

The use of Hunger Marketing in Economy—Based on Apple and Xiaomi

Hanyin Zhang *

New Hampton School, New Hampton, 03256, USA

* Corresponding Author Email: dwoods73248@student.napavalley.edu

Abstract. As the market economy gets increasingly competitive, companies have investigated a range of marketing tactics. Among these, hunger marketing is a very effective strategy used by many businesses, including Apple. In order to enhance sales, many sellers have begun to follow suit. Simple limitations on the quantity of items sold, however, are not always effective. This paper lists the different types of hunger marketing and psychological elements that contribute to the effectiveness of it. The article also analyzes the similarities and differences in the use of hunger marketing between two cell phone companies--Apple and Xiaomi. It is discovered that both businesses use pre-order systems and reduced their stock to give customers a stronger sense of urgency. However, Apple and Xiaomi are positioned differently when viewed by customers. Apple is a high-end product, and although it is priced high, the company's outstanding brand image allows it to successfully utilize hunger marketing to boost sales. Xiaomi, on the other hand, promotes cost-effective pricing. When using hunger marketing, in addition to limiting the amount of time and products available, Xiaomi also provides discounts and reduce its pricing. This has also made it possible for Xiaomi to effectively harness the power of hunger marketing to boost both sales and customer loyalty. However, due to a weak brand image and a lower position in the market, Xiaomi's use of hunger marketing is not strongly effective as it is for Apple recent years.

Keywords: Hunger Marketing, Buying behavior, Apple, Xiaomi

1. Introduction

How to satisfy consumer demand has emerged as the most crucial strategy among the numerous competing businesses nowadays. Limited-edition products have become increasingly common in recent years since standard products no longer satisfy consumers' urge to purchase. This is because any advertising that mentions limited-time sales, limited-edition goods, or anything with the term "limited" in them typically catches the attention of customers. Customers will feel urgent when a product's availability is restricted [1]. This strategy is called Hunger Marketing. Hunger marketing happens everywhere in people's lives. For example, when people go to supermarkets, there are often words like "Today only" attached to the price of some fruits; when people visit a bookstore, they were told that today's maximum passenger volume has been reached so they need to reserve a visit for next time. These are all techniques of Hunger Marketing.

In this paper, a qualitative analysis called documentary analysis is mainly used. This paper first analyzed contributing psychological factors and motivations that led to the success of Hunger Marketing. Then, the article focuses on investigating the two most representative smartphone companies that used Hunger Marketing—Apple and Xiaomi. After comparing selling techniques of Apple and Xiaomi, the strengths and weaknesses of both companies when using hunger marketing are indicated. The results actively demonstrated that there are similarities and differences between Apple and Xiaomi in the use of Hunger Marketing. It reflected that using hunger marketing wisely according to the company's strengths and weaknesses can be beneficial to the company. Therefore, businesses should apply methods to adjust their own need, not just simply imitating other's way of hunger marketing.

2. Literature Analysis

2.1. Related Studies of Hunger (Scarcity) Marketing

“Hunger marketing” strategy focuses on taking advantage of consumers' feelings. When products are presented to customers at an enticing price and a limited quantity, they are more likely to make a purchase [2].

2.1.1. Stock-limited Hunger Marketing Introduction and Application

The most representative method of hunger marketing is limiting stock. It is among the factors with the greatest direct impact on consumers' buying behavior. When businesses start to inadequately stock their products, customers will believe that the product is popular and well-liked because it is difficult for them to buy it.

An experiment done by Stephen Worchel can explain the stock-limited marketing strategy used by businesses today. In the experiment, participants were given the same type(quality) of cookies, but in different amount. There were some who have received a jar full of ten cookies while others received a jar of only two. Others were handed with ten cookies at first, and then later were lowered to two cookies. Then, the researchers asked the participants to assess the quality of cookies in a jar. According to the findings, those who have had their cookies allocation reduced from 10 to 2 gave the highest evaluation, followed by those who had two cookies and those who had ten cookies [3]. This result has demonstrated that subconsciously, people value things with less quantity, particularly those that have recently become harder to access.

