Analysis of Online Price Promotion Strategy Based on Consumer Psychology

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Keywords: Price promotion; Consumer psychology; Consumer purchase behavior.

Abstract. Price promotion is the main factor influencing consumers' decision. There are many forms of online price promotion, such as discounts, coupons, gifts, bundling sales, etc. Each price promotion method give consumer different psychological feelings, thus affecting consumers' purchase behavior. According to the previous studies, the paper proposes an equation firstly, analyzes these price promotion value from consumer psychology, then provides an effective price promotion strategy for online stores.

Introduction

Online shopping has become the mainstream in China. According to 100EC.cn, the number of online shopping in China was 516 million in the first half of 2017 and it will rise to 540 million at the end of 2017. With the increase of buyers, millions upon millions online sellers have been promoted, which brings fierce competition. Whether it is a holiday promotion or an incentive for consumers to buy products, price promotion is the most frequently used to cope with the competition and to boost sales. In the past, people used to use direct discounts as a price promotion, but the direct price reduction has many problems: the frequent use of price discount can lead consumers to doubt product quality, thereby reducing the value of the products and weaken the brand image. But now, more and more online stores are aware of these problems, they choose a variety of price promotion methods, such as coupons, gifts, full minus, bundled sales, etc, and the promotion is becoming more and more complex. Many consumers reflected the promotions are very complicated in Tmall double 11 in 2017.

The aim of this study is to analyze these promotions, then propose some price promotion strategies according to consumers psychology, so as to help online store select the effective price promotion methods.

Consumer Psychology Study

Several Kinds of Shopping Psychology

Bargain Mentality. Jobs said that consumers do not love to buy cheap goods, but prefer to take advantage of it. Seeking bargain price is the psychology of many customers. Who doesn't like products with high quality and inexpensive? Who doesn't want to spend the same money to gain more benefits?

Differentiation Psychology. We all hope that the seller would pay special attention to us and treat us differently from others. We hope to get a cheaper price and enjoy better services than others for the same goods.

Credit Psychology. This refers to that when consumers form trust to a brand or some certain product, they will be loyal to it. This kind of psychology will increase the number of consumer purchases.
Influencing Factors of Consumer Purchase Behavior

The process of consumers’ purchasing decision is complicated and it is influenced by many factors. Suppose all the other factors remain the same, this paper mainly considers the impact of price promotion on consumer purchase.

Let’s look back on the consumer’s buying process. First of all, consumers have a purchase demand and have certain expectations for products and services. Then they will search for information to see the preferential terms for the goods, form purchase intention, thus generate purchase behavior.so we can propose such a equation.

\[ PB = D \times PI \]

PB is purchase behavior level.
D is consumers’ demand degree. The degree of demand varies with the change of product price. Suppose that \( D = \frac{R}{A} \), R is the regular price of product, A is actual price the consumer paid for the product. When the price is half of the regular price, the demand degree doubles.

PI is purchase intention. On the base of former research achievement, purchase intention can be represented by consumer perceived value (PV) and perceived cost (PC). That is \( PI = \frac{PV}{PC} \), when \( PV > PC \), \( PI > 1 \), consumers will have the willingness to buy, or he will give up.

Consumer perceived value (PV) can be expressed by perceived value of commodity (CPV) and psychological premium value (PPV). That is \( PV = CPV + PPV \). Without considering other external factors, CPV is influenced by such factors as product brand, utility, regular price and service, while the consumer psychological premium value (PPV) is the extra advantage psychology for price promotion, which is represented by the gap between the regular price and the promotion price.

\[ CPV = \text{brand} \times \text{utility} \times \text{price} \times \text{service} = \text{regular price} \]

\[ PPV = \text{regular price} - \text{promotion price} \]

Consumer perceived cost (PC) include visible costs and invisible costs. The visible costs is the purchase price the consumer spends, while the invisible costs is the amount of time and energy consumers spend on promotional activities. For simplicity, this paper does not consider the invisible cost.

So, \( PC = \text{promotion price} \).

Analysis of Online Promotion Strategy

Online Promotion Strategy Types

Zhou Mingyuan (2006) divided online promotion strategy into three types when studying the network promotion. One is that consumers can save money directly from sales promotion, such as discounts, coupons, full reduction, gifts, flash sale, seckill, bundle sales, etc. The second is that consumers can’t directly obtain money saving on the promotion, it promotes through permanent warranty or service guarantee. The third is the other promotions, such as group purchase, membership points deduction, payment by instalments. The paper is mainly discussed the first one which is the most commonly used on online store promotion.

Evaluation of the Promotional Strategies Value

There are many kinds of promotional forms online, the paper only compares the promotion strategies with the same favorable conditions. Let's take the 100 minus 50 as an example.

Discounts. Discount is a direct reduction on the basis of the regular price. Let’s analyze the promotional value of discount.

Suppose that we know this brand, we shall have a certain understanding of the product utility, regular price and its services. Provided that the product regular price is 100, the promotion is 50% discount. So the actual paid price is 50. \( PC = 50 \), \( D = \frac{\text{regular price}}{\text{paid price}} = 2 \). the psychological premium value (PPV) is the promotion price is 50. CPV = regular price = 100.

\[ PV = 100 + 50 = 150 \]

\[ PI = \frac{PV}{PC} = \frac{150}{50} = 3 \]

\[ PI = D \times PV = 2 \times 3 = 6 \]
However, most of the time we don’t know the brand and the quality of the product. Direct discounts can weaken the brand image and make consumer doubt the utility of the product. It makes people feel that the product is only worth the sale price. There is no psychological premium, and the product value is the promotion price. That is \( CPV=50, PPV=0, PC=50, PI=50/50=1, D=1, PB=1 \). That means consumer would not willing to buy because of discount promotion if they don’t know the brand. However, discounts are useful for those who are familiar with the brand.

