Analysis of KFC's and McDonald's Strategies Based on Game Theory

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Abstract: McDonald's and KFC are two giants in the Chinese fast food market. In this case, Chinese fast food brands must also seek development. So, studying their strategies can inspire and promote the local Chinese fast food industry. So, in this article, the author will use the Game Theory to analyze their strategies to find their different methods to occupy the market. The article will be divided into five parts. To begin with, introduce the research background, related literature, and the article's structure. Second, describe their basic and current situation from multiple dimensions, respectively. Third, compare their similarities and differences from many of the same aspects. Fourth, provide some suggestions to McDonald's and KFC and inspire other local brands. And summarize what the other brands can learn and take changes from their strategies. Last, accept some limitations and propose some future possible studies. So, this article can promote local brands, learn a lot from them, and strive to break the monopoly and become outstanding brands.

Keywords: game theory, McDonald's, KFC, strategy

1. Introduction

1.1. Research Background

Fast food has gradually become more significant with the acceleration of society's development and living style. With the fast food industry's rapid development in China, more brands and products are flooding the market. According to the National Bureau of Statistics, there were more than 1 million online shops, accounting for 22% of the catering industry and increasing continuously since 2011. In addition, the annual revenue of fast food could reach 150 billion yuan in 2011, which accounted for 20% of the catering industry's total profit and increased steadily [1]. According to the McDonald's website, as of September 2022, there are nearly 5,000 McDonald's restaurants in mainland China, serving over 1 billion customers annually and employing over 180000 employees. Up to September 30, 2023, McDonald's has 4905 stores in the Chinese market. From 2020 to 2022, KFC maintained an annual expansion rate of approximately 1,000 new stores in China, with the number of stores increasing from 7166 in 2020 to 8675 in 2022 [2]. However, McDonald's and KFC are always the two giants in the Chinese fast food industry. They almost achieved a duopoly in the industry. In contrast, domestic Chinese fast-food brands can rarely compete with them. So, studying their sales and marketing strategies is crucial and can inspire the development of other Chinese sellers and even the whole industry. Furthermore, in the world market, McDonald's

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precedes KFC significantly regarding the number of shops and turnover. Surprisingly, in China, KFC instead has much more advantages. So, deeply understanding how their strategies and total business goals cause this result can also help promote the whole industry of fast food a lot. How KFC can win this booming and quite potential Chinese market may teach Chinese fast food brands how to develop their business in an unfamiliar environment or even stretch globally.

1.2. Literature Review

In this respect, Li compared KFC's development strategy to McDonald's and took some real examples to specify them. In her article, this author mainly compared their management strategies, competitive strategies, and core competitiveness to point out some suggestions the Chinese fast food industry can utilize [3]. Su analyzed the globalization and localization strategies of McDonald's and KFC and how KFC could adjust the Chinese environment successfully to win the Chinese market instead of McDonald's. This author mentioned that KFC made more local strategies. In contrast, McDonald's always decided from the global perspective, indirectly leading to KFC's success in the Chinese market [4]. In addition, Zhang and Wang used mathematical and statistical methods, randomly selecting some cities as samples to study McDonald's and KFC's different selling strategies in China. These two authors concluded that KFC focused more on excavating new markets in remote cities, but McDonald's concentrated on the occupied proportion of one market [5]. Zhou emphasized that Chinese fast food brands can learn not to focus on the competition of prices but on the differentiation of the products, which is the real determination of the battles. And this is also the crucial factor why KFC can win the competition. This clever and surprising strategy can inspire Chinese domestic brands and teach them brands that many factors can lead to success and not just being limited to things such as prices [6]. Xv used various models and frameworks to study the values of McDonald's and KFC brands. As a result, McDonald's had more intense brand effects, but KFC had more consumers with a higher consumption frequency [7].

