The Innovation of Tourism Management Mode Based on Computer

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Abstract. With the continuous expansion of the scale of tourism business, various project charges, customer conditions and travel routes in the process of tourism business operation are becoming increasingly complex. Business operators only rely on manual processing of a large number of data, which is easy to cause many problems such as missing information, high error rate of information, waste and idle of a large number of resources. The purpose of this paper is to study the innovation of tourism management model based on computer. The MVC framework studied in this paper can be built into a reusable system framework. Web application framework is required to be able to insert the basic components and component packages of web applications on J2EE architecture, so that the framework can be applied to other similar systems without any changes, and an efficient application system and reusable system framework can be constructed. This paper analyzes the tourism complaint management mode and tourism project management mode. The experimental results show that the processing process of tourism complaints management has been completed, accounting for 30%, indicating that for the tourism complaints that have been handled, the platform based on B / s network tourism management mode can get timely feedback data.

Keywords: Tourism Service, B / S Network, MVC Mode, Management Innovation

1. Introduction
With the continuous improvement of living standards, people's material life is rich, so they hope to have a greater improvement in the spiritual aspect [1]. More and more people choose to travel on weekends or holidays to enjoy relaxing in another environment. They can also broaden their horizons and enrich their knowledge [2, 3]. In this situation of increasing demand for people, all kinds of travel agencies have been allocated land like bamboo shoots. However, due to the large number of scenic spots, the number of travel agencies has increased sharply, resulting in the current situation of tourism industry management order being more chaotic [4, 5]. There is no unified system to manage all kinds of work reasonably in major scenic spots, so we urgently need to establish a standardized tourism management mode system [6, 7].

Tourism management researchers and policy makers often encounter problems such as unsustainable development of tourism destinations, decline in the quality of tourism policies, and low
efficiency of tourism policies. These problems occur frequently in different regions and countries [8]. Ventisette e can summarize problems and their structural features through the analysis of basic patterns, so as to improve the ability of managers, researchers and students to understand, analyze and manage resources [9]. The "four wheel" talent training mode of tourism management specialty is proposed to meet the needs of the rapid development of China's tourism industry and the improvement of tourism quality. Panasiuk a, Taking Hubei University as an example, proposed the implementation scheme mode of "four wheel drive" talent training, and evaluated this training mode [10].

This paper makes a detailed analysis of the current situation of China's tourism information management, especially in the aspect of customer information management, and expounds the expected goals and problems in the past in the implementation of tourism customer information management. Aiming at the problem of poor expansibility in the design of customer information management system under the traditional mode, this system adopts MVC architecture based on B / S mode, which makes the system level clear and easy to manage and expand. At the same time, the system takes a strong data security guarantee for the data. On the basis of in-depth investigation of Tourism Bureau customer management needs, combined with the current situation of tourism industry, the overall demand planning of the system is made.

2. Innovation of Tourism Management Mode Based on Computer

2.1. B/S Network Structure

The information system management software based on B / S structure can only be installed on H end of H server. H network management personnel only need to manage server, and network management personnel only need to do hardware maintenance. However, the data load of the application server is heavy. In order to prevent the server "crash" and other problems, the database h is usually prepared to store the server h, in case of data recovery. Improve system security.

We design the presentation layer, business logic layer and data layer in the application of B / S architecture. In the main idea of MVC pattern, the object and the observer are the most important parts of the system. They can be independent or change the two cores independently. The view and business logic can be separated from each other in MVC mode, which is suitable for the development of tourism management system.

2.2. Distributed Tourism Management Mode

The distributed tourism service and management platform provides tourists with online customization and self-service customized travel itinerary and comment function. The itinerary includes customized modules such as dining standard, accommodation standard, transportation, tour guide service and others. The tourism business self-service customization module is transformed into a mathematical model as follows:

\[
M = \begin{bmatrix}
M_1 & m_{p_1} & m_{q_1} & m_{flag_1} \\
M_2 & m_{p_2} & m_{q_2} & m_{flag_2} \\
.. & .. & .. & .. \\
M_n & m_{p_n} & m_{q_n} & m_{flag_n}
\end{bmatrix}
\]  
(1)

After conversion to a mathematical model, the final price money can be obtained according to the calculation formula of customized model. The calculation formula is as follows:

\[
Money = M + H + C + T + O
\]  
(2)

M stands for meal standard, H stands for hotel standard, C stands for transportation, t stands for tour guide service standard, O stands for other tourism contents. Finally, online self-service generates travel business orders and prints orders.

