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Enhancing Learning Experience of the Disabled: An Accessible Tourism Platform

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Abstract: The purpose of the study is to propose a completely barrier-less, or "accessible" tourism platform and makes suggestions to facilitate current travel information for disabled persons. Drawing on in-depth interviews with tourism industry representatives and academics, and applying Long Tail theory's three "forces" and nine "rules", the study makes assessments as to the viability of the disabled tourism niche, creating an accessible tourism communication network to connect upstream and downstream travel agencies in a Web 2.0 environment. Web 2.0 is an appropriate platform that can be seen as a launching pad or accelerator to share knowledge between business and customer, as well as customer and customer. This platform can provide adoptive learning experiences and behavioural enhancements. This study sets up an accessible tourism communications network based on Web 2.0 concepts, contributing a real platform that travel agents can refer to as they take their first steps to provide travel packages that accommodate the needs of the disabled, a previously marginally represented group in the sustainable tourism literature.

Keywords: Long Tail theory, the Disabled, Tourism, Web 2.0
Categories: M.0, M.5

1 Introduction

According to a *World Travel and Tourism Council* 2008 survey of Tourism Satellite Accounts (TSAs) from 2000-2007 [WTTC, 2008], Taiwan's average annual consumer spending on tourism was US$22.5 billion, an average of 6 percent of Taiwan's US$375 billion GDP (based on an exchange rate of US$1 = NT$29). With increases in both local incomes and quality of life, travel has already become one of the major focal points in the lives of local residents. Thus, many travel operators in

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Taiwan are optimistic over the future of domestic demand in the sector. Yet the packages promoted by Taiwanese travel agents and tour operators are all geared to mass market demand, without any consideration for the needs of niche markets.

In Taiwan, this unfortunate state of affairs is due to the disabled being misunderstood as a fringe societal group without any spending power, to the point where they are equated with impoverished members of society. In fact, the disabled are no different from the average consumer and have the same leisure, travel and accommodation needs. Despite this fact, the preparation and planning of leisure activities for the disabled remains in its infancy in Taiwan. According to statistics from the *Ministry of the Interior's Department of Statistics*, 1,000,729 people had picked up government issued handbooks for the disabled as of June 30, 2007, and it has been committed that once the basic needs and educational rights of this group have been protected by the country, the focus will shift to the improvement of quality of life and the offering of leisure opportunities [Bi et al., 2007].

Thus, helping the disabled obtain better service and greater protection of their rights when they travel to ensure their trips are barrier-free, while at the same time encouraging the enhancement of social welfare and the fulfilment of corporations' social responsibility will become important issues [Williams et al., 2006]. [Brey et al., 2007] found that Internet information is an important tool for the promotion of the travel market, but noted that Taiwan lacks online sites that serve the disabled and provide travel information and packages that cater to them. This study looks at the travel industry from the perspective of niche markets, and, through tourism models that satisfy people with disabilities, it applies new supply-side concepts advanced in "The Long Tail" [Anderson, 2006] to spark latent demand and build a complete tourism plan that is suitable for the disabled. To satisfy an important focus of this study, this research first assesses the suitability and accessibility of Long Tail theory to the tourism industry and then builds the framework for a thorough barrier-free travel Internet platform and offers planning suggestions.

2 Review of the Literature

Over the past 30 years, the travel and tourism industry has experienced rapid growth in every corner of the globe and has become the key engine of economic growth in many nations [Sharpley and Telfer, 2002]. Governments everywhere see tourism as a key engine of development in the future [Clarke et al., 2001]. It is therefore safe to say that tourism is the largest-scale industry in the world today, and it contributes considerably to the economies of both developed and developing countries [Jones and Haven-Tang, 2006].

