

A Study on the Plan and Design of Leisure Farms' Tourist Touch Points

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ABSTRACT. *Leisure agricultural tourism has become a new way for people in modern society to alleviate the pressure in daily life in holidays. Meanwhile, the investment in the construction of leisure farms is increasing rapidly. In terms of farm management, a differentiated management strategy can make projects on the development and construction of leisure farms stand out, and thus brings huge benefits and value. The Leisure Farm Customer Journey Map (CJM) is an effective strategic management tool for farm operators to understand the satisfaction degree of tourists. In this study, through many visits to leisure farms in Taiwan, 20 representative leisure farms are selected as research samples for case study, of which the analysis of touch points is conducted in order to find out visitors' preference. In addition, through questionnaires, we try to find out which factors are the core motivations for tourists to visit leisure farms. This study hopes to help leisure farm operators understand the importance of the planning and design of these touch points for tourists' experience through combining touch points in service design with tourists' core motivations, and aims at optimizing the resource allocation of leisure farms and promoting the sustainable operation of leisure farms.*

KEYWORDS: *leisure farm; Customer Journey Map; leisure motivations; service design; touch points*

1. Introduction

In order to alleviate the pressure brought by the noise, crowded cities, life and work in urban areas, the demand of people in modern society for getting close to the nature is increasing day by day. Leisure tourism has become the lifestyle of vacation. With the guidance and firm support of relevant policies, most traditional farms have transformed, and the scale and number of leisure farms across the country are constantly expanding. With the rapid development of leisure agriculture, the operation and construction of farms have encountered many problems. Because the

tourism benefits of leisure agriculture far exceed the value of agricultural products, the development of many farms has deviated from the original purpose of leisure agriculture, that is to produce edible products. The traditional pattern of growing and processing agricultural products has been gradually replaced by a multi-functional one. For tourists, the impression of farms has evolved into a more diversified and comprehensive mode including sightseeing, picking up fruit, experiencing farming, knowing more about farmers' life, enjoying countryside features, and staying there to relax themselves on vacation.

This challenge of diversified innovation has changed the role of farmers in terms of their ability to develop new skills to improve competitiveness and the ability to support innovation and the governance structure which are required for diversification. It requires a collaborative work of local knowledge and expert knowledge, the ability to build networks and extract value from these networks, and personal motivation and adaptability to achieve business goals (Terence & Monica, 2016). Many scholars, such as Busby & Rendle (2000); Barbieri & Mshenga (2008); Sharpley & Vass (2006); Phillip (2010), have proposed that agricultural diversification is an inevitable development trend of agricultural tourism management. Farmers have been encouraged to diversify their business into the field of agricultural tourism. The compound and cross-border leisure farm combining agriculture and tourism is a comprehensive and diversified business organization. Such diversified business organization will involve a variety of services, such as destination travel, local transportation, accommodation, food and leisure activities. Stickdorn (2012) mentioned that this is a complex service ecosystem, including not only the services provided by stakeholders, but also the entire ecosystem that tourists encounter at a particular destination. The process of farmer's innovation and diversification can be very complicated. However, it is not always easy for farmers to maintain and plan specific farming or agricultural identities to establish tourist attractions on their farms (Domenico & Miller, 2012). Harmonizing the diversified development of agricultural tourism and the conversion of agricultural identity is a difficult task in itself, which causes farmers some problems in achieving continuous economic growth and making progress on the farm, for they try to follow the business model of diversified farms. Similar design, ambiguous market positioning, local cultural neglect and destruction of the environment directly affect the farm's sustainable development.

Stickdorn (2012) put forward the process and method provided by using service design thinking, which is helpful for the establishment of an organization and can deeply and comprehensively understand the need to create a meaningful experience with visitors with obvious potential to help the tourism industry create an excellent travel experience. Innovation can be an important driving force for tourism growth (Hjalager, 2010), and service design can be the core of business model innovation (Prendeville & Bocken, 2017). In order to promote the resource allocation of service design in farm organization management, improve tourists' experience of agricultural tourism, increase leisure tourism's benefits and stimulate revisit on the farm and product sales, this study adopts the service design thinking and combines the touch points of tourists' visit on leisure farms in service design and the core

motivations of tourists to visit the farm, hoping to provide an appropriate plan of resource allocation for leisure farms and intuitively describe the innovative touch point design in the service design system based on tourists' motivations and expectations.

