



An Analysis of McDonald's Business Model Based on Business Ecosystem Theory

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Abstract

In this paper, while reviewing the relevant theories of business ecosystem and business model, the author visits McDonald's restaurants at home and abroad to conduct a field survey. Based on the theory of business ecosystem, this paper researches the business model of McDonald's from a new perspective. This paper constructs a complete map of McDonald's business ecosystem, uses the commercial canvas model, and analyzes the McDonald's business model from four aspects: customer, finance, internal management and value proposition. The research shows that the product structure of McDonald's restaurant is mainly based on the standardized set meal model, supplemented by food matching, so that every step of the production process is simplified to the extreme, and the resource input is minimized. And the ability of professional location leads McDonald's to become the best real estate company in the history. McDonald's share price rose mainly because the company's profit growth led to a rise in the company's valuation. The success of McDonald's over the past few decades is due to the full grasp of the needs of its target customers and the establishment of a complete system for the management of suppliers. Because of a good business model, a McDonald's business ecosystem with mutually beneficial symbiosis of members in the system is successfully constructed.

Keywords: *Business ecosystem, McDonald's, Business model canvas*

1. Introduction

There is an old Chinese saying, "the country is people-oriented, and food is the most important thing for the people." Thus, it can be seen that the importance of food to the people and the indirect importance to the country. Since the reform and opening up, with the continuous enhancement of China's national strength, the pockets of ordinary people are getting bigger and bigger, and there are more and more choices and demands for food. Western steak, Korean cuisine, Japanese cuisine and American fast food have flooded into China. People eat out more and more frequently and spend more and more money. The author believes that the catering industry has not been fully developed and has endless potential. When it comes to the catering industry, it is impossible to bypass McDonald's, a household name in the catering industry.

Ray Crocker founded the franchise company on April 15, 1955 and opened the first McDonald's franchise. By the end of 2017, McDonald's has more than 37,000 restaurants in 120 countries around the world, providing high-quality food and services to more than 69 million customers every day. As of February 10, 2020, McDonald's stock has a market capitalization of \$165 billion. McDonald's, Starbucks and Yum have a combined market capitalization of \$299.2 billion, accounting for 65.72% of the total market capitalization of catering companies. The catering industry is highly concentrated; the overall revenue growth of the catering sector is close to stagnation in recent years, and the market capitalization is highly concentrated in several large companies.

McDonald's operating profit has been increasing over the past few decades, and the company's market capitalization has been rising. The McDonald's successful business model is worth studying from an academic point of view. Based on the business ecosystem theory, this paper uses the Business Model Canvas to study the McDonald's, opening a new perspective for the study of enterprise business model.

2. Objectives

1. Constructing McDonald's ecosystem model and analyzing McDonald's with a commercial canvas model.
2. Analyzing the profit and loss statement structure of McDonald's based on data.

[1756]



3. Materials and Methods

3.1 Literature review

Business ecosystem is a relatively new concept in academic circles. Moore (1993) puts forward the concept of "business ecosystem" for the first time. Enterprises in the business ecosystem co-evolve and innovate in the way of cooperation and competition, and develop new products to meet the needs of consumers; the business ecosystem spans multiple industries, and it goes through four stages: emergence, expansion, leadership, self-renewal or extinction. Members of the business ecosystem depend on each other rather than independently to create value for customers. Tian (2008) believes that the evolution mechanism of business ecosystem includes attraction, entrance and growth, with system dynamic performance, containment performance and hatching performance. Liu (2012) believes that the business ecosystem governance mechanism prescribes the interactive rules, regulations and approaches between the core enterprises and their partners, promotes the coordination and integration of value resources, and improves the efficiency of system decision-making.

Osterwalder, Pigneur, and Tucci (2005) put forward the "business canvas model", which is a general language to describe, visualize, evaluate and change business model. It can help enterprises to see and adjust the elements of enterprise business model more intuitively. Wei and Zhu (2009) believe that the business model includes six elements: positioning, business system, key resource capabilities, profit model, free cash flow structure, and enterprise value. This paper uses the business model canvas as a tool to analyze the business ecosystem of McDonald's.

