

Study on New Strategies for the Future Marketing of Zhuhai Island Tourism based on Qi'ao Island

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Abstract. With the rapid development of tourism, island tourism has gradually become an important travel option. In this paper, the island "Qi'ao Island" in Zhuhai City is selected as a research case, and a systematic and scientific investigation and analysis is carried out from the perspective of tourists' experience, taking into account various aspects of the Zhuhai island tourism market, such as demand, supply, competition, consumer behaviour, marketing methods, etc. This aims to formulate a reasonable solution for the tourism enterprises. This aims to provide a basis for tourism enterprises to formulate reasonable marketing strategies and to provide general guiding principles and directions for the future island tourism market in Zhuhai. The data analysis method covers descriptive statistics and cross-analysis of basic tourist information in order to develop more precise marketing strategies. The results of the study indicate the following: firstly, young people are the main audience of Zhuhai's island tourism market, and they show a strong interest in and demand for island tourism. Second, although tourists' satisfaction with the scenic spots on Qiadao Island is high, there is still room for improvement, especially in terms of infrastructure, transport convenience, and environmental hygiene. Thirdly, there is a diversified trend of users' attention, focusing not only on the natural scenery and history and culture of the island, but also on recreational activities and special cuisines. Fourth, the price level affects the purchasing power of tourists to a certain extent, and too high or too low prices may affect tourists' willingness to spend and satisfaction. Fifth, high-quality service can enhance tourists' satisfaction and increase the repeat rate, service attitude, efficiency and content are important factors of service quality. Finally, the development of island tourism is not only limited to play and sightseeing, but can also achieve wider development through integration and innovation with other industries, such as fishery, agriculture and industry. Based on the above conclusions, in order to further enhance the popularity and brand value of Zhuhai's islands, this paper puts forward the following suggestions: firstly, Zhuhai should strengthen the planning and guidance, optimise the industrial layout, improve the quality of tourism, strengthen the environmental governance, and improve the competitiveness of the market, so as to create a new highlight of Zhuhai's marine economy. Specifically, it can rely on the natural resources and history and culture of Qi'ao Island to create a unique tourism brand and develop diversified tourism products and services to meet the needs of different levels and types of tourists. Secondly, it can make use of online media and social platforms for publicity and promotion to enhance the popularity and reputation of Qi'ao Island, and establish co-operative relationships with other islands and tourism organisations to form complementary advantages and win-win situations, etc.

Keywords: Island Tourism; Zhuhai; Qi'ao Island; Tourism Market Demand; Tourism Market Supply.

1. Introduction

With the gradual economic boom, the tourism industry is also gradually recovering. Zhuhai City has numerous islands, some of which are very famous, making it an ideal travelling and playing destination for tourists. As a new type of tourism featuring the experience of marine fishery lifestyle, island tourism has a unique geographical location and regional characteristics, and being surrounded by water on all sides gives it biodiversity [1]. At the same time, the ecological environment and tourism resources of the islands are outstanding in their originality, providing tourists with unique experiences such as novelty and adventure, therefore, in China, island tourism has a broad market development prospect.

As one of the top ten coastal cities in China, Zhuhai has rich and unique resources. The city is promoting economic transformation and upgrading at a relatively fast pace and accelerating the pace of industrial restructuring [2]. However, due to the limitations of various aspects such as geographic location and historical reasons, its development disadvantages have gradually emerged, which are mainly reflected in the relatively small development of island tourism and the lack of special product branding business model.

In the future development, Zhuhai should focus on strengthening the rational integration and innovative transformation of island tourism resources to form a competitive cultural tourism product with Zhuhai characteristics themed on island sightseeing and leisure holidays [3]. By creating the three themes of "culture + experience", it is expected to enhance visitor satisfaction. With strong support from the state, Zhuhai's tourism industry has experienced rapid growth, surpassing other coastal cities in terms of scale and level, and becoming a focus of social attention.

