

Risk Analysis of E-Commerce Supply Chain in Enterprises: A Case Study of JD.com's No. 1 Boutique Supermarket

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Abstract. This study examines the development process and current status of Yihaodian, a gourmet supermarket under JD.com, to identify potential problems and risks in its operation. The risks are categorized as market, credit, workforce, and capacity risks. To address these risks, specific solutions are proposed, including effective market positioning, innovative business strategies, enhancement of the credit evaluation system and indicators, utilization of internet technology, and improved inventory management. Moreover, the study emphasizes the importance of strengthening internal personnel management in Yihaodian. By providing insights into the risks and solutions faced by Yihaodian, this research offers valuable guidance to other enterprises in enhancing their operation and management processes in the dynamic e-commerce supply chain. The findings are significant for businesses seeking to navigate challenges in the competitive market and achieve sustainable growth. This study contributes to understanding risk management in the context of e-commerce supply chains, benefiting both academia and practitioners in the field.

1 Introduction

Since 2004, in the embryonic stage of the development of the e-commerce industry, the world business environment has been constantly changing, and the world has entered the era of exerting Internet and big data [1]. More enterprises and more talents have gotten involved in the e-commerce industry. With the continuous improvement of the business environment and the implementation of trade facilitation reform, the development of the e-commerce industry is growing vigorously in the current environment [2]. The platform economy has grown through data development and digital construction and the development and application of software engineering technology, management information system, simulation technology, and other data processing technologies, and e-commerce enterprises have become more capable of data processing and resource extraction [3]. In addition, the construction of the supply chain through the e-commerce platform is increasingly improved. E-commerce enterprises in different markets adopt different models to construct supply chains, focusing on the integrated, vertical and cross-border development and construction of supply chains so that the e-commerce platform covers more widely [4]. With the support of policies and the general market environment, the development of e-commerce enterprises still maintains a rapid trend [5].

The literature on Yihaodian can be categorized into two main areas. The first category includes studies and journal articles that examine and report on Yihaodian's

operations. Media and newspapers have also shed light on actual operational issues faced by Yihaodian, such as customer complaints about false advertising and using unqualified merchant materials. There have been observations, for instance, that Yihaodian was listed in a survey of unqualified food. Additionally, some scholars have researched Yihaodian's market share and customer satisfaction, finding that brand awareness could be higher and the product offerings could be more extensive. However, comprehensive risk analysis specific to Yihaodian compared to similar websites still needs to be available [6].

The second category involves scholars who analyze and provide suggestions regarding Yihaodian's development status. For instance, there are analyses on the pros and cons of traditional chain retail enterprises' development, especially in the context of Wal-Mart's acquisition of Yihaodian and the potential development path for enterprises in the O2O model. However, there needs to be more risk-related research addressing Yihaodian. Some scholars have offered suggestions related to Yihaodian's publicity and explored the attractiveness of its website design to customers. Additionally, constructive proposals have been made, such as designing the price and service system of Yihaodian and exploring the possibility of its realization. In addition, a few studies have analyzed specific risks associated with Yihaodian, such as the financial risks of its merger and acquisition.

Moreover, the current online marketing strategy of Yihaodian has been investigated, discussing its financial

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situation and marketing strategy and identifying potential issues. Although some risks have been pointed out, integrated reasoning remains limited. Therefore, this article aims to provide a comprehensive analysis and elaboration on the market risks that Yihaodian may encounter.

The significance of this article is to identify the risks faced by e-commerce enterprises in the above environment and how to prepare to deal with risks when the risks come. When enterprises enjoy the convenience and dividends brought by the country, the Internet and the supply chain, when facing the complex information network architecture and the association and coordination of each node enterprise, it is also necessary to deal with the risks caused by the enterprise development strategy, Internet data and various links of the supply chain. This article uses the Yihaodian Take e-commerce enterprises as examples and proposes solutions for various risk points.

