Optimization Layout of Marketing Management Information System of Hotel and Restaurant Based on B / S Mode

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Abstract. With the rapid development of the hotel industry in China, more and more hotels adopt information management system to deal with a lot of information to realize the automation and informatization of hotel management. This article analyzes the research status of hotel food and beverage marketing management at home and abroad, and designs a new type of hotel food and beverage marketing management information system, the system functional requirements, and each function module in detail analysis, through the test, verifies the practicability of the system.

Keywords: Hotel Management, Catering Marketing, System Design

1 Introduction

Nowadays, the market competition in the hotel industry is becoming more and more fierce. For hotel operators, the main management goal is how to make themselves stand out in the fierce competition. The management level of the hotel industry is an important factor affecting the service level. With the continuous deepening of information technology, the catering industry has gradually used advanced information technology to improve its own management level. The use of information technology has included a la carte, order, checkout, cost control and other factors into the management system, thus Formed the information integration of restaurant management. Most of the construction of the marketing management system of the hotel restaurant will have some problems. For example, there are problems on each functional interface, the degree of relevance of dishes cannot be achieved, and the hotel's system output terminal equipment is difficult to meet the functional requirements. In order to solve this series of problems, it is necessary to form industrial customization in the marketing management of the hotel and catering department, make full use of data mining technology, and further explore and in-depth analysis of the system[1, 2].

2 Analysis of the Research Status of Hotel and Catering Marketing Management at Home and Abroad

In China, hotel management systems have emerged since the 1980s. Through the study of foreign advanced technologies, by the end of the last century, several types of relatively complete hotel management system software appeared in China. With the popularity of computers, the development of related systems began. In the historical period, a new type of information management system appeared, the functions of the information management system were more abundant, and the stability

and security were gradually improved.

In foreign countries, the computer technology of many developed countries is relatively mature, and the hotel and restaurant industry has also integrated automation, standardization, intelligence, and information technology to establish a stable industry ecosystem and fully realize the modernization of hotel management in detail. The management level of hotels abroad is significantly higher than that of China. For example, the global reservation system of Calson Hotel can use online data to complete the specific planning of guests. The Radisson system enables customers to book rooms online and query the number of rooms in real time. The Promus system can calculate the work performance of employees and improve their motivation. In simple terms, the hotel's catering marketing management system belongs to an industry application, and its technology is not complicated. Hotel catering marketing management is a challenge in the market, allowing more catering companies to have the initiative and enthusiasm for informationization, which is fiercely competitive Direct drive for the application of the hotel catering marketing management system。

3 System Requirements Analysis

3.1 Functional Requirements Analysis

The menu system of a catering hotel generally includes the following functions: ordering food according to customer requirements; the kitchen can immediately disclose the menu information and can receive menu data; and investigate customer satisfaction.

Customer: Check the recipe data, select the dishes you want to taste, and make suggestions on the dishes; A la carte waiter: responsible for recording customer's a la carte; Kitchen supervisor: Responsible for real-time generation and update of dish data.; Manager: Responsible for the summary and treatment of customer discount suggestions and dish suggestions; Serve waiter: responsible for serving customers. System maintenance personnel: responsible for reviewing customer information, performing background information processing and system maintenance, etc.

3.2 System Function Subject Area Division

According to the analysis of the a la carte business and related personnel, the a la carte system can be divided into three a la carte subsystems: the kitchen management subsystem, which obtains the a la carte status from the a la carte management subsystem. Obtain the corresponding menu from the back kitchen management subsystem. After the customer finishes the meal, the customer's opinion can be sent to the approval business management subsystem [3].

(1) Ordering subsystem

The system is divided into two parts, the orderer needs to enter his identity information to verify, after the update of the recipe, the user can browse the recipe and order. The scope of the subject area of the a la carte management subsystem is shown in Figure 1:

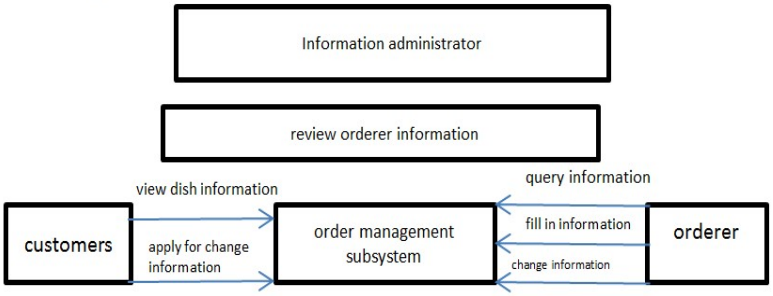

Figure 1. The scope of the subject area of the a la carte management subsystem

The specific functions of the order management subsystem include: customers can view the dish information through this module; customers can make changes to the ordered dishes, and they need to confirm with the order staff and the back kitchen before the change ; the order staff can according to

the customer's requirements Make a second confirmation of the menu and submit it to the kitchen after confirmation by the customer; the orderer can inquire about the order of the customer in the area he is responsible for.