2. Literature Review

2.1 Tourism motivations

The motivation for visiting is a driving force that drives tourists to meet their social and mental demands, it can also be the real reason why tourists engage in recreational activities (Iso-Ahola & Allen, 1982). Scholars like Baloglu and McCleary (1999) believe that tourism motivations can affect the impression of destinations and visitors' choice. This study believes that, in addition to clarifying the core advantages inherent in farm enterprises, it is also important to understand the driving forces and motivations of visitors to leisure farms. Therefore, we must first collect information about tourists' motivations to visit the leisure farm which reveals the true and potential needs of tourists. It is necessary to understand tourists' motivations of visiting leisure farms, and their different needs and mentality and to think from their side. Only through providing better guidance for tourists and designing innovative and differentiated entertainments, can tourists' high expectations on leisure farms be satisfied, thereby achieving the sustainable development of leisure farms.

There are quite a lot of scholars who have done research on tourism motivations in the past. Among them, Ryan (1995) pointed out that there are 9 types of tourists' holiday interests and motivations: having the opportunity to have novel experience, meet different people, learn different cultures, learn new skills, stay away from the stress in daily life, do fitness training, show off the places you have been to, enjoy time with family and friends and experience amazing things. Motivation is a stimulated demand that prompts consumers to take actions to meet their needs, and consumers can reduce personal anxiety when their needs are met. That is to say, all consumers' behaviors begin with motivations, because motivation is the core driving force of consuming behavior (Kotler & Armstrong, 1999). Tourism motivation is the need of individuals to participate in tourism activities (Pizam, Neumann & Reichel, 1979). Uysal and Jurowski (1994) argued that motivations of tourism can be divided into internal (the pushing force) and external (the pulling force) motivations [6]. Some scholars pointed out that tourism motivations can directly affect the emotional image of the destination (Baloglu, 1997) [7]. External motivations are about certain situations and cognition, for example, the infrastructure of leisure farms and cultural or natural characteristics may attribute to the pushing force. (Yoon & Uysal, 2005) [8].

According to the study of Mei-Jung Lai & Wei-Cher Wang (1999), the main motivations for tourists' leisure activities on leisure farms are: to stay away from the crowd and get close to the nature, to alleviate working pressure and relax themselves,

and to spend more time with family and enjoy intimacy. Juho & Raija (2010) concluded that tourists are seeking relaxation, hoping to get out of their busy work and enjoy a quiet and peaceful life, warm atmosphere, beautiful scenery and nature-related activities.

According to a number of studies on leisure farm tourism, many tourists who visit recreational farms have the same motivation factors, the motivation images of the leisure destination are all generated in a humanistic way based on the common goal of creating a harmonious environment and life. Leisure farm mechanism is to provide the public a place to get rid of the pressure in daily life in order to achieve the function of rest and relaxation. Through their studies, we are more certain about the results of our survey and interview, i.e. the leisure farm is a relaxing place for the public to stay away from the city hubbub and return to the pastoral life to build a more intimate parent-child relationship.

2.2 Touch points for tourists to visit leisure farms

CJM is a management tool used by academics and practitioners to understand customer experience in an organization (Rosenbaum & Otolara, 2016). Generally speaking, CJM can reflect the real satisfaction degree of consumer experience. In addition, it is superior to traditional methods of conducting consumer insights, research, and evaluation, enabling companies to be closer to customers (Ortbal, Frzzette, and Mehta, 2016) and achieving a virtuous cycle that companies want to guide the consumer experience. CJM of leisure farms is a visual description concerning the ranking of visitors' interaction with leisure farms based on their experience. All possible touch points during the visit can be listed through CJM.

