

Design and Research of Nanchang Festival Tourism Wayfinding Service System Based on the Dual-Diamond Model

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Abstract: This article investigates effective approaches to optimizing Nanchang's festival tourist wayfinding service system using the Dual Diamond model and service design methodology, with the goal of improving visitor experiences and cultural tourism integration advantages. This study examines the major pain points of Nanchang's festival tourism navigation system using the Double Diamond Model's four phases: exploration, definition, development, and delivery. It defines the interaction between tourists and scenic area operators, suggests particular optimization measures, and finally assesses the success of the given solutions. This technique results in a systematic optimization of Nanchang's scenic area wayfinding system design, considerably improving tourist experience and satisfaction. It supports the convergence of cultural and tourism industries and stimulates coordinated industrial development, providing practical benefit for local cultural heritage preservation and the tourism industry advancement.

Keywords: Double Diamond Model; Nanchang Festival Tourism; Service System Design.

1. Introduction

An essential component of Chinese culture is the celebration of traditional holidays. These gatherings energize local memories and a feeling of place by bringing participants' experiences and emotions to life through the interaction between hosts and visitors. "Strengthen the integration of culture and tourism, using culture to shape tourism and tourism to highlight culture" was the recommendation made in the 2022 report of the 20th CPC National Congress. Combining industrial resources is now largely driven by this integration. With traditional festivals serving as the cornerstone and revolutionary-themed festivals as the specialty, Nanchang, the provincial capital of Jiangxi, has developed a festival tourism system that combines "ancient charm and revolutionary spirit." In order to reinvigorate culture and propel the expansion of tourism, services, and associated businesses, research on the design of Nanchang's festival tourist wayfinding service system is therefore extremely valuable and important.

2. State of the Research

2.1. Present Situation of Festival Tourism in Nanchang

Festival tourism refers to tourism activities developed and utilized by local tourism industries. These activities are based on fully tapping into regional tourism resources such as folk customs, traditional culture, and natural environments. They utilize festivals and celebrations as carriers, transforming them into themed tourism products through a series of planning, marketing, and other procedures. Compared to conventional tourism activities, festival tourism possesses inherent advantages. Its inherent characteristics—regionality, cultural richness, and participatory elements—serve as bridges fostering visitor identification and attachment [1]. In January 2025, the "Several Measures on Further Cultivating New Growth Points to Prosper Cultural and Tourism

Consumption" were officially released. The state has prioritized festival tourism in cultural and tourism development, making "festivals + tourism" a prominent trend. [2]

As the provincial capital of Jiangxi, Nanchang has long been a culturally vibrant area in southern China, with a wealth of resources for cultural tourism and distinct advantages for development [3]. Jiangxi is rich in its red cultural history, which includes revolutionary grounds and the origins of the labor movement. Over 2.63 million out-of-town visitors visited Nanchang during the 2025 Spring Festival holiday. More than a million tourists visited the Tengwang Pavilion picturesque region alone, with holiday crowds being drawn by attractions including fireworks displays, parades honoring intangible cultural heritage, and garden tours with a Hanfu theme. In the meantime, Bayi Square's frequent flag-raising ceremonies have built a strong brand presence and made it the most popular vacation destination in central China during Army Day and National Day celebrations.

2.2. Present Situation of the Festival Tourism Guidance System in Nanchang

Domestic navigation systems' function in festival tourism has changed in recent years, moving from straightforward signage to all-inclusive services [4]. However, there have been relatively few studies on specific navigation services for festival tourism, with much of the study concentrating on regular commercial settings, public spaces like parks and subway stations, and suburban rural homes [5] [6]. Independent tourists make up the majority of Nanchang's tourism market. Nanchang's festival tourism is characterized by packed event schedules and bigger crowds than traditional tourism. Designing and developing navigation systems that are specifically suited for Nanchang's festival tourism requires a multifaceted approach.

Through literature review and field investigations of the current state of wayfinding systems at various scenic spots in Nanchang during festival periods, the following three primary

issues have been identified:

- 1) Shortcomings persist in the maintenance and service of scenic area facilities: As a provincial capital and tourist city, Nanchang's scenic area infrastructure directly impacts the city's image. The existing wayfinding system features overly simplistic signage designs at key locations such as Dashiyuan, lacking detailed guidance that makes it difficult for visitors to navigate. Additionally, some signs lack cohesive design, and improper material selection has increased maintenance costs.
- 2) The thematic repetition of wayfinding signage between scenic areas and insufficient depth of connectivity: Despite the abundance of scenic spots available in Nanchang during the festival season, some attractions suffer from thematic duplication in their wayfinding design and lack systematic connections. For instance, given the difficulty in securing reservations for the August 1st Memorial Hall, visitors could be redirected to the similarly themed New Fourth Army Memorial Hall. This would strengthen connections between attractions and foster the development of cultural tourism brands.
- 3) Insufficient cultivation of wayfinding system branding and lack of intelligent coordination: During festive seasons, scenic area wayfinding designs often prioritize short-term gains and immediate results, neglecting cultural branding cultivation in planning and design. This approach fails to establish long-term IP value. Furthermore, peak holiday periods lack dynamic wayfinding contingency plans, with inadequate multi-departmental coordination mechanisms. Failure to install temporary signage or online guidance in high-traffic areas exacerbates visitor confusion.