Stock-limited hunger marketing also applies in purchasing luxury items. People in search for limited products are frequently attempting to reach a higher position or differentiate themselves in order to satisfy their demand for uniqueness, so they are especially vulnerable to terms like "limited edition" or "rare". Sometimes, luxury brands purposefully limit their product availability. People buy these rare items to boost their social position, alleviate their feelings of impotence, and induce jealousy among peers.

2.1.2. Time-limited Hunger Marketing Introduction and Application

The most typical hunger marketing approach is limiting the time. The time limit is particularly significant because it is one of the primary motivations for consumers. When customers see tags like “Ends in time” or “Today’s special value”, their interests were stimulated and it has raised their desire to purchase. This technique works effectively, according to Bonnie Riggs, a researcher in the restaurant sector with the NPD Group in Chicago, because research showed that people have been willing to spend more for specialty offerings, because it's the seasonal exclusivity that makes such products memorable and valuable.

Additionally, many companies combine special discounts in the limited time period, which makes hunger marketing more powerful. This is because numerous studies have been suggested that people have experienced strong emotional reactions and are readily impressed by price reductions. During this time period, consumers have frequently purchase items based on the low price rather than a practical need. It is because taking advantage of a deadline-based deal generates a sense of "smart shoppers" among purchasers. The aim of this method is that they tend to spend more money than they anticipate [1]. Black Friday is an excellent example. Along with the abundance of discounts available on Black Friday, the transient nature of these offers forces customers to act quickly. Purchasing a discounted product seems like "winning" a bargain, which means that it delivers both practical and emotional fulfillment. This time-limited discount leads to hunger marketing and effectively raise sales of businesses [4].

2.2. Related Studies of Buying Behavior

The phrase "buying behavior" describes a wide variety of behaviors consumers do while they acquire products or services to satisfy their own needs. It has included the actions individuals take to discover, choose, purchase, utilize, and evaluate goods and service. Consumer purchasing habits have

had a considerable impact on sales in today's customer-based environment. Buyers frequently obtain comments of other consumers, including product experts, close friends, or online users, before making a purchase. It has made it simpler for customers to find product reviews [1]. Because people have been more inclined to buy things familiar to them because they approach such products with greater guarantee. As research suggested, there are numerous elements that have affected consumers' purchasing decisions, including lifestyle, brand perception, and shopping experiences [5]. Additionally, environmental, psychological and personal factors have all been influencing to decisions of customers.

2.3. Related Studies of Brand Image

The brand image is characterized as the consumer's perceptions of a product or service represented by brand associations, and it is also linked to consumer buying behavior. Therefore, the brand image represents a company. As statistics show, consumers' appraisal, choice, and willingness to buy products from a particular brand are influenced by their perceptions of that brand or its image. The brand image is also a crucial component of business marketing. Other than providing background about the items, the brand image can enhance how consumers appreciate product differentiation, boosting the competitiveness of the brand's products. As a result, maintaining a positive brand image is a crucial concern for companies. If the quality is poor and negatively affects the brand image, a company will suffer more losses. A nice brand image ensures that customers may buy particular things without worrying [5].

2.4. Literature Analysis

The literature mentioned above are all essential concepts closely related to the topic of hunger marketing. For example, consumer buying behavior is affected by the brand image a company has, and will indirectly contribute to the level of successfulness of hunger marketing strategy. Understanding these relations helps companies to better organize and operate hunger marketing. However, these terms are vague when discussed alone. In this paper, Apple and Xiaomi's use of hunger marketing are analyzed with the inclusion of these terms to better explain and interpret this relationship.

3. Motivations for Hunger Marketing

3.1. Scarcity Principle

The scarcity principle in social psychology demonstrates that people likely corresponds a greater value to things that are regarded as uncommon, while giving common or abundant things a lower value. In order to promote and sell goods and services, marketers frequently make use of this principle. Even when there are no evident differences between the quality of the scarce and common products, people are more likely to purchase the rarer goods because accessing to something that is unavailable to others can enhance consumers' sense of superiority [1].