Customer touch points are comprised of human, product, service, communication, space and electronic interaction, which make up the connection point bridging business operators and consumers during the consuming experience (Dhebar, 2013). The Design School of Stanford University (USA: Stanford d.school, 2013) describes touch points using the following examples: to imagine that the task of an innovator is to design a new thing to attract customers to visit specific cafes; if we merely know that customers just receive the coffee and drink it, then innovators will lose many steps and stages.

Touch points are where customers and services are intertwined with each other, paving the way for mapping the journey. According to the horizontal time when visitors visit farms, they can be divided into three periods: pre-service, during service, and post-service (Rosenbaum & Otolara, 2016). In this study, in the CJM which depicts the journey that visitors take on the farm, the stage of "pre-service" refers to customers' experience prior to their visit to farms. Pre-service may involve introduction through friends, website visit of leisure farms, community discussion on the farm and customer service hotline. The touch points during the service are what visitors experience when they visit the leisure farm including signs and instructions for guidance, ticket office at the entry, parking lots, interaction with staff and farm operators, involvement of farm activities and the purchase of farm

gifts. Post-service touch points refer to what customers experience after their journey on the leisure farm, such as pictures of farm visiting posted on Line moments and Facebook and deliveries bought in farm shops.

3. Materials and Methods

This study was conducted in two stages. In the first stage, interviews were employed to understand tourists' motivations to visit leisure farms, and then questionnaires were handed out to help determine the core motivations of tourists. In the second stage, through field investigations, 20 differentiated leisure farms in 7 different styles in Taiwan were visited, and CJM was created in order to confirm the touch points in the design of leisure farm services. Through the combination of tourists' core motivations and touch points, it is worth discussing that leisure farm operators should optimize service design through these touch points that may improve tourists' satisfaction, and they may even propose differentiated and competitive design to promote leisure farm tourism and increase the sales of agricultural products.

In the first stage of the study, through interviews with 20 people of different ages at different levels of income from different regions and with the reference of relevant research and papers, a total of 45 items of leisure motivations were obtained and made into online questionnaires to compare the core factors that may affect tourists' intentions to visit leisure farms, and 417 valid samples were collected. The questionnaire contains three parts. The first part about basic personal information consists of 11 questions including gender, marital status, age, education level, occupation, income, former visiting experience, budget, the source of information, intention of revisit and factors they care most in leisure travel. The second part is composed of 45 items on leisure motivations, and 7-point Likert scale was employed. For example, 1 represents the least strong motivation, and 7 represents the strongest one. The third part is the order scale, which requires respondents to rank all these 45 items about motivations to visit leisure farms.

For the second stage of research, due to the complexity of the subject who starts the farm tourism business, Scholar Haugen and Vik (2008) hold that a "visit and in-depth research" are necessary. This study focuses on leisure farms in northern, middle and southern part of Taiwan. We select 20 leisure farms of 7 types which already have a score of over 4.0 (5 as the highest) evaluated by Facebook users (They are: 1.Jingfangyuan leisure farm; 2.Jingyuan leisure farm; 3.Tianzhongyao cultural; 4.Chuntianyao leisure farm; 5.Ruisui pasture; 6.Qingjing farm; 7.Feiniu pasture; 8.Owl ecological education leisure farm; 9.Futianyuan educational leisure farm; 10.Mushroom tribe ecological leisure farm; 11.Shangri-La leisure farm; 12.Taiyi ecological leisure farm; 13.Jianmen ecological flower and fruit leisure life farm; 14.Meipu leisure farm; 15.Yayu leisure farm; 16.Xiangyang Farm; 17.Xunzhiyuan vanilla leisure farm; 18.Lianheyuan leisure farm; 19.Qianhuchuanqi leisure farm; 20.Dakeng leisure farm), whose features include fruit and landscape, ecology and education, horticulture and flower, diary, arts, etc. Through visiting 20 leisure farms and drawing CJM, each touch point can be revealed and recorded for

further comparison, analysis and integration, which is conducive to the improvement of touch points' construction concerning the service designed by leisure farms.

