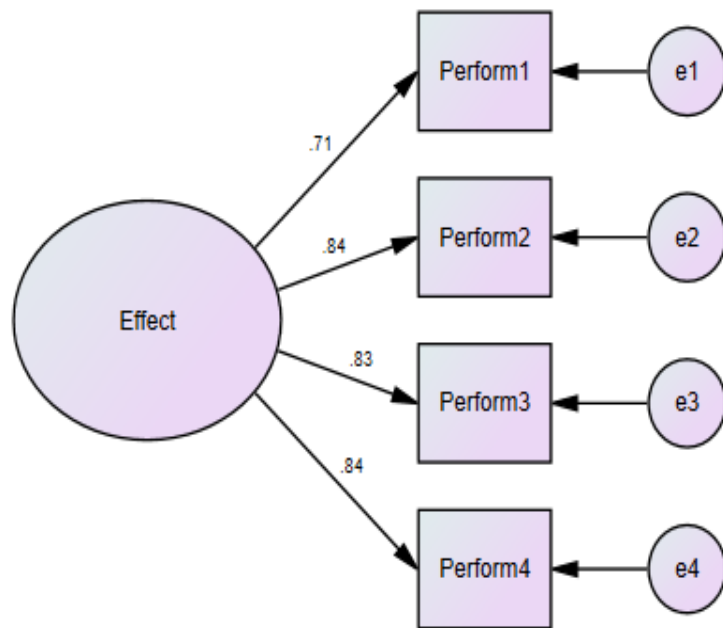
Figure 4.3. The Measurement Model of the effectiveness of
the convention hotel staff's performance

The above figure represents the model fit of the confirmatory factor analysis of the effectiveness of the convention hotel staff's performance in Thailand with significance levels after the researcher readjusted the model according to the model fit criteria. Then, the goodness of fit measures show the good results of each criteria of the Chi-square/df at 0.004 which is an acceptable level. The other criteria is as follows: Goodness of Fit Index (GFI) at 1.000, Adjusted Goodness of Fit Index (AGFI) at 1.000, Comparative Fit Index (CFI) at 1.000, Normed Fit Index (NFI) at 1.000 and Root Mean Square Error of Approximation (RMSEA) at .000. This means that the measurement model of the effectiveness of the convention hotel staff's performance components are fit and can be used for a structural model evaluation. In addition, there was only one modification index to this measurement model which was the modification of the

physical evidence component (perform 1) and the trustworthiness component (perform 3) with a significance loading index of 9.598.

After the measurement modelling of each variable of the study was fit to the model and criteria of goodness of fit Statistics, the next step was to make a structural model assessment. This structural model assessment was constructed using all sample data (N=500), included in the conceptual framework, since this structural equation model aimed to assess the hypothesized theoretical relationship between 21st Century Learning Skills and the effectiveness of the convention hotel staff's performance in Thailand. Those 21st Century Learning Skills were proposed as independent variables, and the effectiveness of the staff's performance components were dependent variables. The proposed structural equation model was tested using the AMOS 22 software package, and the results of its estimates are presented in the figure below.
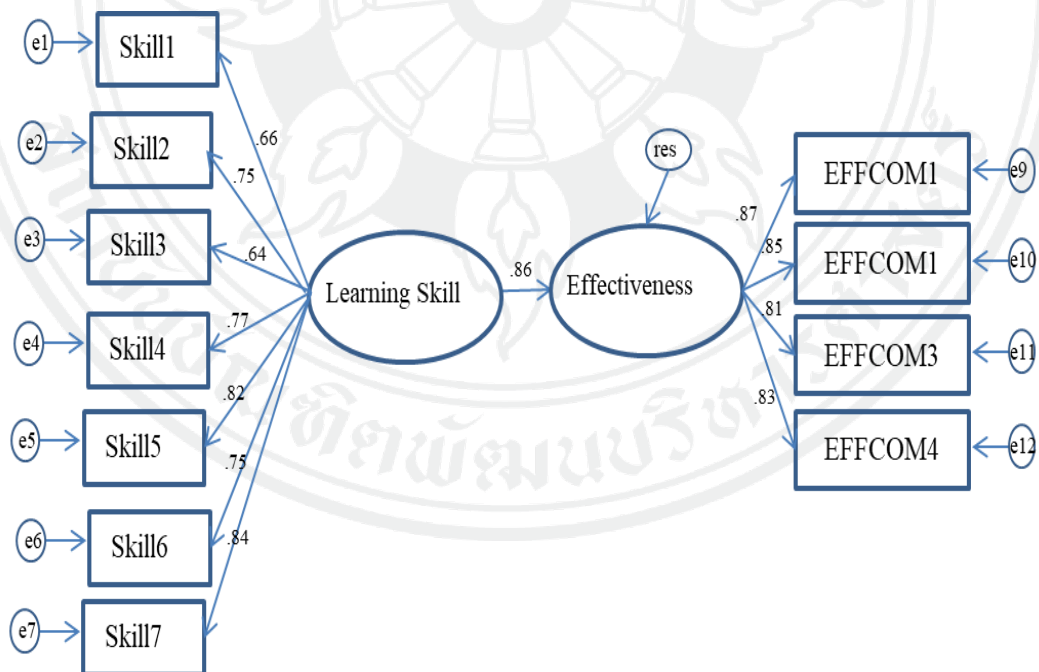

Figure 4.4. Results for Conceptual Framework of 21st Century Learning Skills

The above figure represents the conceptual structural model of the 21st Century Learning Skills on the effectiveness of the staff's performance included in the context of the convention hotel business in Thailand. After adjusting the structural model the outcome shows that the model fit the conceptual framework of the study as per the criteria of the goodness of fit statistics for re-specified structural models (Hair et al., 2010). From the results of the above figure it can be concluded that the hypothesis model provided an overall fit as per the standard criteria of the structural equation model as follows: CMIN/DF, GFI, AGFI, CFI, NFI and RMSEA as shown in the table below.

