Smart Booth Mini Program: An Internet-based Stall Management Model

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Abstract

In 2022, the Web-based business management mode is greatly transforming and promoting the service process and implementation efficiency of the traditional commercial city, but the market of our "street market economy" lacks an effective network management platform. With the gradual opening of Chinese policy to the "street market economy", the variety of "street market economy" products will increase, the expansion of the scale of participants, is bound to cause a great deal of market management pressure, easy to breed chaos. In order to solve the problems existing in the development of land stalls economy, this paper puts forward a tripartite idea of "managing", "buying" and "selling" of land stalls by small program and network end. Through the design of mini program and website, the Internet big data is used to build the information platform with the mechanism of public participation, environmental protection, safety and supervision, so that the smart booth can solve the traditional manual management and processing means, and realize the information transparency, fast dissemination and timely feedback. The smart booth can standardize and facilitate the "stall economy" in front of local governments and citizens.

Keywords

Stall Economy; Network Management; Applets.

1. Research the Background

Based on the vigorous development of information and digitalization, in order to improve the efficiency of urban management departments, simplify the work process, optimize the structure of "stall economy", and facilitate people's life. This paper puts forward a brand-new management mode of the street stall economy, which is carried out around "Internet + street stall economy". The purpose is to build an information management platform for individuals, street stall vendors and city management personnel. This project will design a small wechat program, which can provide individuals with such functions as navigation and collection of street stalls, online recommendation of commodities, online viewing, order management, online evaluation and feedback. Vendors can be provided with online application for booth opening, online display of booth commodities, booth positioning, evaluation and viewing, online bookkeeping and other functions. Can provide the city management personnel with "stall economy" area division, booth information review, booth information inquiry, booth evaluation view, booth around the sanitation evaluation view, booth navigation, online feedback processing, online announcement, online interview and other functions.

2. Research Content

(1) Design and implement small programs for stall management. Through the investigation and analysis of the booth management by the city management department, to determine the function of

the small program; Learn the development technology of wechat mini program, design the user interface of mini program, realize all the functions of the booth management process, and provide the rapid management function for the city management department.

(2) Design and implement the background system of booth management. Through the investigation and analysis of merchants and consumers, the design and implementation of user information management, navigation system, booth information management, order information management, user evaluation feedback and advertising functions, to help merchants and consumers more conveniently understand the operation of the store.

3. System Design

3.1 System Functional Structure Design

The function page of "Smart Booth" wechat mini program consists of the entrance interface, program homepage, booth details, commodity details, order details, search interface, personal center, collection interface and management page. The functions displayed on each page are as follows:

The entrance interface: When users enter the mini program, they will select their identities, such as customers, merchants and city managers, and then verify the user's identity. Wechat authentication is carried out by comparing the background data.

Program home page: This page includes classified columns (mini program homepage entry, River view record entry, Personal center entry, shopping cart entry), search column (skip to search interface), today's recommendation (recommended commodities and recommended booths), city management trends (top regulations, latest developments, historical announcements), message reminder, payment by scanning code (skip to wechat payment interface, generate order information when the payment is successful).

Booth details: to solve the problem of random stalls, affecting traffic. This page includes the list of stall commodities (displayed by commodity classification), stall owner's contact information, stall navigation, stall city, view stall evaluation (including commodity evaluation), collection stall (save to collection), The available areas include booth reservation application (skip to the preset booth application), occupying the place to set up stalls (log in the booth information of the merchant and successfully set up stalls when the merchant arrives at the booth), ending the booth (the merchant is closed, etc.), and showing the place where the stall has been set up in the area (small map area display).

Commodity details: to solve the problem of opaque commodity information. This page includes commodity value, commodity introduction, commodity sales, viewing commodity evaluation (including commodity star rating), collection of commodities.

Order details: It is composed of order records and stall evaluation, among which stall evaluation solves the dirty and bad problem of stalls, which can be evaluated by stalls and commodities.

Search interface: It can be searched by keyword index, category index and interval index, and add advertising placement function.

Personal Center: This page includes modification information, Favorites column (click to jump to Favorites interface), my booth (visible only to merchants), application for preset booth (visible only to merchants), my payment code (will generate a two-dimensional code, this function is visible only to merchants, when scanning the two-dimensional code, the merchant's current online booth information will be queried), historical order (including historical evaluation), help and feedback, Application for preset booth includes application for preset booth, product removal, product shelving, and product information modification, while help and feedback include submission feedback, cancellation feedback, my feedback, customer service, and help guidance.

Collection interface: you can collect booths, collect goods, delete collections, and recommend according to your collection preference.

Management interface: This function is visible only to city managers. This page includes booth management, evaluation management (delete commodity evaluation and delete booth evaluation), announcement management (release announcement, modify announcement, delete announcement, historical announcement), feedback management (reply feedback and historical feedback), The stall management includes the management of the ground stall area city, which can be set up stall area city, but also can handle the application, delete the stall, contact the stall owner, commodity audit (to solve the problem of commodity quality by the health department directly audit), booth information modification of the merchant stall management.