3.2 Case study.

This paper chooses McDonald's as a case study. As a catering enterprise, McDonald's has been operating for 65 years and has developed well. The company's business model has the uniqueness and complexity of a single case study. The research results and conclusions will be of reference significance for the long-term development of other enterprises. The data sources of this case study include second-hand data publicly disclosed or internally provided by McDonald's, McDonald's annual report, semi-annual report, the company's official website of the United States, and company's internal archives, such as various summary reports and corporate meetings, etc. Informal information collection channels include e-mail, phone calls, observations, and news materials disclosed by third parties, such as reports on the catering industry. The above methods are used to collect McDonald's financial data and partnership analysis.

3.3 Field investigation method.

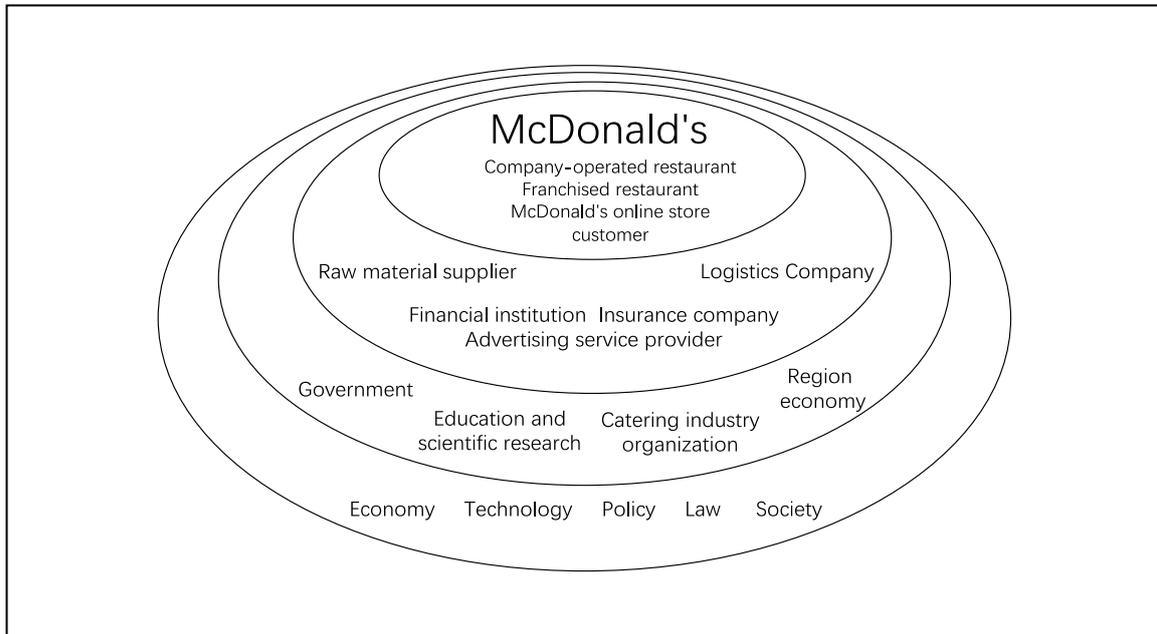
There are two kinds of field investigation methods: on-the-spot observation and inquiry. The author visits many McDonald's stores in Guangzhou, Zhengzhou, Xuchang, Kunming, Hong Kong, Macao, Taipei, Bangkok and Pattaya which covers international tourist cities, first-tier to third-tier cities in China, making an on-the-spot investigation on the location, product structure, consumer purchase and age composition of McDonald's.

4. Results and Discussion

4.1 Construction of McDonald's Business ecosystem

McDonald's from a small restaurant to the authorized business model, and now the huge commercial McDonald's business kingdom is closely related to its established business ecosystem. The authorized operation of McDonald's reconstructs the model of the catering industry, and the division of labor of each link is very meticulous in the business ecosystem established by the company. Moreover, due to the supervision of McDonald's, the cooperation efficiency is very high, and the participants benefit a lot. Through the division of labor and cooperation and the integration of resources, it has produced strong competitiveness to this ecosystem and played an outstanding role in the business ecosystem. The author collates and draws the McDonald's business ecosystem as shown in Figure 1 according to *The Founder* (Ray and Anderson, 2019).