Table 4.19 The results of the model fit indices for the hypothesis model

Index	Acceptable Level	Conceptual Structural Model	Modified Structural Model
Chi-square/df	< 3.0	7.745	1.286
Goodness of Fit Index (GFI)	0 (no fit) to 1 (perfect fit)	0.889	0.985
Adjusted Goodness of Fit Index (AGFI)	0 (no fit) to 1 (perfect fit)	0.829	0.970
Comparative Fit Index (CFI)	> 0.92	0.922	0.997
Normed Fit Index (NFI)	> 0.90	0.911	0.989
Root Mean Square Error of Approximation (RMSEA)	< 0.05	0.116	0.024

The results of the model fit table above show the goodness of fit statistic criteria and indicates that the modification of the structural model is per the program recommendations and follows the significance indices of Chi-square/df at 1.286 which is an acceptable level. The other criteria are as follows: Goodness of Fit Index (GFI) at .985, Adjusted Goodness of Fit Index (AGFI) at .970, Comparative Fit Index (CFI) at .997, Normed Fit Index (NFI) at .989 and Root Mean Square Error of Approximation (RMSEA) at .024. This indicates that the model of 21st Century Learning Skills was in conjunction with the effectiveness of the staff's performance in the context of the

convention hotel business in Thailand. The seven learning skills of creativity and innovation skills, critical thinking and problem solving skills, communication and collaboration skills, media and information technology skills, social and Multi-culturalism skills, social responsibility skill and self-direct and flexible working skills had an impact on the outcome of the four components of effectiveness for the convention hotel staff's performance.

Moreover, from the results shown in figure 10 and table 23 of the summary of this structural modeling assessment, it can be concluded from the hypothesis of this study that 21st Century Learning Skills have a significant level of influences on the effectiveness of the convention hotel staff's performance in Thailand. It should also be pointed out that the effect of 21st Century Learning Skills on the effectiveness of the convention hotel staff's performance was 0.86 which is strong when compared with the index of power as shown in the table below.

Table 4.20 The results of the influence of 21st Century Learning Skill on the effectiveness of performance

Index	Loading Factor of each skill (s)
1) Self-directed and Flexibility Skills	0.84
2) Social and Multiculturalism Skills	0.82
3) Media and Information Technology Skills	0.77
4) Critical Thinking and Problem-solving Skills	0.75
5) Social Responsibility Skill	0.75
6) Creativity and innovation skills	0.66
7) Communication and Collaboration Skills	0.64

The above table focuses on the effectiveness of performance on each variable of 21st Century Learning Skills. The factor loading score of 21st Century Learning Skills are ranked based on the highest score as follows: the self-directed and flexible working skills (loading = 0.84), social and Multi-culturalism skills (loading = 0.82), media and information technology skills (loading = 0.77), social responsibility skill and

critical thinking and problem solving skills (loading = 0.75), creativity and innovation skills (loading = 0.66), and communication and collaboration skills (loading = 0.64).

From the results of the effectiveness of the convention hotel staff's performance in Thailand, the significant predictors, based on highest factor loading scores, were the components of physical appearance with a loading score of .87, communication and responsiveness (loading = .85), problem solving (loading = .83) and lastly trustworthiness with a loading score of .81.

4.3 The development guideline of 21st Century Learning Skills to enhance the convention hotels staff's performance and effectiveness in Thailand

Research objective 3 was to develop a guideline for convention hotel staff included in the context of 21st Century Learning Skills which would enhance the proficiency of the convention hotel staff in Thailand. This is in response to research objective 3 which is to find the best practice guideline for the convention hotel staff's performance and effectiveness in Thailand. The researcher designed the focus group discussion as a qualitative research tool in order to gain the appropriate documents. There were two parts of focus group discussion 1) to help all key informants understand the context of 21st Century Learning Skills and the effectiveness of the convention hotel staff's performance and 2) to gather and generate a guideline of development for 21st Century Learning Skills to enhance the convention hotel staff's performance.

The first step of gathering ideas and information regarding 21st Century Learning Skills and the effectiveness of the convention hotel staff's performance in Thailand was to raise questions. The first question was "What is the definition of each type of 21st Century Learning Skill? There were various points of view and opinions from many experts. To put them in an order to be more effective, each type of 21st Century Learning Skill was grouped by category and put into one of the three of the

following sections: a group of learning and innovation skills, a group of information, media and technology skills and lastly a group of life and career skills. Then, the second question was "Which types of 21st Century Learning Skills could enhance the performance of the convention hotel staff. Then all the results from both questions created a wide range of opinions and open discussion among the experts which included the following:

Expert No. 1 stated that "the most important learning skills of the convention hotel staff consisted of creativity and innovation skills, critical thinking skills, collaboration and communication skills, media and information technology skills. Cross multi-culturalism skill and some social responsibility skills were needed due to the special characteristics of their works which includes meeting and dealing with various people. In addition, those convention hotel staffs may require some special characteristics of self-directed and flexible working skills in order to make their work successful. There are also some special integrated learning skills needed to make application of all the skills in different situations".

The above idea of Expert No. 1 was supported by the opinion of expert No. 2, which is that "creativity and innovation skills, critical thinking skills, collaboration and communication skills, media information and communication technology skills are the major learning skills in this 21st century. Then, in terms of their self-directed skills, social responsibility and cross multi-culturalism skills are additional skills which could help maximize the profitability of their work properly". Expert No. 2, also mentioned that some unnecessary skills in this era consist of self-directed and flexible working skills, whereas, some skills could be blended together, such as media and information literacy skills which must also include some knowledge of information communication technology.

Expert No. 3 expressed that "all twelve learning skills are essential skills for people in the service and hospitality industry, especially, those in the convention hotel

business where there is a world ~~is~~ dynamic and competitive business environment, especially for those staff of the younger generation.

Expert No. 4 pointed out that "21st Century Learning Skills are needed for all hotel staff, in particular, convention hotel staff who need more creative innovation, critical thinking, problem solving and information technology skills". The rest of the learning skills are the basic skills that hotel staff must have in order to serve their customers well. He also indicated that self-directed and flexible working skills could make their work much easier and smoother when dealing with some challenging customers. However, he stated that some skills may not be required for the convention hotel staff from their customers' perspectives such as integrated learning skills and productivity and accountability skills.

