FORMULATION OF MARKETING INFORMATION AND COMMUNICATION STRATEGIES IN TAIWAN TOURISM INDUSTRY

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Purpose: The purpose of this research is to formulate marketing information and communication (ICT) strategies for Taiwan tourism industry.

Design/methodology/approach: This research uses a literature review to identify problems and solutions of Taiwan's tourism industry. One of the identified problems is used as an example to formulate marketing ICT strategies.

Findings: This research has identified twenty-five main problems and forty-eight solutions of Taiwan's tourism industry and formulated marketing ICT strategies for one of the identified problems.

Research limitations/implications: The subsequent research can apply other research method to improve the reliability and validity.

Practical implications: The application of marketing ICT strategies can be used in other country's tourism industry and be adapted to other industries as well.

Originality/value: This research clarifies the problems of Taiwan's tourism industry and applies marketing ICT strategies in Taiwan tourism industry.

Keywords: Tourism Industry, Information and Communications Technology (ICT), Taiwan
Paper type: Research paper

INTRODUCTION

The tourism industry is highly valued and generally acknowledged as a tertiary industry. One reason for this is that the traveling and staying of tourists outside their usual environment may bring tourism revenue. In addition, the tourism industry involves many other industries such as hotels, catering, aviation, transportation, and so forth. This implies that once the tourism industry prospers, it may push other industries forward as well. It will not only bring tourism revenue but also increase consumption and employment. As a consequence, tourism makes vital contribution to the overall economy.

Taiwan (or Republic of China, ROC) is an island country; its territory is not large but includes abundant nature landscapes and distinctive artificial scenery. For instance, Taroko National Park is well known for its majestic canyon and precipice and city of Tainan preserves lots of historical sites. Taiwan possesses rich natural resources that can be used to

expand tourism industry. Moreover, tourism industry was listed as one of the Taiwan's six emerging industries, which proves that tourism is becoming more and more important.

Many countries have started to give more attention to the tourism industry. The United Nations World Tourism Organization (UNWTO) claims that the tourism industry has become a vital source of earning foreign exchange. In Taiwan, approximately 8% of foreign exchange is derived from tourism industry and it accounts for more than 15% of Gross Domestic Product (GDP). According to the statistics of the Tourism Bureau of ROC, foreign exchange earnings in Taiwan from tourism were up to 260 billion NT\$. UNWTO also predicts that the tourist attendance will increase to 1,602 million in the world in 2020. As a result, the tourism industry plays an important role to a country and the whole world.

According to the World Tourism Barometer, the tourist attendance was increasing during 2011 and the Asia's growth rate of international tourist was up to 14.1% compared to 2010. Among the Asia countries, Taiwan's tourist attendance was up to 29% especially. Recently, the mainland tourists are increasing. One reason for this is that the government of ROC has promoted tourism for several years and another is that the government has signed the Specific Arrangements Concerning Cross-Strait Tourism in 2008. Taiwan's visitor arrivals had come to 6 million in 2011 consequently (Table 1).

Table 1: Taiwan's Visitor Arrivals 2006-2011

Year	Total		
	No of Visitors	Growth Rate %	Index 1991 = 100
2006	3,519,827	4.19	189.80
2007	3,716,063	5.58	200.38
2008	3,845,187	3.47	207.34
2009	4,395,004	14.30	236.99
2010	5,567,277	26.67	300.20
2011	6,087,484	9.34	328.25

Source: Tourism Bureau of Republic of China (ROC)

The sales volume of smartphones was 420 million and that of tablet personal computers was 41 million in 2011. The most important fact is that the total sales volume of these two products was more than personal computers, proving that the tendency of mobile computing is coming. Taiwan has endeavored to develop the information and communications technology (ICT) industry for several years; therefore, it has solid foundation of the infrastructure and rich experiences in manufacturing and management. The government of ROC also kept investing in ICT research, as well as encouraged creation and invention. For the sake of expecting they could lead the development of related industries and bring the knowledge spillovers effect for other industries to increase work efficiency, promote productivity and raise value added, and spur the economic growth.

Although Taiwan has put a lot of efforts on the tourism industry for many years and the visitor arrivals are increasing stably, there still is room for improvement. As the ICT industry has become more and more important, the tourist attendance has increased rapidly, and ROC has allowed travel in Taiwan, the number of tourists will probably increase day by day, and it certainly will change the state of Taiwan's tourism industry. This research investigates how the use of ICT can improve the Taiwan's tourism industry. The aim is to formulate marketing ICT strategies for Taiwan tourism industry. In essence, main problems and solutions of Taiwan's tourism industry is identified and based on these some marketing ICT strategies are formulated.