4. Results and Discussion

According to the results of questionnaires in the first stage, the respondents consist of 229 males and 188 females at the age of 21 to 50. Most of them have educational experience of junior college or above. Among them, 154 respondents have never been to leisure farms, 98 have visited leisure farms 5 times or more, and 328 said that they would like to visit or revisit leisure farms. 38.85% of them have a budget (except transportation fees) within 800 yuan, 23.26% within 200 yuan, and 15.35% within 1200 yuan. The sources of information about the farm are mainly friends and relatives (71.94%) and the Internet (46.28%). The top one factor that they care about leisure farm visit is food (82.01%), followed by culture (68.82%), accommodation (65.23%), facilities (57.55%), transportation (50.12%) and shopping (15.35%). There is no difference in the ranking between male and female, and the result of female's attention in facilities is 11% higher than that of male.

Table 1. The average score of core motivations to visit leisure farms based on Likert scale

No.	Motivation items	Average score
1	29. Get close to the nature and breathe fresh air	5.73
2	1. Have a rest and relax on the farm	5.62
3	4. Enjoy the beautiful sceneries in countryside	5.59
4	7. Spend time with friends or families	5.45
5	2. Have a taste of farm specialties	5.41
6	28. Stay away from the city	5.40
7	6. Get rid of working pressure and relax yourself	5.38
8	25. Perfection of farm public service facilities	5.33
9	26. Reasonable fees	5.33
10	27. Recommended by friends and family	5.31
11	24. Good recreation and safety facilities	5.31
12	19. Bring children closer to the nature	5.24
13	34. Promote family relationship and friendship	5.24
14	39. Listen to the sound of nature	5.23
15	5. Experience life in countryside with families and children	5.21
16	10. Appreciate the ecological landscape on the farm	5.11

Table 2 shows that the top one motivation with the score of 36.53 is to have a rest and relax on the farm. It implies that life modern city is under great pressure. The public urgently needs to find a place where stress can be relieved and they can relax themselves both physically and mentally. The core function of leisure farms is

to provide visitors with a place to feel relaxed and relieve stress, which is the most important feature. Motivations ranking second to fifth show the basic functions of leisure farms. First of all, they must provide meals. The average score of this motivation is 26.59. Visitors hope to taste the specialties on the farm, which implies the same result of visitors' most concerned factor as in the first part of the questionnaire, that is food which accounts for 82.01%. If the leisure farm can provide special meal services, the satisfaction degree of visitors and the attractiveness of the farm will definitely be increased. Motivations ranking fourth and fifth show another important factor for the design of leisure farms, that is they are supposed to provide facilities for activities with families and friends. In the planning of leisure farms, it is necessary to design a model of group-type amusement activities instead of single-person ones. In the design of leisure farm activities and facilities, activities which are suitable for the whole family should be prioritized. The whole family includes the elderly, middle-aged people and children. Leisure farms should provide interactive family activities that involve entertainments for children or education facilities, for the proportion of the fourth and the fifth motivations is large (24.89 and 23.09 respectively). It is also very important that, as showed in motivations 2-5, in addition to providing food and family activities, leisure farms are supposed to let visitors enjoy the beautiful scenery of the countryside. In the design of leisure farms, it is necessary to plan unique landscapes, which will be a very important factor for attracting visitors. The landscape features of a farm will attract family members to take photos during their visit, and such interactive activity is also an important part of their shared experience which will become an unforgettable memory for the family.