The Cabbage Patch dolls in November 1983 illustrates the scarcity principle. When it first came to the market, these dolls were extremely scarce but it has a high demand. This resulted in mass number of riots breaking out in stores, and parents were willing to travel great distances to purchase them. According to one mother, she was contacting her cousins in other states to see their availability to the doll. At the same time, the dolls were selling for \$50 in Clifton, New Jersey, considerably over the original price of \$21, and there was no shortage of purchasers. There are various other kinds of dolls to choose, but these consumers still insisted purchasing the "Cabbage Patch dolls" due to its limited value. These consumers' buying behavior actively shows the influence of the "Scarcity Principle".

3.2. The Effect of “FOMO”

FOMO (Fear of Missing Out) refers to the dread of losing anything in marketing. Marketers often utilize their fear to create pressure and anxiety into making a purchase before a product sells out or a promotion expires. When customers detect that a product is running low in supply, they are more likely to make a purchase to guarantee that they acquire the goods before it is gone. By highlighting the limited nature of a promotion or making it available only to a select group, brands can create this sense of exclusivity and drive sales. Normally, people don't want to lose out on a good deal, and the fear of regret may be a powerful motivation. Customers are more inclined to purchase a product if they believe they are part of an exclusive group with access to the final few opportunities to purchase the good. As research shows, 68% of millennials say they've bought at least one thing to avoid feeling excluded. The Hunger Marketing strategy is successful because companies take good use of the fact that buyers are afraid of missing out on any valuable trade.

3.3. The Impact of the “Utility Theory”

According to Western economic theory, utility measures the fulfillment of requirements that products offer to individuals, and items that bring utility to people lead to increasing demand for such products. Economists use it to describe how rational consumers distribute their limited resources to the things that provide them with the greatest fulfillment. Thus, utility is the experience of satisfaction that consumers gain from purchasing, and it is an entirely subjective psychological judgment. When there is an abundance of resources or things, even if they provide utility to people, their value provided is limited, such as air in this circumstance. Yet when a resource or item has a limited supply, consumers must pay a higher price to acquire higher utility, therefore these resources or things will increase in value.

As most scholars expressed, Western economics' "utility theory" provides the theoretical framework for the practice of "hunger marketing". When utility is measured considerably low among buyers, manufacturers will adjust the supply and demand of goods based on consumers' expectations of utility. When the product meets the high utility measure among buyers, the manufacturer will then increase the price of goods to gain more profit [1]. As a result, this feeling of satisfaction is increased when a particular good satisfies the relevant needs of consumers at a particular situation, and the value of that commodity becomes a target for consumers to seek in the future. This matches the feeling of customers who experienced “Hunger Marketing” due to their high satisfaction because of the products’ sense of uniqueness. This also indirectly creates the basis for “Hunger Marketing”, where people compete to buy things that are low in supply but high in price.

4. Analysis of Hunger Marketing Used in Apple

4.1. Introduction to Apple

Apple is an American corporation founded in 1976 by Steve Jobs, Steve Wozniak, and Ronald Wayne that manufactures and distributes computer hardware, software, and portable devices on a worldwide basis. Apple's financial performance has witnessed ups and downs during the course of its more than 40-year history [6]. As society develops, the demand for smartphones nowadays has explosively increased. In recent years, Apple is one of the top leading brands of smartphones in the world. People are so enthused about Apple's products because it has such a strong brand value and image [5]. The iPhones, for example, contribute to a huge part of Apple’s revenue, as Figure 1 shows below.

