Research on the Influencing Factors and Model Innovation of the Development of Traditional Wholesale Market under the Background of “Internet Plus”

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Abstract: Nowadays, the development of traditional wholesale market faces with unprecedented difficulties. Based on the grounded theory method, this paper conducts in-depth interviews and literature research, and collects text data to obtain concepts, categories and their relationships. Finally, this paper also construct the model of indicator system for the development of traditional wholesale market under “Internet plus” background.

1. Introduction

With the development of e-commerce, the traditional wholesale market has met a cold winter. By spot investigation in clothing wholesale market, Shenzhen Lixiu clothing wholesale market and Huaqiang North China electronics wholesale market, it can be found that the passenger flow volume has been reduced and the vacancy rate of shops in these markets. Traditional wholesale market is in face of making its choice of transformation and upgrading.

2. The evolution of the development path of traditional wholesale market

Through literature review, the evolution of traditional wholesale market has gone through five stages: They are the wholesale base stage, store in the front of factory stage, brand development stage, + e-commerce stage, C2M (Customer to Manufacturing enterprise) and new retail (Online-to-offline) stage. Now it is on the fifth stage. The fifth stage is developing and growing under “Internet plus” background. In the fifth stage, the retail terminal will automatically obtain relevant information of customers through consumers’ previous purchase behavior and provide targeted services to customers. Meanwhile, manufacturing enterprises will directly design products basing on the consumers’ requirement to meet their individual demands. In this stage, the function of wholesale will be replaced by the function of service, and traditional wholesale market will upgrade to a new commercial pattern. There is no doubt that in the new stage of C2M&O2O, the development of traditional wholesale market will be influenced by external environment.

Figure 1. The evolution stages of traditional wholesale market
3. The influencing factors of the development of traditional wholesale market under “Internet plus” background

3.1 Problem definition and data collection

In order to clarify the influence factors of the traditional wholesale market development under the background of "Internet +", this article based on the grounded theory, using a semi-structured depth interview, baidu search engine for all of the data collection of traditional wholesale market innovation. This paper find out key words related the development and innovation of traditional wholesale market by using original codes to reflect representative opinions in the fields of innovation of traditional wholesale market. Initial concepts are extracted from all the data through line-by-line, sentence-by-sentence, and segment-by-segment coding. Select, merge, classify and extract core concepts that are highly related to the influencing factors of traditional wholesale market innovation from the initial concept extraction, and these concepts are frequently repeated in interviews. The relationship between selective coding was compared, and the correlation between the extracted concepts and traditional wholesale market innovation was analyzed, and the corresponding literature was compared. Finally, the research memorandum is organized to construct the index system of influencing factors of traditional wholesale market innovation.

3.2 The index system of influencing factors for innovation of traditional wholesale market under “Internet plus” background

Table.1. The influencing factors of the innovation of traditional wholesale market

<table>
<thead>
<tr>
<th>A: Artificial intelligence</th>
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<tbody>
<tr>
<td>A: Cross-platform e-commerce</td>
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<tr>
<td>A: Big data</td>
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<tr>
<td>A: Internet of things</td>
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<td>A: Cloud market</td>
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<tr>
<td>B: C2B(Customer to Business)</td>
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<tr>
<td>B: S2B(Supply chain platform to Business)</td>
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<tr>
<td>B: Supply chain reconstruction</td>
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<tr>
<td>C: Digital supply chain</td>
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<tr>
<td>C: Internet 3.0</td>
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<tr>
<td>C: C2M(Customer to Manufacturer)</td>
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<tr>
<td>D: Production planning decision</td>
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<tr>
<td>D: Inventory decision</td>
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<tr>
<td>D: Logistics network design</td>
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<tr>
<td>D: Supply chain financial</td>
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<tr>
<td>D: Customer demand forecast</td>
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<tr>
<td>E: Product personalization</td>
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<tr>
<td>E: Service differentiation</td>
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<tr>
<td>E: Consuming entertainment orientation</td>
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</table>