Table 2. The average score of core motivations to visit leisure farms based on ordinal scale

No.	Motivation items	Average Score
1	1. Have a rest and relax on the farm	36.53
2	2. Have a taste of farm specialties	26.59
3	4. Enjoy the beautiful sceneries in countryside	25.28
4	7. Spend time with friends or families	24.89
5	5. Experience life in countryside with families and children	23.09
6	6. Get rid of working pressure and relax yourself	21.5
7	10. Appreciate the ecological landscape on the farm	15.52
8	14. Pick fruits and till the soil	14.97
9	19. Bring children closer to the nature	14.53
10	29. Get close to the nature and breathe fresh air	14.16
11	8. Take part in outdoor entertainments	13.25
12	11. Take children to the activities on the farm	12.27
13	3. Join the weekend activities on the farm	11.55
14	12. Have parties or barbeques with friends	11.12
15	21. Have afternoon tea on a quiet farm	10.26
16	27. Recommended by friends and family members	7.22

Table 3: Comparison of 20 leisure farms' touch point

Perodes	Touchpoint	NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	
Per-service	WOM (recommendation by others)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20	
	Online information		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
	Telephone custom service		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
Duing service	Shuttle service						•					•	•	•									4	
	Signature system		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
	Cashier		•	•			•	•	•		•	•	•	•						•			•	12
	Parking lot		•	•		•	•	•	•	•	•	•	•					•	•	•			•	16
	Visitor service center		•	•		•	•	•	•	•	•	•	•	•					•	•			•	16
	Park area explanation		•			•	•	•	•	•	•	•	•	•				•	•	•			•	16
	Mobile staff		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
	Photo souvenir zone		•	•	•		•	•	•	•	•	•	•	•						•	•			14
	Outdoor resting pavilion		•	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•			•	17
	Outdoor sale zone			•	•			•	•	•		•							•				•	9
	Theme restaurant service		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	18
	Barbecue area			•						•		•	•							•			•	7
	Picnic area				•		•	•	•			•	•							•				7
	Sanitation facility		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
	Accessibility facilities							•	•				•						•		•			5
	Shows			•					•				•											3
	DIY activity		•		•	•	•	•	•	•	•	•	•						•	•	•	•	•	16
	Interactions with animals			•	•		•	•	•	•	•									•			•	9
	Production, picking experience										•	•		•	•	•	•	•	•	•				9
	Outdoor teaching commentary					•			•	•	•	•	•	•	•	•	•	•	•	•			•	12
	Children's play area									•	•	•	•	•						•				6
	Gifts redeemable			•				•	•	•	•	•	•							•				7
	Homestay							•	•		•	•	•						•				•	7
Bike rental																				•			1	
Conference lease							•	•		•	•	•	•						•	•		•	10	
Camping					•			•															2	
Upcoming Events		•	•		•		•	•	•	•	•	•							•	•		•	13	
Related product gift store		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	16	
Post-service	Online shop											•	•						•	•		•	5	
	Online community sharing		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
	WOM (recommendation to others)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
Total			18	20	16	18	26	29	23	24	28	25	24	15	13	16	27	23	11	22	21			

What is more interesting is that after the comparison between Table 1 Likert scale and Table 2 ordinal scale, it can be found that the results obtained through different test methods are mostly similar except several items including 24. good farm recreation safety facilities, 25. perfection of farm public service facilities and 26. reasonable farm fees. The contents of Table 1 and Table 2 should be integrated, and the construction of leisure farm facilities which is also mentioned as touch points in Table 3 should be taken into account.

Based on the time visitors spent on the farm, three stages are divided as pre-service, during service and post-service, and touch points in 20 leisure farms are analysed. Due to the complication of the theme of each farm and added services, touch points for macro-analysis on leisure farms and sub-touch points within a single service will not be discussed in this paper, as exemplified by touch points as meal ordering, meal waiting and bill payment in the major services provided by restaurants, which are incorporated into the scope of major service touch points at restaurants. In the light of the analysis on the touch points of 20 farms from 7 types, it is found that there are 3 post-service touch points, 28 touch points during the service and 3 post-service ones (Table 3).