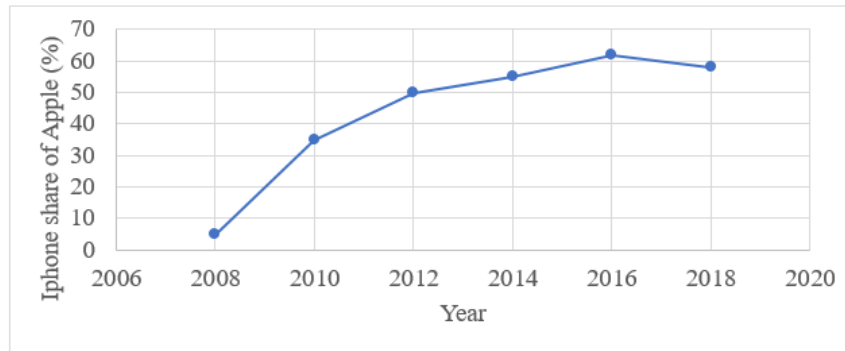


Fig 1. Apple's iPhone revenue as a percentage of total revenue from 2008 to 2018.

4.2. History and Characteristics of Apple's Use of Hunger Marketing

Apple stands out among many brands as an example of Hunger Marketing, which aided Apple's iPhone's sales popularity and took it to another level. (1) Apple heightened consumer expectations by revealing incomplete product details and permitting pre-orders [5].

Take the hunger marketing of iPhone 4 for example. When producing the new iPhone 4, Apple avoids disclosing any details and just announced to the market the arrival of a new generation of iPhones. Following that, there wasn't much information available about the iPhone 4 for a while, and when customers were desperate for product information across all channels, Apple's developers proudly announced the release introduction of the iPhone 4. (2) After that, its commercials spread over the world, and customers in this era were hung up on their appetites and felt compelled to make fervent purchases. (3) However, ever since the product's release, regardless of how strong the market demand for it may have been, Apple has insisted on entering into an exclusive cooperation agreement with the operator in order to update the product before the market occasionally, allowing customers to wait while it is out of stock.

People have the impression that the commodity is valuable because it is scarcity and thus motivate their purchase. This led to a steady rise in orders, online discussions, and media attention [5].

4.3. Strengths and Weaknesses of Apple in the Use of Hunger Marketing

When using the hunger marketing strategy, Apple has strengths that makes it more effective. (1) With a \$408 billion brand value, Apple was ranked top by Interbrand for the ninth consecutive year, demonstrating its excellent brand image [7]. If a brand with no influence goes to limit production and raise prices, it is not only impractical, but also will lose the original market share it may have. Apple can benefit well from hunger marketing due to its powerful brand influence. (2) It also has the unique IOS system, make it an advantage when competing with other companies.

However, the company also has weaknesses that impact its usage of hunger marketing. (1) Apple products can be viewed as a luxury items due to their high prices. This suggests that low-income individuals find it difficult to buy Apple products. Due to this, only people with middle- or high-income levels may become Apple clients [7]. (2) Additionally, People make decisions more carefully when purchasing more expensive items. This creates a weakness when applying the Hunger Marketing strategy because it does not appeal to those who are not impulsive and do not make buying decisions without first accessing and evaluating their demands or alternatives.

4.4. Opportunities and Threats of Apple in the Use of Hunger Marketing

After the usage of hunger marketing strategy, Apple has found opportunities to increase its sales and consumers. (1) According to the CRIP, the use of the hungry marketing strategy resulted in an increase in iPhone loyal consumers of 10%, from 55% in 2012 to 65% in 2013. Apple's profits had also been increasing throughout this time [5]. This actively demonstrated that Hunger Marketing has helped Apple to increase its sales, resulting in increased brand value. (2) Scarcity marketing can also build a cult following. Because Apple's hunger marketing provides customers the sense uniqueness

and scarcity, and because of its high price and quality, it is positioned as a luxury product. People think that all the "cool kids" have Apple, and in order to satisfy their vanity, they start to purchase Apple products.

