



Combined with Economics, Predict the Future Development Direction of Catering Industry Application of Loss Aversion Principle in Starbucks Business Case

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ABSTRACT

Due to the epidemic outbreak, businesses in the catering industry are facing unprecedented challenges. Combined with the previous research on loss avoidance and pricing related to the catering service industry, this paper aims to predict the future market development and find a way to help these companies get out of trouble. In order to achieve this goal, this paper selects Starbucks as the industry representative, analyses its historical data and forecasts its future cash flow, formulates some solutions combined with the loss avoidance principle, and analyses the possible problems and solutions.

Keywords: *Catering industry, Covid-19, Loss aversion*

1. INTRODUCTION

Since the outbreak of covid-19, the service and catering industries in different regions have been hit by the public health policy and the change in consumer psychology. According to DDT's March 2020 survey report, using China as an example, most catering companies have been in the dilemma of the outbreak of COVID-19. Most companies face a sharp decline in customer numbers, cash flow breakup, or other significant challenges. At the same time, as an unpredictable black swan event, when the supply side of the catering industry is difficult to be adjusted quickly, the severe demand contraction will also lead to the waste of food and resources [1-2].

Due to the sudden outbreak of the epidemic and the fact that the catering industry in most countries is not the critical target of government support, there is not enough research rooted in this industry [3]. This phenomenon leads to that although all companies have made corresponding strategic changes according to the epidemic situation, it is still challenging to solve the fundamental problem. Combined with the previous research on the factors such as loss aversion and pricing related to the catering service industry in the economic area [4-5].

This paper aims to predict the future market development and find a way to get rid of the plight of the hit catering service industry in this particular dilemma.

Through this process, this paper hopes to help the currently imprisoned catering and service companies and take these solutions as samples to help more relevant companies better prepare for emergencies, as well as reduce resource waste. Based on this aim, the research has been conducted and presented in the following part. The example company Starbucks will be introduced at the beginning of the method part, followed by analyzing the loss aversion theory related to the catering and service industry. Later new solutions will be constructed and illustrated combined with this theory, and limitations and other research directions will be displayed.

2. METHOD

2.1 Choosing the representative business

Among all the catering industry businesses, Starbucks is a representative company that has made many strategic changes during the epidemic. Usually, such a large-scale business should be more competitive and have a greater possibility of survival in difficult times [6-7]. However, according to the first quarter financial report of the fiscal year 2022 recently released by Starbucks, the store sales in the Chinese market decreased by 14%. Starbucks explained that part of the reason is that the Chinese market continues to be affected by the flow restriction of the epidemic, which has seriously affected customers' liquidity. Such a dramatic decline in sales is quite different from the traditional

concept that large companies are not easily affected, reflecting the complexity of the epidemic situation in the epidemic period, which changes from time to time. According to this background, this paper selects Starbucks as the representative of the research object group to find solutions that can be applied to both large and small companies [8]. In the next part, this paper will combine the past cash flow data of Starbucks to establish a mathematical model, using it to predict Starbucks's future financial situation and cash flow trend. At the same time, the existing measures of Starbucks will be introduced, and based on the predicted data, more details of this representative business in the industry will be illustrated to find their strategic success and room for improvement, which will lead to the new strategic direction of the loss aversion theory.

In the process of analysing this company, three points are selected as the main factors that may affect the cash

flow and future development of this company. They are the current pandemic problem, international extension, and cost control.

2.2 Prediction of the future Starbucks

This part will analyze the future cash flow of Starbucks based on the past data of Starbucks and quantitatively predict the cash flow of Starbucks in the next five years.

2.2.1. Covid-19

It is undeniable that as a catering company, Starbucks faced great challenges during the epidemic. This can be reflected in the sharp decline in revenue in its financial statements.