2 Case description

Yihaodian is one of the earliest e-commerce platforms in China, creating a precedent for online shopping in China. Yu Gang and Liu Junling, the founders of the Yihaodian, learned from the experience of Dell and Amazon, which is the world's top 500 enterprises, in the transformation and management of the supply chain, and applied these experience that condensed the international leading level to the construction of domestic e-commerce platforms. With the country's support for the development of e-commerce enterprises and The development of the industry, which is in the bud, the Yihaodian came into being. The operation of Yihaodian supervises and controls all aspects of the supply chain, selects and inspects suppliers, provides product inspections, manages and controls product storage and transportation, and formulated a "4+1" quality management system for product quality control and verification. Yihaodian had made a home with food production, gradually broadened the categories, increased the logistics operation center, and quickly realized the national layout through management information systems and big data. Later, to resist the risk of breaking the capital chain, Yihaodian was acquired by Wal-Mart. With the support of Wal-Mart, a strong backer, it reached its peak around 2013 and became one of the largest comprehensive online supermarkets in the country in terms of scale and category. However, with Wal-Mart's overall control of the Yihaodian, the senior managers of the Yihaodian changed thoroughly. Yu Gang and Liu Junling's exit brought a downturn, and Yihaodian gradually faded from public view. Yihaodian's total transportation costs and low interest were gradually exposed until JD acquired it, making it an online membership supermarket. Currently, the Yihaodian is regarded as an online membership supermarket aimed at high-end customer groups, usually as warehousing offline supermarkets. The trend of warehousing membership-based supermarkets in China is becoming increasingly obvious, such as Sam, Costco,

Metro, etc. As an online member supermarket, Yihaodian should not only overcome the problems that will occur in ordinary warehousing supermarkets but also solve the problems that will occur in online supermarkets [7].

3 Risk identification, prevention and control

3.1 Risk identification

3.1.1 Market risk

There are too many similar enterprises, and the market competition is under great pressure. Due to the general trend of market operation, e-commerce enterprises and e-commerce platforms have experienced decades of development, and it has been a long time for the Yihaodian to set a precedent and became dominant. For example, Tmall Supermarket is the biggest competitor of JD.com. One of the motivations for JD.com's acquisition of Yihaodian is to make up for the gap in JD.com's e-commerce boutique supermarket, thus forming a situation of competing with Tmall Supermarket. Nowadays, Tmall Taobao mainly focuses on a variety of small commodities, deepens its cooperation with the Internet celebrity economy, and seizes the date-led consumption trend and e consumer psychology of customers from the types of goods, media publicity, promotion and other aspects to increase sales and income explosively. This business model is enough for the specific sales volume of the period, in terms of fame, crushed Jingdong Yihaodian, and even a series of brands such as Pinduoduo and Vipshop.

Improving people's quality of life makes the public's pursuit of satisfaction with life increasingly obvious. Therefore, customer demand is diversified and personalized. The variety of goods is gradually enriched, and the life cycle is gradually shortened with the rapid change in customer demand. Most boutique supermarkets provide products that meet the basic life of the masses, but they cannot meet customers' needs for diversified products; that is to say, The Yihaodian needs to be more complete in terms of customized and personalized products.

3.1.2 Credit risk

In recent years, there are still shops in Yihaodian that have been exposed to the problem of microbial contamination of agricultural products. With the development trend of e-commerce becoming stronger, the scale construction of various e-commerce platforms is in full swing. As a giant of e-commerce platforms, Jingdong Yihaodian has more demand for suppliers, distributors and other market entities to settle in. Therefore, the threshold of market access is also gradually lowered inadvertently. As a result, the market players are mixed, unscrupulous merchants take

advantage of the falsehood to enter, and the phenomenon of shoddy goods is used to be fake. The more such merchants there are, the more problems that occur when customers consume, and the greater the probability of credit risk.

One of the root causes of demand diversification is the diversification of customer groups, and customers' requirements and acceptance of products are also different. When customers are unsatisfied with the product, there will be bad reviews for merchants and even malicious bad reviews. This is a big blow to the reputation and enthusiasm of merchants, which leads to the passive business of merchants, which reduces customers' trust in merchants.