The development mode of Zhuhai's island tourism focuses on two main features: relying on resource advantages and winning with cultural connotations. Qi'ao Island, as the representative existence of Zhuhai's islands, has become one of the most representative islands with the help of its transport advantage of being directly connected to the mainland as well as the early development of its resources [4]. Qi'ao Island is located in the northeastern part of Xiangzhou District, Zhuhai City, Guangdong Province, with an area of 23.8 square kilometres, rich in flora and fauna resources, and a mangrove wetland reserve. It has a long history and rich human resources, including cultural relics protection units such as White Stone Street, Tin Hau Palace, Anti-British Battery and Su Zhaozheng's former residence. It has beautiful natural scenery and is famous for its "Nine Bays and Eighteen Peaks", which is regarded as one of the "Ten Scenic Spots of Zhuhai", and was identified as an ecological tourism area of Zhuhai City in 2000.

By investigating and interviewing the consumer experience of Zhuhai's tourist-type island visitors, as well as effectively counting and analysing the data, and combining the factors affecting consumer behaviour in various aspects, it is possible to provide suggestions for the feasible development of Zhuhai's island tourism in the future.

2. Data Processing

2.1. Pre-survey Data Tests

2.1.1. Reliability Test

Reliability refers to the consistency and stability of the test results of the questionnaire. Cronbach's alpha coefficient was used as the evaluation criterion for the reliability test of the rating scale of this questionnaire, and the results of each item were calculated as shown in Table 1.

Table 1. Reliability test table for island attractions

Cronbach's alpha coefficient	Number of items	Evaluation results
0.995	74	Scale reliability is very good

From the Cronbach α reliability coefficient discrimination method, it can be seen that the Cronbach α coefficient value ≥ 0.7 is high reliability; $0.35 \leq$ Cronbach α coefficient value ≤ 0.70 is fair; Cronbach α coefficient value ≤ 0.35 is low reliability. From Table 1, it can be seen that the Cronbach α coefficient value of this questionnaire is ≥ 0.7 , therefore, the questionnaire of this pre-survey has high reliability [5].

2.1.2. Validity Test

Validity is validity, which refers to the degree to which the measured results reflect the content to be examined, the more the measurement results match the content to be examined, the higher the validity;

conversely, the lower the validity. There are three types of validity: content validity, criterion validity and structural validity [6]. Among them, structural validity refers to the degree of correspondence between a certain structure embodied in the measurement results and the measured values [7]. This survey used SPSS statistical analysis software, through the KMO and Bartlett spherical test factor analysis of suitability, KMO value>0.9, P<0.05, indicating that the validity is better, the quality of the questionnaire is better suitable for subsequent analysis.

Table 2. Validity test for island attractions

Item	numerical value
Sampling adequacy Kaiser-Meyer-Olkin measure	0.918
Approximate cardinality	3287.022
Degree of freedom	120
Significance	.000

2.2. Formal Survey Data Tests

2.2.1. Reliability Test

Table 3. Reliability test table for island attractions

Ever been to an island	Yes	No
Cronbach's alpha coefficient	0.849	0.828
Number of items	36	22
Evaluation results	Scale reliability is good	Scale reliability is good

Table 3 shows that the Cronbach α coefficient value of this questionnaire is ≥ 0.7 , therefore, this questionnaire has a high degree of reliability.

2.2.2. Validity Test

Table 4. Validity test of island attractions

Item	Visited Values	Not Visited
Sampling adequacy Kaiser-Meyer-Olkin measure	0.890	0.858
Approximate cardinality	1893.369	871.293
Degree of freedom	136	36
Significance	<.001	<.001

Using SPSS statistical analysis software, the suitability of factor analysis was tested by KMO and Bartlett's spherical test. KMO value>0.9,P<0.05,indicating that the validity is better and the quality of questionnaire is better suitable for subsequent analysis [8].

2.3. Overall Descriptive Analysis

In the descriptive analysis in Table 5, 40.81 per cent of the tourists who participated in this survey were male and 59.19 per cent were female. This indicates the homogeneity of the sample data. The percentage of males who have had an island experience is 65.14 per cent of all male respondents, while the percentage of females who have had an island experience is 55.21 per cent of all female respondents [9].