Expert No. 5 and Expert No. 6 agreed with the opinions provided by Expert 3 that all 21st Century Learning Skills are essential skills for the convention hotel staff. According to their experience gained from meeting arrangements at the convention hotel, they feel that convention hotel staff need to have more creative, innovation and problem solving skills which could promote satisfaction to customers, especially when they exceed the expectations of the customer. For example, Expert No. 6 shared her experience during meetings that some staff could come up with a fast track idea which could make their work much easier and save money for the customer. This kind of thing can generate satisfaction for the convention hotel staff's work and ultimately to the hotel business itself. However, Expert No. 3 and 4 felt it might be different in cases with government customers who take advantage of the services of the convention hotel staff but don't see any significant values of learning skills such as integrated learning skills and productivity and accountability skills.

Expert No. 9 expressed that convention hotel staff normally require some special characteristics and learning skills to improve their performance and ultimately, the success of the hotel business. He grouped the ideas of 21st Century Learning Skills of the staff into two important groups of skills, the first group is about creativity, innovation, critical thinking and problem solving skills which could increase

satisfaction in the eye of the customer. The second group of skills concerns social surroundings such as social and multi-culturalism skills, social responsibility skill, self-directed skill and flexible working skills that could reduce conflicts and create added values to their performance. He also mentioned that computer literacy and media and information technology skills are not the most necessary like those mentioned above as most convention hotels will likely provide tools and software for the hotel staff who already have these particular skills.

Experts No. 7 and 8 agreed with the above opinions by Expert No. 9 in terms of the two groups of skills which could generate different outcomes. Both Expert No. 7 and 8 felt that some information, media and technology skills may not be required as most of this type of equipment is provided by the hotel and each hotel has different software and technology to train people how to use. However, Expert No. 8 added that self-directed and flexible working skills could generate benefits to their work and performance in the sense of incentives, bonuses and so on.

When all the discussions and opinions of each of the experts concluded they were collected and put together to determine what could be included in the 21st Century Learning Skills to improve the effectiveness of the convention hotel staff's performance. It was noticed that several of the 21st Century Learning Skills which are necessary for students are not needed for in the convention hotel staff's performance.

From the opinions of those key informants regarding twelve of the learning skills, many of them mentioned that the specific skills that convention hotel staff are required to have, especially in terms of being service providers, could be reduced to the following seven essential leaning skills:

1) Creativity and innovation skills

   The ability of convention hotel staff to conceive original ideas, be inventive and have ingenuity that would in able them to change operational processes in order to make their working assignments more successful and effective.

2) Critical thinking and problem solving skills

The ability of the staff to develop the process of thinking and being able to solve problems; to be able to assess situations with appropriate decision making skill within the scope of their authorization.

3) Communication and collaboration skills

The ability to communicate well by both verbal and non-verbal language, which includes the special characteristic of interpersonal skill, and being able to work as a team according to the nature of their service business.

4) Media and information technology skills

The ability to assess, select and apply media and information technology to their work properly.

5) Social and Multi-culturalism skills

The ability to learn, acknowledge and serve people equally. Also having emotional intelligence in conjunction with cultural diversity.

6) Social responsibility skill

The ability to have an awareness of hotel guests, colleagues, and nearby communities while displaying professional ethics; having an understanding of the global consciousness as well.

7) Self-directed and flexible working skills

The ability of people in the service business to be able to work independently, be adaptable, have leadership skills, achieve their goals and work under pressure with success.

The seven skills listed above were listed as the significant 21st Century Learning Skills which are necessary for the convention hotel staff's performance. It is worthy to note that all seven of these learning skills were classified by all concerned parties in the convention hotel business itself.

Then, the next question was which facets of the convention hotel staff's performance could increase the effectiveness of the staff and bring benefits to the

convention hotel business itself. This question elicited a wide range of opinions and discussion among the experts which is stated as follows:

Expert No. 1 stated that the effectiveness of the convention hotel staff's performance could be determined by their work and outcomes. He agreed that all the effectiveness components of the convention hotel staff could generate the most fits to the special characteristics of the convention hotel business in terms of the components of physical appearance, responsiveness and communication, trustworthiness, and ability to solve problems.

Expert No. 2 agreed that all four of the effectiveness components are required for the convention hotel staff's performance which could be represented by their ability and use of the learning skills. She also mentioned that the convention hotel staff already have some of the learning skills as mentioned above, hence, the effectiveness component would be different. The most important components were physical appearance, personality, the ability to respond to their work and the ability to solve the problems, as working in the convention hotel business is a challenging task. She stated that the convention hotel staff are representatives of the hotel so good communication and trustworthiness are required.

Expert No. 3 stated that all four effectiveness components are the major requirements needed to evaluate the convention hotel staff's performance properly. Furthermore, she pointed out that the components of responsiveness and communication should be performed in the same way and could create a good outcome for the staff itself.

Expert No. 9 expressed that "the convention hotel business staff need to have both the communication and responsiveness components. By the convention hotel staff's performance they should be able to care for customers with their ability to deliver messages in both verbal and non-verbal language with promptness, readiness, and a willingness to work properly". He also stated that "in the sense of hotel

management requirements, these two components could generate benefits to not only the staff's performance but also to hotel business"

Expert No. 7 and Expert No. 8 agreed with the above opinions from Expert No. 9 that in terms of the hotel business, these two effectiveness components are required to provide and serve all customers at the same time. This means that the communication and responsiveness components are similar and need to be provided together as a part of the delivery service to customers. Moreover, Expert No. 7 pointed out that the most significant effectiveness component of the convention hotel staff's performance is the ability to solve problems and display trustworthiness which should be provided to all customers equally in order to create trust and satisfaction for their performance.

Expert No. 5 stated that "what the customers in the convention hotel business would like to get form the convention hotel staff's performance is all of the above-mentioned components". To determine the classification of each effectiveness component she used the following from the most to the least requirement for each component: the first component was physical appearance as this is the first opportunity for customers to judge the staff's performance and ability. The second component was communication and responsiveness which is the ability to delivery messages correctly with proper body language and a readiness to serve properly. The next component was the ability to solve problems and display trustworthiness which is important and a key performance feature of the convention hotel staff. These two components can create professionalism and loyalty which leads to word of mouth advertising and ultimately success in business.