Based on the research method of grounded theory, through semi-structured interviews with 28 entrepreneurs, experts and scholars who have established and participated in the operation of traditional wholesale market, and through sorting and analyzing the data obtained from baidu, it is concluded that the influencing factors of traditional wholesale market innovation include five core categories, namely the first-level indicators. They are science and technology innovation, industrial transformation, consumption upgrade, commercial value-chain reconstruction and large data motivation. They are technological innovation, industrial transformation, consumption upgrading, business value chain reconstruction and big data driven. Among the secondary indicators, technological innovation includes artificial intelligence, cross-platform e-commerce, big data,
internet of things and cloud market. Business value chain reconstruction includes consumer demand 
driven (C2B), supply chain platform ecosystem (S2B), and supply chain reconstruction. Industrial 
transformation includes digital supply chain, Internet 3.0, and C2M model; big data-driven enterprise 
business model includes production planning decision, inventory decision, logistics network design, 
supply chain finance, Customer demand forecast, consumption upgrade, including product 
personalization, service differentiation, and consumer entertainment.

3.2.1 Science and technology innovation

Nowadays technology is changing the way people live. Scientific and technological innovation 
will continue to subvert the existing knowledge of human beings in the future, and the accumulated 
knowledge and experience of human beings will sometimes fail to play a role. The traditional 
business model, which has lasted for thousands of years, may collapse under the influence of 
technological innovation. Scientific and technological innovation brings artificial intelligence, 
internet of things, blockchain and other technologies to human society, which will be integrated or 
even replaced with traditional business models. Therefore, whether the traditional wholesale market 
can make better use of the achievements of scientific and technological innovation is very 
important.

3.2.2 Commercial value-chain reconstruction

According to the survey results, what influence the innovation of traditional wholesale market 
most is the future directions of commercial development. C2B model may be the new commercial 
model in the future. The optimization approach of C2B model is to create a flexible network that 
functions as a large supply chain platform (S) and can significantly improve the efficiency of the 
supply side. The manufacturing enterprises on the platform (B) can use their own strengths to serve 
customers (C), and finally form the S2B model. Whether it is C2B mode or S2B mode, the 
wholesale link will be cancelled in the future commercial development.

3.2.3 Industrial revolution

The direction of industrial reform is industrial upgrading. At the micro level, entrepreneurs 
compare the cost of labor and technology when considering the input of means of production, which 
is a process of constant calculation. Due to the development of technology, the cost of technology 
has been reduced. It is making industrial reform become a reality. The core of future industrial 
transformation is the digitalization of the industry. The development of big data and artificial 
intelligence has brought opportunities to industrial upgrading. The digitalized industrial supply side 
and demand side can be perfectly combined. Therefore, under this general trend, the traditional 
wholesale and retail industry is dying out, because consumers (C) and enterprises (B) can connect 
instantly, accurately and efficiently. At last, industrial reform will undoubtedly have a fundamental 
impact on the future development of the traditional wholesale market.

3.2.4 Business management models under big data-driven

This is a new era of great change, the core production materials of enterprises will no longer be 
equipment, materials, capital, but big data. In future, large date enterprises may not be great 
enterprises but great enterprises must be large date enterprises. The core behind the big data-driven 
enterprise business model is the algorithm database and database, which has accumulated a large 
amount of data and established the judgment and decision-making rules related to the company's 
operation. Therefore, big data can make almost all the decisions related to company operation, 
including production planning decisions, inventory decisions, logistics network design, customer 
demand forecast, etc. The transformation of big data-driven enterprise business model has prompted 
the change of traditional wholesale market business model. Traditional wholesale market aims at 
different and complex decisions, accumulates data and improves data analysis ability, and finally 
obtains corresponding decisions and solutions from algorithm analysis of big data. The future 
development of traditional wholesale market needs to make full use of big data to create competitive 
advantages.
3.2.5 Consuming upgrade

Consumption upgrading is what is happening. Take the United States as an example. In the development process of the United States, with the growth of per capita GDP, the entire consumption structure has changed. It can be clearly seen that the proportion of basic daily necessities, such as food and clothing is decreasing, while the proportion of service industry and entertainment industry in GDP is rising. In fact, the same change has taken place in China. Consumption and entertainment, product personalization and service differentiation are the characteristics of the new retail in the future. In the traditional wholesale market, single, homogeneous and low-price commodity trading behaviors will gradually decrease. Consumption upgrade will affect the development direction of traditional wholesale market in the era of "Internet plus".

