

## **Inclusive Tourism: Innovation Service Design in Tourism and Hospitality Operations**

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**Theme:** Service Operations and Performance

### **Abstract**

Inclusive tourism is a rapidly growing industry in the world and people with disabilities and elderly persons are becoming a growing group of consumers of travel in recent years. However, the physical environment that related to the service of hotel and tourism related to the disable customers is still limited and undeveloped either in the design, research and proper implementation. However, the new world tourist disabled people selects the offering set of quality of place to stay in several of accommodations; one chosen over others are from their experiences and quality of services given to them. Although the number of tourists who would benefit from accessible facilities and services are on the increment, most tourism providers have still not yet recognized the importance of taking action on this issue. As a matter of fact, hospitality business should not be forgotten about disabled customers. The innovation service design will develop to assist hospitality operations management skills necessary to operate the staff, communication, architectural facilities and customers. The architectural facilities or services should be accessible for disabled visitors and this should be provided on a complimentary basis as part of a hospitality service and performance.

**Keywords:** Inclusive Tourism, Service Design, Hospitality operations, Universal design

## 1. Introduction

The study on the physical environment that related to the service of hotel and tourism related to the disabled customers has been continuously researched in European and North American countries where are developed countries. However, such studies had focused to study on the service, management, human right but in consideration of the 3<sup>rd</sup> world countries, most physical environment research papers related to architecture only provided information to improve building or premise, etc. In Thailand, over ten years in the past, new knowledge about the universal design was introduced and taught by the top leading governmental academies, such as, King Mongkut's University of Technology Thonburi where opened to teach this subject as compulsory subject for more than 10 years. Thereafter, the universal design was widely expanded in academic aspect. It was true when organizations and public medias have additional studied and researched about universal design especially in the issue that how the physical environment could impact the service of disabled, senile and normal people.

However, the knowledge including research work of physical environment indicating innovation service design in tourism and hospitality operations related to the disabled customers was almost unfound in the research index. From the study found that none was found nor further developed from other research. The hotel service design for the disabled customers in present is lacking information for the design especially the disabled using wheelchair who have movement impairment. In this regard, the suitable physical environmental design can help to develop transportation and living of the disabled and also promote efficiency and quality of self-sustainable life in the society.

Therefore this research is to study the physical environment and service design in tourism and hospitality operations related to the disabled customers in order to develop knowledge as information to further develop the hospitality service for the disabled using wheelchair by studying the Ramada Plaza Menam Riverside where is the large hotel providing service to all types of tourists including the disabled tourist where is located on New Road, Bangkok Metropolis, Thailand.

## 2. Objectives

(1) To propose the innovative service design guidance for architects and designers understand users and the barrier to access tourism industry.

(2) To develop and promote the good practice in education and training for the travel and the tourism industry.

(3) To provide an alternative method of making the service available for the concept of tourism for all.

### 3. Study Method

#### Simulation Study

The primary information from the field survey for the simulation study was conducted on the disabled. Before the field study, the researcher had interviewed the top management of the hotel about current condition and problem related to the disabled using the hotel service. The secondary information was gathered from the literature and research papers, namely, People with Disabilities and Tourism and Hospitality, Research on People with Disabilities in the Tourism and hotel Sectors, , the concept of Universal design in the Hospitality and Tourism.

#### Study Framework

(1) Barrier removal (2) Environment accessibility and (3) Universal design

The research was divided into 2 phases.

- Pre-simulation field survey
- Simulation study

To understand the physical environment, it was necessary to separate the accessible environment from the obstructive environment. In many areas we found both semi-accessible and non-accessible environment because the user of building had regularly modified such environment. Learning to understand the physical environment was required to survey and analyze all restrictions of the environment by using basic analysis tools, namely, observation and survey the educational environment to propose rules on the new alternative service design for the architects and designers to understand the service users and barrier to access tourism industry which was main objective of this study and was considered as part of research projects in the future.

The method used was thus accessible to the actual situation by the simulation of disability that convenient to the possibility of Thai social context, namely, simulation technique to learn the disability experience by the researcher, of which, this method was popular and used in learning/teaching of Universal design both in local and international thoroughly. The reason to apply this method was due the researcher could understand the use of environment in certain degree and the researchers were the both the

researchers and designers having experience in using this type of research tool for more than 8 years but it was field research mostly done on the situation of large transport station and academic buildings. This was the first time to study with building providing various services both in field of its usage model and benefit. In fact, this was basic of self field survey to become acquaintance to know restriction and problem before obtaining information to propose and discuss to find out conclusion to further solve and develop the service design onwards.

