

# The customer satisfaction and Loyalty of Atlantis Water World in Sanya

-- Based on CCSI model

Yuhuang Peng <sup>a</sup>, Dr. Nutteera Phakdeephrot <sup>b</sup>

Rajamangala University of Technology Rattanakosin, Nakhon Pathom 73170, Thailand

<sup>a</sup> 1661110471107@rmutr.ac.th, <sup>b</sup> nutteera.pha@rmutr.ac.th

**Abstract:** This study investigates customer satisfaction and loyalty at Atlantis Water World in Sanya using the Chinese Customer Satisfaction Index (CCSI) model. The main objective is to explore the factors influencing consumer satisfaction and provide actionable insights for enhancing customer experience in water parks. Through a comprehensive literature review and theoretical model construction, a customer satisfaction questionnaire tailored to the characteristics of Atlantis Water World was developed and distributed online to individuals aged 18 and above who had visited the park. Data collected from the valid responses were analyzed using statistical tools, including reliability and validity testing, exploratory and confirmatory factor analyses, and structural equation modeling (SEM). The empirical results support all eleven proposed hypotheses, confirming that overall image, expected quality, perceived quality, and perceived value significantly influence customer satisfaction, which in turn positively impacts customer loyalty. Based on these findings, several recommendations are proposed: enhancing themed immersion through training and cultural elements, innovating recreational facilities to improve interactivity, strengthening emotional connections through performance interaction, and building brand awareness via themed designs and experience-based marketing. These measures aim to drive customer satisfaction and long-term loyalty, offering strategic guidance for Atlantis Water World and similar amusement parks.

**Keywords:** Customer Satisfaction; CCSI Model; Atlantis Water World; Sanya; Structural Equation Modeling; Customer Loyalty.

## 1. Introduction

Tourism has become a strategic pillar of China's economy, playing a key role in driving transformation and improving people's quality of life (Airey & Chong, 2010). Despite the severe disruptions caused by COVID-19, China's tourism industry has shown strong resilience, with Sanya emerging as a leading example (Sharma, Thomas, & Paul, 2021). As one of the country's top tourist destinations, Sanya has demonstrated a robust recovery—receiving 87 million tourists and generating 67.89 billion yuan in tourism revenue in 2023, surpassing pre-pandemic levels. The city's marine theme parks, especially Atlantis Water World, have gained prominence due to their unique offerings and international reputation (Meng & Han, 2019). Ranked 20th in the 2021 Global Theme Park Report, Atlantis serves as a representative case for studying customer satisfaction in the marine tourism sector. In the context of increasing competition, enhancing visitor satisfaction has become essential for sustaining growth (Shien, Jie, Li, & Jing, 2015).

This paper therefore applies the Chinese Customer Satisfaction Index (CCSI) model to examine satisfaction and loyalty among visitors to Atlantis Water World, offering insights for improving service quality and competitiveness in Hainan's marine theme parks.

## 2. Current status of Atlantis Waterpark

Atlantis Water World is located in Haitang Bay, Sanya, Hainan Province, China. As a core component of Atlantis

Sanya Resort, it represents the country's first ocean-themed luxury resort complex. Jointly developed by Fosun International and Caesars Entertainment Group, the resort officially opened in 2018 and has become a flagship tourism project under the Hainan Free Trade Port initiative (Chenna, 2010).

Recognized as one of the largest water parks in Asia, Atlantis Water World features over 20 immersive and interactive water attractions. Highlights include the record-breaking "Poseidon's Leap" slide, the family-oriented "Rapids," and the kid-friendly "Atlantis Adventure" zone (Qinjun, Yu, & Hongying, 2017). The park also offers a spacious artificial beach and various aquatic entertainment options, catering to diverse visitor demographics.

Beyond the water park, the resort includes the Lost Chambers Aquarium, which houses more than 86,000 marine creatures, offering guests a unique underwater exploration experience (Song, 2018). Complementary facilities such as fine dining restaurants, luxury retail outlets, and a range of entertainment venues make Atlantis Sanya a comprehensive destination for leisure and recreation.

