

# Factors Influencing Online Shopping Behavior Focusing on LAZADA, SHOPPEE and JD

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## Abstract

This study examines the factors influencing online shopping behavior focusing on LAZADA, SHOPPEE and JD. For this purpose, the analysis is conducted with 400 people who prefer different types of online shopping platform by utilizing structural equation modeling (SEM). Six potential influencing factors on consumer online platform choice are brand effect, product offering, platform feature, special offer and shopping safety. The result shows that the model's chi-square value of 285.739 with 263 degrees of freedom is non-significant at the .05 level which suggests that model fits the data acceptably in the population from which we drew our sample. Corroborating evidence is provided by the RMSEA fit statistic – the obtained value of .014 is well below the desired .06 cutoff. Similarly, the Tucker-Lewis Index (TLI) result of .998 as well as GFI (.952) and CFI (.998) are considerably above the .95 threshold denoting satisfactory model fit. Therefore, our proposed SEM model seems to fit well according to the descriptive measures of fit. More importantly, Platform (PF) and Brand (BE) seem to have significant effects on online-shopping behavior due to their p-values are both less than .05. This research is significant because it makes it possible for operators to understand how to influence user's online shopping platform choice decision, which is important for establishing relevant strategies.

**Keywords:** Online shopping behavior, Brand effect, Product offering, Platform feature,

Special offer and shopping safety, Structural equation modeling (SEM)

## **1. Introduction**

### *1.1 Introduction of the Problem*

With the rapid development of the Internet, e-commerce has become an important factor that promotes economic development and social progress. And compared with physical stores, more and more people tend to shop online. However, with the process of global economic integration has accelerated, and e-commerce has also developed rapidly, becoming the focus of attention of many consumers.

Consumers can easily purchase goods from other countries and regions. As a global e-commerce market, Southeast Asia. The Asian market has always been favored by merchants from all over the world and Southeast Asian enthusiasts' world. Although it started late, the development space far exceeds expectations. Economic development, market share and capital flow make the Southeast Asian market the focus of investment. In recent years, global GDP and GDP per capita increase rapidly. With the emergence of representative e-commerce brands. The competition between e-commerce platforms is becoming more and more fierce. The e-commerce market bears the brunt. Among them, Thailand is the second largest. Southeast Asia has a developed economy and excellent technological infrastructure.

Most of its nearly 70 million people are already Internet users and are proficient in the fields of digital technology, mobile and e-commerce. Developed e-commerce market. Many physical brands and pure e-commerce companies are competing for market share. Although large companies dominate, but with users. I am accustomed to using e-commerce, there is still a lot of room for development in the Thai market maturity. However, different e-commerce platforms have obvious differences in commodities, logistics, payment methods, etc., so consumers' choice factors. Each e-commerce platform is also very different. This article hopes to understand and master the factors that consumers choose e-commerce. Platform, e-commerce platform can be continuously improved, it can increase the willingness of other groups to buy on various e-commerce platforms, so as to promote the development of the platform. Customer trust in the network. Trading is a virtual trading platform based on the Internet. Trust object. The influencing factors of source and trust are very different from traditional trust. This article will study the safety of online shopping, the unpredictability of products and service and uncertainty risk. Therefore, how to alleviate the potential consumers' uncertainty and risks make consumers trust shopping websites, purchasing is a problem for online shoppers and consumers. Take Taking lazada, shopee, and JD as examples, this article explores the roots of customer trust. From the perspective of empirical research, corresponding countermeasures are proposed in (Figure 1).