The remainder of this paper is structured as follows: To begin with the research approach is described shortly in Section 2. Thereafter, a literature review on main problems and solutions of Taiwan's tourism industry is provided in Section 3. After that, we use one of the identified problems as an example (some of Taiwan's tourism corporates and shopping areas lack of marketing ability) to formulate marketing ICT strategies in Section 4. Finally the research is concluded in Section 5.

RESEARCH APPROACH

This research uses a literature review to identify problems and solutions of Taiwan's tourism industry. Articles that discuss main problems, and possible solutions to these problems, have been collected within five specialized business fields: (1) product management, (2) marketing management, (3) human resources management, (4) research and development management, and (5) financial management. Since the identified problems and solutions were too many and diverse from each other, they were classified into different groups. One of the identified problem groups (some of Taiwan's tourism corporates and shopping areas lack of marketing ability) is used as an example to formulate marketing ICT strategies for Taiwan tourism industry. We expect the marketing ICT strategies will attract more foreign tourists to Taiwan and become a case study for the development of other countries' tourism industries.

LITERATURE REVIEW

Much literature discusses problems and solutions in Taiwan's tourism industry. Our literature review revealed twenty-five main problems of Taiwan's tourism industry (Table 2). Since the identified problems (No. 1-25) were quite many and diverse from each other, they were classified into different problem groups (Table 3). For example, problem No. 8, 14, 15, and 23 in Table 2 are all descriptions of the problem "Service quality in some Taiwan's tourist spots is not satisfying due to employee lack of capability". We therefore categorize them into the same group (A) in Table 3.

Table 2: Main Problems of Taiwan's Tourism Industry

Authors	No	Problems
Deng et al. (2007)	1.	There were few proper channels for tourists to communicate with the hotel proprietors.
	2.	The ways that hotel proprietors deal with the customer relationship problems are usually inadequate and their ability of external communication is insufficient.
Chen (2005)	3.	Although there are many well-known tourist spots in Taiwan, the level of tour packages are not deep and wide enough; leading to low value added.
Hsieh et al. (2008)	4.	The communication and propagation ability of B&B owners is insufficient, and they also lack of effective promotions.
	5.	The expenditure of most Taiwan's tourist spots is too high.
Lee et al. (2008)	6.	The channel strategies of Taiwan's tourism are deficient.
	7.	Taiwan's tourist spots and shopping areas are short of impressive integrating brand elements and corporate Images.
Yeh and Wang (2001)	8.	Service quality of some tourist spots shopping areas in Taiwan couldn't satisfy their customers.
Dai (2008)	9.	Most of Taiwan's tourism corporates are medium and small-size enterprises, and that's the reason why it's usually uneasy for them to get financing loans.
	10.	Financial transparency of medium and small-size tourism corporates is defective and some of them even lack of accounting system.
Hwang and Chen (2009)	11.	The average wages of Taiwan's tourism are too low.
	12.	The job satisfaction of staff is low, but the employee turnover rate is high.

Table 2: Main Problems of Taiwan's Tourism Industry (continued)

Authors	No	Problems
Lee (2005)	13.	Most the meals in the tourist spots or shopping areas are lack of distinguishing features and creation.
	14.	The on meal speed in the tourist spots or shopping areas is slow.
	15.	The meals and dinning environments in some of the travel sites are not that hygienic.
Chen and Wu (2009)	16.	The contents of package tours are indistinctive.
Otto and Ritchie (1996)	17.	The positions of most Taiwan's travel sites are ambiguous.
Chih et al. (2006)	18.	The duties of employees are unclear.
	19.	Some of the tourism corporates don't provide equitable promotion methods and employee evaluation system.
	20.	The standards of recruiting are various.
Liu and Chen (2011)	21.	Most of the mini tourism corporates can't keep their customers staying longer and lack of local tourism industry planning to promote economic growth.
Lai et al. (2011)	22.	Some of the Taiwan's traveling sites are too remote to reach.
	23.	The guides in the tourist spots are insufficient.
	24.	Most of the tourism corporates were unclear towards the policy and government grants.
Denhning et al. (2005)	25.	Most of Taiwan's tourist spots had low prestige on the internet.

Table 3: Problem Groups of Taiwan's Tourism Industry

Problems	No	Problem Group
8、14、15、23	A.	Service quality in some Taiwan's tourist spots is not satisfying due to the employees lack of capability.
9、10	B.	Financial infrastructure in some medium and small-size tourism corporates is incomplete.
11、12、18、19、20	C.	Personnel management and staff motivation are defective in some tourism corporates.
1、2、5	D.	Inefficiency in communication with customers.
3、4、6、25	E.	Some of Taiwan's tourism corporates and shopping areas lack of marketing ability.
13、16	F.	Meals and leisure activities in some tourists spots are insufficient and without innovation.
7、17	G.	There are barely any brand elements and proper positions in most of Taiwan's tourism corporates
21、24	H.	Taiwan's tourism industry lacks of integrated planning to create revenue.
22	I.	Some of the Taiwan's traveling sites are too remote to reach.

