# Study on the Business Model and Development of Catering Chains 

Hanyu Sun ${ }^{1, a, *}$<br>${ }^{1}$ Chongqing Yucai Middle School, Chongqing, China<br>a.1811031217@mail.sit.edu.cn<br>*corresponding author


#### Abstract

With the growth of China's national economy, the catering market has shown a strong momentum of development. People's demand for catering is growing, and catering chain stores provide consumers with diversified choices, so catering chain stores have been developed. Chain restaurants are, to a certain extent, the inevitable product of the development of the catering industry. It is a form of business organization and business model, referring to the expansion of catering enterprises through chain operation and franchising. This paper takes Haidilao and Xiangcai brand Nongchengji as examples, based on their successful business models. The study was conducted on the market size, competition, franchise mode, and management mode of chain catering. In addition, the development process and existing problems of Chinese chain catering were analyzed, and finally improvement suggestions were proposed, which provide examples and references for China's mechanization, and China's chain catering industry will enter a new era of development in the future


Keywords: Restaurant chains, Finance, Catering Chain

## 1. Introduction

With the stable and rapid growth of China's national economy, the income level of urban and rural residents has significantly improved, and the catering market has shown a strong development momentum. People's demand for catering is increasing, and catering chain stores can meet the needs of consumers and provide diversified choices for consumers, so catering chain stores have been able to develop. Chain catering is an inevitable product of the development of the catering industry to a certain extent. It is a form of business organization and operation mode, referring to the expansion of catering enterprises through chain operation and franchise operation. Several years of development have shown that most of the top-ranked catering enterprises are chain operations. China's catering enterprises have begun to attach importance to the shaping of brand advantages, focus on expanding the scale of enterprises, and focus on using chain operation and franchise operation to expand. According to a report from the China Chain Store \& Franchise Association, the Chinese catering market has been growing healthily, with the market size increasing from 2.9 trillion yuan in 2014 to 4.7 trillion yuan in 2019 , with a compound annual growth rate of $10.1 \%$. The report also points out that the Chinese catering industry still has a large room for improvement in terms of chain rate and concentration.

[^0]Liang and Andris study restaurants and chains in the US, finding that chain restaurants make up the conceptual McCity. The authors analyze the effects of walkability, income, education, and age on chain restaurants. They conclude that promoting individual ownership fosters authentic landscapes and suggest creating "sweet spots" for chains and smaller establishments. Policymakers can encourage diverse and affordable food choices and support mobility solutions in high-risk communities [1]. Auchincloss et al. evaluated the nutrition of meals at chain restaurants in Philadelphia, USA. They reviewed 2,615 food items from 21 chains for calories, fat, sodium, and fiber. They compared them to USDA guidelines and found that they exceeded the recommended amounts. Adult meals had $1,495 \mathrm{kcal}, 28 \mathrm{~g}$ of saturated fat, $3,512 \mathrm{mg}$ of sodium, and 11 g of fiber. Older adults and children's meals were worse. The authors suggested standardized definitions of "healthy choices" for vulnerable age groups [2]. Rahimnia et al. discussed how restaurant chains can be agile in mass service operations. It uses a case study of an Iranian fast food chain to show how mass services can adapt to customer and market changes. It proposes a strategy that combines Lean and Agile principles to improve speed, cost, and variety of services. It provides a framework and roadmap for applying this strategy [3].

Mawson and Fearne examined the purchasing processes of UK restaurant chains using the BUYGRID model. It analyzes three types of chains: motorway service stations, fast food burgers, and pizza stores. It collects, validates, and interviews data to test the model. It concludes that the model is useful for suppliers to meet the needs of chains, facilitate decisions, and develop marketing strategies. It also predicts the chains' purchasing processes. It provides insights and guidance for the restaurant industry [4]. Mallapragada and Srinivasa suggest that a company's product and process innovation, as well as other company characteristics, contribute to its overall success. To support their hypothesis, the authors analyzed data from 38 restaurant chains located in the United States between the years of 1992 and 2005. The authors discovered that various factors can lessen the role of experience and size when it comes to process innovation, due to discrepancies in innovation indicators. Similarly, the authors noted that a decrease in financial resources can heighten the impact of both product and process innovation [5]. Nusaira and Khaldoon aim to address the literature gap pertaining to hotel human resource information systems (HRIS). They propose a model based on previous research that focuses on the factors contributing to the adoption of HRIS in restaurant chains. Results indicate that small restaurant chains can successfully implement HRIS with the aid of external resources, but there is a risk of overreliance on such resources. To address this issue, the authors suggest referring to HRIS as an HR function instead of HR drinking [6].