Figure 1

### *1.2 Statement of Problem*

It is understood that people between the ages of 18 and 30 are by far the largest online shopping group. Because they have a higher level of education, are familiar with the use of the Internet, they have more demand for products suitable for sale on the Internet to meet their spiritual needs, and the expected income is higher, so they are more willing to sell on the Internet. It is expected to dominate online consumption in the future. At a deeper level, many young people are gradually entering management positions. The awareness of applying network technology to management work during the process of online shopping experience has a profound impact. This is one of the key factors that promote the sustainable development of e-commerce. At the same time, competition among various e-commerce websites is fierce. However, the convenience and border lessness of the Internet making the transfer cost of the online consumers are quite low. When shopping online, most of the online users are comparing the multiple websites before making a decision to purchase. Therefore, if an e-commerce website wants to attract consumers and facilitate the final purchase, it must work hard to understand the characteristics of the website and the products it provides to meet consumers' basic shopping needs and other needs. Therefore, it is of great significance to study people's online shopping behavior, analyze which aspects of website functions are most important to them, what kind of products they buy, and whether their online shopping experience will affect their perception of the Internet. On the basis of this research, we conducted a questionnaire survey on the factors that affect people's online shopping, trying to understand the factors that affect people's online shopping. For example, the platform must consider people's income and people's preferences, and then upgrade the management of the platform. Study the relationship between the variables and how each independent variable is related to the dependent variable. What factors will significantly affect the people's choice and trust in online platforms? So as to provide some suggestions for online retailers to better develop online shopping.

### *1.3 Literature Review*

#### 1.3.1 Concepts Theories of E-commerce Platform Brand Effect

What Is e-commerce platform brand effect? Brand effect refers to the effect brought by the brand for the enterprise. It is the continuation of enterprise value in the commercial society. In the current brand leading business model, it means commodity positioning, business model, consumer groups and profit return. Establishing enterprise brand requires enterprises to have strong ability of resource integration and show the essence of enterprises to the world through brand. Setting up methods such as advertising, daily marketing, and after-sales service that could have a direct impact. Brand effect is the benefit and influence brought by the use of brand in products for brand users. Brand is the product of the development of commodity economy to a certain class. The initial use of brand is to facilitate the identification of products. The rapid development of products lies in the huge and social benefits brought by brand use to commodity producers.

Brand is an effective means of promotion brand in product promotion; It can make the enterprise focus on propaganda, simple and concentrated, rapid effect, impressive, conducive to product sales, so that consumers are familiar with the product, stimulate the desire to buy. Brand can help consumers identify and choose goods. Brand effect is produced in product publicity. It is impossible for consumers to buy goods after trying, but mainly according to the brand effect. If a brand is well-known, even if consumers do not use it, they will buy it because of the brand effect. The brand effect may be due to the publicity of the operators themselves, or the recognition of the brand by other consumers.

Some scholars have studied brand strategy selection and branding related strategies ((Loken & John, 1993), (Keller, 2012)); Josang, Ismail, & Boyd (2007) conducted a credit research on e-commerce services; Dean and others believe that low price brands provide price incentives, can change brand preference and market share, and have the strategic advantage of establishing new brand names ; However, DAE Ryun Chang and Se bum park (2013) found that technological uncertainty will lead to greater brand preference; Nuria villagra1, Belén López (2013) believe that corporate social responsibility is increasingly important, especially the brand values and communication, which is directly related to the sustainable development of the brand; Mahabubur Rahman (2014) found that the differentiated brand experience strategy is helpful to establish the enterprise's own brand and strengthen the brand equity; Vanessa quintal and Ian Phau (2014) studied the influence of brand familiarity, external attributes, self-confidence and perceived quality on brand perceived risk; Adam and Kirk Plangger (2015) believe that social media, as a set of online communication channels, helps to promote consumer relations and trust, and is conducive to the development and cultivation of brands; Vasileios Ddavvetas, Adamantios diamantooulos (2016) studied the impact of product categories on consumers' choice of global brands and local brands, and believed that global brands were better than local brands in powerful product categories.