The physical environment assessment let us to know where was the obstructive area, whether it was a barrier or existing article designed by the architects, for instance, the slope, handrail, handrail size and other suitability would be also considered. This type of practice built the actual learning skill in this studied case. Other example was trying to take wheelchair upward the slope and noticed its finding to realize the actual design that required repeated thinking to build the model or research. Therefore the selection of building for the assessment was one factor, namely, it would be the building that designed concerning on the disabled, if possible, learning would be developed should it was compared with other similar size building in order to better and deeply understand related information. This method was quick learning method for the short term course but powerful output. The result would be assessed, synthesized and concluded as problem and used as basic information for solving the building design in the future.

- The studied area

The overall area of hotel, such as, entrance hall, lobby, internet room, check-in counter, elevator hall, elevator, swimming pool, restaurant, coffee shop and guest room.

- Data compilation

Compiled from photographs, records, measurements and mapping supporting physical information while the attitude was based on the interview.

- Analysis and Discussion

The survey to study on the usage model of areas related to the area using of disabled with wheelchair by applying the information obtained from the simulation study to analyze and conclude as discussion to suggest as guidance for physical environment design of the hotel onwards.

- Suggestion for the design

The conclusion on the concept design to develop physical environment of innovative service design in tourism and hospitality operations in Bangkok Area and to suggest the guidance of design to develop physical environment of Ramada Plaza Menam Riverside Bangkok, Thailand.

#### 4. Literature Review

##### 4.1 People with Disabilities and Tourism and Hospitality

The WHO had announced that disability meant all restrictions and the lack as caused by the impairment of ability to perform activity or abnormal symptom of ordinary human. The UK Disability Discrimination Act proclaimed that the disabled was the person with impaired mental or body for long time which impacted the ability to perform personal daily activity. Disabilities were classified to 4 different categories, namely, hearing disability, eyesight disability, physical disability and awareness disability.

Travel and tour are important factor in living quality of all human. For the disabled and their families, the opportunity to go out to relax on holiday was special occasion for relaxation and recuperation. The ability to tour, travel and accessibility to the touring activity could be perceived and as key of social justice for the disabled and families according to the international humanitarian principle.

There were 2 issues of the statement regarding international humanitarian principles, namely, the declaration on international principle regarding humanitarian referred from 1948 that "all human beings are born free and should have equal right and prestige" Moreover, the correctness and freedom that entitled to all was prescribed in such declaration that free from any distinction, such as, skin color, race, gender, language, religion, politic, different opinion, nationality, ethnic, property and status, birthplace and other statuses. In addition, all human are free to move, free to relax, refresh and to have free time. The second issue of the statement was The Manila Declaration World Tourism in 1980 declared that "the ultimate goal of tourism is to improve living quality and create better living quality for all". Turco, Stumbo, Garncarz (1998) indicating the disability could participate in tourism activities. However, something was required to prepare for the disabled to access certain activities, such as, transportation information source, convenience such as foods and beverages. To solve this problem in some countries had issued rules on these matters.

However, from the past studies, it was generally accepted that tourism activities or businesses in Bangkok was growth and yielded top rank income to the country among overall businesses. There were lot of researches supporting marketing and culture that related to tourism development but no research about innovative service design in tourism and hospitality operations in Bangkok area especially hospitality service

for disabled. However, the past researches were generally related to the spatial architectural design for disabled, such as, the research of Assoc. Prof. Trirat Jaruthat et al. about human rules on the concept of design for all. Assoc. Prof. Kusuma Dhammathamrong who studied about space use improvement of Faculty of Architecture of King Mongkut's Institute of Technology Ladkrabang. The research of Dr. Budsakayt Intarapasa about the accessibility to the Mekong River Conservative Tourism area and the research of Thayuth Thongpan about Child Psychiatric Center, etc.

Even if tourism business has been continuously grown and yielded great value in Bangkok Metropolis but less of knowledge and narrow attitude about the disabled and tourism and hospitality service. The study of Grady and Ohlin (2009) had studied and emphasized on direct conversation with the disabled in order to understand their necessities and needs in the context of service and tourism. The sample of those studies provided the disabled opportunities that were hardly given to express their necessities and needs. This research was likewise the mouthpiece to speak and express as representative of the disabled to learn and understand both obstructive and non-obstructive environments in order to make extensive known to the publics.

And, therefore, this survey was considered as part of a series of studies that focused on hotel service tourism experiences of hotel in Bangkok Metropolis area with the disabled using wheelchair.