Magnini and Honeycutt investigates the use of celebrity endorsements in promoting merchandise for chain restaurants. A total of 287 consumers were surveyed regarding their preferences, which revealed the following: 1) a preference for chain restaurants, 2) the perceived effectiveness of celebrity endorsements, and 3) the belief that an effective endorsement should entail a good fit between the celebrity and the restaurant, based on the former's attractiveness and perceived ability to influence consumer behavior [7]. Ahrens and Chapman proposes a framework based on a field investigation of a chain of restaurants, which embodies the traits of resilience, internal transparency, complete diffusion of information, and adaptability. By improving members' comprehension of their responsibilities, management systems can achieve the twin aims of effectiveness and adaptiveness [8]. Ottenbacher and Harrington authors interviewed executives from U.S. fast-food chains and found that the development team used a structured approach to menu innovation. By forming strong relationships with food suppliers, QSR succeeded in reducing costs and improving quality. The results highlight QSR's key role in ensuring food safety and as a barrier to decision-making for new products [9]. Bradach examines five American restaurant chains and analyzes how they utilize various formats to maintain consistency while adapting to changes in the market. The author conducts interviews to clarify their organizational structure, Kong system, career trajectory, and strategy
development process. Through this process, the article highlights how these chains have improved their weaknesses and successfully capitalized on their strengths, resulting in an overall performance enhancement. The multivariate design approach was found to be both simple and effective, striking a balance between control and innovation [10].

The main purpose of this analysis is to study the problems that exist in the mechanization of Chinese restaurants at this stage and propose cases and solutions that can be learned from it. This study will analyze existing restaurant chain business models and data on trends, classifications, and other aspects of restaurant chainization in China from 2018 to 2022. This comprehensive analysis will enable stakeholders to understand the current status and trends of restaurant chainization in China. Ultimately, the purpose of the analysis is to assist in the decision-making process, providing insights into opportunities and areas for enhancement and improvement.

## 2. The current state of the market for chain restaurants

### 2.1. Market size

According to the China Chain Catering Industry Report 2022, the size of the catering market reached 4.7 trillion yuan in 2021, which is now on par with its 2019 level. From 2014 to 2019, the catering market in China grew from 2.9 trillion yuan to 4.7 trillion yuan, with a compound annual growth rate of $10.1 \%$. In 2020, the industry faced the consequences of the pandemic, resulting in a $15.4 \%$ decline to 4 trillion yuan. However, as epidemic prevention measures became normalized and consumer enthusiasm began to rise, the catering market size rebounded to 4.7 trillion yuan in 2021, with an $18.6 \%$ YoY growth rate.

Thanks to the younger generation's tendency to consume food online, the take-out industry in China has continued to grow at a rapid pace. Based on Meituan data, the online order volume for the catering industry had a V-shaped recovery since 2020, which has continued with stable and restorative growth in 2021. In addition, the number of registered catering businesses has risen steadily in 2021. Based on Enterprise Search data, the number of catering companies registered from January to November 2021 reached 3.013 million, a $24.9 \%$ increase YoY. During the same period, the number of cancellations and suspensions decreased by $1.7 \%$ YoY to 850,000 , resulting in a net increase of 2.163 million registered businesses. The report concludes that these figures suggest the catering industry remains attractive to entrepreneurs, which could result in even more intense competition in the future.

### 2.2. Franchise Model

There are seven operating modes of chain food and beverage stores: restaurant mode, takeaway mode, fast food mode, buffet mode, multi-brand chain mode, pop-up store mode, and night market stall mode. The restaurant model takes the form of opening a physical restaurant and providing seating service, and customers can eat in the restaurant. The Food Delivery model provides food delivery service to customers through the phone, website, or small program to order food, and then by the restaurant or third-party service platform for delivery. The fast food model provides fast service. The food of chain restaurants in this business model is usually pre-prepared, and customers can order at the counter or self-service machine and then pick up the food directly. In the self-catering model, customers can pay a fixed fee before eating, and choose food several times in a set time. Multi-brand chain mode means that a catering group has multiple brands, and each brand has its own characteristics and positioning to meet the needs of customers. The pop-up store model refers to renting or borrowing commercial space in the short term to provide consumers with specific catering services, which usually promote new products or test new market responses. The night market stall
mode is to set up a stall in the night market or market, providing a variety of snacks and special foods to attract customers.