Brand building has long been popular in developed countries. According to the incomplete statistics of the United Nations Industrial program. Nowadays, there are 85000 kinds of famous brand goods in the world, and more than 90% of them belong to the industrial

developed countries and the Asia Pacific emerging industrial countries and regions. On August 5, 2002, Business Week of the United States published the 2002 annual ranking of "the world's most valuable brands" released by Interbrand company, among which the top ten brands are Coca Cola, Microsoft, IBM, General Electric, Intel, Nokia, Disney, McDonald's, Marlboro and Mercedes Benz. Among the top 100 brands, there are six Asian brands: Toyota, Sony, Honda, Nintendo, Samsung, and Panasonic. What is a brand? Famous scholar Philip Kotler said: "a brand is the name, mark, pattern or their combination of the physical products or services provided by a seller. Its purpose is to identify the products or services of a certain seller or group of sellers and distinguish them from those of competitors." Brand extension, which is based on brand, means to extend the existing brand of one product in one market to the new product in another market. The list of brand extension companies has been very long, and Sony is a successful example.

So, why does the brand have such great charm?

For consumers, brand means:

1. The source of the product.
2. It can reduce the risk.
- 3 Reduce search costs.
4. Quality symbol.
5. Status symbol. For enterprises,

Brand Means:

1. High loyalty.
2. Not easily influenced by competitors. The attack of the pin.
3. Not vulnerable to marketing crisis.
4. It can expand the marketing space.
5. Have more opportunities for brand extension.
6. Possible licensing opportunities.
7. Enhance the effect of marketing communication.
8. More trade cooperation and support.
9. Consumers are more resilient to lower prices.
10. Consumers are more inelastic to increase prices.

### 1.3.2 Concept Theories of Product Supply

What Is Product supply? Commodity supply is also called "commodity supply". Goods that producers and other economic organizations provide to the market for sale within a certain

period of time. Its sources mainly include: products provided by domestic industrial and agricultural production departments, materials allocated by the state reserves, imported materials, social potential materials, etc. The products provided by industrial and agricultural production departments are the most basic source of market supply. The supply of goods is caused by the demand of goods, and the purpose is to meet the demand. The relationship between supply and demand is interdependent and mutual premise. Commodity supply reflects the degree of market prosperity, which is affected by industrial and agricultural production, national income distribution and redistribution, commercial work and consumption level. Commodity supply refers to the sum of goods and services provided by the production department to the society for final consumption and use. The supply of goods or services should not only have the use value that can meet the needs of human beings, but also this use value should appear in the market in a certain amount. The formation conditions of commodity supply. First, commodities have utility, that is, they have use value and can meet some consumption needs of people's social production or life. Second, commodity has value, that is, exchange value, which is the product of human labor and condenses human general labor. Third, the commodity has the circulation, can pour into the market unceasingly, through a series of transactions, causes it to become in the consumer hand actual consumption object. Science and technology factors the level of science and technology and its application in production is the first factor to determine the total social supply and is the basis of the total social supply capacity. It is precisely because science and technology play an irreplaceable role in social production that people call it the first productive force. In modern society, the amount of market supply first depends on its production technology, especially the innovation ability of industrial technology. The innovation ability of a country's industrial technology mainly depends on the input of science and technology elements in industry. This investment is usually measured by R & D expenditure and scientific and engineering personnel engaged in R & D. Among the countries in the world, the developed countries are far more than the less developed countries in terms of R & D expenditure and the number of scientific and technological personnel engaged in R & D. This is the primary factor leading to its strong social supply capacity and high national living standard. Production is the basis of supply. Without the development of production, supply cannot be increased, and trade volume will not be expanded. Therefore, to study the supply of commodities, we should start with production, grasp the laws of production and change of various commodities, try our best to make the products adapt to the market demand, and improve the competitiveness. Price is the most sensitive means to adjust the supply of goods, and it is the most effective lever to adjust the supply and demand. There is an internal correlation between price and the supply of goods. When the use value of a commodity is fixed, the monetary performance of the value of commodity supply will change with the price fluctuation, showing a positive proportional relationship. Generally speaking, the supply of goods will increase with the rise of market price and decrease with the fall of commodity price. With the increase of commodity supply, there is an oversupply situation. Some commodities will not be bought, and the value will not be realized, which forces manufacturers and suppliers to reduce prices or sell them in disguised form, and the market price shows a downward trend; If the supply is reduced, it cannot meet the needs of society,

leading to scramble and rush to buy, the producer or supplier will raise the price, and the price will show an upward trend. At the same time, price will directly affect the change of supply. If the price is high, manufacturers will produce more and faster, expand the supply and meet the needs of society; If the price drops, the manufacturer will make little profit or no profit, or even make a loss, and the supply quantity of the whole society will show a downward trend.

