# Research on the development of store-warehouse integration, front-warehouse and community-group mode under the new retail situation

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**Abstract:** The new retail is proposed by Jack Ma, is a consumer-centered, big data, artificial intelligence and other advanced technology as a means of online and offline retail new model. In this form, China's fresh e-commerce has three major modes: store-warehouse integration, front-warehouse and community-group mode, which constantly promote the development of instant logistics. New retail demand more efficient modern supply chain organization and logistics distribution mode. With these three modes as the main characteristics of real-time logistics to optimize the traditional supply chain mode, to provide customers with more optimized logistics services.

#### 1. The introduction

The new retail in the narrow sense refers to the use of Technology on-line and off-line in people, goods, field level of deep matching and integration, and the new retail in the broad sense refers to the use of innovative means of the new exploration of the nature of retail. The future supply chain will be the lifeline of the new retail, the goal of the new retail supply chain is to support the nature of retail, that is to improve the better sales experience at reasonable cost. By optimizing the supply chain resources to achieve a precise grasp of each link in the upper, middle and lower reaches of the supply chain, to establish a very fast circulation of the logistics distribution system, in order to take the lead in the exploration of new retail. <sup>[1]</sup>In order to enhance the competitive advantage, the giants launched store-warehouse integration, pre-warehouse, community group, and other new models.

## 2. Fresh industry to pursue lower circulation cost has become an inevitable trend.

As the data in Table 1 shows, from the upper reaches, the agricultural employment population in our country is large, but the mechanization level is low, the cooperation consciousness is poor, the scale is insufficient, in contrast, the American farmer's conformity degree and the comprehensive mechanization rate are extremely high. The lack of a large-scale, intensive upstream structure leads to farmers' lack of financing capacity, which exacerbates the lack of intensive production, resulting in uneven product quality, and these "costs" are ultimately borne by consumers. From the evolution path of the domestic fresh produce industry chain, the upstream also needs to eliminate the Information asymmetry through scale, specialization and intensification, and then reduce the circulation cost. Downstream to pursue standardization and concentration, digital transformation, master the terminal, in order to enhance the circulation efficiency. [3]

Table 1.Agriculture comparison between China and the United States

Agriculture accounts for	Scale	Level of
the proportion of the		mechanization
population		

China	40.4% in 2018	50 households/ cooperatives in 2018	The comprehensive mechanization rate is 63.82%
The United	19.3% in 2010	1000 households/	Close to 100%
States		cooperatives in 2001	

Source: national bureau of statistics, anxin securities research center

We transport from a catty of apples across the province, the terminal market price increase of 40%, 2.8 yuan / catty, 72% by channel participants, 14% in the form of rent to the property side, 4% for transport, 11% for loss, but "channel value" for 0. The aim of pursuing lower circulation cost in the upstream and downstream of fresh food industry has given birth to the development of new retail style.

#### 3. A comparison of new retail models.

With the gradual advancement of the new retail model, consumers' demand for real-time logistics and high-quality services continues to increase, as well as the strict requirements on the timeliness of logistics for fresh and catering products, gradually rising from days to minutes, through store-warehouse integration, Front Warehouse, community group, and other ways to solve the new retail model of the last kilometer problem. At present, with the development of C2B and personalized consumption, storage time is shortening day by day, inventory gradually moving to consumers, until it becomes "home inventory" . Therefore, the store or front warehouse (store) will become the fulcrum of the logistics front end, and store-warehouse integrated store (including supermarkets, convenience stores, etc.), front warehouse will become the key point of the future logistics distribution.

## 1) /Store-warehouse intergration

Store Warehouse Integration of the offline store such as supermarkets, convenience stores, logistics distribution point. The most famous Hema Xiansheng, the line with 4000-6000 square meters of shops, as of the first half of 2019, Hema in the country has 153 stores, about half of which are located in the first-tier cities, is still mainly focused on the development of the first and second-tier cities.