Since its opening, Atlantis Sanya has received numerous domestic and international awards, drawing significant tourist attention. With the ongoing implementation of favorable tourism and free trade policies in Hainan, Atlantis Water World has become a key high-end vacation destination for both domestic and international travelers (Weiguang, 2022).

### 3. Research Methods

#### 3.1. A model of Visitor Loyalty to Atlantis Waterpark Based on CCSI Theory

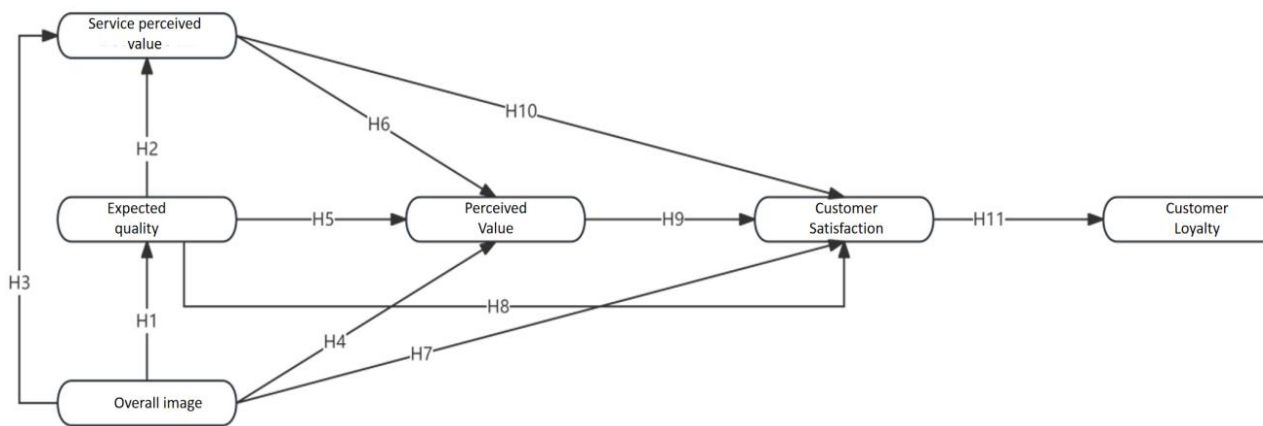
**Table 1.** Summary of assumptions

NO.	Assumptions based on four key factors
H1	The overall image of the park will positively affect the expected quality
H2	The overall image of the park will positively affect the perceived quality of the service
H3	The expected quality will positively affect the perceived quality of the service
H4	The overall image of the park will positively affect the perceived value
H5	The expected quality will positively affect the perceived value
H6	The perceived quality will positively affect the perceived value
H7	The overall image of the park will positively affect customer satisfaction
H8	Perceived value will positively affect customer satisfaction
H9	The expected quality will positively affect customer satisfaction
H10	Perceived quality will positively affect customer satisfaction
H11	Customer satisfaction will positively affect customer loyalty

#### 3.2. Research Hypothesis on Atlantis Waterpark Visitor Loyalty Based on CCSI Model

Based on the theoretical hypotheses mentioned above, the

causal relationship diagram illustrating the influences is depicted in Figure 1.



**Figure 1.** Atlantis Water Park visitor loyalty model based on CCSI model

#### 3.3. Questionnaire Design

The scale design of this study consists of 6 latent variables on the 6 dimensions mentioned earlier. The questionnaire is divided into two sections: the first section includes demographic information of the participants, while the second section consists of measurement items to assess the latent

variables in the proposed model. The scale adopts a Likert five-point rating scale, where respondents rate each item based on their own perspective: 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=neutral, 5=somewhat agree, 6=agree, 7=strongly agree (Guyatt, Townsend, Berman, & Keller, 1987).