3.2 Design of Small Program Function Module

1. Positioning and navigation system function module: based on Beidou, operator signal base station and wifi positioning, to ensure positioning. The city management department divides the "street stall economy" area into cities on the map. When the stall owner opens his stall, he will get the current location and judge whether it is in the "stall economy" area. If it is not unable to open the stall, it will be displayed on the map after successful opening of the stall. Individual users and vendors can view the location information and the system can go through the display point on the map. To determine where there is space to support stall setting up, other vendors only need to click on the empty point, and the system can provide navigation to the designated position. Individual users can click on the registration point to view stall information or navigate directly to the stall.

2. Stall opening function module: When vendors apply to open stalls, they need to fill in their personal information and stall information, and then the city management personnel will conduct online review and feedback whether they can open stalls. The personal information and booth information are stored in the background database. If the information is not modified after the approval, the stall opening does not need to be reviewed, and the information needs to be reviewed again after the modification.

3. Booth management function module: The function module provided to the city management personnel can be used for the division of "stall economy" area, booth information viewing, review, announcement release, feedback processing and other functions.

4. Order management function module: order function module provided to vendors and individuals. Vendors can view personal historical sales orders, and individuals can view their consumption orders.

5. General function module: It can be provided to vendors and individuals for personal information management, personal information modification, stall collection, bookkeeping, etc.

6. Evaluation and feedback module: It is a functional module for individuals to evaluate stall commodities, stall owner's reputation, nearby sanitation and other problems. Feedback can be directly sent to the city management department, which will deal with it accordingly.

7. Advertising service module: provides advertisements to small vendors, and delivers advertisements by big data processing technology.

3.3 Design of Back-End Function Module

The back-end management module is the network management end of "smart booth", which mainly includes four parts: booth management, evaluation management, announcement management and feedback management.

(1) Booth management module: in the ground stall area city management module, city management personnel can set up stalls in the area; In the commodity stall management module, by processing users booth application, booth deletion, contact stall owners, booth information modification, the quality of goods can be directly reviewed by the health department.

(2) Evaluation management module: there are two functions of deleting the evaluation of the commodity and deleting the evaluation of the booth.

(3) Announcement management module: city managers can issue announcements, modify announcements, delete announcements and modify historical announcements.

(4) Feedback management: City managers can reply to consumers' feedback and set the cut-off time for feedback records.

4. Database Design

(1) Announcement table: title, announcement content, publication time, modification time, publisher, modifier, whether to revoke, whether to delete

(2) Comment table: subject, subject type, comment time, comment content, comment user, comment target user nickname, comment user profile picture address, whether to delete

(3) Feedback form: feedback type, feedback content, feedback giver, feedback time, feedback method, feedback record, processing person, processing time and processing result

(4) Booth table: stall owner number, stall owner name, stall owner picture address, stall owner type, stall owner profile, stall owner status, number of visits, number of evaluation

(5) Commodity table: commodity name, commodity number, commodity picture address, commodity category, pricing, inventory, commodity description, commodity status, shelf time, number of visits, number of evaluations

(6) Watch the commodity table: user, creation time, commodity, commodity pricing at the time of collection

(7) Collection booth table: user, creation time, booth

(8) Advertising table: AD picture location, AD name, AD website, AD registration time, AD end time, AD click number, delete mark, and creation time

5. Project Innovation Points and Features

5.1 Associate the Traditional Urban Management Mode with the Internet and Focus on Optimizing the Management Structure

In the traditional urban management mode, it is basically the additional functions provided by the e-commerce platform. The platform of the domestic "market economy mainly helps to open the market, and lacks the management module. The small program has online application, real-time feedback, online processing, announcement and other functions, so that the city management personnel to achieve online office, greatly reduce the work burden, improve the efficiency of problem solving, when necessary can assign staff to deal with the field.

5.2 Optimize the Market Structure of "Market Stall Economy"

The traditional "street stall economy", with temporary, liquidity and other characteristics, is not convenient for customer feedback evaluation, is not convenient for vendors to accumulate "repeat customers", is not convenient for urban management departments to manage.

Small program with account system, evaluation system, navigation and positioning system, advertising service system.

For individuals: collectible booth, easy to find next time. Can search for items of interest, according to the navigation direct to the vendors booth. You can also check the evaluation of stalls and goods through the evaluation system. You can evaluate the goods, stalls and sanitation near the stalls.

For vendors: identity can be confirmed through the account, online bookkeeping, save income and expenditure information at any time to check. When opening the stall, the stall location can be located (need to be in the prescribed area), so as to facilitate the "repeat customers" to visit again.

For the city management department: through the positioning system, divide the "stall economy" area. You can view the evaluation of each stall, conduct an online interview with the stall owner with poor reputation or poor hygiene, and also find the stall owner to talk directly according to the navigation and positioning system during the opening period. Announcements can be published online

6. Closing Remarks

In order to solve the problems existing in the management of street stalls in the economic development, with the help of the Internet platform and the concept of environmental protection, this paper puts forward a tripartite idea of "managing", "buying" and "selling" of street stalls with the help of wechat mini program. Through the design of wechat mini program on mobile phones, it uses Internet big data to build an information platform with mechanisms including public participation, environmental protection, safety and supervision. Set corresponding authority and operation function from the managers, stall owners and consumers respectively, to solve the management problems of relevant departments in the stall operation and the general concern of the society. The mode related by the Internet and the stall management can not only promote the sound development of the stall economy, but also not affect the living environment level of citizens and the construction of urban civilization, so as to realize the harmonious unity of urban economy and civilization.

Acknowledgments

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