Regardless of whether a destination is a small area, a large area or an entire country, tourism has already become a tool for economic development and diversification to the point where economic development policy cannot afford to overlook its potential [Westcott, 2004]. In 2006 alone, people in Taiwan took more than 150 million trips, and more than 78 percent of them said the purpose of their travel was for sightseeing, rest and relaxation, or going on their annual vacation [TBMTC, 2006]. Tourism is a non-polluting industry that can avoid the declining marginal utilities of conventional industries and help the country's development from a sustainable operations perspective. Therefore, tourism is one of the rare industries

that features total development, where professions and businesses at all levels benefit. The *World Travel and Tourism Council* forecasts that global expenditure on travel will more than double over the next decade from US$4.21 trillion to US$8.61 trillion and that tourism's contribution to gross domestic product (GDP) will rise from 3.6 percent to 3.8 percent over the same period. The number of people employed in the industry will also increase, from 198 million to 250 million individuals. From these estimates, one can see that tourism will play a critical role in the global economy in the foreseeable future.

A key element in the development of Taiwan's industries in the past was their ability to accurately grasp and ride global economic trends. In recent years, the output value of the global tourism industry has risen consistently, an indication that the tourism era has arrived, which has led businesses involved in the local travel market to scramble for commercial opportunities. Unlike other industries that have limited life cycle, tourism is sustainable and cannot be outsourced, meaning that any investment in the sector will benefit local economic development over the long term.

Travel agents and government authorities, however, should abstain from the high volume mindset of traditional industries when devising tourism development policies. Instead they need to put a premium on nurturing long-term high quality operating and management approaches [Kalisch, 2002] that will enable Taiwan to unleash its inherent competitive advantages in the sector. The nature of the travel industry seems to change with the times. Looking at the development of tourism from a historical perspective, one discovers that the domestic social structure and the people's living conditions have a mutually interdependent relationship with the scale of population, economic conditions and overseas tourist destinations [Eadington and Smith, 1992]. At present, tour itineraries for the most part are planned and created based on the perceived requests of the mass market and are rarely tailored to meet the less commonplace demands of small groups of potential travelers. There has been greater demand in recent years for strategies targeting travel opportunities for the disadvantaged and, as a result, satisfying the travel needs of the disabled has been given greater urgency. In Japan, satisfying the tourism demands of the disabled and foreigners are fully protected by law**.** In other words, even if a person is disabled, he or she is entitled to have the same travel experience as others.

Travelling can have therapeutic value for people with disabilities if properly planned, stimulating physical and mental growth and increasing their interaction with society while alleviating the level of their disability [Kraus, 1990]. In Europe, disabled people represent a large and growing market for both business and leisure travel. There are approximately 37 million people with disabilities in the EU, indicating that future demand for barrier-free, or "accessible" travel will rise [Westcott, 2004]. In the past, most people in the industry focused on the mass market while ignoring the strength of niche markets, but the mass market cannot possibly be all-encompassing, leaving an opening for niche markets. The consumers that the mass market cannot accommodate can be served by these smaller, specialized markets. Therefore, if one can provide good service to a small group of consumers, a substantial niche can be created [Brynjolfsson et al., 2006].

The newly fashionable management term "Long Tail" described by [Anderson, 2006] completely overturned the traditional "80/20 rule", which theorized that demand is centered on the most popular 20 percent of items at the expense of the

remaining 80 percent, or the so-called long tail. This hotly debated buzzword was selected by Business Week magazine as the "Best of 2005: Ideas". In the past, commercial circles only paid attention to the aggregate value generated by the mass market. Long Tail theory, on the other hand, asserts that the development of the Internet has created a large volume market for hard-to-find or niche products. "Recessive" buyers in various corners of the globe with access to the Internet see "recessive" products in other corners of the globe, and if the price is acceptable, the transaction is completed.

The striking viewpoint advanced by Long Tail theory is currently being put into practice in commercial circles, leading to niche Long Tail markets, but no matter whether big or small, they all must achieve a minimum scale to prop up sales and income. There is no doubt, however, that the formation of Long Tail markets has created many new commercial opportunities [Brynjolfsson et al., 2006].