### 2.3. Chain Management

Existing chains are aggregation chains, operational data chains, supply chains, and decision chains. The headquarters of the restaurant chain company can obtain the operating information of the stores at regular intervals, and summarize the data to the headquarters through the stores at regular intervals and in a targeted manner. This aggregation-level chain can help chain restaurant companies achieve chain management. Although this type of restaurant chain is related, if it is not managed, it can not play the advantages of restaurant chain enterprises. Secondly, chain restaurant enterprises have realized the chain of operating data by real-time aggregation of store operating data. This combined operations strategy allows headquarters to unify setup, unify issuance, and share front office operations resources. Through the advanced data set linkage technology, the basic realization of the chain of food and beverage enterprises in front of the operation of unified management, unified management, unified analysis, and control, to achieve the front of the store operation process management to achieve the grouping of the front of the store operation level of analysis and management. At present, most of the catering chains should be developed for this model. At the same time, through the supply chain, chain restaurant enterprises have realized the information management of the whole process of operation, including group purchase, sale, inventory management, chain distribution management, processing center management, and operation loss management. Through advanced data collection and linkage technology, stores, headquarters, distribution centers, stores, warehouses, and processing plants form a local network platform to establish an integrated and unified management network with headquarters as the management hub and distribution centers as the information hub. In this way, the enterprise can realize unified management from a single store to a chain, realize perfect off-site chain management scheme, realize unified management, unified operation, unified analysis, and control of business processes. Through centralized procurement, unified distribution, and complementary advantages, it can reduce procurement costs and improve core competitiveness. Based on the third mode, the decision chain realizes process intelligence and operation guidance and establishes a perfect center for grouping information analysis. It can carry out intelligent analysis and process optimization for the whole process of grouping operations, and carry out intelligent management and early warning prompts for the control process. The Catering Chain Grouping Decision Analysis Center analyzes the business model of chain catering, predicts future business trends, improves the response speed of chain catering enterprises to the market, economic benefits and management efficiency, reduces the internal consumption of group operations, and gives full play to the advantages of chain intensification and scaling. Through the real-time network platform, it can deal with important issues in the warehouse and distribution of each store more quickly and flexibly, and conduct business analysis on the sales situation, cost, ingredients, planned quotas, TC value, AC value, and other data of each store and operation process, to achieve the role of truly guiding the operation process. Through the analysis center and intelligent optimization, it establishes the group market strategy and realizes the unified procurement, unified management, unified accounting, and unified distribution of the whole group enterprise under the guidance of optimization to truly establish the profit model of the restaurant chain.

## 3. The development of china restaurant chains

### 3.1. Current Situation

From the data in Figure 1, it can be seen that between 2018 and 2022, China's catering industry entered the "big chain era" as the chainization rate of China's catering industry continued to grow from $12 \%$ to $19 \%$.


Figure 1: 2018-2022 China's Restaurant Chaining Rate
As shown in Figure 2, in terms of the classification of food and drink, the chaining of beverage stores rose by $15 \%$, snacks and fast food by $9 \%$, and bakeries and barbecues both rose by $8 \%$, so it is not difficult to see that China's food and drink chaining can not be separated from the contribution of the types of drinks and snacks and fast food.


Figure 2: Changes in category chaining rates, in 2018-2022
China's restaurant chainization rate is relatively low, and there is still much room for growth compared to the United States and Japan. Since 2013, the catering industry has undergone structural adjustment, and consumers have paid more attention to the dining environment, consumption experience, and brand, laying the foundation for the development of catering mechanization. In addition, the development of cold chain logistics facilities has ensured the quality and efficiency of distribution and promoted the process of restaurant chainization. Finally, large-scale catering enterprises have begun to lay down breeding bases and build central kitchens to ensure quality from the source, reduce costs, and promote the development of catering mechanization. In this process,
although the mechanization of Chinese formal dining is not as fast as other categories, it still shows great potential.