#### **4.2 Research on People with Disabilities in the tourism and Hotel Sectors**

In approx. 1970 and later in 1980 to beginning of 1990, even the research work about experiences of the disabled on Innovative Service Design in Tourism and Hospitality Operations was firstly introduced. The researchers had conducted only the superficial and unserious research. However, in present, the study on the tour experience of the disabled is increasing and the publishing of research papers are carefully proved.

The literature related to the research work about experience of the disabled on Innovative Service Design in Tourism and Hospitality Operations was related to following 3 issues, namely, (1) many studies interested on characteristic of the disabled more than tourism experience and the researches also focused on the business potentiality in the disabled market (2) the research works interested on the Act or legislation containing agreements and stipulation of service and the disabled (3) the literatures related to tourism that supporting the disabled as if they were disregarded portion or otherwise whose rights were deprived, was activated by the woman activist group to discussed about the necessity to prepare the space for the voice of minorities in public sporting yard. However, recent research works, instead, focused on the disabled in term of technical work.

Recent researches mostly focused to continuously research about travel of the disabled, for instance, Burnett and Baker's claimed that their knowledge about the disabled tourist was exclusively but such studies too specially focused only the studied subjects or sociology characteristic while other study principally focused on the disabled employee more than the disabled guests and only few researches focused on business relation to the disabled, for instance, Ingamelles et al. (1991) had studied the discrimination of the disabled employment. Groschl (2007), surveyed result of the Personnel Dept training about disabled and highlighted that the importance of each individual had aesthetic appearance in confrontation on the service. Ross (2004) pointed out the contents of morals and treat of disabled officer under the tourism and hospitality business and industry.

Other studies reaffirmed and more realized to the accessibility. However, many studies depicted natural character and firstly focused on convenience of the hotel as the prominent point of rebate the difficulty to the disabled. However, those studies intended not to discuss about difficulty of the disabled, for instance, Chen mentioned the high percentage of the disabled populations using facilities during their touring trips. In her study, she significantly separated different groups of disabled residing in small hut and those required to reside in large house. However, she did not explain how the actual residing experience was. Ray and Ryder (2003) studied the difficulty to access the hotel service. Turco et al. (1998) proved the difficulty in booking of hotel room of the disabled by considering the details from selection of room, selection of room elements, such as, fixture and appliance use for the disabled including certain location and room for maximum use and for convenience to the disabled as much as possible. They also clearly mentioned that shower and tub were also problems of use for the disabled. Simon and Pherezo (1999) claimed that the hotel frequently had insufficient room for the disabled. They mentioned that there were several factors, such as; adjustable shower bench and bed should be specially provided in the hotel for the disabled who used wheelchair. Other studies should be made or the management should provide or suggestion manual/report for better service to the disabled (Handcock, 1991; Sall, 1995) Mill (2008) surveyed the accessibility of tourism and hospitality business on Web Site for eyesight disabled. Most studies were to study the tourists staying in the hotel, in the hotel center, who were mostly refused to appear in public space, restaurant or avoided to intercommunicate with hotel staffs, namely, most disabled generally stayed in the area provided by the service center of the hotel more than stayed alone in other area. Therefore, basically, most and lot of disabled would stay in their room and tried to firstly used other public space which was very poor experience of the disabled in using hotel service facilities that they could use but did not have opportunity to do so. From those findings, it is thus necessary to further conduct exploratory research to prepare basic information for the disabled to gain better experience.

### 4.3 The Concept of Universal Design in the Hospitality and Tourism

The concept on designing that enable all persons to access the environment was the Universal design. As it is well known that, there was a principle that the concept on the accessibility to the environment or products of all persons at all ages, genders and limits would be as true as possible even this method was suitable and benefited the senile and disabled more than the universal design. In several parts of the world, the concept about universal design is attractive and greatly interested especially in European countries, North America or developed countries. In the developing or undeveloped countries, such as, Thailand, the society still did not well understand, realize nor lack of correct attitude about this concept. Even the professional organization in Thailand, either the interior architecture association or major architecture, was almost lack of this knowledge. In addition, teaching in this subject was offered only in top class government universities as compulsory subject. The possibility and continuous effort was some academic organizations that tried to support the educational institutes, etc.

In mentioned about the Universal design concept, it could be explained in several dimensions, either the concept of universal design in education aspect or in mass transportation aspect in this research also mentioned about the universal design on the tourism and hospitality service was inevitably related to the interior architectural design, management and technologies of facilities. Those three factors were required to systematically taken from the beginning of booking until returning the key. This article shall discuss only the study, i.e. the survey of physical condition of the interior architecture around the check-in counter where is the reception and internet counters, lobby, restaurant, swimming pool, guest room and toilet to support consideration and propose as guidelines for the design.