Another principle of the Long Tail is that no one product can satisfy everybody. Not every consumer, for example, likes the same kind of food. It's the same in the tourism industry, where one kind of package can satisfy the average traveler but cannot meet with the approval of all disabled individuals [Bi et al., 2007]. The disabled also have the right to enjoy travel and leisure experiences [Cameron et al., 2003]. In popularizing travel, the Internet is a tool that can transcend culture, graphically and informatively promoting specific travel companies and places of interest around the world. With its rising accessibility, the Internet has become an important resource for travel and tourism information and a marketing medium with a very efficient cost structure. It has the potential to improve the chances of survival and the profitability of small players in the travel business amid fierce competition. Thus, using Web 2.0 concepts to build a consultative, shared, learning platform for accessible tourism [Craig, 2007] can fulfil the special needs of the public and businesses. Why is it important to help these groups understand this market? Because it expands the choice of travel options they have access to where they once would have only a limited range of packages to choose from. It also lengthens and broadens the tail in "Long Tail", better satisfying the needs of the niche market composed of people with disabilities while at the same time making this niche market profitable for travel agencies offering accessible tourism.

3 Methodology

Hoping to explore the ways in which Long Tail theory influences the tourism industry, this study interviewed experts, collating and analyzing the information obtained to make the theory more suitable for and accessible to the travel sector. Using Web 2.0 concepts, this study built a complete accessible tourism Internet structure catering to the disabled and provided integrated planning advice.

Direct fieldwork was used in doing research for this study, based on a strict sampling design to search for facts. In exploring the relationship between variables affecting social phenomena, this type of methodology relies on both big and small clusters, through which samples are chosen for further investigation. Those samples help understand the circumstances, distribution and interrelationship of the influences that many social and psychological variables have on each other. Thus, the method is called the "sample survey method". If one wants to classify the channels through

which data is obtained using the sample survey method [Lucas, 1991], they can be divided into mail surveys, processing surveys, expert interviews, telephone interviews and Internet surveys. Since the travel planning of disabled persons requires a specific sample, and ethnic groups in Taiwan have their own special characteristics, building a structure involved integrating the opinions and viewpoints of industry, government and academia. Thus, this study interviewed experts as its main research methodology.

3.1 Data Source

This study's investigation focused on disabled persons in Taiwan, with the large majority of them physically challenged individuals. It integrated and analyzed the opinions obtained from wide-ranging interviews with the above-mentioned travel agents and scholars. The expert interviews conducted for this study relied on semi-structured questions to ensure that the survey research method could resolve the issues being studied. During the interviews, we asked permission from interviewees to record the conversations, which enabled us to better gather related information to analyze and understand their views on the applicability of Long Tail theory to the tourism industry. Gaining a thorough understanding of their actual experiences and cognizance helped better explain the gap between printed data and the real world.

4 Analysis

4.1 Nine Rules of Long Tail Theory

In pulling together the nine "rules" of successful Long Tail practitioners, accessible tourism, and expert opinions, this study developed integrated applications for Long Tail's nine "rules" [Anderson, 2006] in building a Web portal for accessible tourism and travel in Table 1.

Rule	Long Tail Rule	Web Site Application
1	Move inventory in… and out	Reduce advertising costs
2	Let customers do the work	Traveler comments; member evaluation mechanism
3	One distribution method doesn't fit all	The disabled are not used to searching for travel-related information.
4	One product doesn't fit all	The disabled cannot use mass market travel products; they need customized fixed itineraries.
5	One price doesn't fit all	The disabled can be given tour packages to choose from with clearly marked prices.
6	Share information	The disabled can share their experiences with their peers.
7	Think "and," not "or"	Customers can choose from accessible tourism destinations, matching itineraries to their personal situations.
8	Let the market work for you	Rank the most popular travel itineraries to help the disabled become aware of accessible activities.
9	Understand the power of free	Give the disabled free opportunities to try new things.

Table 1: Long Tail theory's nine 'rules' and their web site applications

Rule 1: In a virtual store, customers enter when they have a need, logging into the site after registering as members and searching for information. There is no need to invest in advertising, substantially lowering promotional costs. In addition, every member can create his or her own itinerary, and through this natural increase in travel products, the Web site will have a richer inventory of commercial tourist products than a typical brick-and-mortar travel agency.