3. Research Methods

3.1. The Concept of the Double Diamond Model

The Double Diamond model was first proposed by the UK Design Council to describe the “design process,” characterized by its non-linear and iterative nature [7]. This model consists of two diamonds representing four distinct phases: the first diamond focuses on “problem discovery” and defines core issues through user research and data analysis within the product's current context; the second diamond centers on “problem solving” and develops effective solutions through iterative development and validation for future product updates. The four phases are: Explore, Define, Develop, and Deliver. As shown in Figure 1, during the Explore phase, the Double Diamond Model adopts a multi-perspective approach grounded in both client and user viewpoints to deeply uncover problems. Tools such as empathy maps, customer journey maps, and co-creation workshops are used to organize research insights, visualize identified issues, and reduce time spent on problem understanding and communication. During the Definition phase, the Dual Diamond model consolidates issues identified in Exploration. Using tools like user personas and affinity diagrams, it categorizes problems to pinpoint core challenges. In the Development phase, the model employs diverse methods—including system diagrams, customer journey maps, service blueprints, and storyboards—to generate

solutions through divergent thinking. These solutions undergo iterative testing and refinement to meet user needs. In the delivery phase, the Double Diamond model creates client-side interaction visualizations through service prototyping. It converges solution optimizations into a final design, completes development, and validates market fit. [8]

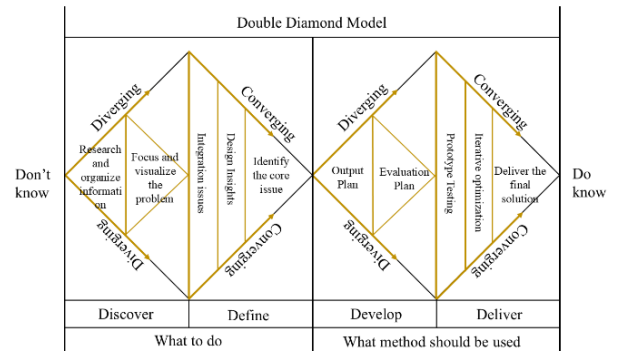


Figure 1. Double Diamond Model

In recent years, the Double Diamond model has gained prominence in the field of service design. By bridging the gap between problems and solutions within complex service systems, it transforms the design process from vague abstraction into coherent clarity. This model facilitates the integration of new ideas among diverse stakeholders, reduces communication costs in understanding user needs, and enables more efficient exploration of solutions. Its flexibility allows application across various design contexts. Therefore, a comprehensive review of this design research reveals that the Double Diamond model aligns highly with the design philosophy of Nanchang's Festival Tourism Wayfinding Service System. Therefore, this study adopts the Double Diamond model to standardize and guide the design architecture, providing methodological support for the research process. [9]

3.2. Design Process for Wayfinding Service Systems Based on the Double Diamond Model

3.2.1. Discover Phase

This study, grounded in the dual-diamond model, first collects and organizes existing research literature and relevant data on Nanchang's festival tourism. It focuses on the theme to determine the practical theme and target of this service optimization design, establishing the service context and optimization outcomes. After clarifying the theme, the study proceeds to gather primary and secondary data. Primary data was primarily collected through questionnaire surveys to investigate user needs and development trends. The findings were then integrated with secondary data to establish a comprehensive framework for researching Nanchang's festival tourism wayfinding service design. This foundation enabled divergent insights and conceptual exploration. [10]

In the questionnaire section, the structural framework employs a “three-tier indicator” breakdown [11]. Tier-one indicators serve as core objective keywords, such as: - Effectiveness of wayfinding information - Interactivity of service experience - Integration of cultural experience Under these tier-one indicators, tier-two indicators are defined by functional dimensions, including: - Static signage systems - Dynamic information updates - Path accessibility - Integration of festive elements - Digital interactive services

Tertiary indicators represent operational execution keywords, such as visibility of wayfinding signs, multilingual coverage rate, timeliness of event schedule updates, prominence of emergency exit signage, alignment of signage design with festival themes, and ease of use for online navigation. Based on this framework, the final questionnaire for the “Design and Research of Nanchang Festival Tourism Wayfinding Service System” comprises 26 questions covering basic circumstances. [12]

This survey aimed to collect data on visitors' functional, cultural, and technical experiences with wayfinding services at scenic spots during Nanchang's festival period, involving a total of 119 respondents. After data cleaning, the questionnaire yielded 109 valid samples, achieving a sample validity rate of 91.59%. As shown in Table 1, the survey revealed a slight predominance of female visitors over males. Respondents were predominantly aged between 26 and 45, with most possessing secondary education or higher. Nearly 80% utilized public transportation to reach the scenic area.