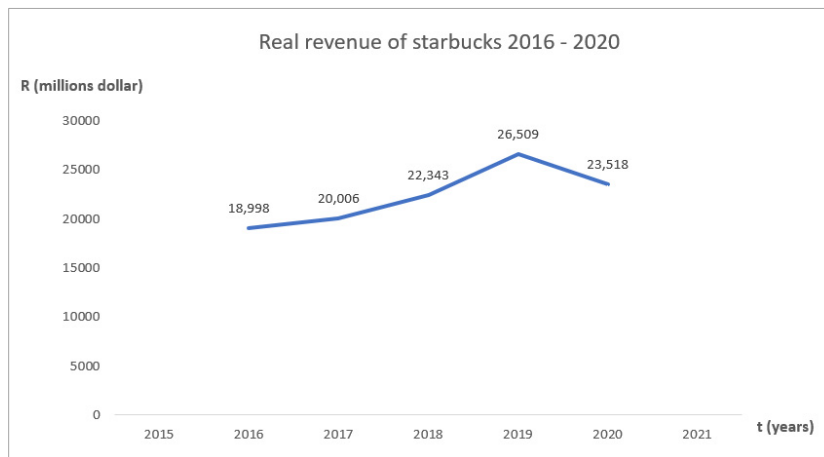


Figure 1 Revenue of Starbucks from 2016 to 2020

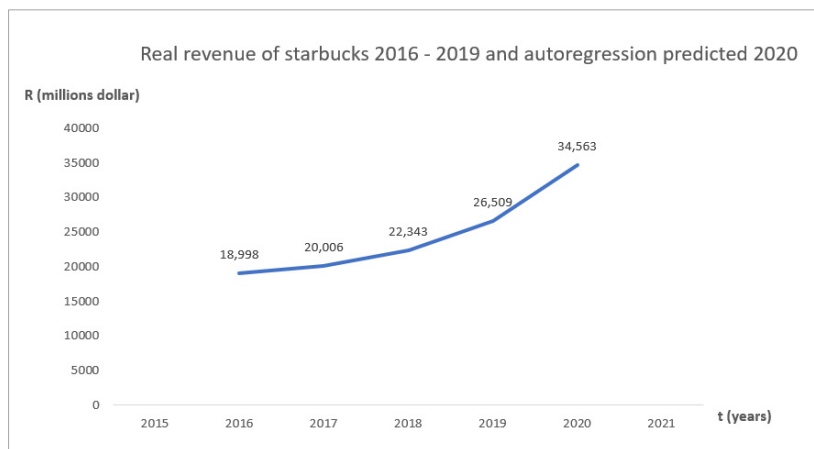


Figure 2 Revenue of Starbucks from 2016 to 2019 and predicted revenue by autoregression for 2020

As can be seen from figures 1 and 2, the actual sales in 2020 are about 32% lower than the sales predicted by Linear Autoregression. This is mainly due to the lack of customers caused by people's fear of coronavirus and strict pandemic policies (such as blockade). However,

Starbucks has also taken some measures to mitigate the negative impact. For example, the company allocates employees between different stores to deal with the temporary store closure required by the government. It formulates strict cleaning and vaccination instructions for

employees to ensure customers' health. In addition, the world is becoming more and more experienced in the treatment of coronavirus diseases in 2019, and a considerable number of governments have relaxed their anti pandemic policies. In this case, this study estimates that the negative impact of the pandemic will be smaller and smaller over time. Based on these preconditions, this paper establishes this model to predict future revenue:

$$R = R' * [1 - 32\% / (t + 1)] \tag{1}$$

In the above, R' refers to the figure of revenue generated by autoregression of previous data while t refers to the time from 2020 to the chosen year. Figure 3 shows the trend of how the company's revenue may grow under this model.

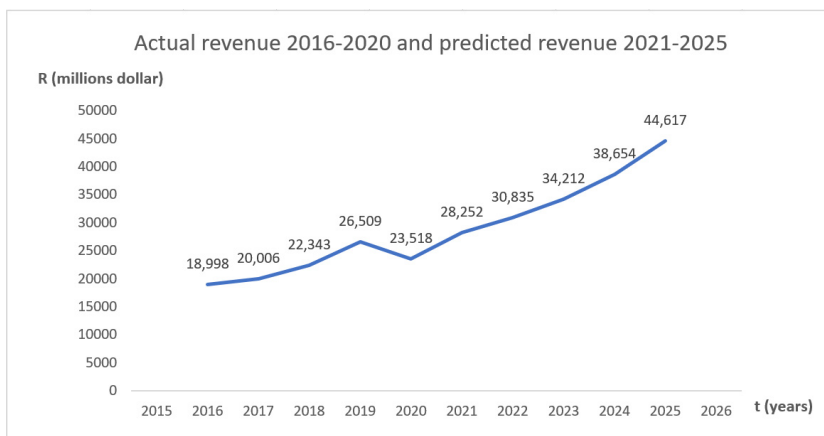


Figure 3 Actual revenue of Starbucks from 2016 to 2020 and predicted revenue from 2021 to 2025