Therefore, before the Universal design, the first issue was how to access there, which meant, to study the accessibility was the first important issue about concept on the area because if it was not accessible, the following issue would be meaningless. The accessibility meant how to make it easy as much as possible for all to access and use the building, exterior area and counter alone without any preparation for special support. Subsequently was the appropriate use of building duly designed according to the concept of Universal design. Even those principles were not all applied nor specially focused only any parameter, it also depended on other conditions. While the guest was staying in the hotel, different room programs would be used, access would play its function as reversal process and then using facility repeatedly. For general persons, these processes were natural and disregard because they had gotten used to those activities but for the disabled especially in case of movement and eyesight deficiency, it was a new life experience to learn and confront and these were information for the researcher to develop the knowledge about repeated process as a pattern of behavior to better reflect action. Next, we then learned about the use of space of physical environment and behavior of the disabled. After collection of all behaviors, we then knew the cause of such action. At the end of

repeated process of all studied area, we then got one set of behavioral pattern for use to support further design.

The last section was also important part and related to the Universal design concept but focused on safety, namely, to evacuate the disabled upon emergency situation. It was true that we encouraged the disabled to help themselves based on the concept of equality and freedom of all people. But in emergency situation, the hotel must ensure that it had preventive system and sufficient preparation to support the evacuation of guests from the hotel not only the disabled but also all employees of the hotel.

In conclusion, The Concept of Universal design in the Hospitality and Tourism was related to 4 mains factors to provide perfect, attractive and wonderful trip should there were (1) Good access (2) Good use (3) Good service and (4) Good safety. Should the hospitality and tourism operators could develop and build the readymade promotion model of new tourism, the disabled would have opportunity to enjoy outdoor tours like those general people and to increase revenue of the hospitality business because this concept, not only to help the human being but also develop living quality of all types of disabled. This concept could be adapted in all small, medium and large hotel and only small additional expenses but we do recommend, in the pre-design stage, to concern on the optimal benefit of the disabled.

## 5. Findings

From the scope of study covering the issues related to the Innovation Service Design in Tourism and Hospitality Operations, namely, elimination of the barrier, accessibility to the environment and the Universal design subjected to the field study by using disability simulation device was found that the finding from such field study review was sufficient and could be explained as follows:-

At the beginning of the survey, parking was the first location and found that there were sufficient parking for the disabled and near the slope leading to the hotel building but one problem was the hotel was constructed for very long time before those facilities were equipped. The subsequently additional slopes were not at appropriate sizes to push the wheelchairs up the slope especially they became the location for the bellboys or baggage, it seemed that these slopes were previously constructed or jointly constructed for transporting the tourists' baggage. It was thus obstruction more than accessibility to the environment.

After entering into the building, it was the time to wait for inspection whereby the tour-guide would lead to the several parts, namely, check-in and internet counter, lobby and restaurant, swimming pool, guest room, hallway and elevator. Check-in was successful in term of usage due to the hotel provided special space for registration. It was thus good in term of using but poor in term of universal design which should not be separated. On study about the counter, it was not appropriately designed for the disabled while slope to

internet area was too steep and inaccessible by wheelchair. These conditions were obstructions of the accessibility.

Lobby was elevated but inappropriately constructed and lacked of handrail, it was thus became obstruction more than convenience. However, upon passing those steps to the seat, it was conveniently circulated even from the outside view, furniture group were obstruction of the accessibility, suitable size of chairs convenient for wheelchair to easily move to the groups while coffee shop-liked counter was also conveniently accessed by wheelchair.

At the swimming pool, the exit door was quite heavy and of swing pane. Slope from the building in this area was good functioning but too short. However there was handrail on both sides to well support downward movement of the wheelchair to the swimming pool which was considered as high efficient access. Moving up from the swimming pool was appropriate by using supporting beam to climb up the slope which was considered as the good success.

In consideration of the restaurant upon trying to take lunch found that there were some problems and obstructions, namely, the exit door was rather heavy and of swing pane. However, there was receptionist who could properly help to solve this problem. At the main area inside restaurant, we then found lot of buffet foods and tables, the circulate was appropriate good. Even it was not as good as in lobby but movement to several food bars was moderate convenient due to the plates and other accessories were set on low level difficult for arm reach. Circulating to reach the foods was difficult due to lot of peoples and insufficient circulation space. Eating table was convenient and very comfortable even the wheelchair could be put beneath the table but the disabled could use the table.