### 1.3.3 Concepts and Theories of Product Offering

What is Product offering? Companies create product versions from multiple components. The big challenge is how to take the available components and combine them into the product versions and product lines that will maximize profits. David S. Evans, working jointly with Professor Michael Salinger of Boston University's finance and economics department, studied the role of cost in determining profit-maximizing bundles (Evans & Webster, 2007). They divide product offerings as follows:

#### A la carte offering

With a la carte, companies can treat different product features individually, allowing consumers to create the product version that suits their needs best. Sony Corp., for example, produces both televisions and DVDs. This allows consumers to bundle the two products on their own if they choose.

#### Specialization offering

Companies use specialization when they realize economies from providing one basic product feature that customers want or that customers can combine with other features. For example, MAXjet Airways Inc. offers only business-class service and Southwest Airlines Co. offers only coach.

#### All-in-one offering

The all-in-one product combines all the different product features, removing the customer's ability to order items separately. For example, newspaper publishers don't allow you to buy the daily paper without the sports or classified sections, even if you never read them.

#### Basic/premium offering

The basic/premium product strategy permits companies to offer both a basic product and a premium version that includes some additional features; however, consumers can't "unbundle" the basic product to get the features they want. For example, cable customers generally can't get ESPN without also receiving a basic cable package that includes standard channels.

#### "Have-it-your-way" offering

These offerings are not mutually exclusive, and some companies offer an array of possibilities. Microsoft Corp., for example, sells the complete Office software suite, but it also lets customers buy the individual software programs separately and several versions of the Office suite with different features. Cable companies offer many different combinations

of channels — from basic to super-premium — in addition to providing bundles that include high-speed Internet and voice over IP phone services.

They found that Consumers value some choice, although the degree varies by product and circumstance. Businesses value it, too, because it allows them to segment their markets and charge higher prices. The most profitable product lines are those that balance the benefits and costs for both consumers and businesses.

Berger, Draganska, & Simonson (2007) propose that the variety a brand offers often serves as a quality cue and thus influences which brand consumers choose. Specifically, brands that offer a greater variety of options that appear compatible and require similar skills tend to be perceived as having greater category expertise or core competency in the category, which, in turn, enhances their perceived quality and purchase likelihood. The findings suggest that in addition to directly affecting brand choice share through influencing the fit with consumer preferences, product line length can also indirectly affect brand choice through influencing perceived brand quality.

#### 1.3.4 Concept Theories of Platform Feature

What is Platform Feature? Online shopping saves time and effort. You can find all the products on the Internet, and you can get the products you want in just a few minutes, and you don't need to go to the crowded streets to find them.

Save money. The reason for the rapid development of online shopping in today's era is the low threshold of online marketing, no need for large inventory, no need to rent expensive storefronts, and the purchase channels are not complicated, which leads to low cost of online operations, so the goods sold online are better than reality. It's much cheaper in China.

Relatively safe. Generally speaking, the payment system for online shopping is still very safe. The current online banking is more complicated and convenient than before. The increase in procedures is the increase in security, and most payments use third-party transaction platforms, which guarantees itself. The payment is safe, even if the purchased product is not satisfied and needs to be returned, your money can still be returned to our account.

The variety of goods is complete. Sometimes I want to buy something and I searched it in major shopping malls for a long time. I was almost exhausted and didn't find it, or I needed to run around and compare pick and choose, but online shopping only needs a page to describe it intuitively and clearly. The basic parameters and data of this product are presented, allowing you to clearly understand its characteristics.

