Research on O2O Business Model and Strategy of Urban Distribution in Mobile Internet Environment

Jun TAN
Zhuhai College of Jilin University, Zhuhai 519041, China
gdhkw1@163.com

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Abstract. According to mobile communication and Internet technology, we are now building the O2O commercial model of the deal for city distribution information, as well as achieving the high usage of social goods transportation resources and industrial energy-saving and emission-reduction. We will analyze the driving factor in urban distribution current operation mode revolution through mobile Internet environment, we will also study on urban distribution information transactions and credit management model so as to put forward urban distribution of O2O business model and enterprise software development, logistics parks, mobile Internet operators cooperation strategy based on the Internet according to the organization of urban distribution, business relationships and business processes of the complexity features.

Introduction

With the rapid development of broadband wireless access technology and mobile terminal technology, the further development trend of mobile Internet has become a hot research to the experts and scholars. Some scholars believe that the cloud services, mobile, big data, machine learning and the innovation of user experience will become the direction of the four IT industry in the further decade. [1] Anderson addressed in the Long Tail theory that because of the concerned cost has been decreased, it can create products and services advantages in the Internet era, that through the market segmentation, companies focus on a specific target market. They are either directed against a niche market strictly, or focus on business service. Alexander Osterwalder, in his book "Business Model Generation", believes that the business models includes value proposition, customer segmentation, distribution channels, customer relations, sources of income, resources and core capabilities, critical business (or enterprise value chain), as well as key partners such nine elements of the cost structure. Professor Zhong Ning from Fudan University, thinks that we must produce and spread the proposition value, profit mode selection, setting the cost structure, as well as cooperate with various stakeholders to complete value creation at the value network. Zhang Qian Fang and others think that we should know the types of applications for mobile business model from the enterprise value chain theory; In the mobile E-business, Liu Yujun and others analyzed and put forward the strategies; Wei Xiao Chao and others applied game theory and diffusion theory to make a research on the mobile E-business value chain members’ gain sharing, with operators as the dominant factor, and cooperation strategies under the demand driven.

Nowadays, there is no literature to make a research about the commercial mode changes of urban distribution influenced by mobile Internet. Therefore, as the main body of urban distribution, this essay will discuss how mobile Internet, which has developed rapidly, make an effect on the commercial mode of the urban distribution and talk about the cooperation strategies between the O2O commercial mode of information deal and cooperative partners in order to refer our country to the arrival of the time that the urban distribution will embrace the Internet age. [2]
Analysis of Urban Distribution of Revolution Drivers in Mobile Internet Environment

The Development of Mobile Internet and E-Commerce Service Life Caused by Growth Diversified Application Requirements

At present, the domestic e-commerce market is still based on transacting commodities and physical class such as Tmall, JD, Dangdang etc. [3] This transactions has been stabilized and e-commerce's powerful competition for new business will change into Life-services (see FIG. 1). Based on large flow and business volume of Internet thinking, like Ctrip and Qunar, these kind of companies are successful in the life-services commodities of plane ticket and hotel. Meituan, dianping got the advantage catering industry’s coupon and the business mode of group buying development. Didi, Uber is growing rapidly in a private car service market. [4] Although it is facing some legal obstacles temporarily, its comfortability and service efficiency is highly above the traditional taxi. This will lead to a huge revolution in taxi industry. At the same time,because of the issues of the less organizing, lacking of service standard and dispersed transport capability, business mode will no longer meet the requirements of development of the industry. The development of "Internet +" provided the conditions to the commercial innovative mode of the urban distribution industry. [5]

Figure 1. Mobile Internet + Life-services products.

Urban Distribution of Value Discovery, LBS Technology Have Been Achieved

LBS, as known as location-based services, is a combination of a mobile communication network and satellite positioning systems together to provide a value-added service. [6]It is required to attain the location information of the mobile terminal from GPS (such as latitude and longitude coordinates data), providing the mobile user himself or others and a communication system so as to achieve the location-related business. GoGoVan is a taxing booking app, which was set up in Hongkong, July, 2013. The entrepreneurial team was set up by five people in Hong Kong, who are borned in 1980s and back from America. In the beginning, the entrepreneurial team received the micro-venture capital investment of Hong Kong Cyberport Management Company Limited, owned by the Hong Kong SAR Government. At present, it has already served to six countries and area, that is Hong Kong, Taiwan, Singapore, Australia and South Korea. All the GoGoVan provide in the platform are vans to handle the demanding issues of carrying furniture, pet transfer, business users carrying goods, delivery send shipment . The appearance of GoGoVan made a huge impact on the Hong Kong lorry scheduling mode, because the owner could release the shipping information immediately by phone APP, then the drivers could improve flexibility and choice accepting by phone. To a large extent, it reduces driver's intervention and control from the platform in order to
enables the customers to get the fastest response and services they feel the best and make the driver more flexible to choose the optimum route.

Encouraging the Development of the City of Joint Distribution by the Policy Guidance

Policy is one of the economy engine and leverage, but also is one of the security mechanisms of economic development. The experimental unit of the joint distribution was put forward by ministry, being directed currently against the domestic common problems like it’s difficult for distribution trucks to enter the city, low degree of organization, higher distribution costs and so on, to propose scientific plans and actively promote the establishment of a service system of urban distribution. The ministry also tightened the policy of “City Joint Distribution integrated service platform specification.” In the specific organization, it will use advanced Internet technology to build information platform. Besides, it also will encourage the service of "one to many" and distribute jointly to the various trade enterprises and community stores relyed on specialized third-party logistics or the suppliers.