Table 5. Demographic characteristics of tourists in Zhuhai island tourism destination

Name	Options	Frequency	Percentage (%)	Cumulative percentage (%)
Sex	Female	248	59.189	59.189
	male	171	40.811	100
Age	19-25 years	291	69.451	69.451
	26-30 years	43	10.263	79.714
	31-35 years old	31	7.399	87.112
	36-40 years old	18	4.296	91.408
	Under 18 years old	14	3.341	94.749
	41-45 years old	12	2.864	97.613
	Above 50 years old	9	2.148	99.761
	46-59 years old	1	0.239	100
Educational level	Undergraduate	317	75.656	75.656
	Speciality	52	12.411	88.067
	Junior high school	24	5.728	93.795
	Postgraduate and above	22	5.251	99.045
	Primary schools and below	3	0.716	99.761
	Others	1	0.239	100
Q6-5 Interest Preference	[1.0,13.5)	417	99.523	99.523
	[13.5,26.0)	1	0.239	99.761
	[38.5,51.0]	1	0.239	100
Q6-4 Your Industry	[1.0,4.5)	82	19.57	19.57
	[4.5,8.0)	49	11.695	31.265
	[8.0,11.5)	39	9.308	40.573
	[11.5,15.0]	249	59.427	100
Total Name		419	100.000	100.000

In addition, the age distribution of tourists participating in island tourism shows a clear trend of youthfulness. 83.06% of tourists in the age groups of under 18 and 18-30 years old indicate that island tourism is more popular among students and young people, with students accounting for the highest proportion of 59.43% [10]. 11.70% of tourists in the age group of 31-40 years old are engaged in the fields of IT/Communication/Electronics/Internet, Finance, Culture, Sports and Education, and the Internet, while the percentage of women who have experienced island tourism is 55.21%. Internet, finance, culture, sports and education, production/processing/manufacturing, service industry, and government/non-profit organisation industries accounted for a higher proportion of 31.27%. These groups of people have higher income levels and stronger spending power, and can be a potential target market for island tourism. On the contrary, the agriculture/forestry/herding/fishery industry, energy/minerals, and transportation industries account for a relatively low percentage (9.31%), and these groups of people have lower spending power, so they can be considered for targeted tourism products [11].

The relatively low proportion of tourists in the age group above 46 may be influenced by economic strength and interest preferences. Analysing the data, it is concluded that the target customers of island tourism are mainly students and young people, especially those aged 18-25 [12]. Therefore, in product

design and marketing strategies, consideration should be given to meeting the needs and preferences of this group by launching student-oriented tourism activities or offering preferential tourism products. For other age groups, corresponding products and services should be provided to meet their preferences, and for older tourists, more comfortable and safe services should be provided [13].

Finally, from the analysis of literacy level, it can be seen that the proportion of undergraduates is the highest, accounting for 75.65% of the total sample, followed by postgraduates and above, with a proportion of 5.25%. This indicates that the target group has a relatively high level of literacy, is more able to afford high-priced tourism or is more willing to participate in high-quality tourism experiences, and may pay more attention to cultural experiences and knowledge transmission [14]. The proportion of primary school and below, junior and senior high school, specialist and others is 19.10%. This may include some people with a lower level of culture or who are unwilling to disclose their specific level of culture, and may also be a more special group in island tourism. In summary, island tourism can provide personalised and close-to-demand tourism services and experiences according to tourists with different literacy levels.

3. Problems with Island Development

Most of the travellers chose inconvenient traffic and infrastructure construction, accounting for a total of 69.73%. From the travellers' point of view, the construction of the island is single and there is no sufficient infrastructure to attract the travellers to play, and from the commercial point of view, the lack of facilities for entertainment, food and recreation will have a negative impact on the economic development of the island, so we believe that the government or the local administrators can make measures to solve the problem of economic development of Zhuhai at the present time [15]. Therefore, we believe that the government or local management can take measures to solve the current economic development problems in Zhuhai. In addition, there are also a small number of travellers on the attractions of expensive tickets and high prices on the island of the two issues have responded, tourism is most people's leisure and entertainment, relaxation after toil, we pursue economic development at the same time we should also pay attention to the level of consumption of the people, not because of the interests of the original intention, but will be counterproductive, so price gouging is not desirable, we can use the power of the local government and other control to ensure that the cost-effectiveness of tourism consumption. Tourism consumption of cost-effective. Zhuhai island that there are other problems of travellers are not a few, so the development of other aspects should always pay attention to, and gradually improve the infrastructure of the island.