Price comparisons can be made. There are many shopping guide comparison shopping websites, on which you can compare the prices of the same product in different shopping malls intuitively. You can find the lowest price just by sitting there.

You can receive the goods without leaving your house. Online shopping is to enjoy the royal treatment, as long as you pay the money, even if you use the form of cash on delivery, they will deliver the goods to you in the fastest time.

### 1.3.5 Concept Theories of Special Offer

What is Special Offer? The so-called personalized service is a kind of targeted service mode. According to the user's settings, it can collect, sort and classify resources according to various channels, and provide and recommend relevant information to meet the user's needs. On the whole, personalized service breaks the traditional passive service mode, and can make full use of the advantages of various resources to actively carry out all-round services to meet the personalized needs of users. Personalized service is a way of network information service. Developing network personalized service is an important means to improve the quality of information service and the use efficiency of information resources. It highlights the initiative of information service and develops new ideas of information service.

Characteristics of personalized service<sup>1</sup>. Pertinence That is, user centered. Personalized service is to use different service strategies to provide different service content according to the characteristics of different user needs, which is the most essential feature of personalized service. All services are based on meeting the needs of users.<sup>2</sup> Dynamism includes two aspects: one is that the dynamism of user's personality needs changes with the change of user's social role; the other is the update of network information resources. The website analyzes user's behavior, interests, hobbies and habits through the customization of user's personality needs to provide users with the latest information.<sup>3</sup> Initiative That is, the website push service is one of the main features different from other service modes. The website searches, selects and organizes information according to users' preferences, and actively pushes it to users through e-mail and other ways.

The content of a valuable website is usually very important. It requires not only the novelty of the service, but also the real value. What kind of content is provided, what kind of value is reflected. A valuable website, first of all, its content must be valuable. There is no doubt that the free email service has gone beyond the concept of free, and its free service has brought it many more valuable things "How to judge whether the content of a website is valuable depends on its comparative advantages in related fields. If it has advantages, it is valuable". Looking at the re combination and optimization of the original products and services, AOL carefully studies the habits of users. A large amount of content is not piled up casually every day. The collocation of content and location is carefully studied and speculated. This kind of detailed research on website content and location matching makes consumers quickly find the goods or services they need. This kind of website is more competitive than other websites. In addition, we should also know that the initiative of the market is always in the hands of consumers, and the demand of consumers is constantly changing. If businesses want to be invincible, the content of products and services they provide must be close to the needs of consumers, and those who have the ability can even guide consumers. Only in this way can the website always be full of vitality.

### 1.3.6 Concepts and Theories of Shopping Security

What is Shopping security? Security is an important foundation of e-commerce transaction. At present, most of the researches on e-commerce shopping platform are focused on shopping security, and the security of online shopping is mainly caused by the uncertainty of the

trading process and results of the platform. E-commerce shopping security mainly aims at payment risk and information privacy leakage risk. At present, e-commerce shopping platform has been extended to all aspects of shopping experience and evaluation, such as product quality, after-sales service, etc. For cross-border e-commerce, consumers' perception of shopping security is equally important. Only when the current consumers' perceived security by external clues exceeds their minimum psychological expectation when using the platform for shopping, consumers will form trust in the cross-border e-commerce shopping platform and produce positive psychological and behavioral results. In view of the availability of platform shopping, the search function, convenience and logistics ability of online shopping platform are easy to cause purchase risk. The trading volume information of the e-commerce platform can convey the signals of group purchase and product identification to consumers, and enhance consumers' trust in the products sold on the e-commerce platform. Contemporary Economic Management researchers Yao Qicui Changqi (2017) pointed out that the number of online word-of-mouth in the network platform and the reverse of online word-of-mouth will affect consumers' judgment on the rationality and correctness of their own decisions, which can effectively reduce or eliminate consumers' concerns. It can be inferred from the above relevant studies that external cues of cross-border e-commerce shopping platforms, such as availability, commodity prices, trading volume, online reviews and after-sales services, have a positive effect on consumers' shopping safety.