[1757]



Data source: *The Founder* (Ray and Anderson, 2019)

Figure 1 McDonald's business ecosystem

McDonald's restaurants are a key element in this business ecosystem as all other factors revolve around McDonald's restaurants, and McDonald's is the founder and leader of the entire business ecosystem. Whether it is site selection, decoration style, personnel training, or the choice of suppliers and distribution companies, McDonald's has the absolute right to say.

McDonald's has set up quality testing centers around the world, which not only conduct continuous product spot checks, but also go directly into the suppliers for on-site visits. The quality inspection center is a sharp knife in the hands of McDonald's, strengthening McDonald's leadership over the entire business ecosystem.

McDonald's is laying out the "McDonald's business ecosystem" by reconstructing the related ways of farmers, suppliers, franchisees, customers, marketing and so on, which is different from other catering enterprises. Participants in all aspects of McDonald's ecosystem can benefit, and McDonald's leadership makes the coordinated activities of various links and systems form a "steady-state" model.

4.2 Analysis of McDonald's financial performance

The author obtained the annual financial report of McDonald's from the official website of McDonald's in the United States.

Table 1 McDonald's balance sheet

Dollars in billions	2016	2017	2018	2019
Assets	31.02	33.80	32.81	47.51
Current assets	4.85	5.33	4.05	3.56
Other assets	26.18	28.48	28.76	43.95
Liabilities	33.23	37.07	39.07	55.72
Current liabilities	3.47	2.89	2.97	3.62
Other liabilities	29.76	34.18	36.10	52.10
Shareholders' equity	-2.20	-3.27	-6.26	-8.21



Data source: 2018 annual report of McDonald's (McDonald's Corporation, 2019)

As can be seen from Table 1, McDonald's current assets account for a very small proportion of total assets, while non-current assets account for nearly 90% of total assets in recent years. McDonald's debt ratio is also very high. McDonald's debt ratio has even risen in recent years, reaching 117% in 2019. However, McDonald's debt is mainly non-current debt, which debt service pressure is relatively less.

According to American accounting standards, real estates and other fixed assets are valued at their purchase price during the holding process, and will not be revalued because of changes in their fair value. Thus, the appreciation of McDonald's fixed assets is not reflected in the balance sheet. The author believes that the value of non-current assets of McDonald's is much higher than its book value. How to judge the value of a company will eventually return to the profitability of the company. Under the circumstances that the global catering enterprises are generally in the doldrums, and some corporate profits are declining or even have negative growth, McDonald's stock prices have been setting new record highs since 2014.

Table 2 McDonald's income statement

Dollars in billions	2016	2017	2018	2019
Total revenues	24.62	22.82	21.03	21.08
Total operating costs and expenses	14.42	12.20	10.24	9.96
Operating income	7.82	8.39	8.59	8.89
Net income	4.69	5.19	5.92	6.03

Data source: 2018 annual report of McDonald's (McDonald's Corporation, 2019)

According to the data in Table 2, McDonald's total revenues have been declining in the past four years, while operating income and net income have been increasing. From the financial report, we can see that the main way to increase profit margin is to reduce operating costs. The author learned that McDonald's operating costs include production costs, sales expenses, management expenses and other expenses. McDonald's advertising expenses are recorded in sales expenses and operating expenses according to different categories. Between 2016 and 2018, McDonald's advertising spending fell sharply, to nearly 50 per cent. McDonald's is committed to increasing net profit by reducing operating costs.

Table 3 composition of McDonald's operating income

Dollars in billions	2016	2017	2018
Sales by Company-operated restaurants	15.29	12.71	10.01
Revenues from franchised restaurants	9.32	10.10	11.01
Rents	6.11	6.50	7.08
Royalties	3.12	3.52	3.89
Initial fees	0.09	0.08	0.04

Data source: 2018 annual report of McDonald's (McDonald's Corporation, 2019)

The revenue source of McDonald's is divided into two parts: direct operation and franchise. The income of franchised restaurant is divided into rent, royalty and initial fee. In the case of McDonald's in Shenzhen, for example, applicants invest at least 2 million yuan as an initial fee to obtain a mature restaurant that McDonald's has been operating for at least three years, usually for 20 years.