2.3 Introducing the loss aversion theory in catering and service industry

2.3.1. The definition of loss aversion

First identified by Tversky and Kahneman in 1979 [3], classical loss aversion is encapsulated in the expression "losses loom larger than gains". People believe that the pain of loss is twice as psychological as that of happiness. Kahneman did the famous mug experiment in 1991 [4]. The participants were divided into two groups. One group had a mug are identified as sellers, while the other group of buyers had the currency that could be used to buy the mug in Seller's hands [9-10]. After the essential value of the mug is determined, Kahneman found that the price that sellers are willing to sell the mug is generally higher than the price that buyers are willing to buy the mug. Scholars attribute this difference to the feeling of loss that sellers experience when selling their own items, which makes them raise the selling price to compensate for the unpleasant experience. After observing this phenomenon, many economists have studied the existing but unclassified corporate strategies related to loss aversion in the market, and have used loss aversion related theories to deduce models to solve practical problems in different periods.

2.3.2. Existing strategy

According to Starbucks' strategy in the post epidemic era, the renewal of Star gift card rules is an attempt different from the universal strategy. Generally speaking, catering businesses in an epidemic situation usually

adopt changes in line with the epidemic prevention and control policies, such as controlling social distance and regularly disinfecting equipment. However, the survival problems faced by the catering industry should be solved from the perspective of stimulating consumption. The introduction of the new Star gift card and membership rules takes advantage of people's loss aversion to a great extent. Before the reform, Starbucks' membership system was to accumulate one point for consumption of 50 yuan and become a Gold Star member after accumulating 25 points. After the reform, the threshold of Golden Star members has been reduced to 16 points, and payment using the cooperation platform can accelerate the integration process. Such a rule change makes it easier for consumers to obtain membership to have a certain sense of belonging to Starbucks. Therefore, more consumers will continue to consume to reach the specified consumption limit to retain their membership.

Similarly, as a coupon collection card, implementing the new rules on the Star gift card cancels two free coffee coupons and replaces them with three buy one gets one free coupon. Such a rule change may not feel a huge difference for consumers who often buy Starbucks, but in fact, businesses directly cancel the existence of a zero-threshold discount and replace it with three times compulsory consumption. These new coupons increase the risk of remaining coupons with consumption threshold, and consumers will spend extra money due to the unwillingness to waste the coupons they already have (which is also contain sunk cost illusion). These existing measures are the solutions to the current situation that Starbucks seeks based on the principle of loss aversion.

At the same time, most companies in this industry have also implemented similar solutions. However, according to the current Starbucks annual report data, the consumption growth brought by these measures is not enough to completely offset the previous decline in consumption. Due to this situation, it is urgent to find new solutions.

2.4 Past research results related to the industry

Existing research results show that loss aversion theory is highly related with the strategy taken by the catering and service industry. Nicolau in his paper claimed that goods endowed with high cultural attributes can weaken customers' loss aversion [5]. In his research, people's expectation of enjoying the cultural attributes of a tourism destination and a more conscious attitude towards the restoration of cultural sites will make them less concerned about the price difference when choosing a destination, thus reflecting a lower loss aversion. Similarly, Hobart pointed out in a 2007 study that businesses can also take advantage of people's loss aversion to make higher profits by changing the service and quality represented by the price of a commodity. In short, if a service with a quality of 5 can be bought for \$5 and a service with a quality of 10 can be bought for \$6, most consumers will choose to spend \$6 to buy the service, because it is obvious that the loss of service is much greater than the price gap. Taking advantage of this mentality, businesses set the service with quality of 5 at \$5, which is a very low cost-effective price, so as to pretend that the mediocre \$6 service is very good and cheap, finally stimulating consumers' consumption. In addition to these two aspects, the new service direction has also become a new way to stimulate consumption combined with loss aversion. Different from the previous shop assistants, in a society where the service industry is becoming more and more important, some businesses have begun to pay attention to their service transformation. Compared with the traditional waiter, the new service focuses on shaping the atmosphere and skillfully uses the loss aversion of customers to make customers rely on the business. Once a strong connection occurs, customers will take the initiative to buy these products and services without more publicity and promotion. The specific measures for this will be described in the next chapter.