**Table 2.** Model variable index system

Latent variables	Measurement items	Source of item
BI	I am very satisfied with the overall image of Atlantis Waterpark	(Ciavolino & Dahlgaard, 2007)
	I am very satisfied with the popularity of Atlantis Waterpark	
	I am very satisfied with the brand reputation of Atlantis Waterpark	
	I am very satisfied with the friendliness of Atlantis Waterpark	
EQ	Before entering the park, I had very high expectations for the quality of service at Atlantis Water Park.	
	Before entering the park, I had very high expectations for the quality of the Atlantis Water Park.	
	Before entering the park, I had high expectations that Atlantis Water Park would meet my needs.	
	Before entering the park, I thought the cost-effectiveness of Atlantis Water Park was very high.	
PQ	I am very satisfied with the quality of the various rides in the water park	
	I am very satisfied with the overall cleanliness of the park	
	I am very satisfied with the number and convenience of the park's amenities	
	I am very satisfied with the layout and variety of dining areas in the park	
	I am very satisfied with the service attitude of the park staff	
	I am very satisfied with the service efficiency of the park's customer service center	
	I was very pleased with the clarity and accuracy of the park's signage and maps	
PV	I am very satisfied with the quality and interactivity of the performances in the park	
	According to the amusement services provided by Atlantis Water Park, I am very satisfied with the charging standards of the park.	
	I think the price of the Atlantis Waterpark ticket was very good for the overall experience I had	
	I am satisfied with the service provided by the Atlantis Waterpark staff in relation to the price paid	
CS	I am very satisfied with the overall value for money of Atlantis Waterpark	
	I am very satisfied with my choice of Atlantis Waterpark	
	Compared with the expected park, I am very satisfied with Atlantis Water Park	
	Compared with the ideal park Atlantis Water Park training institution	
CL	Compared with other parks, I am very satisfied with Atlantis Waterpark	
	I will actively recommend Atlantis Waterpark to my friends	
	I will actively spread favorable information about Atlantis Waterpark to others	
	I will introduce Atlantis Waterpark to others	
	When I need park services, I will choose Atlantis Waterpark as my first choice	

## 4. Results

### 4.1. Descriptive Statistics of Questionnaire Results

For this survey, a random sampling method was used to collect sample data from residents. A total of 415 questionnaires were collected. After manual inspection and screening, samples with excessively short completion times and those with repeated answers to consecutive questions were excluded. As a result, 408 valid questionnaires were obtained, achieving a questionnaire validity rate of 98.31%.

The visitor demographic analysis reveals several key features:

**Gender:** The sample was nearly gender-balanced (52.21% male, 47.79% female), indicating broad gender appeal.

**Age:** A spindle-shaped age structure was evident, with 84.01% of visitors aged 21–50, reflecting alignment with the park's design and marketing toward youth and middle-aged

consumers.

**Education:** 75.49% held a bachelor's degree or higher, suggesting strong appeal among educated urban populations.

**Occupation:** The majority were corporate employees, civil servants, or professionals (78.94%), with limited representation from students and the self-employed.

**Income:** Visitors mainly belonged to the middle-income group (81.87%), matching the park's pricing strategy.

**Geography:** 75.49% came from first- to third-tier cities, with a significant positive correlation between city GDP and visitor share ( $\rho=0.82$ ,  $p<0.01$ ).

**Revisit Frequency:** Most visitors followed a medium-frequency, long-term visitation cycle, with 79.66% returning within 1.5 years.

**Conclusion:** The park's core customer base comprises educated, middle-income urban residents aged 21–50, mainly from economically developed cities. These findings support a targeted marketing approach focused on mid-tier pricing, seasonal offerings, and enhanced customer retention strategies.

**Table 3.** Basic characteristics of samples

Project	Item	Number of people/person	Proportion/%	Cumulative percentage %
Gender	Male	213	52.21	52.21
	Female	195	47.79	100.00
Age	20 years old and below	24	5.88	5.88
	21-30 years old	111	27.21	33.09
	31-40 years old	116	28.43	61.52
	41-50 years old	121	29.66	91.18
	51-60 years old	23	5.64	96.81
	61 years old and above	13	3.19	100.00
Educational Background	High school or technical secondary school and below	73	17.89	17.89
	College	190	46.57	64.46
	Undergraduate	121	29.66	94.12
	Master and above	24	5.88	100.00
Profession	Government or public institution staff	90	22.06	22.06
	Enterprise staff	128	31.37	53.43
	Professional and technical personnel	100	24.51	77.94
	Students	44	10.78	88.73
	Individual industrial and commercial operators	33	8.09	96.81
	Others	13	3.19	100.00
Disposable Income	3,000 yuan and below	57	13.97	13.97
	3,001 yuan ~ 5,000 yuan	123	30.15	44.12
	5,001 yuan ~ 8,000 yuan	127	31.13	75.25
	8,001 yuan ~ 10,000 yuan	84	20.59	95.83
	10,001 yuan ~ 15,000 yuan	7	1.72	97.55
	15,000 yuan and above	10	2.45	100.00
Place of residence	First-tier cities	88	21.57	21.57
	Second-tier cities	106	25.98	47.55
	Third-tier cities	114	27.94	75.49
	Fourth-tier cities and below	100	24.51	100.00
Frequency of park experience	Half a year	45	11.03	11.03
	Once a year	182	44.61	55.64
	Once a year and a half	143	35.05	90.69
	Once every two years or more	38	9.31	100.00
Total		408	100.0	100.0