4. The innovation of traditional wholesale market model under the background of “Internet plus”

4.1 The model of traditional wholesale under the background of “Internet plus”

As shown in figure 2 below, the traditional wholesale market business model under the background of "Internet +" will change greatly. In the age of traditional industry, the value proposition of wholesale market was to gain profit by selling reserve products. After entering the Internet era, Internet financial services, customized products and services will become a new value proposition. In terms of channel access, the original "sitting-in" model will also be replaced by live broadcast, e-commerce, microblog and WeChat cross-platform scenario-based sales.

The emergence of social networks has directly led to the traditional relationship between buyer and seller in sales to become a friendly social relationship. Under the background of Internet, the key point of traditional wholesale market development is the operation of flexible supply chain platform, using the big data collected by the platform as the decision-making basis to provide supply chain finance and other services to merchants. In the Internet era, the core resource of the traditional wholesale market is big data, which as the means of production can make accurate consumer demand forecast for merchants.

In the Internet era, the collaborative network centering on the supply chain platform has replaced the traditional upstream and downstream enterprises of the supply chain. The orientation of traditional wholesale market development in industrial age was to circulate low-price products from manufacturers to consumers smoothly.

In the Internet era, merchants in the wholesale market become a point in the coordination network to provide customers with personalized customized services on demand. In terms of the operation cost of traditional wholesale market, the platform service cost in the Internet era has replaced the rent and purchase cost paid by the original merchants, it reduced the cost of merchants to a certain extent and improved the economic benefits.

Figure 2. The model of traditional wholesale under the background of “Internet plus”
4.2 The operation model of traditional wholesale market under “Internet plus” background

According to the innovation operation model of traditional wholesale market in picture 3, customers (C) will directly carry out customized transactions with manufacturers (M). Therefore, traditional wholesale market can transfer to supply chain platform, wholesalers can transfer to merchants in the platform. Firstly, merchants of wholesale markets need find customers to trade with. When they sign contracts, merchants upload order data to the supply chain platform. In the meantime, merchants can do order financing and customers can loan to platform by prepayment financing. After the supply chain platform checking these orders, it will place them to flexible manufacturers which has signed strategic cooperation agreement. Then the platform will inform customers and customized products will directly be sent to them after being produced.

![Figure 3. The operation model of traditional wholesale market under “Internet plus” background](image)

In this process, all data which including all customers’ basic information, credit information, trade information, logistics information and financial information generating in trades will be uploaded to the supply chain platform. According to collected large data information, supply chain platform can help manufactures and businesses to make production schedules, perfect sales strategies, optimize logistics plans and predict consuming demands to improve operating efficiency of supply chain platform. In the operation of the traditional wholesale market under the background of Internet +, the traditional wholesale market is positioned as a supply chain platform, so it should have big data computing capacity, or seek for effective complementary supply chain platform solution providers based on big data to cooperate.

5. Conclusion

Under “Internet plus” background, the evolution of traditional wholesale market had gone through 4 stages: wholesale base stage, shops in the front of the manufacturers stage, brand development stage and electronic commerce plus stage. At present it is going the fifth stage - C2M&O2O stage. According to spot investigation and grounded theory, this paper has constructed the influencing factors index system of the innovation of traditional wholesale market. In this system, the first grade indexes includes science and technology innovation, industry transformation, consuming upgrade, commercial value-chain reconstruction and large data motivation. The development of traditional wholesale market is facing difficulties under the background of “Internet plus”, it is necessary to focus on changes of external influencing factors. Under background of “Internet plus”, the concepts of wholesale market, wholesalers and wholesale customers borders tend to be vague. The potential developing tendency of traditional wholesale-retail industry may be constructing supply chain platform model.
References