Table 1. Basic Information Form for Research Subjects

Basic Information of Research Subjects	Classification	Number of people	ratio
Gender	Male	45	41.28%
	Female	64	58.72%
Age	Under 18	14	12.84%
	18–25 years old	31	28.44%
	26–45 years old	44	40.37%
	45–60 years old	13	11.93%
	60 years old and above	8	7.34%
Educational background	Elementary school and below	17	15.6%
	Middle school	21	19.27%
	Undergraduate	50	45.87%
	Graduate	21	19.27%
Visual acuity	Normal vision or corrected vision	109	100%
Transportation Options to the Scenic Area	Private transportation	36	33.03%
	Public transportation	49	44.95%
	Walking	24	22.02%

Table 2. Differential Evaluation of Wayfinding Services in Nanchang's Festival Tourism Attractions

Differential Evaluation of Wayfinding Services in Nanchang's Festival Tourism Attractions	Number of people	ratio
Featuring festive and cultural highlights, leaving lasting memories after your visit.	23	21.10%
Some festival and cultural elements fade from memory after experiencing them.	41	37.61%
Lacking distinctive festivals and cultural features, it is no different from other tourist attractions.	34	31.19%
Devoid of any festive or cultural character	21	19.27%

As shown in Table 2, nearly 60% of respondents felt that

compared to other city attractions, the signage system left a lasting impression after their visit. Thirty percent indicated that, like other similar attractions, it suffered from severe homogenization, while 20% perceived it as lacking any distinctive features. This indicates that Nanchang's festival tourism signage service system is well-designed overall, though certain aspects still hold room for improvement.

Reliability analysis of the collected data yielded results shown in Table 3, with a Cronbach's alpha coefficient of 0.879. This indicates high consistency among the questionnaire items, enabling reliable measurement of the wayfinding system design factors influencing users' evaluations of scenic areas during festive periods.

Table 3. Reliability Analysis

Reliability Analysis	
Cronbach's alpha	Number of items
0.879	19

The gathered data was subjected to the KMO Test and Bartlett's Sphericity Test. Table 4 presents the findings. The independent variable dimension's KMO value was 0.861 (>0.5), suggesting that it was appropriate for factor analysis. There was adequate correlation between the variables, as indicated by the significance P value for Bartlett's sphericity test being less than 0.001. This proves that factor analysis is valid.

Table 4. KMO Test and Bartlett's Sphericity Test

KMO Test and Bartlett's Sphericity Test		
KMO value	0.861	
Bartlett's Sphericity Test	Approximate chi-square	1210.095
	Degrees of freedom	171
	significance	.000

As shown in Figure 2, the questionnaire content is divided into three dimensions: basic information, Validity of Wayfinding Information and c Cultural Integration and Digitalization. A factor model is constructed to evaluate the design of the wayfinding system in scenic areas during Nanchang's festival period.

The basic information component comprises four factors: transportation accessibility, interactive experience satisfaction, accessibility for special Populations, and information collection efficiency. The wayfinding information effectiveness component consists of seven factors: Wayfinding Visibility, Accuracy of Information, Timeliness of Information, Coherence and Logic of Wayfinding, multilingual coverage, Information Readability, and Identification and Information Durability. Cultural Integration and Digitalization is comprised of four factors: integration with festivals, interactivity and Interactive and engaging presentation, Synergistic Effects of Digital and Traditional Signage, and Participation Intent in Wayfinding-Related Activities.

From the perspective of basic information, factor loading for information collection efficiency was relatively high in the factor analysis, followed by transportation accessibility. Regarding the effectiveness of wayfinding information,

factors related to accuracy and timeliness exhibited higher

loadings at 0.763 and 0.706 respectively.

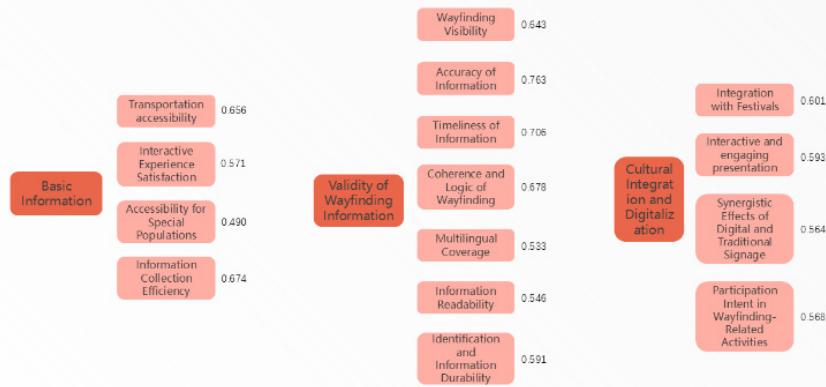


Figure 2. Factor Model Dimensions and Factor Loadings

In terms of cultural integration and digitalization, the factor loading for integration with festivals was the highest, indicating that these aspects significantly contributed to the usage evaluation of Nanchang's tourism wayfinding system design during festival periods. Therefore, enhancing the satisfaction of Nanchang's festival tourism wayfinding service system should focus on these key areas to achieve

higher usage ratings.

