

Research on Risk Strategy of Mutual Aid Pickup Platform on Agricultural University

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Abstract: In today's society, the network economy is developing rapidly, and the service mode of the express delivery industry is constantly upgrading under the development of the network economy. The express delivery industry plays a huge role in connecting college students to the participation process of the network economy, and a huge express delivery market has emerged on campus. Due to the limited nature of express delivery resources on college campuses, the express pickup industry has gradually appeared on major campuses, and the express pickup industry will also adapt to the development of the network economy and become increasingly prosperous. Mutual aid pickup is a major innovation of the traditional equivalent exchange and substitution model. At present, the campus express pickup industry has formed a certain operation mode, which has played a role in solving the "end kilometer" problem of express delivery. "Agricultural University" is the abbreviation of Heilongjiang Bayi Agricultural University. Based on the analysis of the current situation of the campus express pickup industry of Heilongjiang Bayi Agricultural University, this paper will carry out a feasibility analysis of the campus express mutual aid pickup platform, study the risks of the mutual aid pickup platform from multiple angles, and propose solution strategies from multiple dimensions such as platform management and operation.

1. Introduction

With the increasing development of Internet informatization, the commercial economy has gradually developed vigorously, and the express delivery industry has also continued to advance in the take-off of the commercial economy. Big data, information technology and express delivery industry are constantly closely linked, promoting the continuous updating of its service methods. The university campus is a significant embodiment of the high-speed operation of the Internet economy, the network economy plays a huge role in the university campus, and the express delivery industry is the representative of the network economy operation on campus. Based on the above background, the express pickup industry on college campuses has continued to grow and has gradually spread to major universities. At present, many scholars have only focused on the development model, feasibility and development prospect of the express delivery industry, but there are potential risks and problems in the development of the industry, and this paper will analyze the risk prediction and coping strategies based on campus express delivery.

The main research purpose of this paper is to discover the potential risks of the express pickup

industry and provide information for improving the healthy operation of the express service industry. Taking Heilongjiang Bayi Agricultural University as an example, the current situation and feasibility of express delivery collection were analyzed by literature analysis, combined with the development characteristics of the express delivery industry, the risks such as personnel operation and personnel safety of the express mutual aid pickup platform were predicted, and the main strategies such as improving the training guidance system and carrying out education were analyzed.

2. Analysis of the Current Situation of Campus Express Delivery

2.1. Distribution of Campus Express Pick-Up Points

At present, there are 6 self-pick-up points for express delivery cooperation on the campus of Heilongjiang Bayi Agricultural University, all located in the northeast business service area of the campus. The 6 self-pick-up points are Cai-niao Campus Post Station, JD Mall Self pick-up Store, Bai-shi Express Self pick-up Store, SF Express Self pick-up Store, Postal Express Self pick-up Store, and Tu-xi Express Self pick-up Store. Among them, Cai-niao Station has the largest self-pick-up area and daily pedestrian flow, and it includes multiple express delivery companies such as Shen-tong, Yuan-tong, Yun-da, De-bang, and Tian-tian for combined operation business. The other five have their own independent stores. The teaching area and student dormitory living area are located in the southeast and due west directions of the school, respectively. All delivery pick-up points are far from the teaching area and student dormitory living area.

2.2. Campus Express Pick-Up Situation

The six express delivery pick-up points on campus do not use the one-on-one delivery mode where delivery clerks enter the campus, but instead use the form of pre sending SMS notifications to pick up the express at the store with the code. The peak hours for daily pick-up are 11:40 to 13:30 noon and 17:10 to 18:30 afternoon, while the 15 student apartments on campus are approximately 0.9 kilometers and 1.6 kilometers away from the delivery point, respectively. There are two ways to pick up items on campus: walking and riding a shared bicycle. The average time cost for each pick up is 25 minutes, and during the peak pick up period, it even reaches over 35 minutes.

2.3. Current Situation of Campus Express Delivery Pick-Up

The pick-up volume of 6 express delivery points on campus is currently showing an increasing trend year by year. On campus, there has also been a group of pick-up service providers, mainly focusing on classmates, roommates, and part-time retail merchants. At present, the charging amount for pick-up groups on campus is generally 2-3 yuan, with a maximum of 15 yuan. The cost mainly depends on the weight, value, emergency situation, weather conditions, and whether it is during peak hours of the pick-up package. The main reasons why students choose to pick up express delivery services are the long queue time for picking up items, the low convenience of picking up items, the distance from pick-up points to living and learning areas, and the impact of environmental weather.