1.3. Research Gap

Through these particles, they have talked about both McDonald's and KFC's development strategies in the Chinese market and how KFC can win this market instead. These authors discussed their differentiation in terms of prices, products, locations, and strategies. These articles claim McDonald's and KFC's strategies and decisions, including almost every perspective. Their traits of strategies or products seem to have been explained clearly. However, most of them just discussed them separately. There are few authors comparing people who compare them completely and analyze their decisions and actions considering each other together because their decisions will be affected, and their strategies will also influence each other.

1.4. Research Framework

Thus, in this article, the author will first discuss their respective and noticeable characteristics as completely as possible. Then, the author will analyze their similarities and differences regarding their settings and strategies of different perspectives. Then, the author will use the game theory and assume their other possible actions to compare their most remarkable strategies and see how they affect each other or whether they have made their best strategies. So, if they can do better to react to the other one's actions, the author will advise these two brands. Last, through the deep study of these two brands' tactics, the author will point out some inspirations that can instigate domestic fast-food brands. Ultimately, the author will accept the article's drawbacks or things that need improving.

2. Description of McDonald's and KFC

2.1. McDonald's

2.1.1. Price

McDonald's will set different prices in the different countries. At first, it will analyze each market and set a different and proper price. And it will change the prices according to the changes in each market. For instance, the prices of the Big Mac are different and are lowest in China [8]. So its prices are modest in each country. It seems to be localized instead of globalization. And it actually will change it even in different cities.

2.1.2. Products

From this perspective, McDonald's is more fixed and less flexible than its prices. Its products are almost the same in the whole world. Admittedly, it may change slightly in terms of materials or tastes. However, most of the products are not changed wherever the country is.

2.1.3. Advertisement

McDonald's advertisement is still pretty domestic. It will combine its products with the local culture, such as customs, language, and even values or the aspects the local people focus on, in other words. But it will still have its topic spirit and change slightly in each country. For example, in 2003, it invited Justin Bieber to be the global spokesman. However, it also invited Wang Leehom to be the spokesman for the East, which could show that its topic is youth and vigor, but it will add some traits to each part of the world to improve the focus a little bit [9].

2.1.4. Goal

McDonald's goal is not so limited in any one market. Instead, it wants to be the outstanding brand in the world and occupy a certain proportion in almost every market. So, it will not focus only on the Chinese market. In other words, it will not change so much for any one market, including the Chinese market, because its target is to be globalized instead of too much localization.

2.2. KFC

2.2.1. Price

KFC's price is also quite flexible, like the McDonald's. But it follows the steps of the McDonald's. It separates the price into more levels. And its price will change to the changes in McDonald's [10]. But it is more focused on the Chinese market. It sets prices carefully in China's each city. And its price is also modest and rarely changes a lot in order to get higher profits.

2.2.2. Products

KFC's products are pretty fit for the Chinese market. It will change a lot or even introduce new products only for China. For example, it released the Beijing chicken roll and even rice for Chinese consumers [4]. So, their products are pretty localized, at least in China. Its products are well combined with the local Chinese food and culture. It even directly purchases the original food materials from the local areas, which can better fit the Chinese's tastes.

2.2.3. Advertisement

KFC's advertisement is pretty novel and attractive. It completely combines its products and Chinese culture. It even added the Beijing Opera elements into its advertisement. Also, it caught the importance of the concept of the family for the Chinese, letting the atmosphere of family happiness run through the whole advertisement, which was quite new and appealing to the Chinese market [9].

2.2.4. Goal

KFC aims to occupy the Chinese fast food market as much as possible. So, it will take the Chinese market seriously and can change it just for the Chinese market. It focuses on the Chinese market so much but not the whole world. As a result, it will continuously launch new products in order to satisfy the Chinese's needs.

3. Comparison of McDonald's and KFC

3.1. Prices

AS the graph shows, the price changes will greatly affect each other. In fact, McDonald's price changes more frequently, whether increase or decrease, because it wants to stay or expand its profits. In contrast, KFC is much more calm and rarely changes the price. The first reason is that it has certain advantages in terms of the proportion of the market and the profits, so it does not need to change the price to get more profits. Second, KFC always uses a defensive strategy so it seems more peaceful. However, McDonald's is a little hurried to improve its status and is good at catching the opportunities. So, it will decrease the price in order to reverse the inclining tendency. Or it will increase the price when it excavates that people desire to purchase, like during the period of SARS [11]. So, the author will study KFC's reactions or other possible reactions when McDonald's changes it.

