

RESEARCH ON USER EXPERIENCE INTERFACE DESIGN OF LIJIANG TOURISM APP

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ABSTRACT

This study aims to design a tourism app for Lijiang by incorporating regional culture and maximizing user experience through data analysis. By addressing user needs and improving interface design, it provides data-driven support for innovative app interface design. By applying theoretical insights to intelligent terminals and incorporating the unique features of tourism software, this study presents a comprehensive design scheme for the APP interface, focusing on innovative use of tourism scenarios and providing valuable reference for future development of related software.

Keywords: Lijiang, tourism APP use, user experience, interface design

INTRODUCTION

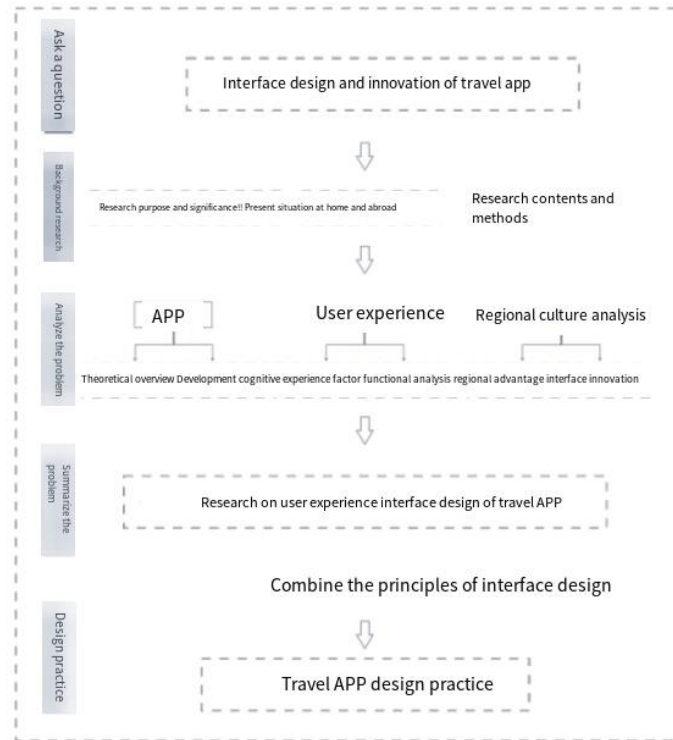
With the evolution of tourism tools, urban tourism apps are gaining prominence by providing comprehensive city exploration beyond basic services. Interface design, blending practicality and regional visual experiences, plays a crucial role in enhancing user satisfaction. Unlike traditional tourism apps, region-themed urban tourism apps offer unique features, applicability, and regional focus, making them advantageous for users.

OBJECTIVES

1. Extract the symbolic and aesthetic features of Lijiang's regional characteristic elements, and apply them in the design of tourism APP.
2. To understand consumers' functional demands for tourism apps through case analysis and empirical research in the form of questionnaire survey.
3. Summarize the symbolic elements of Lijiang regional culture elements in tourism APP product packaging design, and explore the feasibility of practical application.

METHODOLOGY

This study combines literature analysis, inductive design, market research, and user surveys to provide theoretical support and practical insights for the design of a tourism-themed APP. It incorporates color, graphics, and text extraction theories to create a comprehensive interface design. By combining theory and practice, the study offers interface design principles and methods based on data analysis and user feedback, contributing to the development of the Lijiang tourism APP.



From the perspective of user experience interface design, abandon the conventional tourism service type APP, integrate and analyze the characteristic regional culture of Lijiang from multiple angles, extract the characteristic elements, design a tourism APP that is in line with the promotion of the regional culture of Lijiang, Yunnan, and present a unique tourism interface design.