Store-to-home model items the most rich, online SKU 10000 or more, leading companies customer unit price and daily volume higher than the pre-warehouse model. Shop-to-home refers to the offline business super shop based on the store to shop and three kilometers around the home service, to open the online and offline flow integration operations. Compared with the front-store mode, the most significant advantage of home-to-home is to provide more abundant SKUs, so higher unit price; the disadvantage is that the location requirements of the store are higher, so the rental cost is higher, corresponding to the "heavy" mode of operation. The profitability of the store-to-home model is slightly stronger than the front-store model, mainly due to its higher unit price and overall gross margin. Hema fresh single store Sku more than 12,000,more than 1.5 years of operation of mature single store daily average line order 1200, online sales account for more than 60%, passenger unit price close to 100 yuan, daily average revenue more than 800,000 yuan. Sales per unit area 50,000 yuan, is three times the traditional supermarket, single shop daily average sales of 800,000 yuan, online sales account for more than 60%. [2] Table 2 is the single store model of fresh growth of Hema.

Table 2.Single store model of Hema fresh

Monthly sales	2300
On-line percentage	62%
Gross margin	24%
Ratio of labor cost	4%
Percentage of picking, packing and distribution	13%
Percentage of rent	1.70%

Depreciation ratio	2.20%
Current monthly profit and less(ten thousand yuan)	Basic is positive

Source: essence securities research center

## 2) Front bin model

The typical characteristic of the front warehouse mode is the intensive construction of warehouse in different areas, the first-tier cities and some developed second-tier cities are the main battlefields of the front warehouse. The so-called pre-warehouse, generally located within 3 km around the community, after the consumer orders from the pre-warehouse home delivery,to a certain extent,to solve the distribution efficiency and distribution costs. The Front Warehouse Model for the Standard Vegetable Market and community supermarkets,SKU between 1500-2000, passenger unit price of 50 yuan or so, high timeliness of distribution,customer experience is good. The profitability of the pre-warehouse model depends mainly on order density and unit price. Table 3 is the profit model of Missfresh. As the performance cost of this model is still relatively rigid, it requires the unit price to be at least 50 yuan or more. On the other hand, it is limited by the rigid cost of rent, water and electricity, and staffing, etc., daily single volume requirements of at least 600-700 single, less profitable than store warehouse integration model.

Table 3. The profit model of Missfresh

Single bin area	125
Daily order quantity of single warehouse	400
Combined gross margin	25%
Rate of wastage(fresh)	3%
Depreciation amortization rate	0.21%
Rental rate	1.44%
Labor rate	14.10%
Cost rate of logistics and marketing	9%
Front office net interest rate	0.18%

Source: eou power network, guotai junan securities researsh

## 3) Community group model

Community group originated in Changsha, up to now most enterprises still choose to develop in the second-and third-tier cities, the permeability of the first-tier cities is low.Community group model to take differentiation and explosive strategy, social flow and pre-sale as the core,cost structure optimization. The advantage lies in the low investment in the early stage,and the amount of social communication gathered by the head reduces the drainage cost and the performance cost of the platform. However, SKU is limited,which leads to low unit price,low threshold and poor stability. Compared with the former two models,the profit model of community group is more clear, leading enterprises gross profit rate of 25%-30%, net interest rate of about 3%, compared with the overall profitability of community group the strongest.

#### 4. Conclusion

New Retail emphasizes customer experience as the Center, on-line through big data analysis of customer preferences and consumption habits, to achieve accurate marketing, off-line select store address, optimize layout, and provide immediate quality service. Compared with SKU, pricing and time effect, the new retail has a better experience of store-to-home and front-store, and a stronger profitability of community group. [4] The major retail enterprises should seize the opportunity to ensure the development of the basis for the pursuit of lower cost of performance, to obtain greater profits.

#### References

[1] Yongyi Wu.Combination of store space and front store becomes the decisive battle point of new

retail[J].Sales and market(management edition),2019,(01),88-92.

- [2] Zhixing Zheng, Xiuling Jin. Research on the marketing strategy of Hema Xiansheng in the context of new retail[J]. Modern marketing(Late edition), 2020, (02), 46-49.
- [3] Nordfält. The new retailer [J]. Journal of Retailing and Consumer Services, 2017, 34, 309-310.
- [4] Lee, J.G.L., Orlan, E.N., Sewell, K.B., & Ribisl, K.M.A new form of nicotine retailers: a systematic review of the sales and marketing practices of vape shops [J]. Tobacco Control, 2017, 27(e1), e70-e75.