Rule 2: Similar to Yahoo! Kimo's news site where browsers can share their opinion of the stories they read with others by clicking on one of eight facial expressions offered, browsers of the travel site can choose from a window of options to directly offer their opinions in the accessible tourism evaluation section. This empowers people with disabilities to comment on every product offered, creating a word-of-mouth effect, as opinions shared by peers can be more persuasive than a company's own promotional rhetoric.

Rule 3: As the Internet has risen in importance, virtual travel agencies such as ezTravel Ltd. have performed outstandingly in the industry. ezTravel's success has dealt heavy blows to traditional agencies, as an increasing number of travelers are willing to make their purchases online. Being able to obtain related tourism products through this Internet platform, consumers have changed their buying patterns. This indicates that the services that were once exclusively the province of brick-and-mortar travel agents are being gradually substituted by virtual distribution channels.

Rule 4: The travel product needs of every disabled person are different, and they can choose from among the destinations, methods of transportation, and specially designed packages that are included among the accessible tourism options on the Web site. These many choices can satisfy customers with diverse needs and heighten the desire of disabled individuals to engage in pleasure travel.

Rule 5: The disabled want attentive, flawless service, so no one pricing strategy can suit every customer. Within niche markets, there are some consumers who are willing to pay a higher price to obtain special products. The most obvious example of this in the tourism industry is the high-end tour group. Consumers participating in this kind of tour group have higher quality requirements than those taking part in regular tours, but the prices they are willing to pay are also higher. In offering set packages, an emphasis on quality takes precedence over a focus on price.

Rule 6: Turn the activity into participating in a peer's recommendation. This method capitalizes on the comments disabled persons make online about a particular activity they have attended, which are then read by other disabled individuals who can get a feel for the activity from individuals who share their predicament. Because the comments and recommendations are from people browsers know or with whom they share similar disabilities, they have real credibility.

Rule 7: Many of the tour packages and simple ticket-and-accommodation deals offered by the travel industry do not come with any special restrictions. It is not necessary to limit choices of package tours when targeting disabled customers, but

they should be given the basic knowledge they need to have when traveling. That way, they will have many new tour itineraries to choose from. Through the Web 2.0 concept, the Internet offers a wealth of travel products, and when disabled persons select products, they can have an even better range of choice instead of facing product restrictions.

Rule 8: In the future, advanced Internet functions will be able to identify a user's favorite products and rank them in order of priority by tracking his or her actual hits or frequency of use of a particular site. That will enable the disabled to better understand a popular activity and enhance their willingness to participate.

Rule 9: To encourage disabled individuals to participate and increase the site's number of hits, they should not immediately be charged sign-up fees. For example, when a teacher is first invited to teach students the basics of pottery making, admission should be free. When the next activity is held to learn more advanced pottery-making techniques, the course can charge for materials, such as for the clay being used. Naturally, people's first impression will be that the operator is not simply out to make money off them.

4.2 Applying Long Tail theory to Accessible Tourism

Long Tail theory is a new business model that gained prominence as the Internet matured, and its influence continues to expand. With its simple but profound premise, Long Tail theory has rapidly eroded the dominance of the traditional retail sector and is even taking its place. In practical terms, it has subverted traditional operational models. The emergence of Long Tail theory can be attributed to three main forces — the democratization of the tools of production, cutting the costs of consumption by democratizing distribution, and connecting supply and demand [Anderson, 2006] — resulting from the development of Internet information technology, especially Web 2.0 technology that has transformed cyberspace's static functions of the past into a new interactive world. To apply Long Tail theory to the tourism sector, one first has to allow the three forces to emerge in the industry. Once the three forces are apparent, the Long Tail concept will naturally materialize within the sector. To enable these three forces to take shape naturally in the tourism industry, this study has developed an Internet platform that will facilitate their rise.