Distribution O2O Business Models Based on Mobile Internet City

Currently, the urban distribution’s capacity is highly fragmented, less organized and lack of credit management. Based on that, the next part will discuss the O2O business mode which base on mobile client APP application to establish mobile Internet credit scoring system as the core and the urban distribution information trading which is based on driver’s credit and institution of the order transformation. The mobile phone clients are not only able to release the business information, but also can attain the real time information of the distribution cars from LBS. The information platform will coordinate and allocate the source to make the best use of time, which allow the users who have demand make a deal with the free car quickly, avoiding drivers’ waiting or ballast. Eventually that could increase the utilization of distribution car’s milestone. In addition, the shippers and drivers could make a credit rating to each other online to establish a credit accumulation inside the information platform after dealing.

In the following sections, the commercial mode such as client app, information authentication & process control, services evaluation & credit management, value-added services etc. will be focused.

Client APP

Based on the mobile communication terminal - smart phones, the application is using the information entry such as Mobile Client App, WeChat and venture website to make sure information is delivered in time and with effectiveness. The shippers and drivers are able to download the App and establish the connection by App platform. The platform, which following the Match Principal, will coordinate and assign the real time business information and distribution trucks’ real time information released by shippers so as to provide convenient trucks’ information for the shippers. Thus, the drivers also become more flexible for choosing best route to decrease rate of empty driving and cut down the waiting time.

Information Certification and Process Control

If shippers and drivers want to register in information platform, they have to submit and be responsible for the data accuracy, otherwise it is impossible to register their accounts. The valid data that submitted by drivers including their ID, driving license, vehicle operation certificate, vehicle number plate, the photo including driver and vehicle and etc. The platform will evaluate the above information with local vehicle administrative office. The cargo keepers have to submit personal ID, commercial business license, tax certificate, representative of artificial person information and so on. After valid the information online, information platform will require all the registered users to confirm within a certain period. To a large extent, it avoids some big logistic website releasing the false information.
Service Evaluation and Credit Management

The key credit score assessment is to standardize the service when drivers are delivering. These service standards will encourage drivers to serve better and gain the customers’ satisfied evaluation so as to improve their rating.

Value-added Services

The shippers and drivers will have a real-name validation to ensure reality of the trade parties information. The credit appraisal system will lead clients following the transaction information rules. Based on integrity of transaction information data and deal rate, information trade platform, been directed against shippers in well credit, could offer the services of paying out for the freight micro-financial guarantee. It also can provide personal financial services to the drivers whose credit rating is great. For example, the platform can provide business of installment loan guarantee for the drivers wanting to purchase cars. Moreover, the platform also offers service of online purchase of delivering insurance and support to compensate the damage and loss. The customer service system operates 24 hours a day. With the mobile base station and GPS allocation, the platform can supervise the transporting trucks in real time to make sure the safety of trucks and commodities and decrease the risk of transportation effectively.

The Strategy of Logistic Platform Construction under Mobile Internet Environment

Compared with the traditional business model, O2O business model based on mobile Internet urban distribution increases software development like client APP, Wechat official Accounts etc. The customers are more dispersed and the service type and volume of business increases. Therefore, it’s vital for the platform to establish partnership with software development enterprises, logistics parks and mobile Internet operators.

Cooperation Strategy Between Software Development Venture and Information Platform Operation Venture

The technical support of software development venture plays an important role in the urban distribution O2O commercial mode. The information platform operation venture outsources the mobile application platform construction and client APP development to software development venture, which will be responsible for integrating mobile application software and platform construction with a way of turn-key project. In addition, the software development venture is also able to construct their own mobile application platform and become a leader of platform. At the same time, it will face a variety of application small and micro logistics businesses to serve and make a profit. The small and micro logistics businesses or drivers can register landing platform, then use the mobile terminal to get mobile application services offered by the platform from mobile Internet.

Cooperation Policy Between Information Platform Operation Venture and Logistics Park

There are many special logistics companies in the logistics park, these companies’ trucks need to dispatch the goods to their customers after going to the logistics park. Similarly, the goods undertaken by these companies at the local are required to gather to load in the lorry and transport to other places in the logistics places, which is very important to urban distribution information platform. The information platform operation venture sign a cooperation agreement with the logistics park, then the special logistics companies in the logistics park agree to use the business of client APP caring distribution so the profit generated online will be divided into the rates. The logistics park will share the profit with special logistics companies or transform into other inspiring ways to encourage the companies to use mobile information platform.
Cooperation Strategy Between Information Platform Operation Venture and Mobile Internet Operators

Due to large amount of urban distribution, high frequency service and the large generated network traffic, it requires operators to provide safe, stable and high speed mobile Internet, according to the feature in huge demand, to get the advantage of price negotiation from mobile Internet operators. The mobile Internet operators have two strategies: One is using its strong bargaining power to sign agreements with mobile Internet operators and enjoy preferential packages. Being directed against new services launched by mobile Internet operators, it can choose a combination of service packages or combination of tariff packages. Another is, being directed against current mobile Internet operators which provide the equipment of mobile terminal, it can choose the mobile terminal products provided by mobile Internet operators in a large amounts and network services.

Conclusion

To sum up, this paper has analyzed how mobile Internet make an impact on the way of urban distribution operating management and commercial mode and put forward the commercial mode of urban distribution. Compared with the traditional commercial mode, the O2O commercial mode of urban distribution has some significant changes and innovations. That is the urban distribution uses the mobile application so as to change the transaction way of sourcing information and vehicle information, which guarantee the logistics, information flow and capital flow work well in the urban distribution information platform. At the same time, as the improvement of amount of distribution business and vehicle capacity rate, the situation of empty road will decrease step by step, the pressure of traffic will reduce, the consumption of fossil energy and the emission of vehicle exhaust will decrease. And the air quality in our city will be better, our environment will be more comfortable. Thus, the O2O commercial mode of urban distribution is the specific practice carried out by green logistics.

References