The distributed tourism service and management platform provides online comments on the travel itinerary of tourists, including dining standards, accommodation standards, transportation, tour guide
service, tourism shopping and other aspects. The calculation method of the evaluation mode is as follows:

\[ \text{Score} = \sum f_i \times r_i \quad (i = 1, \ldots, 6) \quad (3) \]

3. Experimental Application of Computer Based Tourism Management Model Innovation

The data of this paper comes from our research on the business situation of the Tourism Bureau nearby, and referring to the books on the management of the Tourism Bureau and the personnel management of enterprises and institutions, combined with the understanding of the internal personnel management of the Tourism Bureau, the database of the system is designed, and the customer management is the main body of the management system. The data mainly focus on the internal department management, personnel management and customer management. The end users of the software are the managers and staff of the Tourism Bureau, and the staff of public institutions have certain computer operation knowledge; the maintenance personnel of the system are the information maintainers of the information center of the government departments.

4. Application Analysis of the Innovation of Tourism Management Mode Based on Computer

4.1. Tourism Complaint Management Mode

According to a simple statistical analysis of 1000 tourism complaints, 250 complaints were made in the first quarter of tourism, accounting for 25%, and 210 in the second quarter, accounting for 21% of the tourism complaints. Compared with the first quarter, there were 300 complaints in the third quarter, significantly higher than the previous two quarters, accounting for 30%. The fourth quarter and the first quarter are basically the same, with little difference. Therefore, tourism complaints can be developed mainly in July, August and September of the third quarter. It can be analyzed that July, August and September are the peak seasons of the tourism market. The increase of the scale of tourism complaints leads to the increase of tourism complaints. The relevant quality supervision and management departments should strengthen the supervision and management of the tourism market in the peak season.

Through the analysis of 1000 platform data with large number of tourism complaints, this paper makes a simple analysis on the handling of tourism complaints and makes a table as shown in Table 1.

| Complaint handling status       | number | percentage |
|---------------------------------|--------|------------|
| Processing                      | 200    | 20%        |
| Processed for feedback          | 250    | 25%        |
| Processed feedback              | 250    | 25%        |
| complete                        | 300    | 30%        |

Table 1. Tourism complaints handling results

![Figure 1. Tourism complaints handling results](image)
As can be seen from the table, there are 200 complaints in total, accounting for 20%, which indicates that the platform has a good efficiency in handling tourism complaints, and can timely follow up and supervise tourism complaints for consumers. At the same time, a total of 250 events have been handled, accounting for 25%, and 25% of the cases have received feedback after processing. All processes have been completed, accounting for 30%, as shown in Figure 1. It shows that for the handled tourism complaints, the platform based on B/S network tourism management mode can get timely feedback data for further analysis. Therefore, in general, the construction of big data platform of tourism complaint management mode is very effective, which can strengthen the efficient supervision and management of tourism complaints and related quality problems in the rapid development of tourism industry, and promote the healthy development of tourism industry.

4.2. Tourism Project Management Mode
In order to grasp the tourists' choice of tourism items, the main items such as mountain climbing, camping, cycling, rafting, rock climbing, hiking, bungee jumping, swimming and river lake boating were investigated. At present, among the tourism projects that tourists participate in, the first consideration is mountain climbing, accounting for 15%, as shown in Table 2, followed by cycling and river and lake boating, and then swimming and hiking, accounting for 13.33% and 11.66% respectively, as shown in Figure 2. For the exciting events such as bungee jumping and rafting are the boys' favorite sports. Because the boys are full of vitality, they are more interested in the sports tourism projects with natural characteristics and adventure and stimulation, but the number of people they choose is relatively small. This is due to the strict requirements of these sports on field equipment and safety equipment. These projects are still in the development stage. All aspects of the mechanism is not very sound, and the cost is relatively expensive. Therefore, the governments at all levels in each region should strengthen the supervision and management of the main tourism project objects according to the different tourists' choice of tourism projects, so as to improve the supervision efficiency of local tourism project supervision.

| Mountain climbing | camp | ride on a bicycle | drift | Rock Climbing on foot | Bungee jumping | Swimming |
|-------------------|------|-------------------|-------|-----------------------|----------------|----------|
| Number of people  | 18   | 3                 | 17    | 4                     | 14             | 5        | 16       |
| percentage        | 15%  | 2.5%              | 14.16%| 5%                    | 11.66%         | 4.16%    | 13.33%   |

Figure 2. Tourism projects of harmonious ecological concept

5. Conclusions
Tourism has quietly entered our life. We will choose to travel in our leisure time to see the beautiful scenery, strengthen our cultivation, cultivate our sentiment and enrich our life. Therefore, tourism management is closely related to our daily life. The development of the management system is to establish the background database, which requires the consistency, integrity and security of the data.
Second, it is required that the back-end application should have complete functions and easy to use, and the development of front-end application should be maintained. According to our analysis, it shows that the presentation layer, business logic layer and data layer in the application of B / S architecture are designed reasonably. By using various object-oriented development tools provided by the B / S architecture, especially the algorithm for distributed tourism management mode, the database object is intelligentized and the operation is simple and convenient, therefore, the system application prototype can be established in less time and the requirements iteration of the initial system of the prototype can be carried out.

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