Positioned as an information provider, this Web site has used the Web 2.0 framework to build an accessible tourism information platform that allows people with disabilities to submit articles and provides a forum in which they can share and exchange their own travel experiences. Such a forum can encourage the disabled to participate in more activities [Oberhelman, 2007]. Advertising is the basic source of revenue with commissions from services offered by travel agencies as a supplementary source of income. When the Web site has built up a substantial enough customer base, it can be sold to a private business. This study's introduction of the Web site's structure is divided into the following general categories: fixed itineraries, accessible tourism reviews, accessible tourism knowledge, an accessible tourism audio video area, accessible tourism news, and accessible tourism blogs (see Figure 1-2 and Table 2-3).

Figure 1: The accessible tourism network website

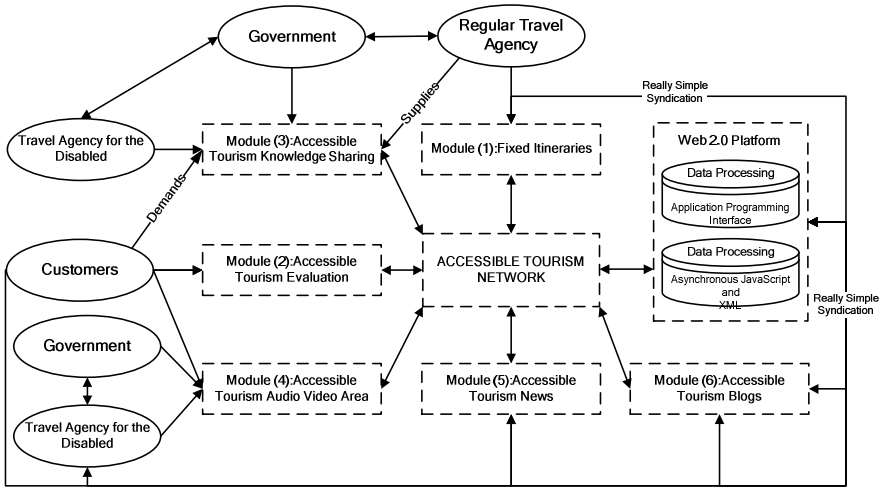

Figure 2: Web 2.0 system architecture of accessible tourism platform

4.2.1 Planned Itineraries

After becoming a member of the Web site, travel agents can post complete accessible tourism itineraries that people with disabilities can refer to when planning a trip. By proposing different itineraries with diverse sights and tours, browsers can choose

packages that they like and that which suit their needs and interests. As can be seen in Table 2, the site gives the disabled excursion options and reinforces their willingness to go on a trip.

4.2.2 Accessible Tourism Evaluation

This page clearly classifies and segments tourism-related businesses and attractions and enhances the convenience of choosing packages. The descriptions provided lay out the accessible tourism features and targets of each company or attraction, and note those features that have passed accessible tourism evaluations. This page fully exploits Web 2.0's advantages. Anyone who has become a member of the Web site can enter the rating system and post their experiences and appraisals of their trips, as well as add or revise travel operator information. The use of an interactive Internet platform enables every user to freely express his or her opinion, resulting in more objective content and a speeding up of the updating and gathering of information. At present, the Web site provides a chat room where customers can express opinions, and through the personal evaluations of travel destinations submitted by site members, other users will select products that suit them, putting into practice the Long Tail concepts "let the customers do the work" and "share information" as shown in Table 2.

(1)The accessible tourism information network has a page offering set itineraries	**(2)Accessible Tourism Network evaluation page content**
(3)Accessible Tourism Network knowledge page content	**(4) Accessible Tourism Network audio-visual content**

Table 2: The (1)~(4) areas of home page for the accessible tourism platform

4.2.3 Accessible Tourism Knowledge Sharing

This page clearly and systematically imparts important knowledge about food, clothing, accommodation, tours, and other details. Relying on related accessible tourism information contributed by disabled persons, the site describes things people

should know or watch out for in every category of activity, building greater confidence among the disabled to get out and travel. Thus, the information provided can help disabled individuals or those who would accompany them to gain a clearer picture of what they need to be prepared for before they leave home and enable them to take steps to prevent problems that might arise during the trip.

