

Digital survey and design of cultural and tourism upgrading in Pan'an Lake, Xuzhou

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Abstract: This article takes Pan 'an Lake regional Scenic spot as the research object, based on the era background of rural revitalization, new rural construction and resource-based regional cultural tourism transformation, focuses on Pan' an Lake area in Jiawang District, Xuzhou City, and focuses on the sustainable development after regional cultural tourism transformation. Relying on the regional existing industry diagnosis its development problems, conform to the consumer convenient, intelligent, the use of Internet technology, combined with its development advantages and characteristics, build integrated online and offline channel wisdom platform, form the "online APP + offline service + cultural and creative product output" service pattern, through the point with operation mode, integrate regional resources, highlight industrial advantages and highlights, build regional industrial cluster, promote the sustainable development of regional industry. Through the survey data sorting of scenic spots and consumer demand analysis, the necessity of the development of digital cultural and tourism in Pan'an Lake is explained, and the significance of digital cultural tourism layout design and development is introduced.

1. Introduction.

1.1 Background of the study

In Xuzhou city to pan lake area coal mine collapse area after the successful transformation, many domestic scholars are the transformation of pan lake area development research, Hu Xinzhe in the article "pan lake ecotourism thinking and Suggestions" summarizes the problems of pan lake ecotourism, and combined with the problem gave the appropriate Suggestions and countermeasures, etc. However, the research on whether the development of cultural and tourism in Pan 'a Lake area needs to be upgraded or transformed into a combination with the emerging digital background of The Times is still in an unknown area.

1.2 Status quo of the study

In recent years, with the development of science and technology and the continuous improvement of people's living standards, ecotourism has been becoming more and more popular with tourists. However, in recent years, the development of cultural tourism in Pan 'a Lake has been hit by peer competition and the epidemic. The number of visitors has been reduced, the publicity degree is low, and the effect of traditional offline construction and publicity has been greatly reduced, which is bringing significant resistance to the future sustainable development of Pan 'a Lake.

New era of rural social governance task has complexity and difficulty, for Xuzhou city, Jiangsu province to explore the "four one" social good governance mode, strengthen grassroots party organization construction, relying on the "big data + grid + iron" governance path, established the "community + park" sharing mechanism, "police" grid highly integration, culture consciously open sachet culture industrialization construction, and from the grassroots party leading, multiple subject participation, digital technical support to China's rural social governance provides experience and enlightenment.

Due to the impact of the epidemic and the continuous intervention of technologies such as 5G and AI, digital capacity is very important in the development of The Times. It is enlightenment from the

governance path of "big data + network" in Mazhuang Village in Panan 'an Lake area, uses the digital ability to upgrade and reconstruct the tourism industry, break through the barriers of industry homogenization, and change and upgrade the original traditional cultural and tourism mode.

1.3 Content and significance of the paper

In Xuzhou pan lake area coal mine collapse after successful transformation, many scholars on the green tourism transformation development made related research, but in the background of "Internet +" rural revitalization, with consumer perspective, using big data, artificial intelligence and other modern information technology to integrate pan lake area existing industries such as pan lake wetland park, zhuang research is few at present. This project is based on rural revitalization, new rural construction, resource-based regional text brigade transformation era background, focusing on Xuzhou Jiawang district pan lake area, pay attention to the sustainable development after regional text brigade transformation, analysis of "online + offline" double development can optimize the quality of scenic spots, show the digital text brigade APP layout and design connotation.

This study provides inspiration and design suggestions for the development of the same cultural transformation village and the cultural and tourism industry, and promotes the sustainable development of the industry.

2. Demand analysis of cultural tourism consumers.

2.1 Analysis of the overall requirements

According to the survey, the number of people choosing to freely plan the scenic spots accounted for 62.02%, but in the question of whether to quickly query the scenic spot information, the number of reactions "can" only accounted for 30.62%, the reaction "basic can" accounted for 58.53%, indicating that the current content of the scenic spot information is still scattered, the consumer demand for searching the scenic spot information has not been solved with high quality.

Data analysis of publicity channels, offline posters like news, newspapers, magazines; 4.65% of the total, 12.79% push through WeChat, public account; 31.4% through friends and friends; 9.3% through tourism platform or software publicity; 27.13% through now popular online media such as TikTok and Xiaohongshu; and the remaining 14.73% understand tourism information through other channels.