## 4.2. Data Analysis of Questionnaire Results and Research Model Hypothesis Testing

### 4.2.1. Reliability analysis

**Table 4.** Reliability value of each dimension

Variable name	Variability
Overall image	0.909
Expected quality	0.893
Perceived service quality	0.936
Perceived value	0.880
Customer satisfaction	0.891
Customer loyalty	0.867

### 4.2.2. Validity analysis

Validity can be divided into four types: content validity, construct validity, convergent validity, and discriminant validity (Analysis., 2000).

(1) Content validity: The method for testing content validity should be referenced from relevant literature sources.

(2) Construct validity: The methods commonly used to test construct validity are exploratory factor analysis (EFA) and

confirmatory factor analysis (CFA). EFA is a dimensionality reduction technique that involves conducting tests such as the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity to determine if the data is suitable for factor analysis. If the fit is satisfactory, CFA can be performed to assess the construct validity. The KMO test coefficient is calculated to compare the simple correlations and partial correlations between variables, with values ranging from 0 to 1. A higher KMO value indicates stronger correlations among variables. Typically, a KMO value greater than 0.6 indicates suitability for factor analysis. The validity verification using KMO and Bartlett's tests is presented in Table 5, with a KMO value of 0.897. Since the KMO value is greater than 0.8, the research data is highly suitable for information extraction.

**Table 5.** Results of Validity Analysis

KMO and Bartlett's Test		
KMO Data		0.945
Bartlett's Sphericity Test	Approximate Chi-Square	5210.008
	df	231
	p	0.000

**Table 6.** The factor loading coefficients, as well as the AVE and CR indicators of the model

Factor (latent variable)	Measurement items (manifest variables)	Standard load factor (Std. Estimate)	AVE	CR
Overall image of the park	A1	0.787	0.638	0.876
	A2	0.785		
	A3	0.851		
	A4	0.770		
Expected quality	B1	0.853	0.704	0.905
	B2	0.859		
	B3	0.825		
	B4	0.818		
Perceived quality of service	C1	0.846	0.648	0.936
	C2	0.880		
	C3	0.794		
	C4	0.750		
	C5	0.830		
	C6	0.786		
	C7	0.795		
	C8	0.749		
Perceived value	D1	0.783	0.636	0.875
	D2	0.795		
	D3	0.809		
	D4	0.803		
Customer satisfaction	E1	0.824	0.652	0.882
	E2	0.781		
	E3	0.867		
	E4	0.753		
Customer loyalty	F1	0.907	0.672	0.891
	F2	0.806		
	F3	0.766		
	F4	0.791		

(3) The method used to test convergent validity is generally Confirmatory Factor Analysis (CFA), which involves examining indicators such as CR (Composite Reliability) and AVE (Average Variance Extracted). CR assesses the internal consistency of the construct, similar to Cronbach's  $\alpha$  coefficient. A higher CR indicates higher internal consistency and stronger convergence. The typical threshold is  $>0.7$ . AVE represents the average amount of variance that is extracted by

the latent variable and reflects the construct's ability to explain the observed variables. A higher AVE indicates higher convergent validity. The typical threshold is  $>0.5$ . In this study, CFA analysis was conducted on the 6 constructs of consumer acceptance: Overall image of the park, Expected quality, Perceived quality of service, Perceived value, Customer satisfaction, Customer loyalty. All factor loadings were above 0.7, indicating significance. The CR values were above 0.8, and the AVE values were above 0.5 for all constructs, demonstrating their convergent validity, as shown in Table 6.