3. Feasibility Analysis of Campus Express Mutual Assistance Pick-up Platforms

3.1. Strong Demand in the Campus Market

The current campus express "last kilometer" pickup model is difficult to adapt to the study, work and life of teachers, students and staff, and students, faculty and staff hope to update the existing

pickup mode. Due to the lack of standardized and unified standards for commissions and time limits, the non-fixed collection procedures, and the poor binding effect of oral agreements between buyers and sellers, the existing campus express collection industry has led to a low degree of security for most of the collection services, and the user demand for platform-based unified management is increasing. The combination of e-commerce and campus economy is becoming increasingly obvious [1], although there is already an express pickup model on campus, but it has not yet formed a unified large-scale development model, so the development demand of campus express mutual aid pickup platform business model is strong, and the market potential is large [2].

3.2. Reasonable Platform Operation Procedures

The campus express mutual pickup platform is a platform relying on WeChat mini programs to carry out "door-to-door" [3] campus express pick-up docking, which is a major embodiment of the O2O business operation model [4], which solves the problem of "one kilometer at the end" of express delivery on college campuses by implementing two modes of mutual assistance and fee-based pickup in portable cases, and improves the systematization, specialization, security and centralization of campus express pickup business. First of all, the mutual aid model is similar to the sharing economy model. Assuming that user A chooses the mutual aid mode to pick up for others through the platform in his leisure time, there is no charge for this behavior. After the contemporary fetch behavior is completed, the platform will automatically add a mutual aid point to user A's account. When user A has a pickup request, he can consume the mutual aid points in the platform to publish his own pickup request. Other users who are in their leisure time can pick up this free mutual aid pickup order. In this way, we accumulate our own mutual aid pickup points and form a virtuous circle of mutual aid pickup mode. Secondly, the fee-based model is biased towards the traditional transaction behavior mode, based on the campus express mutual aid pickup platform, through the transaction behavior of currency and labor exchange for withdrawal, users set their own buying and selling prices, and conduct transactions in the form of voluntary buying and selling, to meet the user population who are not inclined to the mutual aid model.

4. Risk Prediction of Campus Express Mutual Assistance Pick-up Platform

4.1. Personnel Operational Risk

Due to the fact that most of the participants in the platform are students, most of them have no experience in logistics work. As a result, they are not familiar with logistics services and courier delivery processes. In the process of express delivery, there will be mistaken items, damaged goods, lost goods, etc., resulting in the increase of user express delivery insecurity [5]. The identification of compensation liability and amount issues caused by this will lead to difficulties for both the platform and the pick-up party.

4.2. Personnel Safety Risks

The campus express mutual pickup platform is mainly committed to the timeliness of the courier, and the express base is large, so the pick-up personnel will use transportation to carry out express transportation and delivery, and the most practical means of transportation on campus are battery cars [6]. At the same time, the flow of people in colleges and universities is large, and the traffic flow is also large, resulting in certain traffic risks of driving battery cars in colleges and universities, resulting in the problem that personal and property safety cannot be guaranteed due to personnel congestion [7]. In addition, in bad weather, the demand for pickup customers will be much higher than usual,

and the impact of weather and the inconvenience of driving roads have increased the risk factor of express delivery.

4.3. Customer Churn Risk

The campus express delivery mutual pick-up platform has not yet been widely implemented and operated in all universities, and most universities still implement a scattered pick-up group model in express delivery pick-up. Taking Heilongjiang Bayi Agricultural Reclamation University as an example, the market competition targets of campus express mutual pick-up platforms mainly include private or small-scale pick-up teams and part-time pick-up retail stores. Among them, private or small-scale pick-up teams occupy the main market of school pick-up express delivery, attracting a large number of customers. However, the initial operation of the platform lacks a certain level of popularity, resulting in fewer customers. Moreover, customer stability is not strong, and users' willingness to pick up items is also affected by seasonal changes. Heilongjiang Bayi Agricultural University is located in a temperate monsoon climate with distinct four seasons, but it is located in Northeast China and will be affected by harsh environments such as snowfall in winter. As a result, there will be an increase in customers choosing campus express delivery services; In other seasons, more people choose to pick up items themselves, and customers have seasonal flow.