4.2.4 Accessible Tourism Audio Video Area

The video content features films that guide those involved in accessible tourism through simple educational tools to achieve an accessible tourism environment in areas such as food, clothing, accommodation and tours. These educational films can raise awareness of accessible tourism concepts among even more people and make them more universally accepted.

4.2.5 Accessible Tourism News

This page is constantly updated to provide the latest news related to accessible tourism, and, in browsing the page, users can also obtain the freshest information, whether related to the government or to the private sector. In Table 3, the integrated functions of this section of the Web site will help individuals browsing the site obtain information quickly and save them the time that they would normally spend on mass market sites searching for the news or information they need.

(5)Accessible Tourism Information Network news content	**(6)Accessible Tourism Network bloggers section**

Table 3: The (5)~(6) areas of home page for the accessible tourism platform

4.2.6 Accessible Tourism Blogs

In this blog updated by Eden Social Welfare Foundation staffers, bloggers can post their thoughts on travel experiences or upcoming **accessible** tourism related information. They also frequently post insights based on their own travel experiences. The blogs serve as an encouragement for the site's users who read them and enhance the enthusiasm among the disabled to travel [Table 3]. Fully capitalizing on this virtual channel to increase marketing appeal, the blogs serve a market segment that brick-and-mortar outlets have no way of handling. In the future, this proposed Web site can include even more advanced functions, such as ranking the most popular search requests and using browser hits to screen the most popular products, to help customers get a feel for existing levels of participation.

4.3 Insights of Scholars and Travel Agents

This study interviewed businessmen and scholars involved in the tourism sector and summarizes their views in this section as shown in Table 4.

	Regular Travel Agency	Tourism-related scholars	Travel Agency for the Disabled
Commercial Interest	**Disagree**	**Agree**	**Agree**
Reasons	(1) Based on their economic capacity disabled cannot afford it. (2) Personnel costs are high. (3) The uncertainty of a new market is too high. (4) Accessible tourism value-added is low. (5) Taiwan has a poor accessible tourism environment.	(1) Already successful overseas. (2) Accessible tourism demand expected to rise. (3) Elevates Taiwan's international image. (4) Strengthens Taiwan's tourism competitiveness. (5) Mature Internet allows information to be transmitted quickly.	(1) It meets the travel needs of the disabled. (2) Accessible tourism demand expected to rise. (3) Attracts overseas tourists.

Table 4: The perspectives of businessmen and scholars

4.3.1 Regular Travel Agencies

Regular travel agents believe that most disabled persons do not have the economic leverage of the average consumer and lack the income needed to participate in this kind of leisure activity. Due to their limited spending power, fewer disabled persons travel for pleasure than other individuals, and the trips taken were characterized by fewer shopping stops, low value-added and low profits, which reduced the interest among travel agents interviewed to get involved in accessible tourism. Also, more staffers are usually needed to accompany accessible tourism excursions to safeguard the safety of those on the trip, pushing personnel costs higher than for regular groups. In a fiercely competitive environment that has left travel businesses struggling to survive, agents said they don't have the deep financial pockets needed to develop the new emerging accessible tourism market. In addition, businessmen contended that with Taiwan's accessible tourism environment not fully developed, it would be hard to promote the concept. There will be many problems in a number of areas if the transportation network is not improved.

4.3.2 Tourism-related Scholars

Scholars suggested that the promotion of accessible tourism has met with success overseas and brought significant economic benefits to the tourism sector in those countries. With Taiwan's society aging and the demand for travel among the disabled increasing, this market has the potential for rapid growth in Taiwan and at present does not have any competitive pressure. If agents adopt a flexible strategy and operate their businesses well, not only will they benefit, but Taiwan's international image will be enhanced, and its tourist sector will become more competitive in the international

arena. In this era when information can be transmitted quickly and Internet technology is highly developed, the technical barriers to promoting this new concept have been largely removed.