(4) Discriminant Validity: Discriminant validity was evaluated using the Fornell–Larcker criterion, which compares the square root of the Average Variance Extracted (AVE) for each construct with the maximum inter-construct correlations. This approach ensures that each latent variable shares more variance with its own measures than with other constructs. As shown in Table 16, all constructs demonstrate satisfactory discriminant validity:

For the dimension of Overall Image, the square root of AVE is 0.799, which exceeds the highest correlation with other constructs (0.475), indicating good discriminant validity.

For the dimension of Expected Quality, the square root of AVE is 0.839, which exceeds the maximum inter-factor correlation (0.461), indicating good discriminant validity.

For the dimension of Perceived Quality (Hardware and Software Services), the square root of AVE is 0.805, which is greater than the maximum correlation value (0.499), indicating good discriminant validity.

For the dimension of Perceived Value, the square root of AVE is 0.798, which exceeds the maximum correlation (0.461), indicating good discriminant validity.

For the dimension of Customer Satisfaction, the square root of AVE is 0.807, which is higher than the maximum inter-construct correlation (0.451), indicating good discriminant validity.

For the dimension of Customer Loyalty, the square root of AVE is 0.819, which surpasses the maximum correlation with other constructs (0.459), indicating good discriminant validity.

In summary, the square roots of AVE for all constructs are greater than their corresponding maximum inter-construct correlations, confirming that the measurement model possesses strong discriminant validity, with well-separated constructs and robust construct reliability.

**Table 7.** Pearson correlation and AVE square root value

	Overall image	Expected quality	Perceived service quality	Perceived value	Customer satisfaction	Customer loyalty
Overall image	0.799					
Expected quality	0.372	0.839				
Perceived service quality	0.475	0.461	0.805			
Perceived value	0.461	0.420	0.499	0.798		
Customer satisfaction	0.449	0.432	0.451	0.451	0.807	
Customer loyalty	0.415	0.459	0.409	0.425	0.431	0.819

#### 4.2.3. Structural Equation Model Analysis of Atlantis Waterpark Visitor Loyalty

Structural Equation Modeling (SEM) is a multivariate statistical method based on the covariance matrix of variables, used to analyze the relationships between variables (Stein, Morris, & Nock, 2011). It is suitable for studying the mediating effects and causal relationships among multiple

independent and dependent variables. The combination of the Technology Acceptance Model and Structural Equation Modeling allows for the logical investigation of influencing factors based on reasonable hypotheses, while also verifying the significance and scientific validity of the hypotheses.

#### 4.2.4. Structural equation model fitting effect fitness test

To ensure the applicability of the model, it is necessary to

test the model fit. The fitting results obtained using computer statistical software software are shown in Table 8. The test results all meet the standard, indicating that the structural

equation modeling used in this study is appropriate for the data analysis.

**Table 8.** Model fit indicators

Common indicators	$\chi^2$	df	p	Chi-square degrees of freedom ratio $\chi^2/df$	GFI	RMSEA	RMR	CFI	NFI	NNFI
Judgment criteria	-	-	>0.05	<3	>0.9	<0.10	<0.05	>0.9	>0.9	>0.9
Value	365.746	335	0.119	1.092	0.941	0.015	0.004	0.996	0.953	0.995
Other indicators	TLI	AGFI	IFI	PGFI	PNFI	PCFI	SRMR	RMSEA 90% CI		
Judgment criteria	>0.9	>0.9	>0.9	>0.5	>0.5	>0.5	<0.1	-		
Value	0.995	0.928	0.996	0.776	0.845	0.883	0.031	0.013 ~ 0.024		

Note: Default Model  $\chi^2 (378) = 7849.038, p = 1.000$   
AIC = 140.207, BIC = 425.007

