# Auto Service Marketing Management System And Method Through Wechat

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#### **Abstract**

This project discloses a visual management system and method of automobile service operation process based on enterprise WeChat, in which the system includes front-end application, application gateway, business middle platform, technology middle platform and data middle platform; Business middle platform includes system management module, user management module, store service marketing management module and business card management module; The methods include activity implementation and analysis, visual management of shop maintenance process and service operation monitoring; Through this project, auto dealers can expand business operation channels, improve operation efficiency and promote the growth of dealers' maintenance service performance.

### **Keywords**

WeChat, automobile service, marketing, management system.

#### 1. Preface

Automobile is one of the four strategic pillar industries of the national economy. Automobile circulation is a link between production and consumption under the market economy environment, an effective terminal for the automobile industry to achieve added value, and an important way to meet the people's good automobile life. Automobile circulation contributes to social and economic development, ensures stable growth and promotes the realization of consumption goals. Its social value and industry contribution are self-evident.

However, due to the development of the automobile industry from the increment era to the stock era, as well as the youth of the customer group, the dealer business generally has problems such as high service marketing operating costs, great difficulty in operation supervision, and disunity of online and offline businesses. The traditional automobile service operation model has been unable to meet the operation and management of automobile aftersales service enterprises. At present, auto dealers should rely on the automotive aftermarket to drive corporate profit growth, obtain more new customers and retain retained customers for after-sales service. Customer centered and customer demand oriented has become the primary task of daily operation management of auto dealers to achieve performance growth.

### 2. Project content

The technical problem solved by this project is to overcome the shortcomings of the traditional dealer business, such as high marketing and operation costs, difficult operation supervision, and inconsistent online and offline business, and to provide a visual management system and method for the operation process of automobile service based on enterprise WeChat.

The purpose of this project is achieved through the following technical solutions:

The visual management system of automobile service operation process based on enterprise WeChat includes front-end application, application gateway, business middle office, technology middle office and data middle office. The front-end application is connected to the business

middle office through the application gateway, the business middle office is connected to the technology middle office, and the technology middle office is connected to the data middle office. Its feature is that the business middle office includes system management module, user management moduleStore service marketing management module and business card management module;

The store service marketing management module includes the activity planning sub module, the execution sub module and the activity evaluation sub module;

Business card management module includes business card making sub module, business card communication sub module, business processing sub module and communication effect analysis sub module.

The system uses Java+Vue+MySQL R&D technology, is developed based on the Spring boot framework, and conducts product R&D, iteration, and deployment through DevOps tools.

The system is based on VUE lightweight and reliable Vant component library to realize the integration of third-party platforms; The UnionID provided by WeChat is matched with the OneID data of the self built data center.

The system management module manages departments, provinces, cities and counties, job roles, menu permissions and functional operation permissions;

The user management module manages the basic information, corresponding permissions and roles of personnel.

The activity planning sub module is used to collect activity materials, define activities, distribute activity tasks, edit activities and launch activities;

The execution sub module is used to arrange applet activity functions, view activities, register activities, assign customer service consultants, online service reminders, invite customers and distribute rewards;

The activity evaluation sub module is used to evaluate the communication effect of the activity. Business card making sub module uses employee files to make business cards;

Business card propagation sub module is used to forward business cards and add contact information;

The business processing sub module is used for customer reception and communication;

The communication effect analysis sub module evaluates the analysis effect according to the communication quality and communication quantity of customers.

Specifically, it includes one or more of the following non sequential execution steps:

Activity implementation and analysis;

Visual management of shop maintenance process;

Service operation monitoring;

The activity implementation and analysis steps include the following sub steps:

Establish connection with customers;

Uniformly formulate service marketing activities and formulate activity task management;

Activity task distribution;

Conduct online marketing activities;

Activity confirmation/invitation;

Activity effect analysis;

The visual management steps of the repair process at the store include the following sub steps:

Online independent service inquiry/application;

Maintenance service reminder;

Maintenance service evaluation;

Service operation monitoring steps include the following sub steps:

Online business monitoring;

Service potential customers/guaranteed customers management.

Online marketing activities include: WeChat conversation messages, friend circles, group messages to obtain the dealer's activity information, which can be viewed, registered, forwarded, and followed related service marketing activities.

The activity effect analysis is as follows:

Automatic statistics of service activity participation, number of stores, rate of store arrival, activity conversion rate and new maintenance service output value.

The online business monitoring specifically includes: real-time distribution and monitoring of marketing effect, real-time access to online communication between consultants and customers, activity follow-up, in store maintenance process, employee performance, etc., and grasp the in store operation; Utilize the intercommunication ability between enterprise WeChat and customer WeChat to effectively obtain the data of the whole link and the communication records between consultants and customers, and carry out data operation.

### 3. Innovation

This project deeply integrates the maintenance service business of traditional automobile dealers with the Internet, aiming to help dealers achieve direct customer access by means of enterprise WeChat, connect online and offline business scenarios, and realize visual management of automobile dealers' service operation process from the aspects of communication process, service marketing, business management and control, and customer assets, so as to expand operation channels, improve work efficiencyPromote the growth of dealers' service performance.

## 4. Implementation mode

Please refer to Figure 1. Visual management system of automobile service operation process based on enterprise WeChat, including front-end application, application gateway, business middle office, technology middle office and data middle office. Front end application connects with business middle office through application gateway, business middle office connects with technology middle office, and technology middle office connects with data middle office. Its feature is that business middle office includes system management moduleUser management module, store service marketing management module and business card management module; The store service marketing management module includes the activity planning sub module, the execution sub module and the activity evaluation sub module;

Business card management module includes business card making sub module, business card communication sub module, business processing sub module and communication effect analysis sub module.

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(Liaoning University of Science and Technology 2023 Innovation and Entrepreneurship Training Program for College Students)

### References

- [1] University libraries rely on WeChat public platform to carry out strategic research on disciplinary services [J]Yang Jing. Jiangsu Science and Technology Information, 2022 (13).
- [2] Try to analyze the development direction of traditional TV news communication in the new media era [J]Xu Hanbing. Cultural Industry, 2022 (11).
- [3] Operation status and improvement strategy of WeChat public platform for mathematical academic journals [J]Yang Fengxia;Zhang Shuxin. New Media Research, 2022 (03).
- [4] Quantitative research on the operation of the "double first-class" university library's WeChat public platform [J]Yang Xiaofeng. Library Journal, 2021 (01).
- [5] Research on the Audience Preference and Marketing Strategy of Tourism WeChat Official Account -- Taking Jiangsu 5A Scenic Spot as an Example [J]Li Junlou. Modern Commerce, 2020 (32).
- [6] Take advantage of our efforts the use of WeChat public platform in exhibition marketing [J]Chu Junwei;Li Shaohua;Zhang Jun;Li Na;Zhao Guanghui, China Exhibition, 2020 (15).
- [7] Construction and application of teaching platform based on WeChat official account -- take secondary vocational school network marketing as an example [J]Qiu Peina, Guangdong Vocational and Technical Education and Research, 2020 (03).
- [8] A preliminary study on the application method of WeChat public platform marketing planning and management [J]Ma Xiaohong, E-commerce, 2020 (05).
- [9] Application of WeChat public platform in enterprise network marketing [J]Pan Lin; Cheng Kun, Ming Dynasty. Science and Technology, 2019 (25).
- [10] Research and practice of cross-border import product marketing based on WeChat public platform [J]Zhang Bo;Xuan Huiyan;Shang Junmei;Ethan. E-commerce, 2018 (09).