Expert No. 6 agreed with the above ideas of Expert No. 5 that for customers, especially in the government section, some effectiveness components are required in order to promote the success of the meeting or event at the hotel. She stated that "government customers may need the specific components of problem solving, responsiveness and trustworthiness of the convention hotel staff rather than those of physical appearance and communication". The opinions and suggestions of the experts

stated above are regarding the effectiveness of the convention hotel staff's performance included in the context of Thailand businesses. It could be seen that most of the key informants agreed on the outcomes produced in reference to the convention hotel staff's performance which could be improved by the implementing of 21st Century Learning Skills. These can also be considered as one component, as the convention hotel staff's performance would show the same outcome by their performance. Therefore, the outcome of the convention hotel staff's performance can be summarized as noted below:

1). Physical appearance

The outcome of the convention hotel staff's performance that deals with presenting a better personality in working by means of good gestures with a standardized uniform and excellent delivery service.

2). Communication and responsiveness

The facet of performance shown by readiness, accessibility, quick service, and use of a standardized service procedure. This could create more comfort for guests and better service.

3). Trustworthiness

The outcome produced by improved delivery service and fulfilling guests' expectations with safety and consistency. This would make guest have more trust and confidence in the services provided.

4). Problem solving

The professionalism of the staff displaying problem solving skills in terms of the prioritizing of tasks, handling, sorting out, and assisting guests in unforeseen situations.

The next step in establishing a guideline development of 21st Century Learning Skills is to enhance the effectiveness of the convention hotel staff's performance in Thailand. Seven significant 21st Century Learning Skills were chosen

to match with the four outcomes for the effectiveness of the convention hotel staff's performance. This was accomplished by a focus group discussion among those experts who have experience and are gurus of the convention hotel business. The 21st Century Learning Skills was drawn-up by those experts in order to make an appropriate guideline or method of learning skills development which could be incorporated within the four effectiveness components. The group of key informants present in this focus group discussion was the same group of experts who collaborated on the first research objective in order to get a clearer understanding of the concept and purpose of the study. There were nine key informants who are experts in their various fields of convention hotel management, scholars in educational institutes, and who have themselves been convention hotel customers from the government and private sectors accordingly.

This focus group was formed when all the data of research objectives 1 and 2 were drawn-up and confirmed. The discussion started with the defining of each variable in terms of 21st Century Learning Skills' in both effectiveness and performance. The results of the 2nd research objectives were described to all key informants with supporting information that came from the convention hotel customers' opinions. These results helped to direct the ideas of the key informants in order to develop a guideline for the convention hotels' staff development.

In creating a guideline for 21st Century Learning Skills development for the convention hotel staff's performance and effectiveness in Thailand, many of the experts had a great opinions and useful suggestions of for this study as shown by the following comments.

Expert No. 1 stated that "the majority of 21st Century Learning Skills are necessary to improve he convention hotel staff's performance and all these learning skills should be judged according to the effectiveness of the components mentioned earlier". Moreover, both on-the-job training and off-the-job training are the most powerful methods to improve their performance.

The above opinions were supported by Experts No. 7 and 8 as they both work in the convention hotel business. A guideline for learning skills development by both on-the-job and off-the-job training could also generate improved delivery service for the company which is another important factor for service industries likes convention hotel businesses. Some would call these on-the-job and off-the-job training a gimmick established by businesses which could include delivery from the senior staff to the operational staff. Expert No. 9 indicated that all opinions provided by Experts No. 7 and 8 are true and that they happen in real situations of convention hotel businesses. Both on-the-job and off-the-job training are an important requirement for each convention hotel in order to maintain their service quality and reputation through staff performance, such as, physical appearance, communication and responsiveness, and the trustworthiness of the customers.

Moreover, Experts No. 3 and 4 agreed with the above guidelines and methods of training. Expert No. 4 also stated that "both on-the-job and off-the-job training are workable, however, another important role is the process/person to evaluate all these things whether they are effective or not". Then, the idea of evaluation was raised and Experts No. 7 and 8 said that their hotels' procedure for training was evaluated by the Training Department, Colleagues, Managers and even customers who regularly use the services at the convention hotel.

Expert No. 2 agreed that the guidelines of a training program would need an evaluation process. She suggested that there should be persons involved in each training development, and those persons would evaluate the convention hotel staff's performance. For example, on-the-job training of a coaching and buddy system might use colleagues and managers to be the one to evaluate staff's performance.

Experts No. 5 and 6 stated that "with government customers, both the training method and the evaluation criteria are significant, but they pointed out another issue of evaluation concerns that customers (both in the government and private sectors) are the key persons who should evaluate and judge the convention hotel staff's

performance. Therefore, not only a guideline of training processes is required, but also, having an evaluator is another key factor in making the business succeed or to fail. This was agreed with by Experts No. 3 and 4 as they both are private customers of businesses too.

Below is a summary of the above-mentioned comments of the experts for an appropriate development guideline.

Table 4.21 Guideline development of 21st Century Learning Skills to improve the effectiveness of the convention hotel staff's performance

21st Century Learning Skills	Factor Loading	Development Guideline
Self-directed and flexible working skills	0.84	On the job training process (Job Rotation)
		Off the job training process (Case study)
Social and cross-cultural skills	0.82	On the job training process (Coaching and Buddy system)
		Off the job training process (Role plays)
Media and information technology skills	0.77	On the job training process (Coaching)
		Off the job training process (Computer assisted instruction)
Critical thinking and problem solving skills	0.75	Off the job training process (Case study)
Social responsibility skill	0.75	Job Assignment/ Project base (Event & Meeting & Function)
Creativity and innovation skills	0.66	70% using the process of mentoring and Buddy system
		30% using Discussion among the team, Lecture by classroom training process
Communication and collaboration skills	0.64	On the job training process (Job Rotation)

The above table clearly illustrates the method of development which could be used as a guideline for the convention hotel staff to practice and enhance themselves. The results are presented with a specific method of development which needs to be different depending on which learning skills the convention hotel would like to propose and develop. Moreover, the right side of the above table indicates the person in charge of this section which may be different from in the past when all tasks were only done by the training department. The results clearly show that different learning skills outcomes require a different evaluation section, for instance, it could be colleagues who judge the convention hotel staff's performance. In some cases convention hotel customers could evaluate the staff's performance for particular areas of service which differs from those in the past. Previously, convention hotel customers answered questionnaires regarding the overall service and their satisfaction but this was too generalized and this kind of process may not be workable in the 21st century. This means that the feedback from convention hotel customers could have a direct impact on a particular service of the convention hotel staff's performance and this could cause their performance to be more effective and generate benefits to not only, themselves but ultimately to all convention hotel businesses.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

The purpose of this study was to develop a guideline of 21ˢᵗ Century Learning Skills in order to enhance the effectiveness of the convention hotel staff's performance in Thailand; this study presents a theoretical, conceptual framework for research consisting of learning skills necessary in the 21ˢᵗ century era and the effectiveness of the component of staff's performance. Therefore, this chapter describes all data found and the results of the study in brief which consist of the conclusion of the study, discussion and recommendations for further research.