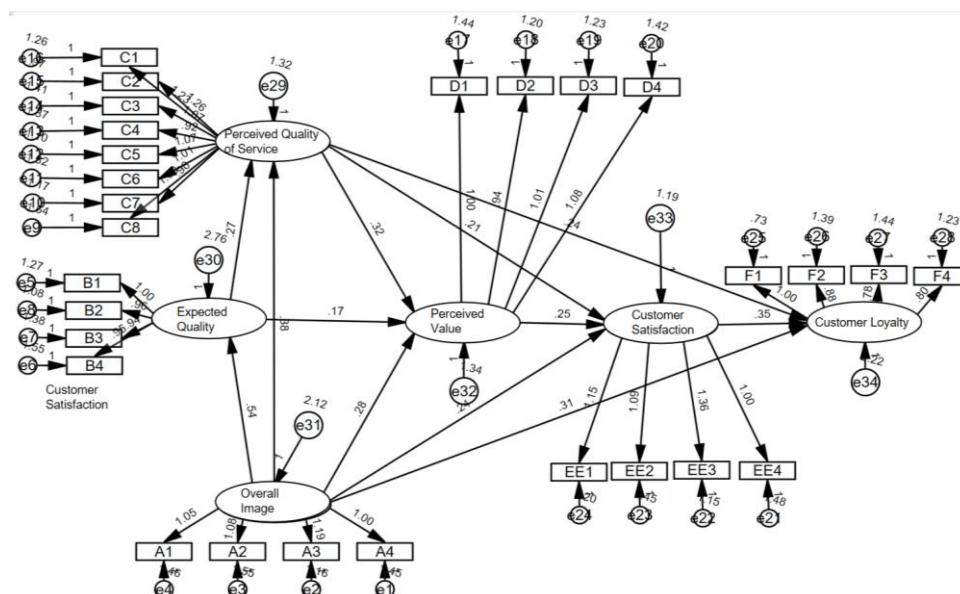
**4.2.5. Analysis of structural equation modeling results**

Using computer statistical software, the exploratory and confirmatory analysis of the model's causal relationships was conducted. The standardized path coefficients and their

significance were obtained, as shown in Figure 2 and Table 9. The model fit results indicate that all hypotheses are supported, and the summarized results are presented in Table 10.

**Table 9.** Model regression coefficient summary table

X	→	Y	Unstandardized path coefficients	SE	Z (CR date)	p	Standardized path coefficients	Result
Overall Image	→	Expected Quality	0.411	0.051	8.087	0.000	0.372	Significantly
Expected Quality	→	Perceived Service Quality	0.253	0.038	6.738	0.000	0.295	Significantly
Perceived Value	→	Perceived Service Quality	0.119	0.037	3.162	0.002	0.121	Significantly
Overall Image	→	Perceived Service Quality	0.293	0.041	7.075	0.000	0.309	Significantly
Expected Quality	→	Perceived Value	0.203	0.039	5.188	0.000	0.232	Significantly
Perceived Service Quality	→	Perceived Value	0.174	0.040	4.387	0.000	0.171	Significantly
Overall Image	→	Perceived Value	0.283	0.043	6.604	0.000	0.293	Significantly
Expected Quality	→	Customer Satisfaction	0.213	0.043	4.982	0.000	0.234	Significantly
Perceived Service Quality	→	Customer Satisfaction	0.234	0.052	4.451	0.000	0.221	Significantly
Overall Image	→	Customer Satisfaction	0.258	0.048	5.429	0.000	0.257	Significantly
Customer Satisfaction	→	Customer Loyalty	0.426	0.044	9.646	0.000	0.431	Significantly



**Figure 2.** Structural equation model of consumer loyalty to Atlantis Water park (standardized coefficients)

**Table 10.** Summary of research assumptions and conclusions

NO.	Hypothetical content	Result
H1	The overall image of the park will positively affect the expected quality	Support
H2	The overall image of the park will positively affect the perceived quality of the service	Support
H3	The expected quality will positively affect the perceived quality of the service	Support
H4	The overall image of the park will positively affect the perceived value	Support
H5	The expected quality will positively affect the perceived value	Support
H6	The perceived quality will positively affect the perceived value	Support
H7	The overall image of the park will positively affect customer satisfaction	Support
H8	Perceived value will positively affect customer satisfaction	Support
H9	The expected quality will positively affect customer satisfaction	Support
H10	Perceived quality will positively affect customer satisfaction	Support
H11	Customer satisfaction will positively affect customer loyalty	Support

## 5. Conclusions

Based on the CCSI model, this study explores the key factors influencing customer satisfaction at Sanya Atlantis Water World. The empirical findings demonstrate that overall park image, expected quality, perceived service quality, and perceived value all have significant positive impacts on customer satisfaction, which in turn strongly affects customer loyalty. Notably, visitors from third-tier cities and below tend to rate overall image and perceived value more positively, while frequent visitors exhibit higher levels of perceived value and customer loyalty.