However, employing Hunger Marketing for Apple also has threats. (1) When the cost of these "rare" products does not meet customer expectations after such a long lead time, Apple occasionally loses customers. For instance, after extensive advertising, Apple debuted the iPhone 5S and iPhone 5C in 2013. Many individuals at the time believed that the iPhone 5C could be categorized for a smartphone of civilian-grade usage. However, the price wasn't as low as hoped for at the time of release, and criticism increased significantly. Yet, the research conducted by CIRP on American consumers found that the iPhone 5S took up 64% of the entire sales volume while the iPhone 5C only accounted for 27%. This demonstrates that the iPhone 5C's sales performance fell short of expectations.

The reason of this phenomenon is that after the long use of hunger marketing on the iPhone series, customers have learned to wait until the sales volume of a new product becomes steady before purchasing, or buy other products in the meanwhile rather than pre-ordering things that are not yet on the market. As a result, Apple's buyers have decreased in that season, and Hunger Marketing has not been successful in bringing in as much money as anticipated. (2) If this continuously occurs, rival companies might utilize Apple's pre-order lead time to increase their market share and consumer satisfaction [5].

5. Analysis of Hunger Marketing Used in Xiaomi

5.1. Introduction to Xiaomi

Xiaomi was established in Beijing in 2010 and produces electronics, including smartphones. The company's founder father, Lei Jun, was 40 years old at the time and is now a multibillionaire. Xiaomi is also the world's fourth-largest Smartphone manufacturer in 2019 [8]. As statistics shown in Graph 2 below, Xiaomi's annual revenue has been constantly increasing from 2015 to 2018, suggesting its progress to a stronger brand.

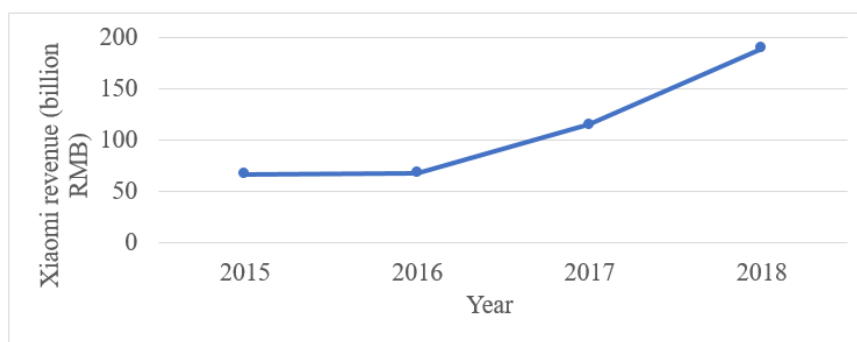


Fig 2. Xiaomi full year revenue (billion RMB) from 2015 to 2018.

5.2. History and Characteristics of Xiaomi's Use of Hunger Marketing

Xiaomi has also adapted Apple's hunger marketing strategy in order to increase sales. In fact, Xiaomi did bring its sales to a record-breaking level of selling 200,000 mobile phones in just 2 minutes and 26 seconds. (1) It holds the supply below the level of demand, causing a fake scarcity [5]. This benefits the business since many buyers participate in its flash discounts, which often last only a few seconds [9].

(2) When buying Xiaomi products, online pre-orders are requested, and a limited number of items are provided. (3) Those who have already placed their orders successfully will talk about the specifics and spread the word even more, which will encourage additional people to "rob" their stuff online. It's not only because the Xiaomi devices are truly good, but also that consumers can brag about their "smart choices" even when the phone doesn't completely satisfy them when they finally receive their

purchases and provide comments to others. This help spread the social awareness and encourages a high level of buyer loyalty.

5.3. Strengths and Weaknesses of Xiaomi in the Use of Hunger Marketing

Xiaomi's high cost-effectiveness is one of its biggest strengths. Compared with other smartphone brands, Mi hasn't invested much in advertising, making its smartphones 50% to 60% less expensive than those of other brands [5]. Because of its achievable pricing, Xiaomi is able to attract more customers in developed countries.