According to the survey, 215 people, accounting for 83%, and 43 people, accounting for 17%. Among them, the reasons for not choosing online reservation were investigated, and the comprehensive results show that consumers mostly interfere due to cumbersome and distrust steps.

Based on the above data, it can be seen that the publicity and offline service construction of Pan'an Lake scenic spot need to be optimized. Based on the background of the network era, the double-line construction of the scenic spot is one of the best ways to optimize the scenic spot.

2.2 Demand analysis of digital cultural and tourism service

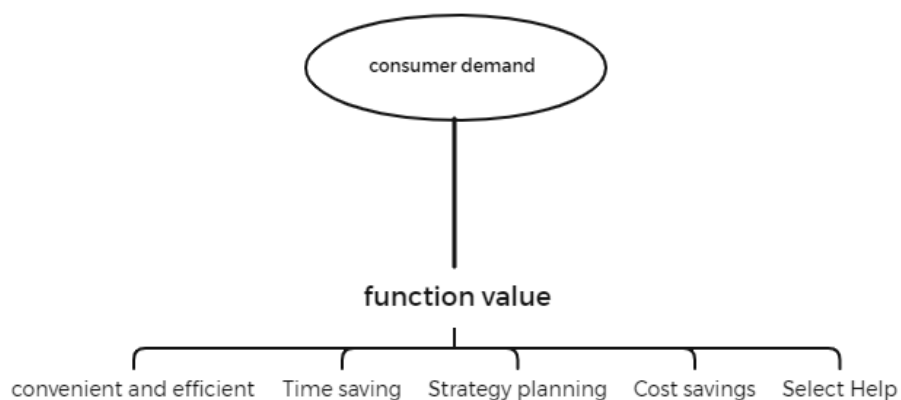


Figure 1. The funtion value of digital cultural and tourism service.

Build product models according to the survey data. The modules contained in digital cultural tourism should meet the five consumer needs shown in the figure, and the five value needs are interrelated and complement each other. "Select Help" accounted for 13.07%, and the rest accounted for more than 18%. Therefore, the first four items as the primary content, the "Select Help" value and the remaining expansion items are listed as secondary content.

2.3 Conclusion

Digital cultural tourism can effectively promote the publicity of Pan'an Lake and its surrounding scenic spots. The potential customer base of scenic spots can be increased through appropriate media publicity, trust promotion and other ways, and consumers' acceptance of double-line services in scenic spots is generally high. Therefore, the development of digital cultural tourism APP is a new way to adapt to the development background of The Times and improve the consumer tour experience and satisfaction.

To sum up, the double-line development model of scenic spots is necessary and contemporary of The Times. The development of digital cultural tourism is help to enhance the popularity of scenic spots, increase the passenger flow of scenic spots, but also help to improve the quality of consumer tourism and enhance the competitiveness of the horizontal development of scenic spots.

3. Digital cultural tourism design in Pan'an Lake area.

3.1 Introduction of software

After the epidemic, the tourism industry is bound to pick up. The difficulty of travel lies in the early preparation and the retention of good memories of travel. To further explore the essence, we aim at writing travel notes. The reason is that users can write travel to make their own trip, and often high timeliness valuable travel is difficult to find, therefore, the platform to provide users with useful travel, and travel "creator" is more scarce, it determines the platform focused on "write", good service creators, motivate them to create valuable content, so as to attract more people with travel needs. Therefore, our product positioning is a travel book tool, hoping to provide a travel note filling template with low cost, high effectiveness and good experience. While the travel notes on the platform have high timeliness, strong reference and rich content, it can also provide a decision-making basis for users' travel plans.

3.2 Design philosophy

3.2.1 Practicability

The prototype content display form, information classification, content module, close to the tourism field, to provide users with valuable information, and thus promote the value transformation.

3.2.2 Reusability

Considering the multiplexing of the material, in addition to the login registration and my general page, the home page is suitable for some e-commerce and community display, and the template for writing travel notes is also applicable to the products with record needs. We believe that prototypes with high multiplexing rate and adaptability will be more extended in the future.

3.2.3 Value

Visual design combines the knowledge of psychology to provide users with a friendly product experience. Example: highlight keywords, grasp the user's attention, allow users to quickly obtain key information; adopt the basic principles of information structured classification display, simple and clear, reduce the difficulty of the user to obtain information; love shape collection icon, can stimulate the user's collection behavior. In this way, bring valuable content to users with a friendly product experience.