Dongba cultural characteristics of Naxi nationality in Lijiang

Yulong Naxi Autonomous County, at the crossroads of the Qinghai-Tibet and Yunnan-Guizhou Plateaus, holds economic and cultural significance in Yunnan, Sichuan, and Tibet. It is famous as the birthplace of Dongba culture, appreciated for its ecological importance as a key forest region, and renowned as the hometown of forest medicine and Yunyao in Yunnan Province. The county's heritage, deeply influenced by the Dongba religion, entices visitors to immerse themselves in its thousand-year history.

The south APP design principle of color cloud

The advancement of the Internet has propelled design companies to excel in interaction design, guided by Ben Schneiderman's Eight Golden Rules that emphasize consistency, clear feedback, error prevention, and user control. In travel software development, prioritizing user-centric design, considering user habits and diverse environments, and ensuring coherence and simplicity are essential for effective interface interaction design.

Tourism APP Hornet's nest case analysis

1. Hornet's Nest framework analysis



Figure 1 LOGO design diagram of Hornet's Nest
(picture source: Hornet's cell phone interface)

The Hornet's Nest logo utilizes a bold yellow color and a graphic representation of the letter M, symbolizing a scenic journey and a sense of belonging in travel. The playful design elements, including curved links and letters, aim to create an inviting and joyful experience for travelers.



Figure 2 Hornet's Nest Ions picture (Credit: Screenshot from Hornet's cell phone)

2. Visual analysis of Hornet's Nest interface

The interface design of Hornet's nest is mainly concise, the user is mainly young people, and the interface design style is also in line with the aesthetic style of young people at present.

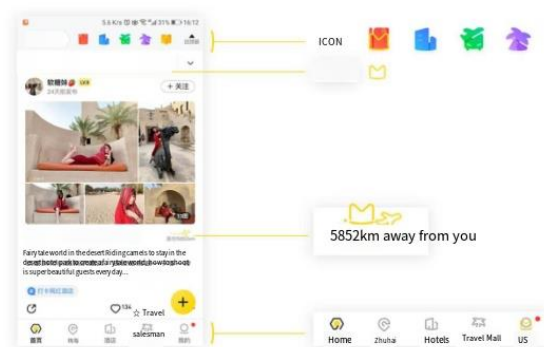


Figure 3 Screenshot of the interface of Mahoneycomb mobile phone
(photo source: redrawing)

Mahoneycomb distinguishes itself through its cohesive design, incorporating elements like the King Kong area ICON and the logo's arc that conveys position status in the navigation bar, accompanied by captivating micro-motion effects. The integration of logo elements into distance indicators and bottom navigation adds an intriguing touch to the app's overall design.

3. Hornet's Nest frame analysis

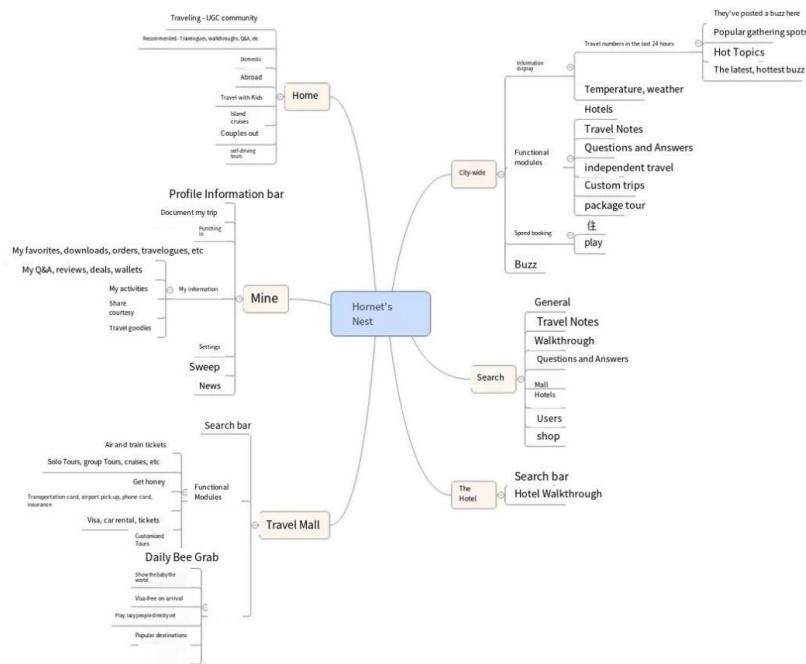
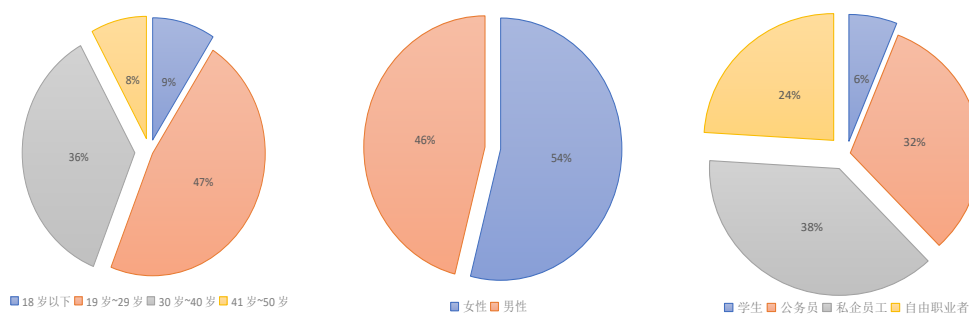