5.1 Conclusion

This was a study on the development of a guideline for the convention hotel staff's performance and effectiveness regarding 21ˢᵗ Century Learning Skills, necessary in Thailand. This study had three main objectives: 1) to development each type of 21ˢᵗ Century Learning Skill for convention hotel staff in Thailand, 2) to develop a Structural Equation Model of 21ˢᵗ Century Learning Skills necessary for the convention hotels staff's performance in Thailand and 3) to develop a guideline of 21ˢᵗ Century Learning Skills to improve the convention hotels staff's performance and effectiveness in Thailand.

The study provided 500 questionnaires surveys to respondents who are involved with the service of convention hotel staff. There were 192 males and 308 females that took part in the survey. The majority of respondents were from Generation X, which are persons who were born between 1965-1979, with 294 or 58.8 percent. In terms of the educational level, most respondents had a Bachelor's Degree or equivalent (68.4%). Regarding the monthly income of the respondents, there were

21.2% in the range of 15,001-20,000 THB and 20.4% in the range of 20,001-25,000 THB respectively.

Additionally, the researcher also arranged a focus group discussion in order to obtain the qualitative data from key informants. There were those from the convention hotels business and other related businesses as well. There were three groups of key informants as follows: 1) Two scholars from academic institutes who had experience in the hotel business, human resource management and research methodology with Doctoral Degrees as their educational background 2) Four customers from both the government sector and private sector who had at least five years' experience in the usage of convention hotels 3) Three convention hotel staff members who work in convention hotel service.

The following is a summary of the results of the study:

5.1.1. Development of each type of 21st Century Learning Skill for convention hotel staff in Thailand

The research objective was to develop 21st Century Learning Skills for the convention hotel staff's performance by asking the question, "What type of 21st Century Learning Skills could improve the performance of convention hotel staff in Thailand?" The following seven learning skills were chosen from the results of the study as appropriate 21st Century Learning Skills that could improve the convention hotel staff's performance:

(1) Creativity and innovation skills

The ability of convention hotel staff to conceive original ideas, be inventive, and have ingenuity that would in able them to change operational processes in order to make their working assignments more successful and effective.

(2) Critical thinking and problem solving skills

The ability of the staff to develop the process of thinking and being able to solve problems; to be able to assess situations with appropriate decision making skill within the scope of their authorization.

(3) Communication and collaboration skills

The ability to communicate well by both verbal and non-verbal language, which includes the special characteristic of interpersonal skill, and being able to work as a team according to the nature of their service business.

(4) Media and information technology skills

The ability to assess, select and apply media and information technology to their work properly.

(5) Social and Multi-culturalism skills

The ability to learn, acknowledge and serve people equally. Also having emotional intelligence in conjunction with cultural diversity.

(6) Social responsibility skill

The ability to have an awareness of hotel guests, colleagues, and nearby communities while displaying professional ethics; having an understanding of the global consciousness as well.

(7) Self-directed and flexible working skills

The ability of people in the service business to be able to work independently, be adaptable, have leadership skills, achieve their goals and work under pressure with success.

The next question was "Which types of 21st Century Learning Skills could enhance the performance of the convention hotel staff in Thailand. The researcher instituted the same method as in the above process, the results of the study were concluded as:

(1). Physical appearance

The outcome of the convention hotel staff's performance that deals with presenting a better personality in working by means of good gestures with a standardized uniform and excellent delivery service.

(2). Communication and responsiveness

The facet of performance shown by readiness, accessibility, quick service, and use of a standardized service procedure. This could create more comfort for guests and better service.

(3). Trustworthiness

The outcome produced by improved delivery service and fulfilling guests' expectations with safety and consistency. This would make guests have more trust and confidence in the services provided.

(4). Problem solving

The professionalism of the staff displaying problem solving skills in terms of the prioritizing of tasks, handling, sorting out, and assisting guests in unforeseen situations.

As shown by the above results, the variables of both the effectiveness of 21st Century Learning Skills and the convention hotel staff's performance have very high significance levels which could be furthered explored for the next question of the study. This could also help in discovering additional aspects of how 21st Century Learning Skills can improve the effectiveness of the convention hotel staff's performance in Thailand.

5.1.2. Development of a Structural Equation Model of 21st Century Learning Skills to improve the convention hotels staff's performance in Thailand

The objective was to study the relationship of 21st Century Learning Skills on the convention hotels staff's performance in Thailand. In order to get the results, the research used a questionnaire surveys distributed to those respondents who had service encounters with convention hotel staff. To disperse the 500 questionnaires appropriately, they were distributed to the five major MICE cities in Thailand, which are, Bangkok, Chiang Mai, Khon Kaen, Pattaya and Phuket provinces respectively. After collecting the data, a structural equation model was established in order to find out the influence between the dependent and independent variables. The results showed that the conceptual structural model of the study fit to the conceptual framework.

After adjusting the structural model, the outcome presented a model that fit to the conceptual framework of the study as per the criteria of the goodness of fit statistics for a re-specified structural model per the following: 1) the CMIN/df of the study had a result of 1.286 which was in line with the criteria level of less than 3, 2) the GFI value of 0.985 was a good fit of greater than 0.90 as per the criteria level, 3) the AGFI value of 0.970 was in line with the criteria of greater than 0.90, 4) the CFI value of 0.997 was a good fit in line with the criteria of greater than 0.92, 5) the NFI value of 0.989 was in line with the standard value of more than 0.90 and 6) the RMSEA value of 0.024 was a good fit in line with the criteria of less than 0.05 respectively.