Drawing on the successful case of the "Pirates of the Caribbean" themed area in Shanghai Disneyland, this study puts forward several targeted recommendations for enhancing customer satisfaction and loyalty at Sanya Atlantis Water World (Sixun, Qinglei, & Louyang, 2019):

Enhance the overall park image by shaping a distinct thematic atmosphere based on ocean culture and tropical vacation elements, supported by immersive scene design, social media marketing, and influencer engagement.

Improve visitors' expectation management through transparent information release, intelligent reservation systems, and optimized in-park guidance to reduce expectation gaps and improve pre-visit planning.

Strengthen perceived service quality by standardizing staff training, offering differentiated services for specific visitor groups, and establishing effective emergency response mechanisms.

Increase perceived value by launching flexible ticketing schemes, enriching value-added services, and continuously introducing innovative interactive attractions.

Foster customer loyalty through the implementation of membership programs, return-visit incentives, and ongoing emotional engagement via digital communication.

While the study validates the applicability of the CCSI model in the context of water parks, it is limited by sample scope and variable selection. Future research is encouraged to incorporate broader geographical samples, integrate new influencing factors such as social media reputation and environmental comfort, and explore the dynamic evolution of tourist expectations over time.

The findings not only provide practical strategies for service optimization at Sanya Atlantis Water World but also serve as valuable references for similar theme parks aiming to

enhance visitor satisfaction and long-term loyalty.

## References

- [1] Airey, D., & Chong, K. (2010). National policy-makers for tourism in China. *Annals of tourism Research*, 37(2), 295-314.
- [2] Analysis., W. M. S. (2000). *Practical Application of SPSS Statistics (Vol. 9)*. China Railway Publishing House. (Vol. 9): China Railway Publishing House.
- [3] Chenna, L. (2010). Design of Sanya Regional Folk Culture Theme Park. *China Business(10X)*, 134-135.
- [4] Ciavolino, E., & Dahlgaard, J. J. (2007). ECSI-customer satisfaction modelling and analysis: a case study. *Total Quality Management*, 18(5), 545-554.
- [5] Guyatt, G. H., Townsend, M., Berman, L. B., & Keller, J. L. (1987). A comparison of Likert and visual analogue scales for measuring change in function. *Journal of chronic diseases*, 40(12), 1129-1133.
- [6] Meng, Q., & Han, L. (2019). Baidu Index, Mixed Frequency Model and Sanya Tourism Demand. *Tourism Tribune/Lvyou Xuekan*, 34(10).
- [7] Qinjun, W., Yu, C., & Hongying, Z. (2017). Investigation and evaluation of geological tourism resources in Sanya. *Journal of Hainan Normal University: Natural Science Edition*, 30(4), 443-449.
- [8] Sharma, G. D., Thomas, A., & Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. *Tourism management perspectives*, 37, 100786.
- [9] Shien, Z., Jie, Z., Li, L., & Jing, Z. (2015). Review, evaluation and prospect of the development of Chinese theme parks. *Tourism Tribune/Lvyou Xuekan*, 30(8).
- [10] Sixun, Z., Qinglei, L., & Louyang. (2019). A Further Study on the Core Issues of Tourism Planning: Taking Disneyland Planning as an Example. *Nanning Zhiye Jishu Xueyuan Xuebao*, 24(4).
- [11] Song. (2018). Fosun Atlantis invests over 10 billion in Hainan, Sanya tourism enters 3.0 era. *China Railway Publishing House* (19), 76-77.
- [12] Stein, C. M., Morris, N. J., & Nock, N. L. (2011). Structural equation modeling. In *Statistical human genetics: Methods and protocols* (pp. 495-512): Springer.
- [13] Weiguang, C. (2022). *Institutional Innovation: Hainan Free Trade Port*: Chongqing University Electronic Audiovisual Publishing House Co., Ltd.