3.1.1. McDonald's Increases the Price

If KFC decreases prices, it can get a much higher market proportion. But it will at first add its production pressure. Also, it may instigate a price war, which will cause the much negative effects. And if KFC increases the price this time, they can both get higher profits and even achieve a winwin situation [11]. But they do not cooperate, so KFC cannot predict whether McDonald's will change it soon. In addition, price changes with the many other rising brands may cause bad and unpredictable consequences. But staying the same price will never cause any disadvantages in this situation, which fits KFC's defensive strategy.

3.1.2. McDonald's Decreases the Price

In this case, if KFC decreases the price, it is pretty clear that it will lead to a price war, which is not wanted by both of them. And McDonald's decreases the price for more proportion of the market, which is not so needy for KFC. So, it does not need to take an adventure. Second, KFC does not need to increase the price to gain temporary profits but loses some market proportion. Still, staying the same price is the best strategy for KFC [11].

In this case, KFC, which has more proportion, always uses the defensive strategy and rarely changes its price. And McDonald's can properly catch the opportunities to get profits, which is a more aggressive strategy continuously. Although the one who decides first can take the initiative, KFC also has found the best reaction. However, both of their strategies are fit to their situation and may maximize their profits.

3.2. Products & Advertisement

3.2.1. Products

In this case, KFC and McDonald's products have many differences, at least in China. KFC's products truly achieve localization. It can launch many aimed products for Chinese consumers, such as rice, chicken, etc. Even if McDonald's also follows it and provides some local products currently, its products are almost the same worldwide and will not change a lot in any country. It may be related to their goal, but it may also be the strategy, considering the other. So if KFC does like McDonald's or McDonald's acts like KFC, they may both lose some advantages because they will lose many characteristics. But if they mutually change the strategies, it cannot be the best. Because KFC is not so popular in the world, one of the reasons why it can succeed in China is the combination of Western civilization and Chinese culture. So, if it changes its strategy, it may not be so successful and get a certain monopoly. McDonald's has been so popular worldwide, putting so much attention as KFC does to the Chinese market, and even developing an independent brand is not so worthy of it. They have to pay more attention to the whole world. So standardization may help them build a more global model and image.

Table 1: Game theory of KFC and McDonald's.

KFC/McDonald's (Profit in China)	Localization	Standardization
localization	5,5	10,8
standardization	3,4	2,6

As Table 1 assumes, both get the dominant strategy when KFC chooses the localization, and McDonald's chooses the standardization. Also, they reach the Nash Equilibrium. So they both take the best reactions to the other one's actions in terms of the products.

3.2.2. Advertisement

From this perspective, they combine their products or the topic well with Chinese culture [9]. They both have targeted advertisements in China. But there is still a little difference.McDonald's advertisement still contains its topic and core. In addition, it adds as many Chinese elements as possible to Chinese advertisements. In contrast, KFC's advertisements are more likely to be just a mixture of its products and Chinese culture. Like the products, these strategies are their general decisions--localization and standardization.

3.3. Goals

In general, the target of KFC is to occupy the Chinese market and get a certain status in the Chinese fast food industry. Because actually, it is not as popular as its competitor--McDonald's in the world. So, China is the best opportunity for KFC to develop. However, McDonald's has been famous in the world. So it will want to hold its standard image in the world. So, it will not be as focused on the Chinese markets as KFC does. In other words, it will not change much just for the Chinese market. Their total goals lead to their actions and decisions. They are the world's McDonald's and China's KFC [4]. Their actions are controlled by their goals. And their goals are based on their status in the world. So, both of them have done the best strategies they can do based on their situation and each other's actions. That may directly cause their duopoly in China and why KFC can ultimately win the game.

