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Users' Demand Analysis of Intelligent Information Service for Rural Tourism based on the Kano Model

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1. INTRODUCTION AND RESEARCH QUESTIONS

Rural tourism utilizes local and distinctive resources to offer tourists relaxation, entertainment, vacations, and other tourism services by choosing rural areas as its destination [1][2]. The level of tourism services can be raised and rural tourism can be promoted by providing information services through the Internet. In China, the domestic travel market currently has various established online travel agencies (OTA), but the information service for rural tourism is not well developed. While existing research on the intelligent information service of rural tourism focuses on the macro-development opportunities provided by intelligent tourism for rural tourism, there has been few consider the development of the intelligent information service system of rural tourism. Starting from the demand side, systematically sorting out and analyzing users' information service demands is the key to developing an intelligent information platform for rural tourism, which is critical for optimizing tourists' rural tourism experiences and improving tourists' satisfaction.

Therefore, by reviewing related literature, this paper aims to answer the following questions: (1) What is the general users' demand of intelligent information services for rural tourism? (2) How do these demands influence users' tourist satisfaction?

2. FRAMEWORK OF INTELLIGENT INFORMATION SERVICE SYSTEM FOR RURAL TOURISM

Based on interviews with 10 heavily-dependent users of the travel platforms and 10 tourism industry practitioners, we proposed a framework covering five categories and 30 main information service items. Table 1 shows the proposed framework.

Table 1. Rural tourism intelligent information service system.

Categories	Demand items
Cultural travel service	(1) Transportation ticket booking; (2) Board and lodging reservation; (3) Destination recommendation; (4) Destination service booking; (5) Recommendation of characteristic route combination; (6) E-ticket
Information service	(7) Destination information; (8) Display of rural cultural resources; (9) Real-time information; (10) Consultation and complaint; (11) Parking information service; (12) Rescue service; (13) Live streaming
Map navigation	(14) 2d map service; (15) Three-dimensional reality; (16) Positioning and navigation; (17) Tour route planning; (18) Intelligent voice service; (19) VR virtual reality
Independent shopping mall	(20) Commodity purchase; (21) Commodity intelligent recommendation; (22) Order management; (23) After-sale of goods; (24) Commodity traceability; (25) Commodity distribution; (26) Evaluation and feedback
Online Community service	(27) Dynamic publishing; (28) Community interaction; (29) Travel together; (30) Live interaction

3. RESULTS AND MAJOR FINDINGS

The Kano model and the Better-Worse satisfaction index are used to examine the effects of each service demand on tourist satisfaction. Based on Kano model, 15 attractive demands (A), 2 one-dimensional demands (O), 10 must-be demands (M), and 3 indifferent demands (I) are obtained. The basic requirements of most users for rural tourism intelligent information service (i.e., must-be demand) are similar to those provided by existing OTA, covering such basic services as transportation ticket booking (1), accommodation reservation (2), and so on. Simultaneously, requirements for functions not yet included in the OTA platform, such as positioning and navigation (16), commodity purchase (20), and so on, are outlined. Half of the demands in the service system are attractive demands, indicating that the system has greatly enhanced users' cognition of information service elements. The one-dimensional demand includes only parking information service (11) and live interaction (30), which reflect users' travel and social demand while traveling. Some ser-vices, such as commodity intelligent recommendation (21), received 9 reverse demands (R) responses from statistical data of various service types, indicating that, while intelligent recommendation saves users information search costs, it may in-volve the collection and utilization of personal privacy information and is negatively evaluated by some users.

As shown in Fig.1, the Better-Worse satisfaction index shows similar results as Kano model.

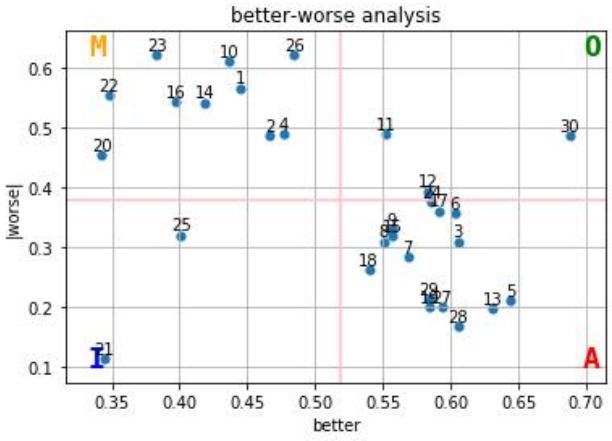

Fig. 1. Quadrants of each service

4. CONTRIBUTIONS

The following are the findings of this study. When building the rural tourism intelligent information service platform, it is possible to carry out key, hierarchical, and phased construction planning based on the priorities of all levels. The attractive demands should be constantly explored to enhance user stickiness and improve user experience. Furthermore, because users' demand change in response to their surroundings, service categories are undergoing a dynamic transformation cycle. As a result, while maintaining the service's advanced nature, the development of a rural tourism intelligent information service should pay close attention to users' demand.

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