Elevator hall leading to the room was standard for disabled service, namely, there was Braille Code, buttons that were reachable by the disabled and sufficient circulating space, reachable help button and speaker.

Upon arriving the room, the first thing we saw was the circulating space for the wheelchair was sufficient and showed that the disabled had to use the first one of the double beds. The wheelchair could be conveniently moved in case of the disabled wanted to work on the writing desk with the space of reachable book and drawer. In addition, moving to the headboard was easily due to sufficient space for accessible from the end or beside of bed. Therefore, in consideration the use of accessories, such as, lanterns and others are well usable. From consideration of the function of utilities that obstructive to the disabled was too small bathroom and too narrow for circulation of the wheelchair and difficult for the disabled

to move on the bathtub. Good accessible to sink. Sanitary-ware was good usable but the entrance of room and bathroom were too small but the good function was cat's eye at the wheelchair level for the disabled.

## 6. Analysis

Result of the survey was concluded that the pathway in the hotel was considered as very important area for the disabled with wheelchair due to it was the area where the disabled could circulate. In the hotel, the area where there were most activities was the pathway where it had fully functioned to link between main areas of the building, such as, check-in counter, restaurant and reception counter, etc. One important obstruction of the pathway was the joint on the area that were uneven despite it was improved but such obstruction was still existed. Other obstruction was the heavy door and inappropriate size that greatly increased difficulty to the disabled including also several inappropriate size slopes due to limited space and without safety rails whereby all these problems should be concerned.

Result of partial survey showed that the areas were designed to support the movement of disabled that specially emphasized on the slope. The service areas were designed to activate social promotion for the disabled either the lobby, reception hall where were equipped with flexible furniture sufficient for the disabled to naturally share in the conversation group.

Preparation of check-in counter was good in term of its usage but it was unharmonious to the Universal Design that was too different. This issue should be omitted due to it was very sensitive problem. However, check-in counter could not facilitate convenience to the disabled whatsoever. In addition, internet service area was most difficult access while the front office service counter could not facilitate convenience at all and inaccessible.

Restaurant was somewhat accessible with compact slope but difficult to reach buffet counter due to obstructive movement. Holding food back to the table was difficult for the disabled and necessary to have helper.

The circulating space inside the room was appropriate but too small entrance and bathroom doors. Accessibility to other area had no problems except very narrow turning radius in the bathing area because the bathroom was very small and obstructed movement of wheelchair. The bathtub and washing basin were perfectly accessible.

## 7. Conclusions and Recommendations

Ramada Plaza Menam Riverside, Bangkok, Thailand has prepared innovation to facilitate convenience to the disabled with wheelchair in the main area of the hotel, such as, room, restaurant, lobby, etc. The service areas on the ground floor were closed to each other, such as, check-in counter, reception hall, lobby, restaurant, swimming pool, internet counter, public toilet, etc.

The slope of the entrance is necessary to be improved, cleared and redesigned which should be better and waste less space if the slope was straight in parallel to the building at any necessary length.

However, at the joint between external slope and internal area was an obstructive due to the joint of two different materials that was too thick resulting the wheelchair could not move across the joints. It is thus recommended to improve the slope surface to become smooth and in the same level.

From the survey found that management was efficient and convenient for the disabled with wheelchair to circulate around on the same plane not necessary to use many floors of elevator nor many stairs of escalator. It was the good design as open plan where all facilities were located on single floor and visible thoroughly from all locations, it was thus easily to use and manage.

Many slopes in this hotel are necessary to be considered in order to specially design to suitable with the hotel because it is different from other area, this includes to consider about floorings, size of slope that requires additional research to study the type and location of slopes in the hotel, suitability and design to support designing. Moreover, the details or materials of uneven surface due to change of level should be studied.

Standard door of hotel should be designed and re-studied to use suitable size for accessibility of the disabled with wheelchair including pathway, turning along the pathway so that the disabled shall be able to conveniently and safely move and turn their wheelchairs. Slide door pane especially in bathroom or curtain should be considered to be easy and safety for use.

In conclusion, as the guidelines for further design, Ramada Plaza Menam Riverside, Bangkok, Thailand can adapt this research as case study for benefit in detailed research on the physical environment of the Innovation Service Design in Tourism and Hospitality Operation for the disabled with movement impairment and use as benefit information to develop knowledge to achieve the objective of this study, namely, to present new alternative service design of the architects and the designers to understand the customers and obstruction that prevent accessibility to the tourism industry, to develop and promote good training of learning and tourism and prepare option to provide service of tourism industry for all.

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