Figure 4 Architecture diagram of Mahoneycomb APP (picture source: self-drawn)

Mahoneycomb app primarily focuses on first-level page functions, with clear guidance entrances and information display modules on each page, simplifying user operations and providing various travel guides. However, this approach has both advantages and disadvantages, as excessive content display may lead to information overload and distract user attention.

DATA ANALYSIS



The survey targeted provincial tourists in Lijiang's old town, collecting 186 valid questionnaires through a random survey using Questionnaire Star. The gender distribution revealed that 52.97% were male and 47.03% were female, indicating a higher participation rate from males. In terms of age, the largest group surveyed was between 30 and 50 years old, accounting for 44.06%, followed by those between 20 and 30 years old at 32.67%. Participants over 50 years old constituted 16.34%, while those under 20 accounted for 6.93%, indicating a relatively even distribution, but with a focus on middle-aged and young individuals.

Features	Situation description
age	Most people are between 19 and 30 years old, with 47% of them between 19 and 30 years old and 36% between 31 and 40 years old
Gender	There are more women than men, with 54% women versus 46% men
Occupations	Private sector workers accounted for 38 percent, civil servants 32 percent and freelancers 24 percent
Education	Bachelor's degree accounted for 50.5%, master's degree accounted for 20.4%, and junior college accounted for 16.1%
Background	6000-10000 accounts for 53.2%, over 10,000 20.2%, 3000-6000 12%
Salary	
Mobile phone system	iOS accounted for 60.5%, Android accounted for 32.6%

The analysis of Lijiang tourist groups and online questionnaire survey reveals diverse travel goals: cultural experiences (13%), culinary exploration (15%), scenic enjoyment (19%), recreational activities (22%), shopping (16%), lifestyle change (8%), making friends (12%), and work-related activities (5%).

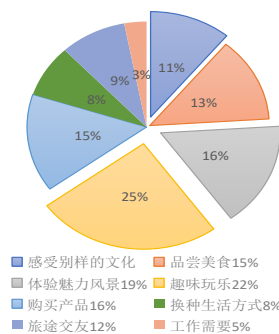


Figure 6 Data of users' travel purposes (photo source: self-drawn)

From the structural analysis, the majority of online users who use tourism apps are 20-35 years old and have higher education, but the number of trips of the general population has increased, indicating that the tourism industry is progressing in an orderly development. According to the survey, the proportion of male and female tourists in China is superior, and the proportion of male tourists is 61.5%. The survey showed that female users prefer outdoor activities, while male users are more interested in the speed and ease of use of the Internet.