**Coupons.** There are many forms of coupons. In general, consumers get the tickets first and can reduce actual payment by using coupons when they reach a certain amount of money. From consumer psychology, coupons will not change the regular price, debase product value and affect the brand image. Suppose that we have a 100 minus 50 coupon. In normal conditions, Online stores don’t charge 100 directly for the product. Provided the product worth 109, \( PC=109-50=59, PPV=50, CPV=109, PV=109+50=159, PI=PV/PC=2.7, D=109/59=1.8, PB=D*PI=4.86 \).

So under the same favorable terms, coupons is more useful than discount promotion for those consumers who buy the product for the first time or who are unfamiliar with the brand.

**Gifts.** This promotion strategy is by giving away gifts while the product price remains the same. Sending gifts promotion won’t change the brand image, decrease product utility and the service. But the purchase quantity doubled. So the total value is increasing. Suppose the gift worth 50, the product worth 100.

\[
CPV= 100+50=150, PPV=50, PC= 100, PV=150+50=200, PI=PV/PC=200/100=2, D=100/100=1, PB=D*PI=1*2=2.
\]

This kind of promotion is applicable to the product when the price, service, utility, brand image of the goods are reached to the standard level of the industry.

**Bundle Sales.** This promotion is bundling one item with another. Consumers can get the price preference when they buy the set, or they have to pay the regular price if they buy just one. Normally, the two goods won't be just 100. Suppose that this two items worth 59 each. It can be reduced by 50 if buy together. This kind of promotion will bring two kinds of consumer psychology: one is that they don’t need one of them, so the psychological premium value (PPV) is 0, the other is they need both, the PPV=50.

The no one: \( PV=59+59=118, PC=118-50=68, PI=1.7, D=59/68=0.87, PB=1.48 \).

The yes one: \( PV=59+59+50=168, PC=68, PI=2.47, D=118/68=1.7, PB=4.2 \).

We might learn from it that this method of promotion applies to complementary goods.

**Buy One Get One Free.** Consumer buy a product at the regular price and get another goods that is worth as much as the paid one. Suppose that this two items worth 100 each. This also brings two kinds of consumer psychology: one is that they don’t need two, so the PPV=0, the other is they need both, PPV=50.

The no one: \( PV=100+100=200, PC=100, PI=2, D=100/100=1, PB=2 \).

The yes one: \( PV=100+100+50=250, PC=100, PI=2.5, D=200/100=2, PB=5 \).

This promotion is suitable for abundant product range, which can provide consumers with a variety of options. We can also use the equation to analyze other promotions.

**Price Promotional Strategy Design**

Let’s review the equation, consumer purchase behavior \( PB=D*PI \). \( D \) is consumer demand, it is affected by the ratio of the regular price to the actual payment price. The higher the ratio, the stronger the demand. Consumer purchase intention \( PI = (CPV+PPV)/PC \). \( CPV \) is commodity perceived value, which is influenced by product brand, regular price, utility, service, etc. Simply, we use the regular price to express \( CPV \). \( PPV \) is consumer psychological premium value for promotion, such as more quantity at the same price, or lower prices for the same commodity. The paper use preferential degree represent PPV.
More Quantity While Low Price

Seeking for higher performance-price ratio is the rational consumer psychology. When online-store carry on the price promotion, it can increase the consumer's psychological premium by increasing the quantity. For example, two items for 50 is better than an item of 25. The former one makes consumer feel that each item worth 50. The second promotion makes consumer feel that the product is only worth 25, there is no psychological premium. Besides both 50 and 25 are low price, but the former one add quantity that make consumer feel psychological premium.

Similarly, if the product market price is maintained at a low level, the psychological premium can also be added by giving the gift.

Differential Pricing

Another way to increase consumer psychological premium is to make consumers feel differentiated pricing. That is consumer buy the same commodity at a lower price than others. So limited time sales promotions can be used sometimes. When the time passes, it should be at the regular price again. It can’t always be the same goods for limited time sales, or there is no psychological premium, but it can be used for different product.

It can also be priced differently on different consumers. Membership pricing is one of them. Online-store can also give preferential prices when consumers finishing some certain task, such as share the store link, invite friends to join you, etc. That is what we experienced in tmall double 11 in 2017.

Enhance the Brand Image

When consumers bought your products for the first time because of price promotions, he has a perception of your brand image: the regular price, commodity quality, and service. If he stills feels the psychological premium after using the product, he would continue concern your brand, otherwise he would pay no attention to. So no matter what price promotion used, enhance brand image is the most important. Let product value matches the regular price, that will make consumer feel psychological premium when you do promotions.

Conclusion

1. Don’t reduce product value when running promotions. It can’t improve consumer psychological premium by offering direct discounts for price promotions, especially when the consumer is unfamiliar with the brand. Direct price reduction will debase the value of the product itself. Price promotion should be carried out on the basis of not reducing the value of the product, such as coupons, more quantity and so forth.

2. Differential promotion. The increase in consumer psychological premium is to make consumers feel that they buy high value products at lower prices. Limited time sales promotions is not a bad way. You can also form price gap by letting consumer fulfil tasks. For those who pay higher price, it can be compensated by gifts and better services.

3. For frequent customers, they have a certain perception of your brand. The price reduction does not cut down the value of product. Occasional discounts can be used sometimes but not often. It is better to be that price promotion should provide convenience for consumers, such as marking sales price directly and putting the same price commodity in a region, which will make consumers feel that they have multiple choices with one price.

Acknowledgement

This paper is funded by Organizing Committee of Institutions of Higher Learning, the Teaching Design of the Innovative and Entrepreneurship Education—From the Perspective of Internet plus(2018GZH14206).
Reference