This study believes that leisure farms are different from other types of products and services. It is a highly inclusive carrier, and it features more diversified services than traditional tourist attractions. When analyzing the construction of the blueprint of touch points, a wholistic concept is required. This is in line with the opinion of a scholar (Dhebar, 2013) that any systematic consideration of customer touch points must be comprehensive and wholistic. Operators can improve their services more effectively and efficiently through knowing all touch points experienced by customers. Some farms which have been visited during this study prove to be lacking in touch points, more or less, dampening the interests of visitors due to the shortage of interaction. The innovation and construction of touch points remain key to increase the visiting time of visitors and confirm their real experience and potential demands, which helps to develop sustainable products and services that can meet the demands of visitors.

According to the statistics in Table 3, all leisure farms have 8 common touch points (the necessary touch points in the design of the farm service): word-of-mouth before the service (others' recommendations), online information, telephone customer service, signs and instructions of facilities, mobile staff, sanitary facilities, and community sharing and word-of-mouth after the service (others' recommendations).

Through analyzing the core motivations of tourists visiting leisure farms, it is found out that word-of-mouth is one of the core factors for tourists visiting farms when considering the design standards of leisure farms. Online consumption comments, or word-of-mouth, has become an important reference for consumers before making purchase. Chen, Y. & Xie, J. (2008) believe that online consumer review is a kind of product information created by users based on personal use experience, which can be used as a new element for marketing and advertising as a free "sales assistant" to help consumers identify the most matching product. Word-of-mouth (recommendations from and for others) is very important as a touch point for service design before and after the service. Therefore, it is particularly important to maintain and build a community for communication among visitors on the basis of word-of-mouth before and after service, which can increase the number of loyal customers.

Online information and farm websites are the most important channels to present the brand of leisure farms, transmit information, release event notices and provide

farm services. They are also the primary touch points between visitors and leisure farms besides word-of-mouth. Moreover, survey in the first stage also shows that farm information is mainly obtained from family members and friends (71.94%) and online information (46.28%). Therefore, creating a website with comprehensive farm information is an important part in service design to attract tourists to visit the farm.

The customer service hotline mainly solves problems for visitors, and it is an important part of the design of interaction between visitors and the farm. Effective communication and warm and friendly service attitude can be easily reflected from the customer service hotline. Mobile staff are also responsible for solving problems for visitors, which is a touch point about the interaction among people in the design of leisure farm services and an important gateway to show the interactive affinity of farm services.

Facilities like signs and instructions and sanitary facilities reflect the image of a leisure farm, and they are regarded as indispensable infrastructure of it. They are also the touch points that feature the most frequent interaction between leisure farms and visitors. In the investigation of core motivations, the importance of facilities is not significantly presented in order scale, but in the Likert scale, important key motivations are presented. Creative and clear instructions and signs and clean sanitary facilities are important channels to reflect the culture of the farm. At the same time, customized and localized design in the construction of facilities can be employed to optimize visitors' impression on the farm and lay the basis for post-service advertising.

There are 7 touch points that more than 14 out of 20 leisure farms are equipped with: car park, tourist service center, farm guide, outdoor pavilion, DIY activities, theme restaurant and souvenir shop. According to the core motivations of visitors, special cuisine on the farm, activity areas and public facilities are the main ones. For small-scale leisure farms in the suburbs or in the city, most visitors go there by car, so parking lots are quite necessary. Farm guide is one of the main ways for visitors to know more about the leisure farm. Outdoor pavilions and DIY activities are important touch points which reflect visitors' relaxation and educational motivations to visit the leisure farm. Theme restaurants and souvenirs are the major source of income of a leisure farm and an important channel for advertising leisure farm products, which is an important part of touch points for increasing the loyalty and satisfaction degree of visitors.