By organizing the aforementioned questionnaire data and integrating it with secondary sources, a customer journey map for Nanchang's festival tourism wayfinding services was constructed. This map identifies service touchpoints and emotional fluctuations experienced by tourists throughout their wayfinding service journey.[13]

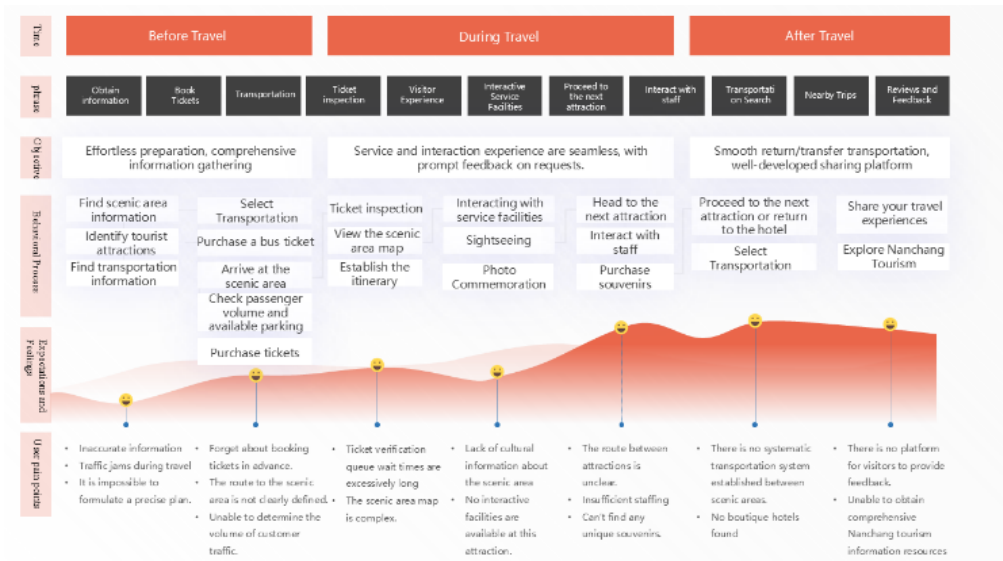


Figure 3. customer journey map

As shown in Figure 3, the primary pain points in Nanchang's scenic area wayfinding system during festivals are concentrated in the "information retrieval" phase before travel and the "scenic area facility interaction experience" phase during travel. The main cause of pain points in the pre-travel phase lies in redundant service processes. This occurs because tourists expend excessive effort retrieving information, leading to expectations for faster access, improved operational efficiency, and enhanced content reliability in this phase. During the travel phase, festival-bound tourists require clearly structured itineraries to minimize congestion and traffic jams. Such visitors also place greater emphasis on the service methods and attitudes of scenic areas. However, in actual interaction experiences, scenic area wayfinding services lack clear systematic and logical route planning [14]. Simultaneously, during festivals,

high visitor volumes are compounded by insufficient coverage of interactive wayfinding facilities, resulting in a somewhat inadequate experience.

3.2.2. Define Phase

During the definition phase, insights are first organized using affinity diagrams based on data from preliminary questionnaires. Existing commonalities or ultimately similar needs are categorized to establish distinct problem clusters, each annotated with keywords representing specific pain points. User profiling is then employed to further segment user needs, enhancing the personalization of strategies developed in subsequent phases.

As shown in Figures 4, the core issues of Nanchang's festival tourism wayfinding service system can be summarized as key pain points including Wayfinding System Performance, Value of Interactive Wayfinding Experience,

and Sustainable development of Wayfinding Systems.