In 2020, the Chinese formal food industry was affected by the recurring epidemic, and the market size fell sharply to 0.95 trillion yuan. However, in 2021, the market size gradually rebounded, growing by $9.0 \%$ to reach 1.04 trillion yuan. Although the Chinese food industry is under more pressure than other categories in 2022, the crisis also contains transformation opportunities, so the market size is expected to rise slightly to 1.06 trillion yuan, as shown in Figure 3.


Figure 3: China Chinese Formal Food Market Size, in 2016-2022
From the point of view of the size of stores in shopping malls, the concentration of local cuisine in the Chinese formal dining market is low, with single-store brands accounting for more than $60 \%$ and brands with less than 20 stores accounting for more than $97 \%$. Brands with 50 stores or more accounted for less than $1 \%$, and brands with more than 100 stores accounted for less than $0.2 \% \mathrm{Lu}$ Cuisine, Gan Cuisine, and Northeastern Cuisine, which account for a relatively small number of stores, do not have brands with a scale of more than 100 stores. This indicates that Chinese formal dining shows great potential for development, as shown in Figure 4.


Figure 4: Percentage of number of brands in different store size ranges of China's formal dinners

### 3.2. Issue

The catering industry has a long industrial chain, from procurement, storage, and distribution processes, to acceptance and refrigeration, cleaning and disinfection, cooking, dine-in, and take-away, as well as the corresponding store expansion and management, the chaining of Chinese food is facing more difficulties: first of all, unlike Western food, Chinese food is rich in ingredients, and the production process is particularly delicate. The complicated production steps make Chinese food production efficiency and standardization difficulties. Secondly, with the increase in the number of
chain stores, staff control, inventory, environmental management, and other issues have become difficult for brand management.

### 3.3. Development Countermeasure

First of all, in Chinese cuisine, hot pot is one of the categories where the chain process advances faster. Of the top 50 Chinese food stores, nearly half are hot pot stores, of which Haidilao is the only Chinese food brand with more than 1,000 stores. Compared with other categories, the production process of hot pot is simpler, and the operation is more convenient under mechanization. Through modern standardized base material production plants, raw materials, base material frying time, and the timing of adding various spices can be strictly controlled, which makes it easier to achieve standardization. Haidilao's classic business model is the " 721 fashion" store expansion. 721 Represents shareholding distribution, 7 is $70 \%$ of the headquarters shareholding, 2 is $20 \%$ of the equity of the chain store manager, and the remaining $10 \%$ is given to the old staff to train new employees equity incentives. The advantage of this is that the head office and the store manager of the joint partnership finance employees in accordance with the incentive mechanism, as long as they complete the performance targets, you can get the corresponding commission dividends. At the same time, if the old store manager takes the initiative to train the new store manager, and waits until the new store opens, the old store manager can enjoy the $10 \%$ profit dividend of the new store. This will enable the store manager and store performance to be linked to the headquarters and the store manager of the partnership to open stores, not only to save the company's cash flow expenditures but also to stimulate the enthusiasm of the store manager. At the same time, chain store management will also adopt a unified standard and mode of implementation. Haijilao, every chain store manager is through an internal selection, and there are two modes of compensation system: first, you can get their own stores' profit dividends of $2.8 \%$. Second, you can get your own store profits $0.4 \%+$ training out of the apprentice new store $3.1 \%$ profit sharing+ grandson store $1.5 \%$ profit sharing. This model can also stimulate the enthusiasm of Haijilao's internal team, to ensure that the old store manager "wolf" at the same time, but also drive the fighting spirit of the newcomers. Everyone working together to make the cake bigger can achieve a win-win, as shown in Figure 5.