4. Conclusion

Among the 435 samples surveyed, 59.3 per cent of the total samples were tourists who had visited the island attractions in Zhuhai, and 40.9 per cent were tourists who had not visited the island attractions. Among the tourists who have not visited the island attractions, the degree of concern for various aspects of the island attractions is different, so we seize the tourism psychology of this group to capture the market share. Among the 177 samples of tourists who have not visited the island attractions, from a general point of view, the tourists' attention to these six aspects is centred on the score of 4-5, with a high degree of overall attention. From a local point of view, tourists are less concerned about the "cultural heritage" of the island attractions than the others, while the "hygienic environment" is the most concerned aspect, followed by "catering" and "price level" of the scenic spots. "Price level". Therefore, compared with the material aspects, such as price, catering, accommodation, transport, tourists are more concerned about the experience of the scenic area, ornamental aspects, focusing on the spiritual enjoyment. Scenic area managers should start from the scenic area itself, viewing, experience, and improve the quality of the island attractions.

4.1. Tourists Who have Visited the Island Attractions Cognition

At present, the publicity power of traditional media has been greatly weakened by the new media, and the best awareness channel is the network media, followed by various types of magazines, television advertisements, newspaper advertisements and friends. Among the tourists who have never been to the island attractions, 41% of them are not sure which information can be trusted, which shows the homogenisation of the publicity methods of the scenic spots, and the reliability and innovation of the publicity methods need to be improved. The most effective channels of understanding and trust are online media, followed by various types of magazines, TV advertisements, newspaper advertisements and referrals from friends.

Therefore, the scenic spot should firstly set up online marketing platform, focus on online interaction with tourists, pass the culture, characteristics, image and surrounding of the scenic spot to tourists through the form of network media, deepen the tourists' understanding of the scenic spot, increase the recognition of the scenic spot, and stimulate the desire to play. Secondly, friends and the emergence of short videos on the role of consumer guidance should not be underestimated, scenic area managers should focus on this aspect of advertising, establish a brand image, the formation of a good reputation, improve the influence of the scenic area, to stimulate the potential publicity power of the tourists who have been.

Create island attractions public number, provide electronic exhibition and other one-stop service is the most acceptable way of publicity for tourists. Therefore, the scenic spot should also be built in the direction of promotional video and public number, to improve the visual effect of the scenic spot and information sharing, in the creation of the public number, it should highlight the multifunctionality of the public number, focusing on the online interaction with tourists to understand the integration of information about the attractions, reservations, the surrounding environment and so on.

4.2. Tourists' Satisfaction with Various Aspects

52.94% of the tourists are satisfied or very satisfied with the traffic, but 6.67% of the tourists are not satisfied with the traffic, and some measures can be considered to improve the traffic situation. In terms of catering, 48.62% of the tourists are satisfied or very satisfied with the catering, 42.75% of the tourists are neutral, but there are about 10% of the tourists are dissatisfied with the catering, and we can consider improving the quality of the food and the quality of the service so as to enhance the satisfaction level of the tourists in terms of catering. In terms of price, 16.54 per cent of tourists were dissatisfied or very dissatisfied with the price, while 48.42 per cent of tourists were neutral. Compared with other aspects, tourists were more dissatisfied with the price than with other aspects. This means that prices may be a major element of tourist dissatisfaction, and consideration could be given to lowering prices or providing more discounts and favours. In terms of hygiene, most of the tourists were satisfied or very satisfied with the hygiene, but about 10 per cent of the tourists were dissatisfied with the hygiene, and consideration could be given to improving the cleanliness and sanitation. In terms of culture, 51.17% of the tourists are satisfied or very satisfied with the cultural heritage, and a very small number of tourists are dissatisfied with it, so it is possible to consider increasing the variety and improving the quality of cultural activities in order to improve the cultural experience of tourists.