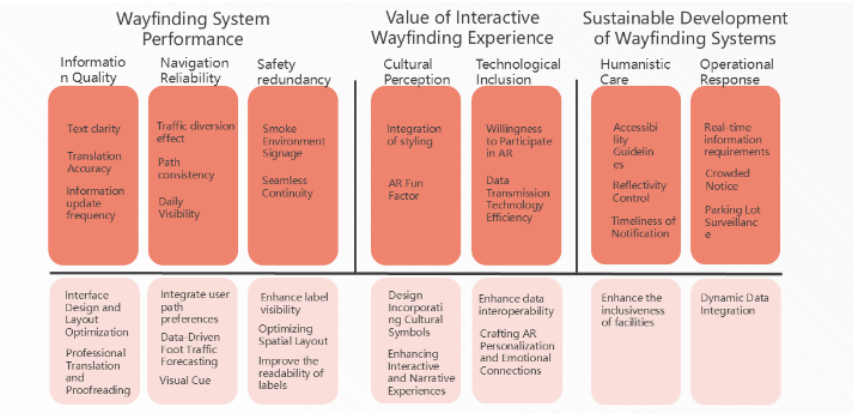


Figure 4. affinity diagrams

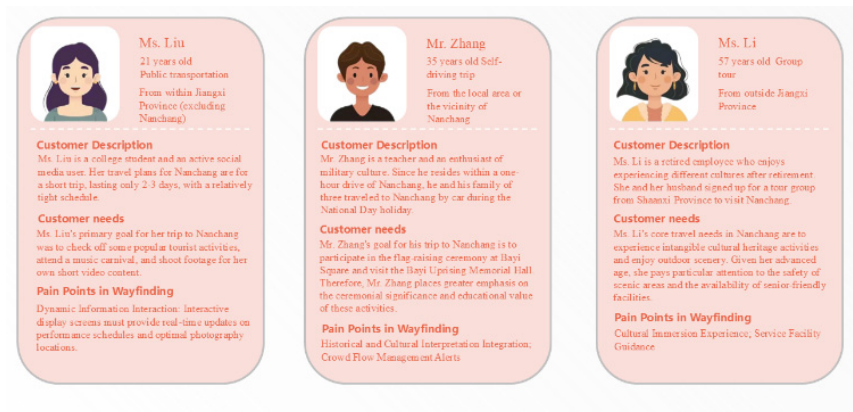


Figure 5. User Profile Diagrams

As shown in Figure 5, users' demands for the Nanchang tourism wayfinding system design extend beyond basic improvements to offline facilities. They increasingly emphasize the development of online functionalities, with a greater focus on interactivity, integration of local culture, and stylistic elements. This trend aligns with the current shift in scenic area services toward experiential consumption and resonates with contemporary consumers' preferences for enjoying life and exploring novel experiences.

3.2.3. Develop Phase

During the development phase, the Double Diamond model formally entered the design creation stage. Three pain points related to interactive services identified during the definition phase were ultimately selected as design optimization opportunities. Specific designs were developed based on value propositions, proposing the following three improvement directions:

- 1) Streamline and integrate travel routes and transportation pathways within scenic areas and between attractions during festive periods, establishing a systematic wayfinding guidance system. Where necessary, install more prominent temporary signage within scenic areas for visitor reference;
- 2) Integrate information retrieval across all travel stages by establishing an online service platform. Minimize interface complexity to enable users to access necessary information through simplified operations;
- 3) Personalize upgrades to both online and offline wayfinding systems to enhance interactive experiences during user journeys, while strengthening the incorporation of

cultural elements in the design.

Based on these optimization strategies for identified pain points, construct a stakeholder map (Figure 6). Analyze the relevance and influence of various user groups, visually presenting the composition of related service facilities and personnel [15]. By mapping stakeholder relationships, Nanchang scenic areas' stakeholders include visitor groups, local residents, scenic area management departments, local governments and their cultural promotion departments, research institutions, local tourism-related enterprises, and social media platforms.

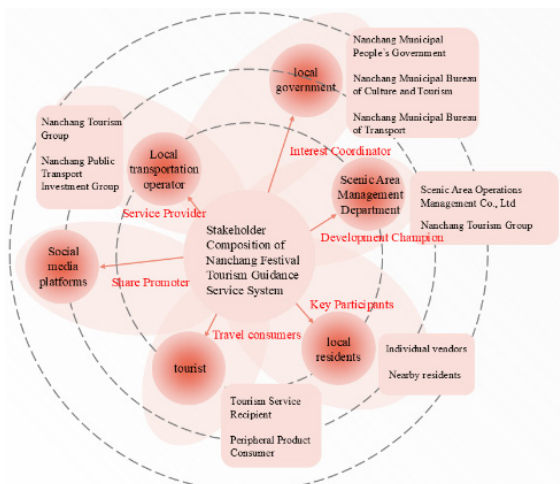


Figure 6. stakeholder map

Continue conducting stakeholder analysis for all parties and create Figure 7. Among these, local governments and tourists are the primary stakeholders. Local governments contribute through formulating relevant policies and plans, as well as overseeing tourism management and service quality. Tourists, by visiting and experiencing the scenic area, generate direct economic benefits for Nanchang's tourism industry. Consequently, these two groups maintain the closest relationship with the scenic area and exert the highest level of influence. As the most grassroots management body, the scenic area administration directly manages the site and exerts

significant influence, though its stakeholder relevance is relatively weaker than that of local governments and tourists. It is therefore classified as a key stakeholder. Local residents exert limited overall influence on the scenic area and have weaker ties to its interests, qualifying as general stakeholders. Surrounding businesses, enterprises involved in scenic area operations, and social media platforms play roles in preserving local culture and providing tourism services. Though their impact is limited, their high relevance to local interests positions them as secondary stakeholders. [16]