3.1.3 Capacity risk

Overcapacity and inventory surplus are relatively significant and serious problems in Yihaodian. Today, there are a lot of discussions and complaints on the Internet about the shelf life and quality of goods in the Yihaodian. Due to the long-term backlog and idle inventory, some products received by some customers need to be fresh and are even on the verge of shelf life. Because it is an online e-commerce platform, such problems are more significant. Therefore, the inventory problem is also one of the sources of risk caused by the operation of the Yihaodian. The unreasonable and untimely prediction of the merchant's market environment and customer demand collects insufficient, opaque and inaccurate network information. It needs to handle the information conveyed by the demand side properly. All kinds of uncertainties are ignored, causing the supply side's production capacity and inventory to accumulate and hoard. Excessive production capacity risk will not only reduce customers' satisfaction with using the Yihaodian but also greatly affect the operation of the merchant's business system and even lead to out-of-control [8].

3.1.4 Human risk

Jingdong Yihaodian has changed owners three times. Its founders, Yu-Gang and Liu Junling, left the Yihaodian as early as 2016 and devoted themselves to other enterprises. Then thousands of veteran employees left one after another, which completely shook the staff base of Yihaodian [9]. At present, the internal personnel structure of Yihaodian has long been changed. The worker's understanding of the No. 1 member store is second only to the present, and he needs a first-hand understanding of the rise and fall of the development of the Yihaodian. Therefore, when there are problems and risks in the Yihaodian, there will be a lack of understanding of the Yihaodian itself, leading to mistakes in decision-making.

3.2 Risk prevention and control

3.2.1 Do a good job in market positioning and broadening business ideas

For all competitors, we must first learn their way of success. For Taobao Tmall Supermarket, the Yihaodian should set up the same next-day or half-day delivery mechanism. At present, JD Logistics has already achieved unified logistics, which is uniformly distributed to all regions by JD Logistics to ensure that users can receive the goods within the time they want. For Kaishike and Sam's member stores, offline exclusive supermarkets should be set up to realize the combination of online and offline and improve the channels for supplier products and timely response to customer needs. At the same time, Kaishike and Sam's stores are introduced from abroad to China, full of many imported high-quality and high-end products, which also satisfies the pursuit of high-quality life for customers with membership. Therefore, Yihaodian should also constantly improve its strength, seize the trend of overseas platform construction, expand a broader market, and realize the combination of domestic and foreign markets to improve its competitive strength and brand awareness.

3.2.2 Improve the credit evaluation system and credit evaluation indicators

As a selected supermarket, it must also be selected regarding investment and acceptance of suppliers. All aspects of suppliers should be supervised and considered. The supplier's credit is rated, the supplier's historical credit records are investigated and filed, and a certain rating is stipulated for each supplier's bank or platform transaction as an entry threshold to promote each supplier to strengthen its quality and reputation. At the same time, it is necessary to examine the credit level of suppliers from multiple angles, that is, to examine the comprehensive strength of suppliers. First of all, it depends on its size and share in the industry. Large-scale enterprises often pay more attention to constructing their reputation, making them less likely to have credit problems. Secondly, they can pay attention to the supplier's credit information on other platforms to determine whether to absorb the supplier. In a word, it is necessary to comprehensively understand and investigate the supplier enterprise and carefully determine the enterprise access [10].

For the credit problem of users, we should do a good job in consultation with users, establish a compensation mechanism, and solve it promptly and appropriately after the user puts forward opinions. At the same time, we can establish a user credit rating system, evaluate and classify the credit level of the user's account, and give incentives to customers with high credit so as Let customers take the initiative to improve their credit.