4. Suggestions and Implications

4.1. Change Prices

4.1.1. Suggestions

Through the study of KFC's and McDonald's strategies of prices, it can be concluded that KFC adopts more defensive strategies and McDonald's adopts more aggressive strategies due to their different proportion in the Chinese market. And the suggestion to McDonald's is not to change the prices too frequently but just during special periods because it is a pretty adventurous method. So it is not so perfect for McDonald's to change it at ordinary times. It may even lose much more profits if accidents or unpredictable changes occur. Especially for this kind of huge company, earning these profits with a great adventure is unnecessary. And for KFC, keeping the price is quite rational and good. Because it even reached a monopoly in the Chinese fast-food industry. So it is needless to get profits by changing prices.

4.1.2. Implications

The other local brands can draw lessons from McDonald's and KFC's strategy because they do not have such a big scale, so they will meet less adventure when they change the prices. So, they can change prices to get the benefit more frequently than KFC but have to change prices rationally, like McDonald's. But it also inspires other brands that as long as they expand to some certain scale, they need to consider whether they still need to use such an adventurous way to get profits.

4.2. Meet Local Characteristics and Flavors

4.2.1. Suggestions

For KFC, it has done well in the Chinese market regarding localization. However, the suggestion is to expand its scale to other potential markets with the same operational form. And McDonald's can still maintain its strategy, which is having standard products and identical core topics and changing in every country to adjust the local culture and flavors.

4.2.2. Implications

So, their strategies in terms of products inspire local Chinese brands to adjust the local flavors and characteristics. Whatever strategy they choose, they must conform to the local culture and flavors, or they cannot achieve lasting success. Taking McDonald's as an example, one significant reason why they can succeed in the Chinese market is that their products fit Chinese s flavors after some changes, even if it adopts the standardization strategy. So, adjusting the local flavors is the crucial and indispensable base. Any fast food company cannot be successful without this, whatever excellent the other things it finishes.

4.3. Know about Companies' Situation and the Rivals

Like McDonald's and KFC, they completely know about their status in China and each other, which instigates the local brands to know their characteristics and advantages, how large their scale is, and who their pretty competitive rivals are. So they can take relative actions to respond to rivals and maximize their profits. Running a successful business can completely not depend on a personal strategy but on the Game Theory between it and other rivals. McDonald's and KFC are famous Game Theory between two companies. So, knowing about the rivals and having a rational and

reasonable understanding of themselves are necessary for every brand, which can help companies make the right choices.

5. Conclusion

5.1. Key Findings

In the article, the author mainly uses the Game Theory to discuss the competitive strategies used by McDonald's and KFC in the Chinese market regarding price, products, advertisements, and even general goals. KFC adopts the general localization strategy, and McDonald's adopts the universal tactic of standardization so that they have differences in many aspects and form a game relationship. In addition, it inspires local brands to win battles with other brands. So, according to their strategies, the author also gives some practical suggestions to the other brands.

5.2. Research Significance

In general, this article, through the study of the game between KFC and McDonald's, summarizes some key points about helping the fast food brands or even the whole catering trade become successful. So, it first gives some suggestions to KFC and McDonald's to promote their developments. In addition, it provides many values and useful strategies for local brands. So the article can also encourage the local fast food brands a lot and may help them achieve a breakthrough under the duopoly of McDonald's and KFC and eventually emerge many outstanding local fast food brands, breaking the foreign monopoly in China in the field of fast food.

5.3. Limitations and Future studies

5.3.1. Limitations

In this article, there are many restrictions, without a doubt. First of all, it is lack of some current and recent data. Much of the data used in the article is old. Also, the article lacks field investigations and only gets information online. In addition, it only includes some of the most rudimentary and significant aspects, not pretty overall and comprehensive due to the limitation of ability. And many analyses are rough and not accurate enough. Last, some suggestions are general and not precise enough, so it may not bring some practical help to the brands but just some outlines and general directions.

5.3.2. Future studies

In the future, the author can do deeper research and field investigations to get more current, accurate, and reliable data. Also, if the author has enough time, the author will do a comprehensive analysis. Last, the author can use more time to have a deeper understanding so that they can provide some more actual suggestions.

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