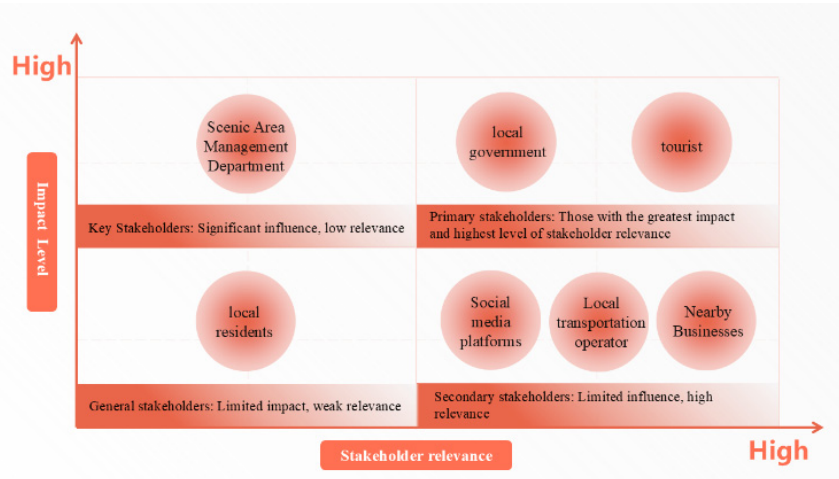


Figure 7. Stakeholder Impact Diagram

By categorizing the various related entities as described above, we analyze the distinct needs expressed by each entity, reorder these needs, and use this framework to plan subsequent services and touchpoints. This process establishes user scenarios, a comprehensive wayfinding service system, and simulated user experience flows. After finalizing the key service touchpoints, we proceed with prototype design, progressively refining and expanding the design proposals to foster diverse solution options.

Integrating the above research, the design approach for Nanchang's festival tourism wayfinding system can be summarized as follows:

1) **Simplicity for User Retrieval:** Design should adhere to the principle of “cognitive load reduction” to enhance the usability of wayfinding systems. This strategy centers on categorizing and filtering information, eliminating redundant visual elements, and retaining only the most critical and frequently used guidance. This enables visitors to retrieve information and make decisions with minimal cognitive effort in the shortest possible time, thereby improving navigation efficiency and user experience.

2) **Clear and User-Friendly Functional Design:** Design must strictly adhere to principles of ergonomics and universal design. Functionality takes precedence, fully considering the physiological and cognitive characteristics of diverse user groups (including children, seniors, and individuals with special needs). While ensuring signage meets specifications for viewing height, angle, font size, color contrast, and lighting conditions, the expression and transmission of wayfinding information must be internationalized, standardized, unambiguous, and immediate [17]. This achieves safe, smooth, and barrier-free spatial navigation.

3) **Interactive Design Rich in Cultural Significance:** Designs should draw deeply from Nanchang's regional

cultural symbols, translating them through modern interactive technology to match the festive atmosphere. Through interaction with signage, visitors not only obtain route information but also perceive the scenic area's cultural spirit and ecological characteristics. This fosters deeper cultural identification and emotional connection with the site, enhancing the visitor experience.

4) **Stylized Design with Visual Appeal:** Establish a systematic visual language standard encompassing color schemes, typography, graphic styles, and material craftsmanship. Harmonize with the scenic area's natural landscapes and cultural ethos to create a wayfinding system blending modern aesthetics with Nanchang's regional culture, reinforcing visitors' overall image memory of the destination.

Additionally, offline signage system design must consider the use of recyclable and low-maintenance materials, as well as ease of transportation and assembly.

3.2.4. Deliver Phase

During the delivery phase, after finalizing the optimization plan for the Nanchang Festival Tourism Wayfinding Service System, the plan underwent Net Promoter Score (NPS) testing. The NPS concept was introduced by Fred Reichheld of Bain & Company in 2003, primarily used to collect user feedback and test data to gauge users' willingness to recommend. Key advantages include: - High intuitiveness: Features only one core question without additional inquiries; - Strong acceptance: Requires users to have experienced the service before completing the survey; - High precision: Features an easy-to-operate process with a straightforward algorithm [18]. This makes it ideal for distribution and collection near scenic areas during festivals, where user diversity is high, transportation is complex, and foot traffic is fast-paced.

All feedback for this survey questionnaire originated from

users at the scenic area site [19]. We clearly explained the design approach to respondents, collected their recommendation preferences, and asked them to rate their satisfaction on a scale of 0 to 10. Following the rating, we appropriately inquired about their reasons. The collected questionnaires underwent further detailed data cleansing and statistical analysis to infer user loyalty toward Nanchang scenic areas during the festival period. This ultimately determined the value of targeted adjustments to Nanchang's festival tourism wayfinding product and service design strategies. The NPS (Net Promoter Score) calculation formula is as follows:

$$\text{Net Promoter Score (NPS)} = (\text{Number of Promoters} / \text{Total Sample Size}) \times 100\% - (\text{Number of Detractors} / \text{Total Sample Size}) \times 100\%$$

Table 5. NPS Survey Results Statistics

Variable value	detractor							Passive Respondents		Referrers		NPS Score
	0	1	2	3	4	5	6	7	8	9	10	
Possibility of Recommendation	0	0	0	0	2	4	4	7	14	40	35	61.3
	0%	0%	0%	0%	1.89%	3.77%	3.77%	6.60%	13.21%	37.74%	33.02%	

As shown in the chart, the Net Promoter Score (NPS) for this optimization plan reached 61.3, exceeding the industry average. This indicates that the Nanchang Festival Tourism Wayfinding System Design Optimization Plan effectively addresses visitors' core needs. The vast majority of visitors believe that after experiencing this wayfinding system, they will transition from being “passively satisfied” to becoming active “promoters.” This demonstrates that this design plan outperforms Nanchang's current festival tourism wayfinding system.