4.3.3 Travel Service Providers for the Disabled

Because travel agents offering accessible tourism services may be people with disabilities or those that understand them, they are fully aware of the demand for travel among their disabled peers and don't believe it's as weak as outside estimates suggest. With Taiwan quickly becoming an aging society and demand growing for tour packages among disabled individuals, this segment of the tourism market has significant growth potential. By offering excellent accessible tourism opportunities, tour companies not only can provide Taiwan's disabled community with chances to sightsee but also attract disabled persons from abroad to visit Taiwan, stimulating local tourism development and helping meet targets for visitor arrivals.

From the interviews with businessmen and scholars, we can also identify what they saw as the strengths, weaknesses, opportunities and risks related to accessible tourism, as detailed below.

Strengths*:* The development of accessible tourism not only caters to the disabled but can also apply to the average tourist. Because the disabled need people to accompany them, they create greater value-added than typical tourists. Promoting first-rate accessible tourism packages and facilities can enhance Taiwan's international image, attract foreign disabled tourists to Taiwan to sightsee and improve Taiwan's tourism competitiveness.

Weaknesses: During accessible tourism trips, shopping is limited, meaning a tour's value-added is relatively low. Also, tours for the disabled may require additional staff to take part in the tour, pushing personnel costs higher, and developing a barrier-free environment requires long-term investment, meaning there is considerable risk and a long payback period.

Opportunities: The onset of the aging society and the growing demand for leisure travel among the disabled indicate that the accessible tourism market has substantial growth potential. At present, there are no competitors in the market, and plenty of room exists for profit growth and development.

Threat: The market does not have any precedents to use as references, so it is a completely emerging market, characterized by a high level of uncertainty. That uncertainty is one of the main sources of operators' reluctance to get involved in the market, and with Taiwan's accessible tourism environment still underdeveloped, promoting accessible tourism has proven even more complicated.

4.4 Comparison of Accessible Tourism in Taiwan and Foreign Countries

As presented in Table 5, some foreign countries, including Australia, Hong Kong, Japan and New Zealand have developed successful accessible tourism products, and

many, including Australia, China, France, Hong Kong, India, Japan, South Korea, Singapore and Thailand have passed legislation protecting the rights of the disabled.

AUSTRALIA	1. Offers free information to those providing services to the disabled and their families. 2. Provides "accessible maps" for people with disabilities. 3. Australia's whale watching accessible services include: 1) providing a sloped ramp so the disabled can easily board the vessel 2) providing "accessible" restrooms on board, and 3) ensuring that disabled persons have good vantage points on the boats from which to see the whales.
HONG KONG	1. Provides an online downloadable accessible tourism guidebook with accessible hotels, shopping malls, restaurants and public facilities. 2. Lists every hotel's accessible features. 3. Has designed relatively low wharfs, allowing the disabled easy access.
JAPAN	1. Trains have accessible restrooms and space for people in wheelchairs. 2. Vessels must be equipped with elevators and accessible restrooms. 3. Online accessible tourism guidebook includes information on accessible hotels, transportation, parks and shopping and accessible maps.
NEW ZEALAND	1. New structures are legally required to provide disabled access and related facilities, including motel and hotel accessible maps. 2. Provides a 300-page accessible tourism guidebook on the Internet, including information on accessible transportation, activities, shopping centers and public restrooms.
SINGAPORE	1. Installs "accessible maps" for people with disabilities. 2. There are two taxi companies which provide accessible vehicles for disabled people. 3. Provides an online downloadable accessible tourism guidebook.

Table 5: Accessible tourism in other countries

4.5 Using Long Tail Theory to Suggest Future Directions for the Tourism Industry

Applying Long Tail theory perspectives [Curran et al., 2006], this study identified strategies used by the travel industry in developing accessible tourism, including: integrating the virtual and real worlds to expand the scope of services; creating new supply to attract potential customers; listening more closely to customers to discover Long Tail niches; and using an information screening platform to create new demand by molding new tastes and extending a product's value. In operating accessible tourism ventures in the future, this study suggests businesses develop in diverse directions targeting different customer segments. Agents should not limit themselves to targeting people with physical disabilities, but can serve many other tour groups with limitations, including, for example, the visually impaired.