However, there are also weaknesses that Xiaomi needs to improve in order to reach a higher level in the market. (1) For instance, the view of Xiaomi's brand image is not very favorable. Customers from all over the world tend to view it more as a cheap alternative than as a leader in terms of performance and build quality. The brand only invests a small amount in advertisement, which keeps its popularity at a low level [8]. (2) Additionally, Xiaomi finds it difficult to maintain low costs because low-volume manufacturing lacks economies of scale. (3) Although its "high-profile and low-cost" motto may quickly get customer recognition, it may generate some unfavorable consequences if it falls short of its customers' expectations [5].

5.4. Opportunities and Threats of Xiaomi in the Use of Hunger Marketing

(1) Utilizing hunger marketing strategy has helped Xiaomi to reach its targeted sales faster. When celebrating their fifth birthday, Xiaomi sold a record-breaking 2.11 million phones in a single day during an online shopping sale. What's more, no Western corporation, including Apple, had ever accomplished this feat before [5]. This shows that Xiaomi has the potential to reach a higher level and sell in more places. What's more is that the limited amount creates exclusivity and encourage consumers to identify as "smart buyers". (2) This also provides opportunities to boost profits and increase buyer's loyalty.

Xiaomi has recently experienced some threats attributed to its use of hunger marketing as well.

(1) According to Bin Zhao, he discovered that he needed to make a reservation at a limited time frame which is only offered once a week in order to be eligible to purchase Xiaomi products. Zhao then made the decision not to purchase Xiaomi in order to save time and effort. Xiaomi pledged to offer the most cost-effective smartphone, but its hunger marketing plan unintentionally exposed a critical flaw. Money and time are two of the most valuable resources in life for the majority of people. The actual cost of the phone increases constantly for each hour a customer spends on purchasing it; the extent of this increase is determined by the time expenses of the various customers.

(2) Since microblogging is one of the major factors in Xiaomi's success, its audiences are primarily Internet users. Therefore, negative remarks about Xiaomi can also spread swiftly online, leading to an increase in criticism and a decrease in positive discussions about them, resulting in a decrease of sales [5].

5.5. Compare and Contrast of Hunger Marketing Used by Apple and Xiaomi

Both Apple and Xiaomi have successfully increased their sales and customers loyalty after the use of Hunger Marketing strategy. As shown in Table 1 below, they used similar methods, such as limiting the time, creating pre-ordering systems, and decreasing the supply of products. Both of them avoid providing specific information of their new products before selling. In addition, they both create the sense of uniqueness on their customers and depend on this to spread social awareness to benefit their popularity [5].

Comparing Xiaomi's use of Hunger Marketing to Apple's, there are also significant differences. Along with the customary strategy of limiting supply, Xiaomi also combines it with the attractiveness of low prices, as their phones are frequently offered for half the cost as much as the newest iPhone. Yet Apple remains a "luxury" brand in smartphone devices, expanding the sense of exclusiveness. Additionally, even after the release date, Xiaomi refuses to advertise significantly, while Apple concentrates on advertising its new products [5]. Apple has positioned its products at a higher degree

of demand because of its outstanding brand recognition. The IOS and A series chips in Apple's smartphone set it apart from other cell phone manufacturers. Because of this, the fluidity and experience of Apple's cell phones are improved and well above other manufacturers, allowing it to attract more customers and more successfully employ hunger marketing strategies. Table 1 also reflected that Xiaomi's brand loyalty and popularity are not as strong as Apple's, and the company rushed to implement hunger marketing in the medium and low-end markets, which made it simple for customers to leave [10].

Table 1. SWOT analysis of Apple and Xiaomi on the use of Hunger Marketing.