Figure 5: Distribution of the top 50 food outlets in China by category
Secondly, for restaurant chains, the core of the company's digital operation covers digital product development, digital marketing, digital supply chain, intelligent store site selection, intelligent franchise management, etc. These dimensions will be the decisive factor in winning the restaurant business. In this process, catering SaaS products are very important tools. The new generation of integrated catering SaaS products generally have the following core modules: membership marketing, private domain operations, personnel management, central kitchen, supply chain management, and
data analysis. For example, membership marketing refers to the combination of digital marketing, personalized marketing, and services for members; private domain operation is the system to support marketing activities, member services, coupons, red packets, points, and other fancy marketing methods; supply chain management is mainly the supply chain and finance, logistics, warehousing, and linked to the front-end sales system, refined, dynamic management of the procurement process, reducing procurement costs. For example, Hunan cuisine brand Nongchengji, established in 2017, has begun an efficiency revolution with the help of digital solutions, realizing efficiency improvements in order taking, sorting and distribution, and review, of which sorting efficiency has increased by about $30 \%$. The company has shifted from a single dine-in model to a "dine-in + takeaway + semi-finished products retail" model and is promoting a semi-finished products retail business with Box Ma and live broadcasting platforms. The rapid development of digitalization has empowered the mechanization of Chinese food. Against the background of rapid expansion in the number of stores, a set of digital systems suitable for the organization and operation system of the restaurant brand itself can provide convenience for the brand in all aspects, from functional support to production and operation to strategic decision-making.

## 4. Conclusion

Haidilao and Hunan cuisine brand Nonggongji are both more successful examples of restaurant chains in China, which play a very important role in demonstrating and inspiring the mechanization of Chinese restaurants in the future. Based on the business model of the previous results, this paper draws the following conclusions: First, hot pot is one of the categories in which the chaining process of Chinese food is advancing faster, and Haidilao is the only Chinese food brand with more than 1,000 stores. Haidilao adopts the " 721 fission" store expansion model, in which the head office and the store manager jointly co-fund the store, and employees follow the incentive mechanism. Secondly, the core of digital operation covers digital product development, digital marketing, digital supply chain, intelligent site selection of stores, intelligent management of franchisees, etc. The new generation of integrated catering SaaS products has core modules such as membership marketing, private domain operation, personnel management, central kitchen, supply chain management, data analysis, etc. The rapid development of the digitalization process has brought many benefits to formal Chinese food brands. The rapid development of the digitalization process empowers the chaining of Chinese formal dining. A set of digital systems suitable for the restaurant brand's own organization and operating system can facilitate the brand. Haidilao and Hunan cuisine brand Nonggongji, as representative enterprises of China's restaurant chains, provide good cases and lessons for restaurant chainization.

## References

[1] Liang, X. \& Andris, C. . (2022). Measuring McCities: Landscapes of chain and independent restaurants in the United States.
[2] Auchincloss, A. H. , Leonberg, B. L., Glanz, K., Bellitz, S., Ricchezza, A., \& Jervis, A. . (2014). Nutritional value of meals at full-service restaurant chains. Journal of Nutrition Education \& Behavior, 46(1), 75-81.
[3] Rahimnia, F., Moghadasian, M. , \& Costka, P. . (2009). Benchmarking leagility in mass services the case of a fast food restaurant chains in iran. Benchmarking An International Journal, 16(6), 799-816.
[4] Mawson, E., \& Fearne, A. . (1996). Purchasing strategies and decision-making processes in the food service industry: a case study of uk restaurant chains. Supply Chain Management, 1(3), 34-41.
[5] Mallapragada, G., \& Srinivasan, R. . (2017). Innovativeness as an unintended outcome of franchising: insights from restaurant chains. Decision Sciences, 48(6).
[6] Nusair, \& Khaldoon "Khal". (2007). Critical factors in implementing hris in restaurant chains. Advances in Hospitality and Leisure, 69-86.
[7] Magnini, V. P., Garcia, C., \& Honeycutt Jr, E. D. (2010). Identifying the attributes of an effective restaurant chain endorser. Cornell Hospitality Quarterly, 51(2), 238-250.

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[8] Ahrens, T., \& Chapman, C. S. (2004). Accounting for flexibility and efficiency: A field study of management control systems in a restaurant chain. Contemporary accounting research, 21(2), 271-301.
[9] Ottenbacher, M. C., \& Harrington, R. J. (2009). The product innovation process of quick-service restaurant chains. International Journal of Contemporary Hospitality Management, 21(5), 523-541.
[10] Bradach, J. L. (1997). Using the plural form in the management of restaurant chains. Administrative Science Quarterly, 276-303.


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