3.2.3 Strengthen inventory management in combination with the Internet

To achieve the healthy development and upgrading of the Yihaodian, it is the top priority to solve the problem of overcapacity and excessive inventory backlog. Traditional inventory management requires enterprises to store a certain amount of inventory for a rainy day. Still, there is bound to be a long backlog of inventory, resulting in unnecessary waste, and there will also be situations where selling temporary products to customers cannot satisfy customers. In the case that traditional inventory management is difficult to predict the wishes of customers and the needs of the market, it is necessary to use the Internet effectively, big data and other technical means to establish a management information system, use system simulation technology to simulate the changing trend of the market, use big data to collect customer information, and pass through customer browsing results and purchase records. Accurately analyze customer needs to formulate inventory storage and avoid unnecessary waste reasonably. At the same time, it is necessary to strengthen existing inventory management among competitors and sell temporary products promptly or reduce the price to minimize the waste caused by the inventory backlog.

3.2.4 Strengthen the management and control of the internal personnel of the Yihaodian

Today's market environment and business environment are constantly changing. It is important to grasp and follow up on the development of the times. Still, while strengthening the learning and application of modern management concepts, we should also pay attention to the understanding of the enterprise itself and reconstruct personnel in combination with the characteristics and foundation of the enterprise itself, which is conducive to its continuous development and construction. It is of great significance. Building a specialized management team for the No. 1 member store is necessary, considering the retention and subsidies of old employees and the absorption and motivation of new employees. The old employees have more solid professional technology and experience and have a unique understanding and experience of the development and operation of the enterprise, which is an indispensable mainstay in the operation of the enterprise. New employees are the fresh blood of enterprises, bringing social cutting-edge management ideas and concepts to enterprises and providing new ideas for the publicity and operation of enterprises, which is conducive to promoting the innovation and transformation of enterprises. It is the pioneer of enterprise development. Every department and every employee within the enterprise works together to establish and improve the staff system. At the same time, we should improve the distribution and incentive mechanisms to prevent employee loss. Provide a solid personnel base for the operation and control of the enterprise.

4 Suggestions

The development of Yihaodian has experienced many ups and downs, from "the first shot of the e-commerce platform" to today's failure; the development process and the risk problems encountered are worth learning from and pondering for other enterprises.

First, we should recognize the development trend of emerging industries and be good at grasping market trends and customer needs. When the Yihaodian showed little sign in the e-commerce platform industry, it decisively grasped the opportunity. It became the first person to eat crabs, thus becoming a leader in the e-commerce industry. Secondly, you want to maintain the advantages of your enterprise in the industry. In that case, you must be good at identifying various risks, reducing costs as much as possible while meeting customer needs, and paying attention to the introduction of capital to maintain the normal operation of the enterprise.

In addition, other enterprises should pay attention to preventing and controlling risks in operation and management. When enterprises face the pressure of large market competition, they should be good at learning the strengths of competitive enterprises and innovating them to make up for their shortcomings and shortcomings. At the same time, they should be willing to invest in publicity expenses to improve their enterprises in Popularity and social recognition. When enterprises face a trust crisis, they can screen inferior enterprises by establishing a perfect credit inspection mechanism to prevent trust risk. Strengthening the communication between customers and improving the comfort and compensation mechanism can effectively appease and retain customers, and do not serve customers with sincerity, which will also force the reputation to improve. When enterprises improve the inventory management mechanism, they can easily deal with the risks related to inventory. Clearing inventory as much as possible helps enterprises flexibly meet customer needs while avoiding the waste caused by inventory backlog. System simulation can effectively predict demand to respond to customer needs and reduce unnecessary inventory preparation promptly. Strengthening internal personnel control can help enterprises have the appropriate crowd support, fresh blood and the middle-aged backbone of the enterprise to work together to perform their respective duties and combine the traditional development of the enterprise with innovative development to achieve the effect of $1+1>2$.

5 Conclusion

In summary, enterprises should pay attention to the market, credit, workforce, and production capacity risks in production and operation and carry out timely risk prevention and control based on correct risk identification. Through market forecasting, the establishment of the credit system, the strengthening of inventory management, and the optimization of employee structure. Applying big data information technology and other methods should be dealt with. Risk is inevitable, but it must be identified and controlled

within the scope of capabilities, which is one of the bases for the prosperity of enterprises and an important factor that enterprises must pay attention to.

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