Purchasing Decision-Making Process of Online Consumers
Based on the Five-Stage Model of the Consumer Buying Process

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ABSTRACT

Because of the advancement of Internet technology in China, online shopping has witnessed great development in recent years. In the process of shopping online, many factors are affecting whether online consumers will buy a product. By using the theoretical and empirical methods, this research intends to investigate the related factors that will have influences on online consumers' shopping decisions. Besides, the general process of online consumers' purchasing decisions still follows the theory of the Five-Stage Model of the Consumer Buying Process, which is composed of need recognition, information search, evaluating of alternative, purchase decision, and post-purchase behavior. However, these five stages have new content and rules in an E-commerce environment. This paper will analyze each stage of network consumers' purchasing decision and establish the related comprehensive model.

Keywords: E-commerce, Online consumer behavior, Consumer buying decision.

1. INTRODUCTION

Internet technology has undoubtedly become the most profound technology in the 21st century in terms of economic and social development. Its rapid advancement has brought unprecedented vitality and opportunities to the world economy, especially the development of E-commerce and online marketing. On this basis, the new business model can be established, and great chances of the traditional business model and the consumption mode have been made. The rapid development of electronic commerce has promoted the emergence of network consumption which has the great advantage of lower cost and higher efficiency. With the rapid development of the Internet and the support of the network marketing system with huge information processing ability, it is easier and more accurate for online consumers to obtain commodity information. It provides an unprecedented wide space for customers to choose goods, and its consumption mode and status have also changed greatly. Moreover, it improves the promotion of online consumers' sovereign status and purchasing freedom and makes online consumers' shopping decision-making behavior more reasonable and rational.

However, in the process of shopping on E-commerce platforms, there are many factors that will affect whether online consumers will make a purchase decision. By using the theoretical and empirical methods, the main purpose of this research is to explore the influencing factors, and get the degree of influence of these factors on online consumers' shopping decisions through data analysis, and summarize the key factors.

At present, the customer who is the value-added factor has become the core competitiveness of the enterprise development. Cardinal number of population is big in China, and the potential growth in the number and size of online consumers is huge. Although network application technology has developed rapidly in recent years, it is still in a backward stage compared with developed countries, such as Europe, America, Japan and South Korea, because there is still a huge gap in the development of E-commerce and the penetration rate of online consumers. Figures released in 2020 by Marketer show that the Internet consumption penetration rate of American Internet consumers is 71.2%, and among Asian countries, Korea has reached 64.3%. However, according to the 2012 China Online Shopping Consumer Survey report released in April 2012, the penetration rate of online consumers in China in 2011 is only 41.5%.

Therefore, China's network consumption has a huge space for growth and penetration. Only by clearly grasping the factors that affect online consumers' shopping decision-making behavior can E-commerce enterprises make full use of the network to create higher value. The great advantage of the Internet is that it is a brand new two-way communication platform where E-commerce, a new business model of paperless transactions is built. Compared with the traditional entity business model, online consumers' transaction behavior is determined by themselves and will not be affected by Internet service providers. Through an E-commerce platform, online consumers can communicate directly with the shops to obtain commodity information, which breaks down the barriers of geography and time, thereby improving the efficiency of the transaction. The rapid development of Taobao, Jingdong, Fanke and other famous online shopping websites in China shows the huge prospect of E-commerce. The key to the survival and rapid development of E-commerce is to correctly grasp the influencing factors of online consumer decision-making and formulate and implement the corresponding marketing strategies.

The shopping decision process in E-commerce refers to a series of actions in each stage from consumers' need recognition, information search, evaluating of alternative, purchase decision to post-purchase evaluation. The consumption behavior of network consumers is to realize the shopping consumption behavior electronically and networked through E-commerce platforms.

Zeng and Reinartz conclude that the decision-making behavior of online consumption can be divided into three stages which are searching for the desired goods or services, making the optimal choice and paying. The first stage is to find the desired goods or services, the process of obtaining more detailed and specific information about the commodity or service. In the traditional consumption environment, consumers' access to information is limited by many factors and the information obtained is often incomplete or even false. Some businesses just take advantage of the asymmetry of information to deceive customers. Because consumers are limited by region and space, they have very little access to information and can only rely on scarce information about goods or services to make the final purchase decision. In the Internet era, information resources are extensive and comprehensive, and the ways of transmission are rich and fast. With a click of the mouse, Internet consumers can quickly obtain a large amount of relevant information about goods or services and select the best one by a simple comparison. The second stage is to make a comparative evaluation. Different consumers have various selection criteria for goods or services. Generally, consumers can understand the appearance and performance of goods by observing and touching them in physical stores. Online consumers can also do this through text descriptions of products,

photos from various angles, and other online consumers' comments and descriptions. However, compared with traditional shopping, the biggest defect of online shopping is that online consumers cannot get the sensory experience brought by close contact with products. The third stage is paying, the process in which consumers make purchase decisions and payments. The influence of the Internet on this stage is determined by the category of goods and some factors related to online consumers. Therefore, it can be known that consumers' shopping decision-making behavior is a continuous dynamic process, which is composed of the life demands, the attitude formed in the online shopping process, the actual purchasing decision-making behavior and the psychological and behavioral chain formed in the post-purchase process. Due to the differences in living habits formed in life and knowledge accumulation, different consumers will make diverse buying decisions.