5.1.3. Development of a guideline for 21ˢᵗ Century Learning Skills to enhance the convention hotels staff's performance and effectiveness in Thailand.

The last objective of the study was to develop a guideline of 21ˢᵗ Century Learning Skills to enhance the convention hotel staff's performance and effectiveness in Thailand.

In order to get an accurate result for this section, the researcher gathered all data received from the structural equation model to discover and confirm the development guideline from the experts. Then, a focus group discussion was arranged among the experts to construct an appropriate guideline.

After the discussion among key informants from convention hotels and related businesses, a development guideline with a training program for convention hotels was proposed, including the following suggestions: 1) Development of creativity and innovation skills, methods of mentoring, a buddy system and discussion among team members were needed along with evaluation by colleagues and managers, 2) Development of critical thinking and problem solving skills, methods for off-the-job training (case study) with evaluations by convention hotel customers, 3) Development of the communication and collaboration skills, methods for on-the-job training (job rotation) with evaluations by convention hotel customers, 4) Development of media and information technology skills, methods for both on-the-job (coaching) and off-the-job (computer assisted instruction) training with evaluations by colleagues and managers, 5) Development of social and Multi-culturalism skills, methods for both on-the-job (coaching and buddy system) and off-the-job (role plays) training with evaluations by colleagues and training managers, 6) Development of social responsibility skill, methods for job assignments with evaluations by colleagues and hotel customers, and 7) Development of self-directed and flexible working skills,

methods of both on-the-job (job rotation) and off-the-job (case study) training with evaluations by colleagues and managers.

Moreover, the results of this study could also generate a lot of positive impacts from a wide range of concerned people and organizations which are summarized by the following two perspectives.

1). The perspective of convention hotel businesses

The results of this study could generate business development not only for the convention hotel business but also to the following related parties:

(1) Convention Hotel staff could better understand the significance of their performance in relation to the entire business. This would bring them to a development level that could help them to enhance not only themselves but also the convention hotel business and involved industries as a whole.

(2) Human resource departments of convention hotel businesses could understand and adapt this development guideline in order to improve the convention hotel staff's performance which could reflect on their business performance as well. Human resource departments could also create new facets of their staff development from the 21st Century Learning Skill that they develop. This would be different from in the past when training was done primarily for one skill. The training manager and related people should be aware of what outcomes the various learning skills could generate and they should provide these to the convention hotel staff individually.

(3) The entrepreneurs of the convention hotel business and business owners should be aware of the outcomes of their staff's performance that are related to their business performance as well. This would help the convention hotel business to recognize the value of the convention hotel staff in order to reward them for their efforts. The more convention hotel owners reward their staff, the more their businesses will benefit and thus gain a better reputation in return.

(4) The government and other related organizations should try to understand how the convention hotel staff's performance differs from that of other hotel staff's performance. Therefore, the government and other private organizations might need to create a development guideline in order to establish necessary qualifications such as the Professional Qualification Certificate for some of the particular jobs of convention hotel staff.

2). The perspective educational institutes

Another positive aspect of this study is the benefits to educational institutes which provide training for the hotel staff and hospitality programs. They could use the outcomes of the development guideline to integrate with their educational programs and curriculums in order to create an effective course for young students to in the hospitality field. This is further elaborated below.

(1) The process of subject arrangement where scholars and educational institutes should start with is an integration of the 21st Century Learning Skill for some particular subjects such as convention business design, marketing in convention hotel business and so on. Moreover, various essential learning skills could be adjusted and combined with other subjects, for instance, leadership, social responsibility and sustainability courses.

(2) The curriculum development could be established to accommodate convention hotel staff development. At the present, most curriculums rely on hotel business and tourism business, however, as the results of the study have shown the performance of convention hotel staff differs from other hospitality businesses. Therefore, those scholars or institutes which are ready to establish new courses or curriculums regarding the convention hotel business and staff performance would help generate new platforms of educational curriculums in Thailand.

(3) The output of students from this development program could produce suitable graduate students who could serve well in the hospitality enterprises and

more efficiently. These professional graduate students could be a benefit to the convention hotel business and the hospitality industry.

5.2 Discussion

The results of this study created a guideline for the development of 21st Century Learning Skills that can improve the convention hotel staff's performance in Thailand. Therefore, this section of discussion provides the interpretation of the findings along with a discussion on some of the particular points of the study and research objectives.

5.2.1. Discussion on the topic of 21st Century Learning Skills that enhance the convention hotel staff's performance in Thailand

The findings from the current study confirmed the significance of 21st Century Learning Skills that can support and enhance the performance of the staff within the convention hotel setting. These ideas are supported by many studies in academic papers on the significance of 21st Century Learning Skills for human beings in this era (NCREL, 2003; Partnership for 21st century skills, 2008; Mitchell, 2010; Somkait, 2013). Several studies confirm the reasons why the development of 21st Century Learning Skills enhance the development of people's performance, especially in terms of those people working in a business environment that is subject to dynamic change at any time, like the convention hotel business. They mentioned that people need particular leaning skills in order to perform their work well, such as creativity and innovation skills, communication and collaboration skills, self-directed and flexible working skills, and critical thinking and problem solving skills (Kaufman, 2013; Somkait, 2013; Suthat, 2013; Quieng et al., 2015). However, the results of the overall opinions of respondents to the study on social responsivity skill was quite low with a mean value of 4.30. This may be because the majority of respondents who replied to the questionnaire surveys were based at convention hotels in Thailand which may imply that the skill of social responsibility may be less noticeable in Thailand.

Moreover, most respondents were customers who used services provided by the convention hotel staff, so they may pay more attention to the success of the business and profitability concerns rather than social responsibility concerns.