There are 6 touch points that less than 6 out of 20 leisure farms are equipped with: pick-up service, facilities for the unable, shows, bicycle rental, camping and online shopping mall. The design of leisure farm service can start from the service items with less touch points, so as to provide differentiated services and improve visitors' satisfaction degree. Considering that some tourists do not drive there, it is necessary to provide the touch point of paid pick-up service in a timely manner. In addition, since most of the leisure farms are in the suburbs covering a large area, bicycle rental service can undoubtedly provide great convenience for visitors. Unlike mainland China, the development of online shopping malls in Taiwan is

relatively slow, and few leisure farms provide an online platform for shopping. Online shopping mall is one of the channels to present the image of a leisure farm. It provides visitors with convenient access to second browsing, purchase intention realizing and second purchase of agricultural products on the farm without leaving home. As a touch point for interaction between visitors and leisure farm products, it also provides a platform for recommendations to others, realizing multi-functional service.

In addition, due to different farm sizes and types, the design of touch points such as outdoor selling area, barbecue area, picnic area, interaction with animals, producing and picking experience, gift exchange and accommodation is also different. Barbecue area and picnic area are more commonly seen in farms with horticultural landscapes and dairy farms, and producing and picking experience are mostly provided farms featuring ecological education or with flowers and fruits.

According to the longitudinal analysis, the numbers of touch points in farms with horticultural landscapes, art culture farms and food art farms are almost the same, and the touch points of large-scale dairy farms like Qingjing Farm and Feiniu Pasture are similar. Small-scale farms for fruit picking and traditional orchards have the least touch points. Combining the results of the core motivations in the first stage, it can be concluded that in the design of leisure farms, local specialties, farm landscapes, amusement facilities, culture education and shooting scenes are crucial, while farm entertainment, farming experience, farm's word-of-mouth, afternoon tea area, public facilities and DIY area are executional factors. Leisure farms can optimize the allocation of resources and be fully equipped with touch points that are in line with tourists' core motivations mentioned above according to their own theme and development goals, so as to improve visitors' satisfaction degree.

5. Conclusion

This paper reveals the core motivations for visiting leisure farms to find out which factors are most influential in deciding to visit leisure farms. Through the research on core motivations, this paper provides suggestions for leisure farms that they should add new, explosive and profitable projects and apply refined operation and investments, aiming to promote the benefits of leisure farm tourism and clarify how these benefits can contribute to increasing visitors and product sales of the farm. The most important function of a leisure farm should be providing a place for visitors to relax. It should provide not only specialties but also the conditions of parent-child interaction. More importantly, it should feature the ecological landscape of farm, so that the public can breathe fresh air and spend a pleasant holiday there.

Through the study on designed touch points regarding 20 leisure farms of 7 types in Taiwan in this paper, we comb through some typical design of touch points and conduct a comparative study on the business service mapped in leisure farms. By way of analysing the coordinative role played by touch points in leisure farms before, during and after service, 8 necessary touch points are determined including word-of-mouth (recommendations from others), online information and custom

service hotline before the service, signs and instructional facilities, mobile staff and sanitary facilities during the service, as well as community sharing and word-of-mouth (recommendation to others). Besides, there exist 6 touch points neglected by most farms owing to the differentiated competition and 7 touch points that still need improvement, which are shared problems of the majority of farms.

This paper thus makes contribution to the service design and sustainable business model regarding leisure farms. Also, only 20 cases are studied here which involve the northern, middle and southern part of Taiwan. As a result, this paper has not verified all touch points of CJM made by a variety of visitors due to the complexity of visitor types and the differences of farm sizes, and most of the respondents of this questionnaire are from Fujian, China, followed by Taiwan, Guangdong and Beijing. Due to the objective differences such as tourists' cultural background, social environment and economic development level, the research results may not be suitable for other countries and regions. Therefore, there are some limitations in the research conclusion of this paper. Moreover, due to the differences in leisure farms' themes and sizes, farm operators need to adjust or increase the execution items according to their own farm scale based on the implementation conditions.

However, this paper lays the foundation for future study of this topic, especially the area for the upcoming survey: how the establishment of touch points in the service design of leisure farms can increase the sustainable profit of leisure farms through innovation, which innovation construction and supplementary service are needed accordingly by leisure farms in their design service targeting at distinct visiting groups, and how visitors' core motivations can help guide the design of services provided by leisure farms in order to increase farms' sustainable revenue.

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