4.4. Information Security Risks

In order to protect the corresponding rights and interests of both parties of the campus express mutual pick-up platform and prevent fraud, the platform users are required to log in their personal basic information on the platform. However, in today's era of frequent information explosion, information leakage and other problems, it is still a very noteworthy issue to ensure that users' information is not leaked, stolen, improve user information security, and achieve long-term operation of the platform.

5. Risk Response Strategies for 5 Campus Express Mutual Assistance Pick-up Platforms

5.1. Improve the Training Guidance System

It is necessary to set up an introductory training [8] module in the campus express mutual aid pickup platform, and carry out detailed online training for specific requirements such as platform operation rules and precautions for delivering express delivery, so that users who use the platform for the first time have a detailed understanding of the platform operation and can quickly become proficient in using it, so as to reduce the risk of damage and loss of express delivery due to improper operation of personnel in the process of pick-up. At the same time, the construction of the platform introductory training module also further improves the operation system of the campus express mutual aid pickup platform, which is a major embodiment of the innovative closed-loop operation of the platform, and promotes the stable operation of the platform and the efficient operation of the campus express terminal delivery.

5.2. Carry Out Education + System Improvement

In response to the security issues that users encounter when picking up express delivery, a platform security education module needs to be established. This security education module requires regular pop-up reminders to gradually improve the security awareness of delivery for new and old users of the platform during use. In addition, for the backend management personnel of the campus express

delivery mutual pick-up platform, it is necessary to regularly carry out offline and face-to-face safety education and lectures on campus, and widely promote the delivery safety issues during the peak period of express pick-up. When severe weather occurs, the platform can activate a severe weather warning module to block and connect accounts based on the pace rating of the proxy, and implement mandatory slow traffic. Assuming that User B picks up express delivery for other users in bad weather, the platform will remind User B in advance to "pay attention to safety in bad weather". If it is snowy weather, the platform will automatically activate the frequency limit function. If User B's delivery frequency is too fast and exceeds the platform's limit rating, the platform will automatically block User B's account for one month. Based on this mandatory mechanism, platform users will automatically slow down when picking up express delivery in bad weather, Reduce the risk factor.

5.3. Strengthen Platform Promotion Efforts

In order to improve the attractiveness of the campus express mutual aid pickup platform, the platform operation team should strengthen publicity. First of all, it can be widely publicized through Internet publicity methods, such as school Tieba, QQ exchange groups, Douyin and other social software [9]. It can also be through the implementation of a new user reward system, assuming that when a new user registers and carries out a courier order, the platform will provide them with double mutual aid pickup points for free, or provide cash red envelope rewards, so as to increase students' interest in using the platform. Secondly, you can set up a platform pickup ranking to rank users of mutual assistance pickup points, and regularly or irregularly carry out cash rewards or point exchange rewards. For the seasonal flow of user groups, the platform implements a seasonal platform use reward system, and carries out incentive activities such as platform lotteries in the off-season. Through the above series of procedures and activities, more student groups can be attracted to use the platform, so as to improve the stability of platform customers and promote the smooth development of the campus express mutual aid industry.

5.4. Improve Information Protection System

The In order to prevent the serious problem of user information leakage, the campus express mutual aid pickup platform needs to establish a sound information protection system. First of all, for users, the platform operation team needs to carry out information protection security education for them and improve their self-information security protection awareness from a subjective degree. Secondly, for the platform, it is necessary to build an advanced and complete credit review [10] system, when a new user registers, through the implementation of the "real-name system" [11] model, the background big data verification of its ID number, if it is a dishonest person or a person with a low credit level, the platform will automatically screen out and not register for use, to a certain extent reduce the risk of leakage of other users' personal information; Finally, for platform managers, it is necessary to strictly check the degree of user credit, to ensure that there is no problem of mutual theft and leakage of information between platform users, and to implement strict management of user information, when the user account has abnormal login and other problems, the background management personnel should conduct one-on-one real-time inquiries by phone, and confirm that it is the user's own will before giving the information through.

6. Conclusion

Through in-depth analysis of the feasibility and existing risks of the university campus express delivery mutual pick-up platform, combined with the characteristics of the Internet economy, precise solutions have been proposed from the perspectives of platform operation and backend management,

improving the operational efficiency of the mutual pick-up platform. Innovative development has been carried out on the existing campus express delivery proxy model, which has played a huge role in solving the problem of "one kilometer at the end" of university campus express delivery.

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