Based on the generated problem groups, forty-eight corresponding solutions were identified in the literature review (Table 4). In Table 4, we can see the different problem groups and the corresponding solutions. The solutions not identified from literature review were deduced by analogy by the authors.

Table 4: Solutions To Main Problems of Taiwan's Tourism

Problem Group	No	Solutions	Authors
A. Service quality in some Taiwan's tourist spots is not satisfying due to the employees lack of capability.	A1.	Select outstanding students from department of tourism, tourism experts, and the employed of relative industries to well-known foreign hotels or institutes to pursue further education every year.	Chen and Chen (2008)
	A2.	Provide education and training for attendants and apply standard operating procedure (SOP) to manage them.	
	A3.	Set up internal tourism staff training, for instance subsidizing to run senior leader programs of tourism, inviting experts to participate in seminars.	
	A4.	Improve the environmental sanitation.	Lee (2005)
	A5.	Set up standard purchase and produce systems to make sure every segment is checked on.	
B. Financial infrastructure in some medium and small-size tourism corporates is incomplete.	B1.	Establish accounting system.	Dai (2008)
	B2.	Make use of government resource.	
C. Personnel management and staff motivation are defective in some tourism corporates.	C1.	Concerned about employees.	Hwang and Chen (2009)
	C2.	Design inner compliant channels.	
	C3.	Arrange employees' insurance and retirement systems.	
	C4.	Create particular and harmonious corporate culture.	Lee (2010)
	C5.	Establish employee motivational system based on their achievement.	
	C6.	Build up management and employee evaluation system.	
	C7.	Design main tasks and responsibilities of gross root employees.	Chih et al. (2006)
	C8.	Provide professional training for employees.	
D. Inefficiency in communication with customers.	D1.	Establish member data system.	Deng et al. (2007)
	D2.	Take account of relationship marketing.	
	D3.	Establish the interaction with customers via social network.	
	D4.	The B&B proprietors should show consideration actively for their customers, even open their hearts to each other.	Lu et al. (2008)
E. Some of Taiwan's tourism corporates and shopping areas lack of marketing ability.	E1.	Increase promotive tour packages.	Chen (2005)
	E2.	Take advantage of internet marketing, public reports, and travel magazines to raise prestige.	Huang (2006)
	E3.	Apply strategic alliance to different business fields or the same trades.	
	E4.	Adopt search engine optimization (SEO)	ComScore (2009)
	E5.	Take advantage of Internet marketing and try to make the information on websites abundant and orderly.	Lee et al. (2008)
	E6.	By sharing the articles on Blogs to create loyal customers.	
	E7.	Adopt location based service (LBS).	
	E8.	Enrich customers' cultural knowledge with local impression, environment, and resources.	Benz and Fürst (2002)
	E9.	Develop products with stories to make customers touched.	Liu et al. (2011)
	E10.	In compliance with area feature to invite international competitions or exhibitions to Taiwan hereby let more people acquainted with Taiwan.	

Table 4: Solutions To Main Problems of Taiwan's Tourism (continued)

Rearranged Problems	No	Solutions	Authors
F. Meals and leisure activities in some tourists spots are insufficient and without innovation.	F1.	Combine with local products to create diversity of dishes.	Lee (2005)
	F2.	Design experience activities which combined with local culture, natural landscape, and ecological environment.	Rossman (1989)
	F3.	Apply local and community life culture creatively into your corporate's core ideology.	
	F4.	Apply local cultural features into your corporate culture.	
	F5.	Provide theme activities such as entertainments, education, and virtual reality to enrich customers' life experiences and emotional feelings.	Lin and Huang (2009)
	F6.	Design experience activities for tourists to learn cultural knowledge and experience different life styles.	
	F7.	Provide interactive guidance, narration service, or guidance facilities.	
G. There are barely any brand elements and proper positions in most of Taiwan's tourism corporates	G1.	Establish brands and corporate images.	Lee et al. (2008)
	G2.	Design the environment with the same theme to create obvious atmosphere.	Otto and Ritchie (1996)
	G3.	Design the environment with five senses experience to improve the recognition of brands.	
	G4.	By visual designing to create space harmony.	
	G5.	Adopt knowledge management systems (KMS).	Lai et al. (2011)
H. Taiwan's tourism industry lacks of integrated planning to create revenue.	H1.	Coordinate with government policies to create tourism revenue.	Landry (2000)
	H2.	Enhance the marketing ability to attract more foreign tourists.	Wu (2011)
	H3.	Coordinate with neighboring tourist spots to develop a win-win situation.	Chen et al. (2008)
	H4.	Tie in relative festivals to attract more tourists.	Liu et al. (2011)
	H5.	Establish local integrated marketing platform.	Carayannis and Alexander (2006)
I. Some of the Taiwan's traveling sites are too remote to reach.	I1.	Mark the routes on Google Map.	Lai et al. (2011)
	I2.	Provide shuttle services.	