There are many differences between E-commerce and traditional marketing, so consumers' purchasing decision-making process shows some new features and rules. Therefore, it is of great significance and value to study the purchasing decision-making process of online consumers. Internet consumers are those who use the Internet as a tool to consume in the E-commerce market. The consumers' decision-making behavior refers to the whole process in which consumers produce demand and finally make purchase decisions. In E-commerce activities, the general process of online consumers' purchasing decisions still follows the theory of the Five-Stage Model of the Consumer Buying Process, that is, need recognition, information search, evaluating of alternative, purchase decision, and post-purchase behavior. However, these five stages have new content and rules, so this paper will analyze each stage of network consumers' purchasing decisions and establish the related comprehensive model.

2. ANALYSIS OF CONSUMER PURCHASING DECISION PROCESS IN AN E-COMMERCE ENVIRONMENT

2.1. Need Recognition

In an E-commerce environment, the starting point of the consumer buying decision process is to arouse demand. In addition to the internal and external stimulus in the traditional market, the stimulus of Internet consumers is more from the Internet, which is mainly reflected in the following aspects. One is the network media, which releases a variety of information directly or indirectly affecting the consumer's demand confirmation. The second is an online community, where Internet users share their shopping experience in virtual communities such as forums and post bars, as well as product placement in some communities. The third one is the marketing activities of online enterprises, such as online advertising, online bidding and auction and online public

relations activities, which are stimulating the desire of consumers to buy. After being stimulated by internal and external factors, consumers will feel that there is a certain gap between their desired and actual needs. If they have a certain purchasing power, they will have a corresponding consumption demand, and in the E-commerce environment, consumers will have some new demands. The first demand is the interest, which refers to the tendency of people to engage in online activities out of curiosity and the satisfaction of being successful[1]. The second is personality display, the need for people to use the Internet to show their unique ideas[2]. The last one is gathering communication, and that is consumers want opportunities to come together and interact with others who have similar experiences[3].

2.2. Information Search

Once consumers are aware of a need and are motivated to purchase a particular product or service, they often start searching for the information they need to make decisions in a variety of ways. When shopping online, consumers can use search engines to make a comparison of shopping websites, shopping forums and other tools to effectively collect information, which is more convenient, fast and comprehensive than traditional information collection. Although E-commerce has greatly improved the efficiency of information search and changed the purchasing behavior of consumers, consumers still show high or low enthusiasm in collecting information under the influence of the following factors: The first factor is product knowledge, which refers to consumers' understanding of products. Generally speaking, consumers hardly need the information to search for the products they are familiar with or often buy. They make decisions mainly based on experience, and they have a strong search intention when they buy new products[4]. The second factor is product value. Search intention of consumers usually with a positive relationship with the value of the purchased products. For products with low risk and low value, consumers make decisions mainly based on experience, and information search is rarely required. When consumers buy products of high value, information collection becomes particularly important because they are concerned about information asymmetry and greater risks. Therefore, information collection becomes particularly important[4]. The third factor is time stress. Because gathering information takes a lot of time and effort, consumers' search intentions are lower when decisions need to be made quickly in a short period of time. The last factor is involvement degree, which refers to how much time and energy consumers are willing to spend in the purchase process. For some complex purchases, most consumers know little about them, so they will spend a certain amount of time collecting information and make multi-faceted selections and comparisons[5].

2.3. Evaluating of Alternative

When consumers get relevant information from different channels, they will analyze and compare various products to choose the most suitable products and services. When consumers choose goods, they will compare the functions, styles, reliability, prices and after-sales services of similar goods according to a certain evaluation standard. The evaluation and comparison results are based on consumers' utility value. If an evaluation standard is recorded as gi, the evaluation results can be recorded as ui (gi). Different consumers have diverse utility values. At the same time, even the same consumer has a different importance to various evaluation standards. We use WI to represent its weight. Therefore, consumers will rank goods according to their utility value. The utility function of a commodity can be expressed as: $u(g)= w1u1(g1)+ w2u2(g2)+ \ldots + wnun(gn)$[6], so as to finally form the ideal goods they want to buy. For online consumers, the use of the Internet not only greatly facilitates their search for commodity information, but also various comparison shopping websites provide detailed commodity information to help them make a choice as soon as possible.

