Research on the Fundamental Principle of Network Group Buying Improving the Enterprises’ Benefits

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Abstract: Nowadays, network group buying is a new hot issue appearing in the process of consumers purchase. On the basis of analyzing the domestic and overseas scholars research on network group buying, this article Reviews the market mechanism of network group buying therefrom the Angle of the product demand and consumers, And further analyzes the fundamental principles how the network group buying to improve enterprises’ benefits from several aspects.

Keywords: network group buying; enterprises’ benefits; fundamental principles

1 Introduction

As a new consumption pattern crystallized by the information age, network group buying is a kind of behavior that the enterprises, public institutions or individuals combine with consumers who has the same purchase intention to order the commodities from suppliers through the Internet information exchange platform. In our country, Since some net friends bargain and buy goods collectively with the way of spontaneous joint in the beginning of 2002, with the double advantages of bringing practical interests to the consumer groups and providing the new business opportunities to the enterprises, this consumption patterns has received great favor by producers, consumers, and the third party network platform after decades of development.

2 Research statuses at home and abroad

The development of electronic commerce promotes the network group buying influence to expand constantly, and many experts and scholars at home and abroad have launched a research on it in succession. As early as in 1972, Webster and Wind began to study group buying from the Angle of political science. They also thought those individuals or groups who join a bulk have a common objective, make purchase decision and take the risks of making decision commonly. Robert J Kauffman and Bin Wang took the group on——Mobshop for example and analyzing the characteristics of several network marketing business model. Rugullies considered network group buying can reduce the operation cost of the small and medium-sized enterprises, and manufacturers can also use network group buying to reduce inventory. O’Brien J put forward the network group buying is a kind of cooperative business. Only with the quantity advantage can consumers obtain the discount of commodity prices and service.

Domestic researches on groupon mainly focus on the review of the group buying phenomenon and the surface application of it, but only a few theory discussions relatively. Wu Guoqing thought consumers’ purchasing behavior is the key to decide whether the enterprise products can be sold successfully or not. Li Zhenning and others considered network group buying still can’t become the mainstream of marketing model in retail enterprises because of the lack of humanized service ability and the contradiction between group buying and personalization. Zhao Yubo and others chose an important section——channeling goods problems in the process of group buying, then analyzed and put forward the solutions. Qu Peng and Han Shenglong made an empirical research on Peking University BBS, and carried on an analysis of college students’ network group buying activities. Based on TAM model and the perceived risk for consumers, through established the model of consumers participating group buying willingness, Zhang Ji and Lu Xijun reached a conclusion that perception usability, perception ease of use and perception risk of network group buying will affect consumers’ attitude to network shopping, even influence the participate willingness. Based on ant colony algorithm of the similar number and weight method, Zhao Peiqing put forward credit evaluation model of network group buying, and constructed the network credit evaluation index system of network group buying.

3 The existence mechanism of the network group buying market

3.1 Product demand in the traditional market are not met

If traditional market is the monopolistic competition market, the enterprises which products a certain production have different demand curve in the market. If an enterprise, such as A, has the demand curve \( P=a-bq \), as shown in figure 3-1.
When there is a market equilibrium point $E$, and the market price of A enterprise is $P_A$, the market can only meet product demand of $P_A = \frac{a}{b} - \frac{P_A}{b}$ consumers, in that time, there are still $\frac{P_A}{b}$ consumers who cannot get satisfied. Similarly, for B, C, D enterprises and so on, when its price is $P_B$, $P_C$, or $P_D$ and so on respectively, there are also $\frac{P_B}{b}$, $\frac{P_C}{b}$ or $\frac{P_D}{b}$ consumers and so on who cannot get satisfied. So, let there are n enterprise(s) who produce the this kind of products in the market totally, for the equilibrium price $\{P_A, P_B, P_C, \ldots\}$ of each enterprise in the market, there is $q_H = \min\{\frac{P_A}{b}, \frac{P_B}{b}, \frac{P_C}{b}, \ldots\}$ making that there is $q = nq_H$ consumers who cannot get satisfied at least.

### 3.2 Some consumers in the market cannot get satisfied

As is known to all, Enterprise's goal is to maximize profit, and the condition of profit maximization is the management standard which the enterprises must follow. This standard which combines the benefits with the costs analytically shows when the marginal benefit equals the marginal cost, that is to say, $MR = MC$, the profit of enterprise may achieve the maximization. This is because if $MR > MC$, it indicates that the additional profits will more than increasing costs when we add the sales of a unit product. Then for increasing profits, the enterprises will increase production up to $MR = MC$. If $MR < MC$, it indicates that the additional profits will less than increasing costs when we add the sales of a unit product. In other words, the decreasing profits will more than decreasing costs when we reduce the sales of a unit product. In this time the enterprises will decrease production up to $MR = MC$ for increasing profits. As shown in figure 3-2.