Lastly, the research findings showed the importance level of similar learning skills which were able to be regrouped and reorganized into seven essential 21st Century Learning Skills for the convention hotel staff in order to improve their performance in business. When looking at the study in detail there were some interesting aspects of these learning skills which could be categorized into three parts, as mentioned in the earlier chapter, Partnership for 21st Century Skills (2008) they are: 1). A group of learning and innovation skills which consist of the sub-learning skills of creativity and innovation skills, critical thinking and problem solving skills and lastly, communication and collaboration skills. This is confirmed by many studies of North Central Regional Educational Laboratory,v2003; Dede, 2005; American Association of Colleges and Universities, 2007; International Society for Technology in Education, 2007. 2). A group of media and information, communication technology skills which consist of the sub-learning skills of media and information technology skills. These learning skills were grouped together and discussed among the key informants during a focus group discussion and many of the experts agreed that some media, information and information communication technology skills should be rearranged it into one skill, which would be more suitable for the convention hotel staff's performance. 3). A group of life and career skills which consist of the sub-learning skills of social and Multi-culturalism skills, social responsibility skill, and self-directed and flexible working skills. This is supported by the many studies of Mitchell et al., 2010; Sukor, 2010; Voogt & Roblin, 2012; Ngang et al., 2015; Sidhu and Fook, 2014; Ongardwanich et al., 2015.

5.2.2. **Discussion on the topic of the effectiveness of the convention hotel**

staff's performance in Thailand

Regarding the effectiveness of the components of the convention hotel staff's performance, the findings show that there were four significant components of effectiveness. They were 1). the physical appearance component, 2) communication and responsiveness components, 3) trustworthiness component and 4) problem solving component respectively. According to results from both the focus group discussion and the statistics test all four effectiveness components had a significant level. This means these components can represent and evaluate the effectiveness of the convention hotel staff's performance, which agrees with many studies such as Wu & Ko, 2013; Jasinskas et al., 2016. These studies confirm that the four essential components clearly represent the effectiveness of the work done by people. Nevertheless, during the brainstorming session among the key informants in the focus group discussion, there was an issue raised by the experts regarding the two components of communication and responsiveness. Some of the experts claimed that both components were the same in terms of the services provided by the convention hotel staff; this means that communication and responsiveness are joined together during their performance and cannot be separated or divided it into two separate components. This is supported by Gil et al., 2006; Hon, 2013; Horng & Lin, 2013; Wu & Ko, 2013; Ren et al., 2016 respectively. However, there are studies which support only the component of responsiveness rather than the communication component, such as Mohsin & Lengler, 2015 and Subramanian et al., 2016, both of these studies did not focus any attention on communication, they mentioned only responsiveness which could represents the good service of a hotel business. Therefore, in-depth studies into the details of both studies reveal that their papers were about the budget of hotel businesses, this implies that the communication component might not be required for the budgets in hotel businesses, which is different from this study of convention hotel businesses where full service needs to be arranged.

5.2.3. Discussion on the topic of the development of 21st Century Learning Skills which could enhance the effectiveness of the convention hotel staff's performance in Thailand.

The approach to develop essential 21st Century Learning Skills in order to enhance the performance of convention hotel staff is the method for a development guideline. Therefore, to provide this development guideline, a focus group discussion was arranged among experts who had experience, knowledge and skills of this century. The results of the development of the seven 21st Century Learning Skills to enhance the effectiveness the convention hotel staff's performance in Thailand was generated in both terms of on-the-job training and off-the-job training (Mitchell et al., 2010; Caruana & Mcpherson, 2015 and Quieng et al, 2015). However, this training needed to be different from previous on-the-job and off-the-job training that followed the same pattern. In this 21st century era business patterns have changed because the surrounding environment has become more dynamic and complicated, hence, the type of the training should be different as shown in the table below.

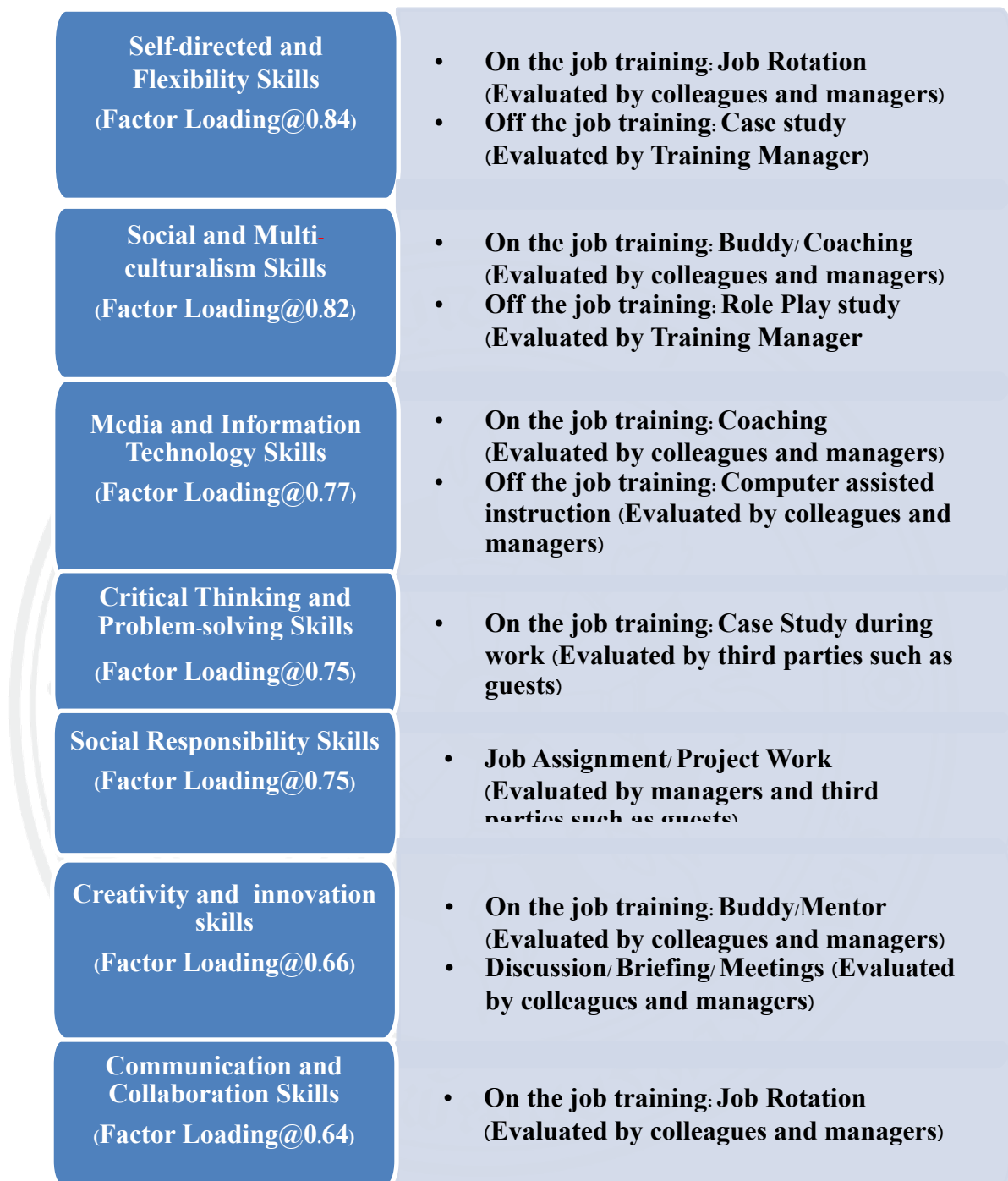|	
Self-directed and Flexibility Skills (Factor Loading@0.84)	• **On the job training: Job Rotation** (Evaluated by colleagues and managers) • **Off the job training: Case study** (Evaluated by Training Manager)
Social and Multi-culturalism Skills (Factor Loading@0.82)	• **On the job training: Buddy/ Coaching** (Evaluated by colleagues and managers) • **Off the job training: Role Play study** (Evaluated by Training Manager
Media and Information Technology Skills (Factor Loading@0.77)	• **On the job training: Coaching** (Evaluated by colleagues and managers) • **Off the job training: Computer assisted instruction** (Evaluated by colleagues and managers)
Critical Thinking and Problem-solving Skills (Factor Loading@0.75)	• **On the job training: Case Study during work** (Evaluated by third parties such as guests)
Social Responsibility Skills (Factor Loading@0.75)	• **Job Assignment/ Project Work** (Evaluated by managers and third parties such as guests)
Creativity and innovation skills (Factor Loading@0.66)	• **On the job training: Buddy/Mentor** (Evaluated by colleagues and managers) • **Discussion/ Briefing/ Meetings** (Evaluated by colleagues and managers)
Communication and Collaboration Skills (Factor Loading@0.64)	• **On the job training: Job Rotation** (Evaluated by colleagues and managers)