4. Design Practice

Based on the aforementioned research findings, the final design deliverables were produced. The optimization of Nanchang's festival tourism wayfinding service system focused on two key aspects: offline physical wayfinding

Based on users' varying evaluations of Nanchang scenic spots during the festival period in the questionnaire, and in accordance with NPS (Net Promoter Score) testing requirements, user willingness to recommend the platform is categorized into three groups: Promoters (scoring 9-10), Passives (scoring 7-8), and Detractors (scoring 0-6). As the two extremes within the tourist demographic, Promoters and Detractors are the users who genuinely influence the reputation of tourism guidance services. Therefore, this questionnaire data analysis focuses on them as key subjects.

The questionnaire comprised 9 questions, including 1 core question, and involved 126 respondents. After data cleaning, 106 valid samples were obtained, yielding a sample validity rate of 84.126%. The survey results are presented in Table 5:

service design grounded in intuitiveness and reliability, and the establishment of online virtual wayfinding services aimed at breaking temporal and spatial constraints through data-driven approaches.

4.1. Design of Offline Physical Wayfinding Services Based on Intuitiveness and Reliability

The offline wayfinding system design for Nanchang's festival tourism prioritizes environmentally friendly and recyclable materials, followed by ease of installation and transportation [20]. Based on user needs, it provides timely guidance and safety assurance within physical spaces while maintaining aesthetic appeal. Leveraging wayfinding design to manage visitor flow enhances the overall tourist experience. See Figure 8 for the rendering:

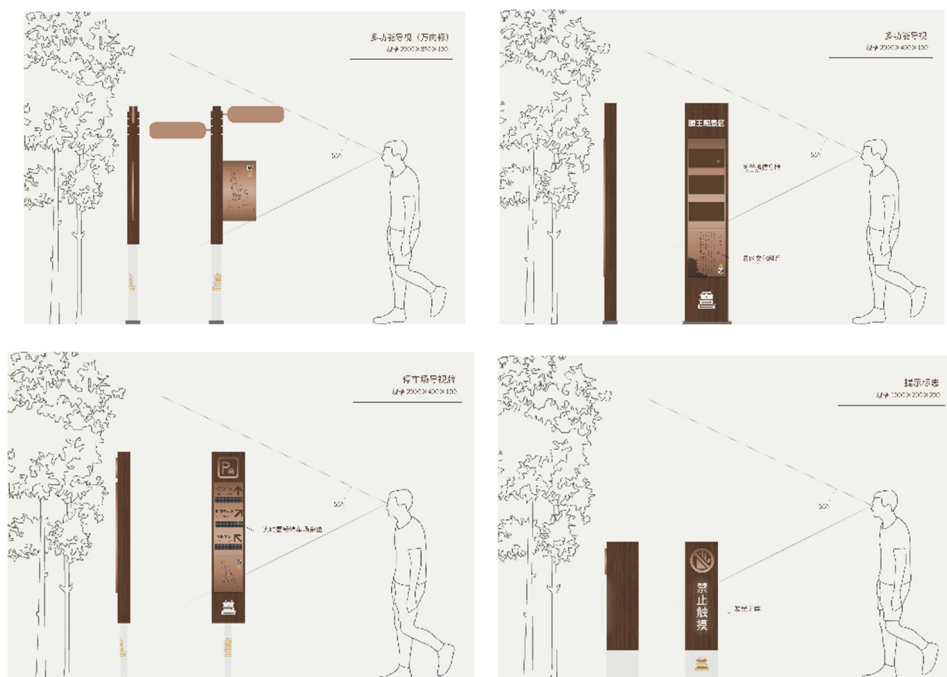


Figure 8. Offline Wayfinding System Design Rendering

4.2. Establishing an Online Virtual Guidance Service Aimed at Breaking Temporal and Spatial Constraints Through Data-Driven Approaches

Design of Nanchang Festival Tourism Online Guidance System: Functional development prioritizes systematic integration and comprehensiveness, while page design emphasizes personalization and search efficiency. Based on user needs, the system delivers intelligent guidance services. It integrates essential festival tourism functions—accommodation, dining, transportation, and activities—into a one-stop travel service portal. See Figure 9 for visual representation:



Figure 9. Online Wayfinding System Design Rendering

5. Conclusion

This study employs the Dual Diamond model combined with service design methodologies to conduct an in-depth design and research analysis of Nanchang's festival tourism wayfinding service system. Through systematic research and

analysis, existing pain points within the system during Nanchang's festival periods and visitor demand types were identified, core issues were pinpointed, and targeted optimization strategies were proposed. The research process followed the four stages of the Double Diamond Model: Finally, the delivery phase involves validation and refinement. NPS testing verifies the effectiveness of the optimization plan, significantly enhancing visitor experience and satisfaction while forming a practical design solution. This research holds significant importance for advancing Nanchang's tourism industry and preserving local culture. It also provides additional theoretical and practical support for other cities seeking to achieve higher-quality festival tourism experiences and integrated cultural-tourism development.