Companies Categories	Apple	Xiaomi
Strengths	<ul style="list-style-type: none"> ⑩ One of the top leading brands of smartphones in the world ⑩ Strong brand image ⑩ Unique IOS and A series chips 	<ul style="list-style-type: none"> ⑩ Product 50% to 60% less expensive than competitors, cost-effective
Weaknesses	<ul style="list-style-type: none"> ⑩ High cost ⑩ Less impulsive buyers 	<ul style="list-style-type: none"> ⑩ Lower brand popularity ⑩ Weak brand image ⑩ Lacks economies of scale ⑩ Fewer advertisement
Opportunities	<ul style="list-style-type: none"> ⑩ Boost profits and increase buyer loyalty ⑩ Increase popularity due to the abundance of advertisement ⑩ Long pre-order time creates opportunities for rivals 	<ul style="list-style-type: none"> ⑩ Boost profits and increase buyer loyalty ⑩ Increase brand image ⑩ Create discussions of the brand
Threats	<ul style="list-style-type: none"> ⑩ Price doesn't match with expectations ⑩ Long-used and costumers find solutions to deal with this strategy 	<ul style="list-style-type: none"> ⑩ Limited reservation and long buying period ⑩ Decreasing cost-effectiveness since consumers take a lot of time purchasing ⑩ Negative remarks spread swiftly online

6. Conclusion

When using the Hunger Marketing, it is important to first understand their audiences' demand and possibilities that exist due to the company's advantages. Apple products' hunger marketing strategy has indicated that it has a great enhancing effect on revenue and customer loyalty. This is because brand is a crucial factor when using hunger marketing, and Apple has a strong brand image, always positioning as "luxury high-end products" among smartphones. It attracted costumers that enjoyed the sense of exclusiveness, successfully increasing sales using this method. Compared to Apple, Xiaomi has a lower positioning among smartphone brands. Therefore, when Xiaomi used hunger marketing strategies, it also lowered the prices of its products to attract customers who value cost-effectiveness products. However, because of its weaker brand image and less popularity, hunger marketing wasn't as successful as it was for Apple, as Xiaomi's sales recently was less affected by hunger marketing. Therefore, in order to avoid the gap between market expectation and outcomes, manufacturers must first undertake a market segmentation, targeting, and analysis of their own client base, and adjust the use of hunger marketing according to their own brand strengths and weaknesses.

References

[1] Lo C L. Perceived Impacts of Hunger Marketing on Buying Behaviors: A Survey Study of Online Shoppers [J]. 2021.

[2] TIAN S, Chen D. "Hunger Marketing" Strategy and Its Application Research—Based on Apple Products [J]. DEStech Transactions on Economics, Business and Management, 2016.

[3] Worchel S, Lee J, Adewole A. Effects of supply and demand on ratings of object value [J]. Journal of personality and social psychology, 1975, 32(5): 906.

- [4] Mishra A, Mishra H. We are what we consume: The influence of food consumption on impulsive choice [J]. *Journal of Marketing Research*, 2010, 47(6): 1129-1137.
- [5] Chen Y, Kuo C J, Jhan Y C, et al. Hunger marketing on smartphone[C]//*Proceedings of PICMET'14 Conference: Portland International Center for Management of Engineering and Technology; Infrastructure and Service Integration*. IEEE, 2014: 1950-1957.
- [6] Mallin M L, Finkle T A. Apple Inc.: product portfolio analysis [J]. *Journal of the International Academy for Case Studies*, 2011, 17(7): 63.
- [7] Khan U A, Alam M N, Alam S. A critical analysis of internal and external environment of Apple Inc [J]. *International Journal of Economics, Commerce and Management*, 2015, 3(6): 955-961.
- [8] Sun L, Fah C T. Xiaomi-transforming the competitive smartphone market to become a major player [J]. *Eurasian journal of social sciences*, 2020, 8(3): 96-110.
- [9] Tolety Rajendra. Hunger marketing, flash sale and cost optimization strategy of Xiaomi Inc. -setting a new trend through Etailing. *International Journal of Research in Finance and Marketing (IJRFM)* 2017, 7(5): 1-4.
- [10] Fang-Ying Lian. The Uniqueness of Apple's Hunger Marketing Strategy. *Journal of Business Innovation* 2022, 4(3): 1-13.