3.3 Software design layout display

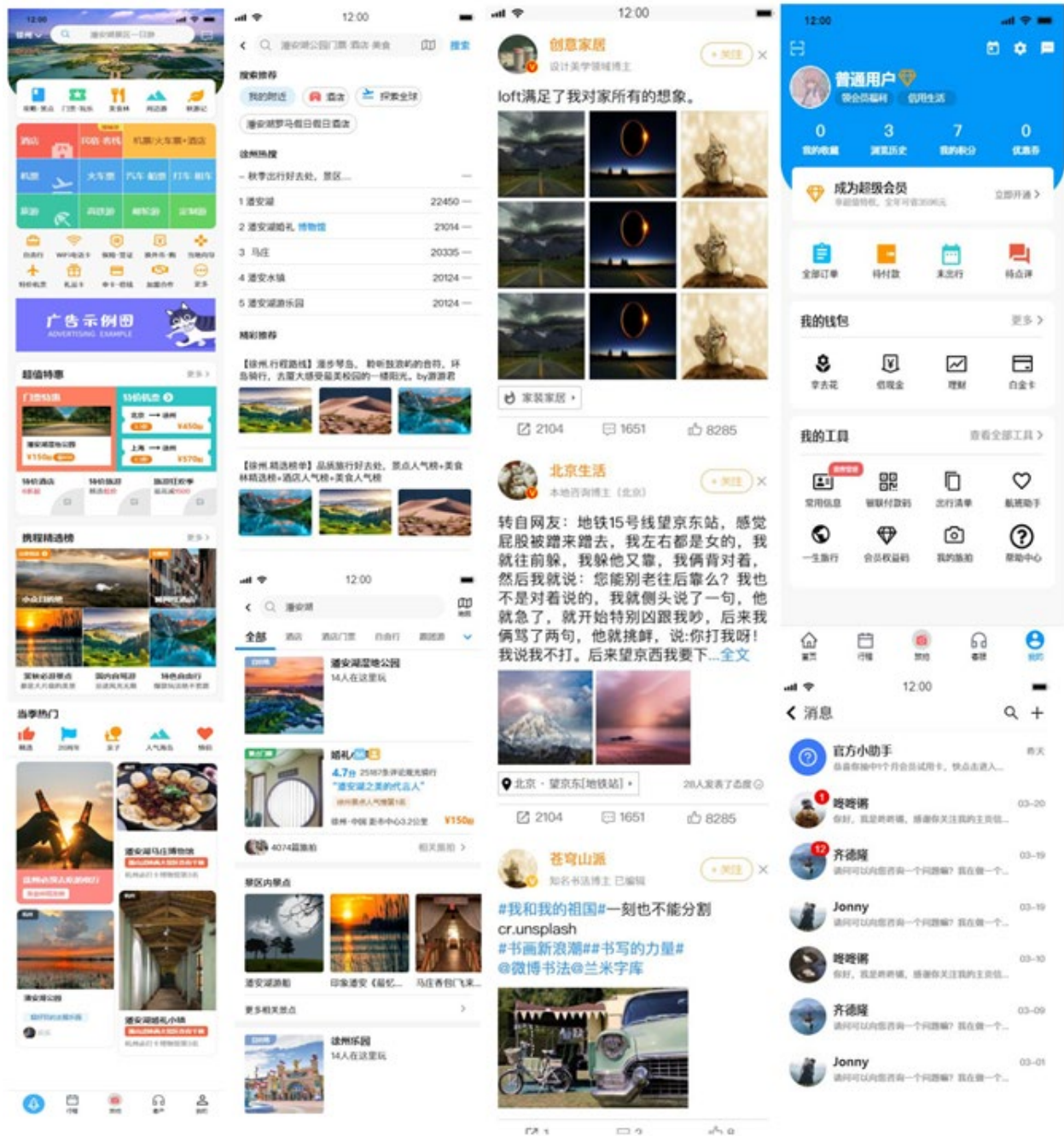


Figure 2. The display of software.

3.4 Purpose of design

The software mainly establishes a complete tourism ecology, including clothing, clothing, housing and transportation, highlighting the characteristics of tourism, with beautiful interface design, main functions:

Users can pay for the design and inquiry of the relevant transportation modes, hotel reservations of Pan'an Lake, the distance and travel methods of each scenic spot, and place online orders for the ticket fees of the scenic spots.

There is a certain number of tourist attractions available for reference. It is convenient for tourists to understand all kinds of relevant information of the scenic spot, and is conducive to the cooperation and communication between the management departments of the scenic spot and the scenic spot, improve the management level, so that tourists can have a rich understanding of the real situation of the scenic spots in advance.