Figure 5.1. the guideline Development of 21st Century Learning Skills Listed in order of their Significance

The above table summarizes the process of convention hotel staff development as the two functions of on-the-job training and off-the-job training according to the 21st Century Learning Skills defined in the following paragraphs.

The first group of on-the-job training appropriately has communication and collaboration skills, media and information technology skills, social and Multi-culturalism skills, and self-directed and flexible working skills consecutively. Moreover, on-the-job training would be different according to each unique skill, for instance, with communication and collaboration skills there needs to be on-the-job training in terms of job rotation in order for people to learn how to adapt themselves and be understood by others whom they works with. While, with media and information technology skills there needs to be on-the-job training, such as coaching, to improve job performance.

The second group of off-the-job training includes critical thinking and problem solving skills, media and information technology skills, social and Multi-culturalism skills, and self-directed and flexible working skills respectively. Each skill requires different training methods, for example, off-the-job training of media and information technology skills would include computer assisted instruction like mobile application or language application. While, self-directed and flexible working skills would have case studies of off-the-job training in order to improve the ability to work well.

The above ideas are supported by many research studies for example, Ngang et al., 2015 did a study on soft skills integration in teaching which is quite similar to the above concept of training used to make adjustments and integration in order to match requirements.

Not only should a training program be provided but according to this study, further study on evaluation concerns for those skills. The results of the study are very interesting and challenging for those in the convention hotel business. Since this creates a new channel of for the evaluation of the convention hotel staff's performance, rather than what hotels have done in the past. The results indicate that convention hotel customers should also be evaluators of the hotel staff's performance, especially, for some particular areas of training such as case studies of critical thinking and problem solving skills, job rotation for communication and collaboration

skills, and even job assignments for social responsibility skill and so on. These training programs need convention hotel customers to help evaluate their work properly. The difference is instead of letting customers evaluate at the end of the event or the last night of their stay, convention hotels should change the process of evaluation to be on the day of the service encounter with particular attention directed to the convention hotel staff's performance. With this new process convention hotels would be able to better know the performance of their staff in particular areas of service. This new platform of evaluation is supported by the study of Horng & Lin (2013) that all training programs assessments within the hotel should be done in terms of 360 degree feedback to better develop the hotel.

5.3   Recommendations for further study

The intention of this study was to develop a guideline of 21st Century Learning Skills for the convention hotel staff based on the evidence shown in chapter 2, that hotel performance will be successful if their staff can provide good service and meet the needs of the customers. Particularly, in this 21st century era where the world is changing dynamically, hence, to survive in the competitive convention hotel business, the hotel staff's performance needs to be more effective. This brings us to the results of the study that were mentioned earlier in this chapter. However, this research has not focused on all areas of concern; there will be further recommendations for additional study that may include the following:

5.3.1. This study of learning skills focused on the convention hotel staff's performance and it was only for convention hotel staff. There may be other interesting settings for study other than for convention hotel staff, such as other business services, or possibly businesses which have similar situations in equally competitive environments.

5.3.2. The scope of this study was only for 21st Century Learning Skills which where appropriate to this service business. For further study, the study of other areas of learning skills could be examined.

5.3.3. This was study focused only from the point of view of staff performance, further study could generate and expand to other points of view such as overall business performance.

5.3.4. This study only emphasized the learning skills of the convention hotel staff's performance, therefore, this could be a benchmark for another areas of study or possibly make comparisons between destinations or business areas.

5.3.5. The research methodology was a mixed method research which consisted of both qualitative and quantitative research methodology. For further study, the researcher could use either qualitative methodology or quantitative methodology.

5.3.6. This study concentrated on five cities of MICE business of convention hotels in Thailand, the next study could be done in terms of other MICE business sectors such as meetings, incentives, exhibitions or business events.

5.3.7. The scope of the study focused only on business in Thailand. For further study, the researcher could investigate other local areas or possibly an international level of service businesses.

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