References

- [1] Li Jing, Yin Shuhua & Wu Shaofeng. (2023). Research on the impact of festival attraction perception on tourists' attachment - an analysis based on the "Cognition-Emotion-Intention" model. *Price Theory and Practice*, (07), pp. 144-147 + 211.
- [2] LIU Bo, ZHU Hong & YUAN Zhenjie. (2012). The Significance of Traditional Festivals in the Construction of Local Identity - A Case Study of "Yingchun Flower Market" in Guangzhou. *Geographical Research*, 31 (12), pp.2197-2208.
- [3] Li Hongyong & Lu Jie. (2015). Selection of Nanchang Festival Tourism Development Path Based on Gan Culture. *Jiangxi Social Sciences*, 35 (09), pp.239-243.
- [4] Wang Jiahang, Kingdom Rock & Anna Binti Abd Shukol. (2024). Research on sustainable design of urban street wayfinding systems. *Northern Architecture*, 9 (03), pp.13-16.
- [5] Huang Lanling, Lu Jiayi, Lin Zhiwei, Liu Bihua & Yao Rui. (2025). Research on the improvement design countermeasures of the subway in-app cultural tourism guide map. *Urban Rail Transit Research*, 28 (01), pp.340-342 + 345.
- [6] Cao Mixue, Huang Chunyu & Li Mengzhu. (2025). Research on the design of rural wayfinding system from the perspective of cultural tourism - taking Gejiagou Village as an example. *Footwear Technology and Design*, 5 (03), pp.198-200.
- [7] Wang Jiahang, Kingdom Rock & Anna Binti Abd Shukol. (2024). Research on sustainable design of urban street wayfinding systems. *Northern Architecture*, 9 (03), pp.13-16.
- [8] Design Council. *Eleven Lessons: Managing Design in Eleven Global Companies*. Desk Research Report[J]. *Engineering*, 2007, 44: 18.
- [9] Li, Peixuan, and Zhen Liu. Research on MR navigation design based on double diamond model: a case of South China Botanical Garden. [J]. *Third International Conference on Computer Science and Communication Technology*, 2022. pp. 450-457.
- [10] Wang Xiang, Yu Dongjiu & Zhao Cheng. (2020). Analysis of B & B Service Design Based on Double Diamond Model (4Ds). *Packaging Engineering*, 41 (14), pp.73-84.
- [11] Chen Wei. (2023). Research on the design of visual orientation signs for tourist destinations in the suburbs of Chengdu (Master's thesis, Sichuan University). Master.
- [12] Qin Hong. (2018). Development Opportunities and Paths of Characteristic Towns. *Research on Industrial Innovation*, (02), pp.17-21.
- [13] LIU Shan & Ding Xiong. (2023). A Bow Tie Model for Value Proposition-Centered Service Design - Thinking Based on the Double Diamond Process. *Packaging Engineering*, 44 (20), 460-468 + 476.
- [14] Zhou Huiyuan, Zha Qinyi & Zheng Xiyang. (2025). The impact of the wayfinding system in commercial space on the flow of people - taking the improvement of the wayfinding system in Jiangbei Hongyue City as an example. *Hunan Packaging*, 40 (01), pp.97-99.

- [15] Zhan Qinchuan, Wu Qi & Du Guolong. (2025). Research on evaluation and design of integrated development of human landscape and tourism along the Silk Road based on stakeholder needs. *Packaging Engineering*, 46 (02) , pp. 377-391.
- [16] Zhang Hanwen & Yan Wei. (2024). Research on rural cultural tourism service design based on cultural memory theory. *Packaging Engineering*, 45 (20), pp.120-128.
- [17] Principles of urban wayfinding systems. Institute of Transportation Engineers. [J].*ITE Journal*, 2002.72(4), 30.
- [18] Xie Xiayang. (2023). Application of NPS data in frontline management. *Management and Technology of Small and Medium-sized Enterprises*, (03), pp.111-113.
- [19] Xia Zhixiang. (2021). Research on the design of pure electric vehicle charging service based on NPS user recommendation model (Master's thesis, East China University of Science and Technology).
- [20] Jin Renjie & Yang Jie. (2023). Research on the visual image design of rural wayfinding system from the perspective of interaction design. *Design*, 36 (09), pp.18-21.