It is thus clear that when the marginal benefit equals the marginal cost, the enterprise neither increases nor reduces production. The state of production in this time is stable relatively, and $MR = MC$ is also known as the enterprise equilibrium condition.

### 4 The principle how the internet GROUP buying improve the production profits

#### 4.1 Internet group buying can expand the market share of the products and increase total profits

A. the market of group buying provides the consumer groups which cannot be get in the traditional market for manufacturers

Because of the Internet group buying, customers can get the low-price products, so the customers who participate in Internet group buying is very sensitive to price. From make an order to get the production, there are always a waiting time, this defect requires that customers should have strong price sensitivity, or they will choose
the more convenient way, such as go the mall for shopping. It can be concluded that this consumer groups should mostly belongs to the scope of \( q = nq_H \). If this product is on market at the normal price, these consumer groups who are very sensitive to price usually do not buy this product. From the above deduction we can know this price sensitive person can be made a distinction between the others in traditional market, in other words, they are two markets which do not overlaps each other.

B. the mechanism of Internet group buying can provide a discrimination environment which is proper for enterprise to operate market price

In the traditional market, enterprises always use price discrimination strategy to carry out marketing for different target groups. 

As a new battleground of marketing, the Internet has been concerned by more and more manufactures. But the marketing of product in the Internet always is blind because manufactures do not often make sure the taste of target consumption groups. We can basically determine an important feature of the consumers—-price sensitivity due to the emerging of Internet group buying. The most proving consumer sensitive to price is that they can take the waiting cost for getting low price product. So, manufacturers using the low price strategy in the Internet group buying can make the enterprise get profit successfully.

C. the Internet group buying can fulfill the purpose of profit growth at a low price

When a manufacturer joins the group buying, if the market of group buying only belongs to this manufacturer, it will be the monopolist of this group buying. In this time the manufacturer need to consider how to make the product price of group buying.

From the above analysis, we know there is price sensitivity in the consumption of the Internet group buying. Manufacturers have different demand curve between in traditional market and in the Internet group buying mode because of the high price elasticity.

4.2 Internet group buying can increase profits based on the manufacturer

A. the Internet group buying can make full use of the manufacturers’ idle capacity and reduce inventory

With good market segmentation ability, the Internet group buying can make manufacturers ensure that the prices and sales of traditional market remain stable. At the same time, they can use the price sensitivity to promote sales, and then ease temporary difficulties of manufacturer.

B. the channels open of traditional market need the help of group buying mode

When a new enterprise enters some industry, it often faces the resistance of developing channels. New enterprises need high fixed costs in this time, and the product has the trend of diminishing marginal cost. If products can enter the market quickly, it will help the enterprises to reduce average production cost, and improve the product's market occupancy rate and visibility. In this case, the Internet group buying can play a very important role.

C. the Internet group buying mode can enlarge market share

There are many manufactures in monopolistic competition market, while one manufacturer may have a very low market occupancy rate. Let the market occupancy rate of A manufacturer in traditional market is \( a\%\), the sensitive groups online is \( b\%\), the probability that the sensitive groups can be attracted by the Internet group buying is \( c\%\), then the number of people that manufacturer attracts customers through the group buying is \( c\% \times b\% \times nq_H \). When the Internet group buying development to a certain degree, it even may appear this case that \( c\% \times b\% \times nq_H \) is more than \( a\% \times q \), of which \( q \) represents all the products purchases and \( nq_H \) represents all the buying groups in the traditional market.

Therefore, the Internet group buying can develop into the enterprise’s main sales channels under certain conditions; bring more extra profits for the manufacturers and enlarge the products’ market share.

5 Conclusions

The rapid development of the Internet makes enterprises’ core competitive elements change. With the development of Internet consumption mode, the information advantage gradually becomes enterprise’s core competitive ability.

From the above analysis, we can see the Internet group buying can talk the consumer groups from the consumer market, so the enterprises can use the way of price discrimination to reach profit maximization. At the same time, compared with the traditional trading, the Internet group buying has the advantage of cutting the transaction cost. In addition, the certain manufacturers can get extra utility through carrying out the Internet group buying. The group buying can be used as an effective mode which can improve sales and profit growth. But how to well play the effectiveness in practice, and make the Internet group buying play the role of the middleman among customers, retailers and manufacturers, it remains to be a further exploration and research for managers and scholars.

References


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