As can be seen from Table 3, revenue from McDonald's company-operated restaurants has declined year by year, from \$15.29 billion in 2016 to \$10.01 billion in 2018. Revenue from franchised restaurants climbed from \$9.32 billion to \$11.01 billion. Rental income climbed from \$6.11 billion to \$7.08 billion.



The company's important sources of income are revenue from operating restaurants, rental fees for franchised restaurants, and royalties, while initial fees are secondary sources of income. From the perspective of McDonald's revenue structure, although rental income is an important part of McDonald's income, it cannot be said to be a real estate company. McDonald's also made it clear that its fixed assets are owned and leased real estate related to the restaurant business.

4.3 Logical analysis of McDonald's Business Model

The author believes that the core of McDonald's business model lies in McDonald's strict control over all aspects of operation. All McDonald's suppliers must be closely screened. American HAVI Group is the only logistics and transportation partner in the world. Each restaurant sends the material requirements to McDonald's, and McDonald's will place material orders and logistics orders according to the demand. Logistics companies collect goods from suppliers according to the orders placed by McDonald's and send them to McDonald's restaurants. In the whole process, the franchise store operators only need to report the material requirements to McDonald's, putting an end to some disadvantages of traditional restaurant material procurement.

On the other hand, the purchase price is uniformly negotiated with suppliers by McDonald's. The company can use economies of scale and extremely large orders to push the price down to a price that individual operators cannot negotiate. The headquarters always adheres to the principle of profit concession and transfers the concessions obtained in the purchase directly to the franchised branches.

4.4 Business Model Canvas Analysis of McDonald's

Customer segmentation. McDonald's restaurant is divided into direct restaurant and franchise restaurant, so based on McDonald's, customers are divided into restaurant consumers and franchise restaurant franchisees. After a field survey, the author observed that the main consumer groups of McDonald's restaurants are mainly young people including teenagers, college students, business travelers and office workers, accounting for more than 70% of the whole consumer group. The number of children is gradually decreasing from third-tier cities to first-tier cities.

Customer relationship. Customer relationship means that an enterprise takes the initiative to establish a certain relationship with its customers in order to achieve its business objectives. The relationship between McDonald's and consumers is a business relationship to provide services, a partnership with franchisees, and a strategic alliance with suppliers.

Sales channels. As a food supplier, McDonald's mainly sells its products to customers through direct stores and franchises. In addition, McDonald's also uses online platform as its main sales channel.

Value proposition. At the beginning of its establishment, the company adhered to the service concept of "QSCV" (Quality, Service, Cleanness & Value). The company requires every restaurant to provide consumers with first-class products, thoughtful service, a clean dining environment and make people feel that eating at McDonald's is good value for money.

Critical business. For restaurants, the key business is to sell food to make a profit, while McDonald's can also share the sales profits of franchise restaurants. McDonald's restaurant products mainly sell hamburgers, as well as French fries, fried chicken, soda, ice and other fast food.

Core resources. The first is brand advantage. The second is the physical assets of the company, which is also the top priority. The third is to establish a long-term cooperative relationship with suppliers.

Important partner. McDonald's partner selection is a very important link, and it always adheres to the principle of buyer's market in the process of partner selection.

According to Ostwald's description of "business model canvas model", The Business Model Canvas of McDonald's business model proposed by Zheng (2018) is shown in Figure 2.



Important partner Franchisee Raw material supplier American HAVI Group	Key business Sale of food Authorized operation	Value proposition Adhere to the service concept of "QSCV"	Customer relationship Business relationship Partnership Strategic alliance	Customer segmentation Franchisee Customers under the age of 35
	Core resources Brand advantage Physical assets Key resource integration capability		Sales channels Physical restaurant operation Online operation	
Cost structure Production costs Management expenses Sales expenses Other business expenses			Source of income The income of restaurants operated The rental income of holding houses The sales share of franchisees	

Figure2 Business Model Canvas of McDonald's

The profit model of McDonald's is mainly based on the revenue of the restaurant operated by the company, supplemented by the revenue sharing of franchised restaurants and the rental fees of franchised restaurants. However, McDonald's profit model is not just that. The added value of McDonald's 's large number of illiquid assets is a huge invisible part.