2.4. Purchase Decision

Through choice and judgment, consumers will form their preference or purchase intention for a certain commodity. However, in the process of transformation into actual purchase behavior, it is also affected by the attitude of others and unexpected circumstances[7]. In the E-commerce environment, the extensive and comprehensive commodity information on the Internet will guide consumers to make rational decisions, reduce the probability of impulse purchase, and make online decision-making faster. In addition, besides the traditional factors such as purchase time, purchase quantity, the way to buy is another important decision-making factor, that is, online or offline. Many consumers choose to buy their ideal products in the traditional market after collecting information and selecting and evaluating them through the network. The main reason is that consumers will take the following factors into consideration[8]. First, price is still the most sensitive factor for consumers in online shopping. Only when online goods have a greater price advantage compared with the traditional market will consumers be inclined to choose online shopping. Second, risks are factors that need to be considered, mainly including payment risks and privacy risks. Because online shopping usually has to carry on the membership registration, and through online payment and other forms to buy goods. It usually needs to pay in advance to receive goods. As a result, consumers will worry about their personal information being maliciously stolen, or the risk of account password theft due to Trojan horses and other viruses. Third, trust including the trust of product information on the network

and the trust of various promises made by enterprises is another factor. At present, the trust degree of Chinese netizens to the Internet is not high. According to the latest CNNIC survey, only one third (35.1%) of netizens express their trust in the Internet. The fourth factor is delivery time and cost. When shopping online, the goods must be sent by the post office or express company, so the buyer not only has to bear the transportation expense but also has to wait for several days to receive the goods purchased.

2.5. Post-purchase Behavior

After buying a product, online consumers often compare the actual properties of the product they feel with the expectation of the product to judge the correctness of their purchase decisions and guide the next purchase. If the product performance exceeds expectations, consumers will feel very satisfied; If the actual performance of the product is roughly in line with the expectations, the consumer will feel basically satisfied; If the performance of the product does not meet expectations, consumers will feel disappointed and dissatisfied. Moreover, consumers tend to talk about their feelings to their relatives and friends around them, which further expands the influence of online consumers' post-purchase feelings. When consumers post relevant comments through various channels such as online forums, QQ groups, virtual communities, blogs, etc., it will even affect the purchase decision behavior of strangers. And the major factors that influence consumer post-purchase satisfaction can be attributed to the following four points. The first point is corporate image and commitment. Generally speaking, an enterprise with a good corporate image and commitment will have high expectations from customers. Therefore, online retailers must act according to their capabilities when making relevant promises, otherwise it is easy to make consumers feel disappointed and reduce their satisfaction. The second point is consumption experience, a kind of overall feeling of consumers in the process of online buying, including the perception of some services provided by network performance merchants, etc. A positive consumption experience will further enhance the satisfaction of consumers. The third point is after-sales service. Whether the return process is convenient, quick and thoughtful will affect customers' evaluation of purchasing. The last point is safety and reliability. As mentioned above, customers' consideration of website security performance is an important factor hindering consumers from online shopping. Therefore, most consumers do not have high requirements for it. When enterprises strengthen their security system to reduce customers' risk perception, customer satisfaction will be greatly improved [7].

3. CONCLUSION

The stimulus of Internet consumers is more from the Internet, such as network media, online communities, online marketing activities. When shopping online, consumers can use search engines to effectively collect information to analyze and compare various products according to a certain evaluation standard based on consumers' utility value. The extensive and comprehensive commodity information on the Internet will guide consumers to make rational decisions. After buying a product, consumers tend to talk about their feelings to their relatives and friends online.

REFERENCES

[1] China Internet Network Information Center (CNNIC), Statistical report on Internet development in China,2001(01).

[2] Y.D. Zhao, The influence of consumer behavior on the development of C2C E-commerce model, 2008(05).

[3] Y.F. Yang, Research on online consumption psychology and behavior, 2008(06).

[4] H.M. Zheng, Research on influencing factors of online shopping intention, 2006(05).

[5] J.S. Chen, H.L. He, Analysis of the influence of e-commerce on consumer purchasing behavior, China Management Informationization, 2006(10).

[6] C. Wang, Y.J. Li, Internet consumer's behavior based on multiattribute utility theory, 2008(02).

[7] Y.L. Dong, P. Yang, Analysis of influencing factors of consumers' purchasing behavior under C2C E-commerce platform, Consumer Economics, 2007(06).

[8] A. Gupta, B.C. Su, Z. Walter. An Empirical Study of Consumer Switching from Traditional to Electronic Channels: A Purchase-Decision Process Perspective, International Journal of Electronic Commerce, 2004, 8(3):131-161.

[9] S.S. Li, Y.W. Chen, J.Y. Li, Shopping Decision-Making Model: An analysis of Consumer Online, Advances in Psychological Science, 2006(14).