3. RESULTS AND DISCUSSION

Combined with previous research cases, it can be found that the principle of loss aversion in economics usually affects consumers' behavior from an unnoticed perspective to stimulate consumption. Combined with the current global epidemic situation, such a negative impact can better affect the emotional public without causing resentment. The particularity of such a period

also determines that applying the loss aversion principle is a better solution.

In the research of the previous chapter, three main loss aversion applications are shown: to increase the cultural attributes of products, clever pricing mechanisms, and the optimization of services and the environment. The following will explain three leading specific solutions combined with Starbucks' characteristics.

The first aspect that can be considered is to endow the products sold and even the whole store with unique cultural attributes. Starbucks launched the Rwanda coffee cup set when the epidemic broke out in early 2020. During the publicity, Starbucks emphasized Starbucks choice of coffee bean origin and its help to women's employment in origin. The packaging of the coffee cup set is printed with the story of Rwandan coffee women workers, which shows that Starbucks is not only a distributor of coffee and peripheral products but also helps the development of upstream and downstream enterprises and people, as well as paying attention to global environmental change. In the actual company operation, these actions belong to the CSR strategy of a company, but fully integrating the CSR strategy into the publicity can combine most consumers' perception of cultural value to reduce consumers' loss aversion and improve consumers' recognition of the value of the company's products. Such a change can make consumers have higher purchase intention at the same price because they convert the cultural value of the product into the value of the product itself to improve sales and profits.

In addition, similar measures can be taken to improve services and the environment. Some Starbucks staff have adopted a service mode different from the traditional service industry. Compared with the traditional staff in charge of cashiers and production after consumers put forward their needs, some Starbucks employees shifted their service focus to creating an atmosphere of meeting friends. Simply put, it is to remember some characteristics of regular consumers, use chat instead of mechanized service, and let consumers define the behavior of buying coffee as meeting familiar Starbucks partners in coffee shops. Such a friendly environmental atmosphere will enable consumers to add the feeling of meeting friends to the behavior of buying coffee to improve their estimation of the value of coffee itself, reduce loss aversion, and finally increase sales and profits.

Besides the above two aspects, the pricing mechanism commonly used in business behaviour is also a controllable factor. Due to the limitation of the epidemic, people's consumption frequency is reduced. Therefore, the same consumption as before in a single consumption is not enough to support the normal capital flow of businesses. Previous studies found that using the price difference between products of different specifications can guide consumers' consumption choice to a certain extent, so this can also be referred to by a

series of catering companies such as Starbucks. For example, if a merchant only sets a small cup of \$3 and a medium cup of \$4, consumers who do not need to drink much coffee may choose a small cup. However, if an additional \$8 large cup is added, the \$1 difference between the medium cup and the small cup and the \$4 difference between the large cup and the medium cup will form a sharp contrast. Under the condition that the actual coffee capacity gap is equal, more consumers will choose the medium cup that looks cost-effective. The loss aversion principle plays a significant role here because consumers will have the illusion that buying a \$4 medium cup reduces the loss under the same capacity gap. While buying a small cup does not have this feeling, more consumers will choose to buy a medium cup. Such a pricing mechanism can guide consumers to choose a more significant cup type to a certain extent to increase the purchase volume, and business can finally achieve the purpose of increasing sales and profits to maintain the regular operation of the company.

4. CONCLUSION

In general, this paper focuses on the current situation of the catering industry under the epidemic situation. Combined with the research on the principle of loss aversion in economics, this paper formulates a series of solutions focusing on solving the problems in a specific period. Based on the previous research results, this paper selects specific directions that can be applied to the current situation and tries to optimize the solution into a more applicable version. At the same time, the difficulties that may be encountered in the practical application process are also predicted in the research process, which further improves the operability of the research results of this paper. Different situations may also occur in future development. Therefore, this study is a product that has the possibility of further follow-up and improvement in the future.

This paper also exists some limitations. The above three points are the measures that catering businesses can take based on loss aversion. Theoretically, these measures can achieve good results, but unknown difficulties may be encountered in practical application. For example, when implementing the second solution to improve service and atmosphere, it may be challenging to find a specific measurement standard to regulate employees' specific services, such as what kind of dialogue can reach the standard of "cordiality". At the same time, ensuring that these solutions can be effectively implemented in each store is also a debatable problem. Generally speaking, using consumers' loss aversion psychology is indeed a practical solution, but at the same time, it also needs the synchronous guarantee of management and other measures to achieve the best effect.

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