Every time McDonald's opens a restaurant, there is a professional evaluation team to comprehensively evaluate the flow of people, transportation system, the way people travel and other indicators. The uniqueness or ingenuity of McDonald's is reflected in that it not only has the ability of professional location, but also establishes McDonald's catering culture and McDonald's business circle by selling hamburgers. Through McDonald's business area, it continues to attract many people to McDonald's and nearby business circles. This approach will actively and directly promote the rise of property prices. This is the secret why McDonald's has become what people call "the best real estate company in history". It does not passively wait for the property to appreciate, nor does it rely solely on the so-called professional location ability, but take the initiative to drive the growth of real estate prices for a long time.

McDonald's either signs a 20-to 30-year long-term lease with the original landowner, or buys out the entire land to build a house, or holds it for a long time, or subleases it as a franchisee, so that its illiquid assets have a lot of room for appreciation. In McDonald's financial statements, one of the main assets is real estate, and McDonald's houses and land are bound to appreciate with the surrounding urbanization process. McDonald's can make effective use of fixed assets by leasing. With the continuous appreciation of fixed assets, rents continue to rise, so rents account for an increasing proportion of profits in the annual financial report. The appreciation of fixed asset prices can be directly reflected in the company's annual report, thus increasing the income of McDonald's. The houses bought by McDonald's a few years ago or even decades ago are very cheap, but fixed assets are recorded at cost. If they are not bought and sold, the appreciation can never be clearly calculated, which is McDonald's huge hidden income.

5. Conclusion

Based on the relevant literature of business ecosystem and business model, this paper studies from the top down from the perspective of God. Taking the "commercial canvas model" as the main research method, through the methods of literature research and field investigation, this paper studies the



McDonald's business ecosystem and business model, and makes an in-depth analysis of its constituent elements, carried out a detailed study. The main conclusions of the article are as follows:

This paper synthesizes the concept of business ecosystem and the research results of its constituent elements. In this paper, the business ecosystem is defined as a multi-element and multi-link business ecosystem, which covers the relatively stable complex system formed by the interest-related groups and the external environment on which the enterprise depends for survival and development. Members participate in the material exchange of the business ecosystem to form a mutually beneficial and win-win steady-state system.

From the point of view of ecosystem, the key points of McDonald's profit are as follows: the first is to build strategic alliance; the second is strong control over ecosystem; the third is scale effect, which makes the profit per unit of business ecosystem is not high; however, due to the large scale, the overall profit is high; the fourth is to actively participate in the transformation of the supply chain; Fifth, the responsibility and obligation are the same. McDonald's own sense of mission does not ask too much for the interests of franchisees.

Research on McDonald's based on "Commercial Canvas Model". The company makes money by selling goods, issuing franchise qualifications, recovering rent and collecting a share of franchise revenue. However, some scholars believe that the conclusion that McDonald's real business model is a real estate company does not have enough data to support. The fixed assets held by McDonald's are related to the restaurant, and because of the accounting method, the appreciation of fixed assets in the process of holding cannot be calculated.

The rise in McDonald's stock price is mainly due to the rise in McDonald's valuation, and the core of the rise in valuation is caused by the growth of the company's future profits. The management of the company is capable and honest, and the distribution of profits in all aspects is reasonable. Based on itself, McDonald's first integrates upstream and downstream resources, constantly expands and strengthens the fast food market, which is not only beneficial to itself, but also creates value growth for the whole industry, making McDonald's stock favored by investors.

The author thinks that the reference value of McDonald's business model to other business ecosystems is as follows. Firstly, the business ecosystem should identify the target customer group, and the company should aim at creating value for customers and long-term operation. Secondly, enterprises in the business ecosystem should establish a good cooperative relationship with upstream and downstream enterprises, and pay attention to the values brought by partners when choosing partners. Thirdly, a single enterprise is particularly vulnerable to resist risks, while a whole ecosystem can bear greater risks accordingly. As leaders of business ecosystem, they should distribute their interests reasonably and should not aim at self-interest maximization.

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