In managing accessible tourism, businesses should remember that people with disabilities are not the only ones who can participate in accessible tourism itineraries. Diversified customer groups, including individuals with different kinds of disabilities, can ensure that every disabled individual can participate by eliminating environmental barriers and providing specialized service assistants. Only then can the tail in Long Tail be big and long enough to make these niches in the tourism industry profitable.

5 Conclusions

This study examined the accessible tourism segment within the tourism industry, and through interviews with experts discovered that the pleasure travel requirements of disabled persons are not as complicated as is widely portrayed. As long as a complete barrier-free environment exists and specialized personnel are provided, people with disabilities can experience the same joy from pleasure travel as the average tourist. After interviewing academic experts and tourism professionals, this study found that accessible tourism was a niche worth pursuing and has plenty of room for growth in the future. Because of the market's lack of competition and customers' special requirements, it has more room for profit growth than the mass market travel sector. This study focused primarily on people with disabilities, just one niche market among many. In fact, accessible tourism is not the only niche in the tourism market, and accessible facilities can also be of benefit to non-disabled individuals, including the elderly, young children and pregnant women.

Segmented markets, designed or customized holidays are becoming more and more important for profitability and competitiveness in tourism [Poon, 1989]. With the blossoming of the Internet and the rise of Web 2.0 websites [Eijkman, 2008], Web 2.0 can be seen as a launching pad or accelerator to deliver niche market the proper information or services that specific groups are looking for. This study suggests that travel agents set up sites to improve people's access to information. Through the Internet's free flow of information, businesses and attractions can speed up the popularization of accessible tourism concepts and enable more potential customers to familiarize themselves with related products. In fact, only creative and innovative companies will be able to remain competitive in new tourism industry market niches by taking advantage of emerging information technologies and innovative management methods [Chang and Chou, 2007], especially in the era of Web 2.0.

More importantly, Web 2.0 can be described as an attitude rather than technology alone [Miller, 2005]. Web 2.0 has a tremendous potential when it comes to effectively share knowledge between business and customer, as well as customer and customer [Bertoni and Chirumalla, 2011]. The platform needs to steer toward more adoptive learning experiences and behavioural enhancements. Web 2.0 applications are those that make the most of the intrinsic advantages [O'Reilly, 2005]. This study used Web 2.0 concepts proposed in Long Tail theory to design a Web site specifically geared to people with disabilities. Using the Web 2.0 model, the site provides travel agents and customers a transparent platform that empowers people from around the world to post accessible attractions and even allows the disabled to share their own experiences, in the process increasing the willingness of potential customers to travel for pleasure [Oberhelman, 2007]. The Web site also gives even non-disabled people exposure to accessible tourism, spreading the concept to an even wider audience. Ultimately, it can become a platform where information is shared and quickly links upstream and downstream actors, as well as successfully proving the feasibility of applying Long Tail theory to the tourism industry.

5.1 Implications for Government

Tourism is seen as having the greatest potential of any industry in the economic development of many countries, but before a viable tourism industry can be

developed, each country must take stock of its strengths and weaknesses, and should upgrade its strengths while resolving any lingering problems. In the fiercely competitive tourism industry, products should be built to satisfy different niches, maintain a market's novelty and create a unique appeal to generate profit. Long Tail theory, which has gained resonance in recent years, stresses that the combined profit of niches exceeds that of mass market commercial goods and it helps identify markets different from those that have traditionally existed. Because the needs of these markets are unique and competition is limited, profits are higher than for more popular commercial sectors.

The two most important factors in accessible tourism are service personnel and the overall environment. Scholars interviewed contended that the government should make a concerted effort to promote and maintain a welcoming travel environment for people with disabilities and strengthen the construction of accessible facilities to provide barrier-free spaces. In terms of service personnel, more people are needed to push for a barrier-free environment and spread the concept among local residents. That way, everybody can join together in preserving accessible facilities and ensure that these facilities can fulfill their true functions in helping the people they are intended for. With the integrated development of these two factors, accessible tourism is a market worth pursuing that has considerable profit potential [Bi et al., 2007].

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