The literature review shows that there still are lots of challenges in the front of the Taiwan tourism industry (Table 3). Although there are many tourist spots, which are no less amazing than the foreign, lack of integrated planning and undistinguished characteristics of traveling sites, limits the success. The literature review also shows that there are plenty of solutions to the identified problems that should be considered (Table 4). Nevertheless, the state of Taiwan's tourism is different from the past. Taiwan has put a lot of efforts on ICT industry and has a sturdy foundation. In the following, we will focus on the combination of Taiwan's tourism and ICT on the identified problem of "Some of Taiwan's tourism corporates and shopping areas lack of marketing ability" We expect it will make more foreigners know about Taiwan and further attract them to make a tour there.

AN EXAMPLE OF APPLICATION OF ICT

As the ICT is evolving, the ways people live and travel have changed a lot. For example, the Internet age brings more creative business models and marketing skills and even makes social networks become new media. The smart phones also bring us a more convenient life style. ICT means using technology to reach the telecom communication effect and changes the instrumentality of communication between people through the broadcasting of voice, words and messages. As the matter of fact, we suggest using marketing ICT strategies within the Taiwan tourism industry to solve the identified problem of “Some of Taiwan’s tourism corporates and shopping areas lack of marketing ability”. In the following, we provide recommendations with regard to three areas: (1) Social network marketing, (2) Location Based Services and (3) Internet marketing channel. This may strengthen the connection with foreign tourists and increase the value added in Taiwan’s tourism industry.

Social Network Marketing

We can use social networks to conduct integrated marketing. For instance, making mini short videos to introduce different local images and characteristics to tourists traveling from different countries with different needs. The videos can then be broadcasted through satellite TV or Internet (e.g., Youtube) to create topics and discussions. We want to motivate traveling to Taiwan by using the videos to increase the visibility of Taiwan and change the mindset of foreign tourists. Moreover, tour spots and shops can set up official Facebook pages or use Twitter to create interaction with the potential visitors. For example, creating events for fans that can be shared with friends in order to have a chance to win discount coupons or other prices. This allows the shops or tour spots to make exposure to consumers frequently and to evoke the memory of the consumers to increase sales.

Location Based Services

The tourists can freely use the Radio Frequency Identification (RFID) personal navigation with different language versions to find answers and information and by combining it with QRcodes, it will also increase the involvement of the tourists. QRcodes have been used widely in the daily life and could also be used in the tourism industry on websites or tour spots to inform the tourists in a faster and better way. It is also possible to add information about parking options and public toilets on the QRcode or include QRcode in shopping catalogues to allow tourists to buy souvenirs by phone. The tourism industry can also use instant messages or QRcodes, to send information about discounts once the tourists arrive to a location. This will make the tourist more familiar with the surroundings and hopefully increase their interest to other products and services.

Internet marketing channel

On an Internet based selling platform we can place information about local specific products to increase the valued added and to conduct integrated marketing. For example, the Taobao net or the largest tour news media, the TraNews, is going to launch Malaysia and Taiwan ECMALL website to advertise specific products in Taiwan to different countries. A website is able to introduce the full range of products and service and to provide links to tour spots in Taiwan. In addition, it could give information about shops to make foreign visitors more eager to visit Taiwan. Development of different Apps with food maps and traffic ways in Taiwan would facilitate tourists traveling in Taiwan.

Summary

The use of marketing ICT strategies in the tourism industry in Taiwan is more than the above shown examples. It could reduce the distance to potential consumers by allowing an efficient mean of communication. This allows foreigners to get access to information about Taiwan to improve their interest and willingness to visit Taiwan. In the longer run this will help Taiwan tourism industry to grow.

CONCLUSION

There are many island countries like Taiwan with abundant nature as well as culture sights. However, the problem is that island countries are difficult to connect to other countries. Thus it is a hard work to develop the tourism industry. Today, with the advancement of ICT it is not that difficult to make foreign visitors aware of Taiwan but to attract them to visit. In our literature review we have identified twenty-five problems and forty-eight solutions. However, the development of tourism industry is more different now than before. The government of ROC has worked hard on the tourism industry in recent years and actively developed the ICT industry. If we use ICT strategies in tourism industry, it may bring us opportunities. We expect it will not only make more foreign visitors come to Taiwan but also upgrade the industry in Taiwan and make Taiwan as a case study in the tourism industry.

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