To sum up, most people are satisfied with the various aspects of the island scenic spot of Qi'ao Island, among which the most important thing that needs to be paid more attention to is the price, which should be reasonable and make the price more transparent, so as to increase the tourists' desire to buy. This information can help the island tourism industry to develop better tourism strategies and improve services to meet the needs and expectations of tourists.

4.3. Expectations of Island Attractions

More than 80% of the respondents go to the island for experiencing the special activities of the island, while about 9% of the respondents go to the island for island leisure and holiday, and the remaining

11% are for business activities and study and others, so it can be concluded that tourists go to the island mainly for experiencing the special activities of the island. According to this information, what we need to do is to increase more characteristics and belong to the respective island's local cultural activities, followed by the creation of corresponding cultural products we should also increase the publicity efforts. At the same time to treat the lower part of the part we also need to do perfect, reduce the loss of customers.

4.3.1. Scenic Spot Culture

In the island tourism hope that the tourism industry and urban cultural integration of the people accounted for the least, which has been to the island tourists accounted for 9.41%, has not been to the island tourists accounted for 7.91%, obviously more tourists have been to the island than those who have not been to the island. This means that for this group of people, the integration of island tourism and urban culture is more attractive to them. Among those who want the tourism industry to integrate with local culture, the proportion of tourists who have been to the islands and those who have not been to the islands are equal. This means that for this group, the attractiveness of the island tourism industry is equal to the attractiveness of local culture, and consideration can be given to finding a balance between promotion and development to attract more tourists. For those who want the islands to have an independent tourism industry, it can be found that the number of people who have visited the islands is slightly lower than those who have not visited the islands. This means that this group of people is more interested in whether the island has a unique tourism industry and characteristics, rather than just the attractiveness of the island itself. Therefore, it is necessary to develop more unique tourism industries and features to attract this group of tourists. In summary, the survey of people's expectations of the island tourist attractions can provide some guidance for the promotion and development of the island tourism industry, which can be seen in the hope that the island and the integration of the local culture of the population accounted for a larger proportion, thus indicating that the management of the scenic area should strengthen the integration of local culture, but also pay attention to the independence of the tourism industry, to carry forward the advantages of the city of Zhuhai, to avoid the overpowering of the cultural heritage, the sense of the tourist journey does not achieve a good leisure and entertainment purposes, but also to pay attention to the independence of the tourism industry, carry forward the advantages of the city of Zhuhai, avoiding too strong, travelling to reach the good leisure and entertainment purposes. The purpose of entertainment, but also to reduce the integration of urban culture, the fast pace of urban life, is not conducive to leisure.

4.3.2. Infrastructure and Equipment

Tourists' demand for convenient transport measures accounts for the largest proportion of 20.7%, which strongly suggests that strengthening the construction of roads and the establishment of parking areas has a great potential to enhance the willingness of tourists to travel. According to the data analysis, tourists' demand for diversified and safe accommodation conditions, island theme entertainment projects, environmental protection measures, hygienic and safe food and beverage facilities is also stronger, accounting for 10%-15%, which shows that customers pay more attention to entertainment, food and accommodation, but in the process of the survey we found that such a provision is still relatively small, and if we can strengthen the commercial operation in these areas, we can better promote the development of Zhuhai's tourism industry and the development of the tourism industry. If we can strengthen the commercial operation in these aspects, we can better promote the economic operation of Zhuhai Island. There are also tour guide interpretation service, timely feedback and processing mechanism, transparent prices, unique natural scenery and several service needs compared to other will be a little lower, even so we have to pay proper attention to these services, when our services are getting better and better, the travellers' experience will be better, in order to attract more repeat travellers, more conducive to the future development of the island.

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