Management personnel can collect and release all kinds of tourism information through software, deal with various problems, and various opinions, timely improvement, through the user in the process of software operation, can understand the basic situation of tourists and different points in time, make the necessary preparations in advance.

3.5 The System Function Design

The APP is mainly used in pan an lake area tourism, of course, not only limited to this, after market investigation, most of the market's tourism APP homogeneity, all product interface and functions are almost the same, not far from, considering the long-term use of such APP, the interface and operation, so the designed product interface also used homogenization processing, imitate the basic interface of most tourism products app, users quickly use the APP, without spending a lot of time cost to learn the use of software.

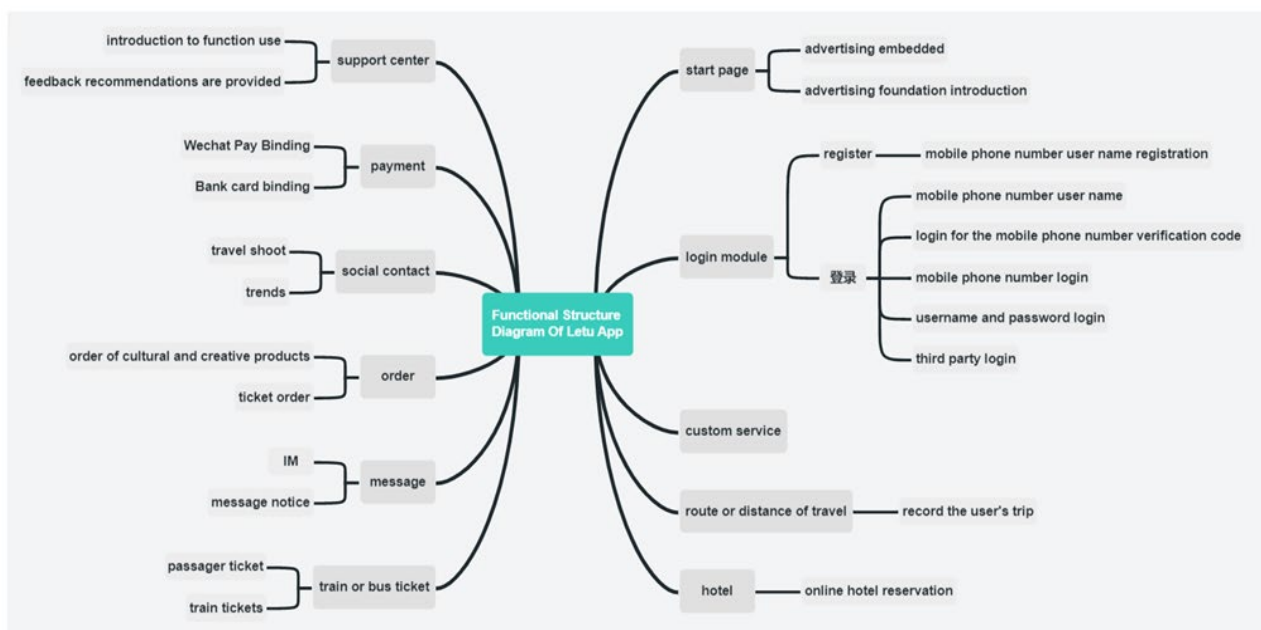


Figure 3. Functional Structure Diagram of Letu App.

4. Summary

The study by Shi and Mao(2022),combining the era background of science development and academic literature with tourist needs surveys, highlights the necessary to apply digital technology to upgrade cultural tourism, for sustainable rural cultural transformation and development.

The author first illustrated the current shortcomings of cultural tourism and characteristics of high consumer acceptance of digital platforms by investigating consumers' sources of tourism information, choice preferences and service satisfaction, by taking the current situation of Pan 'an Lake(which is in Xuzhou City, Jiangsu Province, China) as a model. Then, the author put forward a view, the current missing consumer demand for travel satisfaction can be met through the development of digital cultural tourism app, proved by methods of survey studies and in-depth analysis of the data. The author went on to demonstrate the design and function of the digital cultural tourism app and enumerated the value advantages of it. It once again emphasizes that the follow-up development of cultural tourism transformation needs the support of digital technology.

To comprehend the significance of the combination of tourism upgrading and technological power, brought out in this study, more studies could help to construct new ways to subsequent road of sustainable rural development.

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