Figure 7 Analysis of user group consumption (Photo source: Self-drawn)

The audience for tourism apps primarily consists of students and young people who have a strong desire to explore, along with the time, money, and energy to do so. With the prevalence of smartphones, young people use mobile apps for travel planning and date inquiries. On the other hand, the middle-age group, who have sufficient income for leisure activities, may have the time and financial resources to support travel but are less likely to use travel apps. While the mass market is the main consumer of travel, low-end consumers also have some disposable income and time, but traditional travel methods and complexities of travel apps hinder their adoption and usability.

After analyzing and investigating the users of travel APP, the required elements can be extracted according to the commonness of users. According to the survey, 81% of users will use travel-related software for travel planning or tourism cognition before traveling.

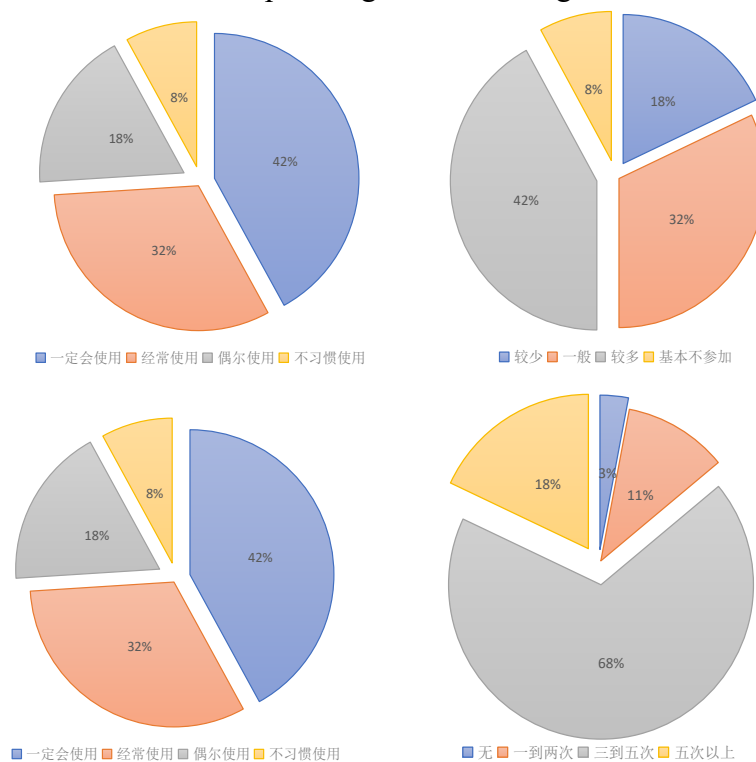


Figure 8 User demand data (Photo source: Self-drawn)

Users prefer feature-rich travel apps that offer sharing, consulting, booking, and tools. The survey highlights that 74% of young travelers engage in communication activities within apps, and 68% of users travel multiple times a year, often opting for short trips. Local culture, food, and beauty significantly influence travel choices. Consequently, users desire the South of Caiyun tourism app to provide various functionalities, including travel traffic inquiries, hotel booking, voice navigation, self-guided exploration, electronic guide consultation, cultural understanding, experience sharing, and social interaction. When faced with travel uncertainties, users turn to resources like apps first, with young travelers particularly enthusiastic about sharing travel information on social media platforms.

THE VERDICT

Current travel apps suffer from issues like homogeneity, complex operations, repetitive functions, and a lack of personalization, making them less enjoyable for users who struggle with smartphone operation. This graduation project addresses these concerns by incorporating traditional culture and modern technology, utilizing interactive design to enhance regional visual experiences and enable tourists to immerse in Lijiang's local culture. By integrating cultural tourism into existing travel modes, it enriches route planning and enhances user experiences, presenting opportunities for artistic and commercial prospects while offering design references for tourism app interface research.

SUGGESTION

1. In the future research, it is suggested to further carry out the research on Dongba culture and APP design in Yunnan, so as to provide design references for the research on tourism APP interface design.
2. The research results should be published in seminars and forums.

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