(2) Back kitchen management subsystem: The back kitchen management subsystem is the core of the marketing management system of the catering department. This module can comprehensively manage the overall situation of the back kitchen, including customer ordering and raw material usage. The scope of the subject area of the back kitchen management subsystem is shown in Figure 2:

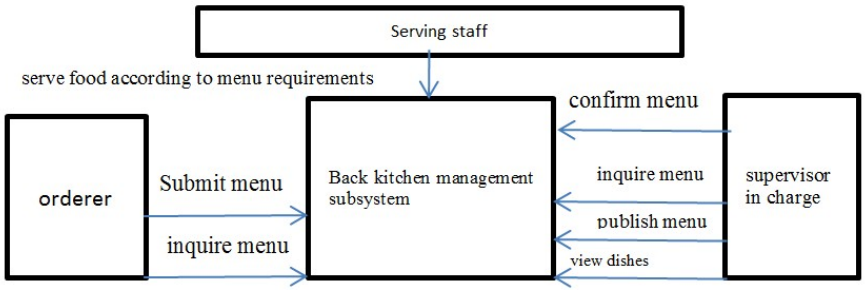

Figure 2. The scope of the subject domain of the back kitchen management subsystem

The main body of the back kitchen management subsystem includes: orderer, food attendant, back kitchen supervisor.[4-6] The orderer teaches the customer's order information to the rear kitchen management subsystem. The service staff follows the order menu to serve food. The rear kitchen supervisor can perform menu inquiries, publish new recipes, and change menus from the rear kitchen management subsystem.

(3)Approval management subsystem: This module is one of the more important data information processed by the system. In the examination and approval business management subsystem, there are three subjects: orderer, customer and restaurant manager. The orderer can submit the customer's request and transfer the modified menu to the approval business management subsystem after query and approval. The restaurant manager can summarize and reply according to the customer's request and a piece.

4 System Architecture Optimization Design and Technical Analysis

4.1. JAVA Message Service

JMS is an API that is deployed at the bottom of the program. JMS can be used to define different interfaces in the management system to complete the communication of messages between servers and the communication of messages between clients to realize the sending and transmission of information.

4.2. JMS Message Composition

In the design of hotel catering marketing management system, the realization of JMS is the most important carrier. Under normal circumstances, JMS consists of message header, message body and attributes. The message header can indicate the priority set by the message. The attribute is mainly to add or delete information other than the message header. In JMS, the message body structure is shown in Figure 3:

Figure 3. Message body structure

4.3 Delivery of JMS messages

In this information management system, messages are mainly transmitted through the JMS point-to-point message domain. A message queue will be formed and sent in order, and received messages are also received in this queue.[7-9]

5 Design of functional modules for the marketing management information system of the hotel restaurant

The hotel catering marketing management system designed in this paper adopts B/S three-tier architecture, which is divided into presentation layer, business logic layer and data layer. The functional module of the system is mainly composed of three aspects: a la carte management, catering internal information management and logistics management:

Ordering management system: The design of this function module is mainly that customers can order orders through the handheld PDA. During the ordering process, they can add requirements notes to a certain dish, such as: adding hemp, adding spicy, list, etc. The chef in the food and beverage department can directly see the customer's requirements for dish preparation and operate according to the requirements. The management personnel can manage the category of dishes in the background, such as the category of newly added dishes, maintenance of dish information, and dish statistics Analysis, etc., can also manage high-quality customer information and regularly return visits to improve the hotel's humanized service.[10]

Internal information management: This module is mainly for the management of personnel information and financial information of the catering department, including personnel management, role management, authority management, attendance management, information query, etc. This module is the core module of the hotel catering marketing management system.

Logistics management: This module mainly manages the supply of hotel daily necessities and dishes to ensure the safety of food supply. The specific contents include supplier management and food storage management, and unified storage of goods provided by suppliers Each item of food should be recorded in and out of the warehouse for later inquiry.

Conclusion

The marketing management information system of the hotel and catering department studied in this paper is developed according to the work needs of the catering department, and cooperates with the scientific management system to maximize the profit of hotel operations. In the course of operation, it can not only solve the user's behavior analysis, but also integrate other systems. The mutual integration between the systems is also a long-term strategy for the development of the management information system of the hotel restaurant. It is hoped that the design of the marketing management information system of the hotel catering department studied in this article can play a reference role in the development of other hotel catering marketing management.

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