### 1.3.7 Concepts and Theories of Shopping Behavior

What is Shopping behavior? Shopping behavior is driven by consumers' desire to meet their needs. Divided into: pragmatic needs, guide consumers to consider the purpose. The function attribute of the product. The needs of enjoyment or experience guide consumers to consider subjective aspects, product comfort, aesthetics, etc. In a purchase decision, it is common for both types of demand to be considered. For example, consumers may buy a car for practical purposes, but at the same time, they will choose to buy a luxury sports car for pleasure. When consumers have unsatisfied demand, TONGCHAN will produce a force, that is, the power to make individuals respond to demand. The reason why consumers take shopping behavior is to drive consumers to purchase the intrinsic motivation. Generally divided into two categories: physical shopping behavior and psychological shopping behavior. Physiological shopping behavior is based on physiological needs and has the characteristics of regularity, repetition, and habit. Psychological shopping behavior is a kind of shopping behavior due to psychological needs. It has profound, secret and diversified characteristics, and is held by people (UCLA 1999) consumers' shopping behavior is often not caused by a single shopping motivation, but the result of several shopping motivations. The freedom of online shopping is that consumers can make purchase decisions at any time. Details of online products can arouse consumers' interest in shopping. More emphasis on the autonomy of shopping, I hope the shopping process can have a happy process. So I don't like crowded shopping malls, and hope to make independent decisions without interference from others and personal privacy. It's more convenient and timesaving. The network provides more comprehensive information, easy to find, online shopping not only has product description, but also has the real comments of consumers who have bought and has a certain degree of trust in decision-making. Flexible

payment and door-to-door delivery. Some businesses will also present small gifts, which can satisfy consumers psychologically. In addition, the network mountain can also find high-cost performance, their own unique hobbies and rare goods, which can make consumers have a great sense of achievement "Seeking honesty" is also one of the behaviors of consumers to choose online shopping. Modern people are full of passion and desire for change, easily affected by advertising and popular trends, so the emergence of online shopping is a new way of shopping. Consumers who like to pursue fashion and novelty will experience new ways of shopping and bring freshness and stimulation to themselves.

### 1.3.8 Previous Studies

Rahman, Islam, Esha, and Sultana (2018) studied "Consumer buying behavior towards online shopping: An empirical study on Dhaka city, Bangladesh" and found that most of the consumers are concern about the security of the payment system, and their overall online shopping satisfaction is mixed.

Daroch, Nagrath, and Gupta (2021) found on his study: "A study on factors limiting online shopping behavior of consumers" that total six factors came out from the study that restrains consumers to buy from online sites – fear of bank transaction and faith, traditional shopping more convenient than online shopping, reputation and services provided, experience, insecurity and insufficient product information and lack of trust.

Chayapa Katawetawaraks & Cheng Lu Wang (2011) found on their study: "Online Shopper Behavior: Influences of Online Shopping Decision" that marketing communication process differs between offline and online consumer decision.

Lim, Osman, Salahudin, and Romle (2016) found it their study: "Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention" that subjective norm and perceived usefulness significant positively influence online purchase intention but subjective norm insignificant influence shopping behavior in a negative way. It is interesting to note that perceived usefulness also insignificantly influences online shopping behavior. Finding also revealed that purchase intention significant positively influence online shopping behavior.

Skarzauskiene, Glaveckaitė, and Gulevičiūtė (2015) found on their study "E-COMMERCE FACTORS INFLUENCING CONSUMERS' ONLINE SHOPPING DECISION" that he main factors influencing consumers to shop online are convenience, simplicity and better price.

### 1.3.8 Variables Used in this Research

Brand effect (BE)

Product offering (PO)

Platform feature (PF)

Special offer (SO)

Shopping security (SS)

Shopping behavior (SB)

1.4 Conceptual Framework and Hypotheses

1.4.1 Conceptual Framework

Based on related literature and previous studies discussed above, the researcher developed a conceptual framework Study of factors influencing online-shopping platform choice focusing on LAZADA, SHOPPEE, JD.

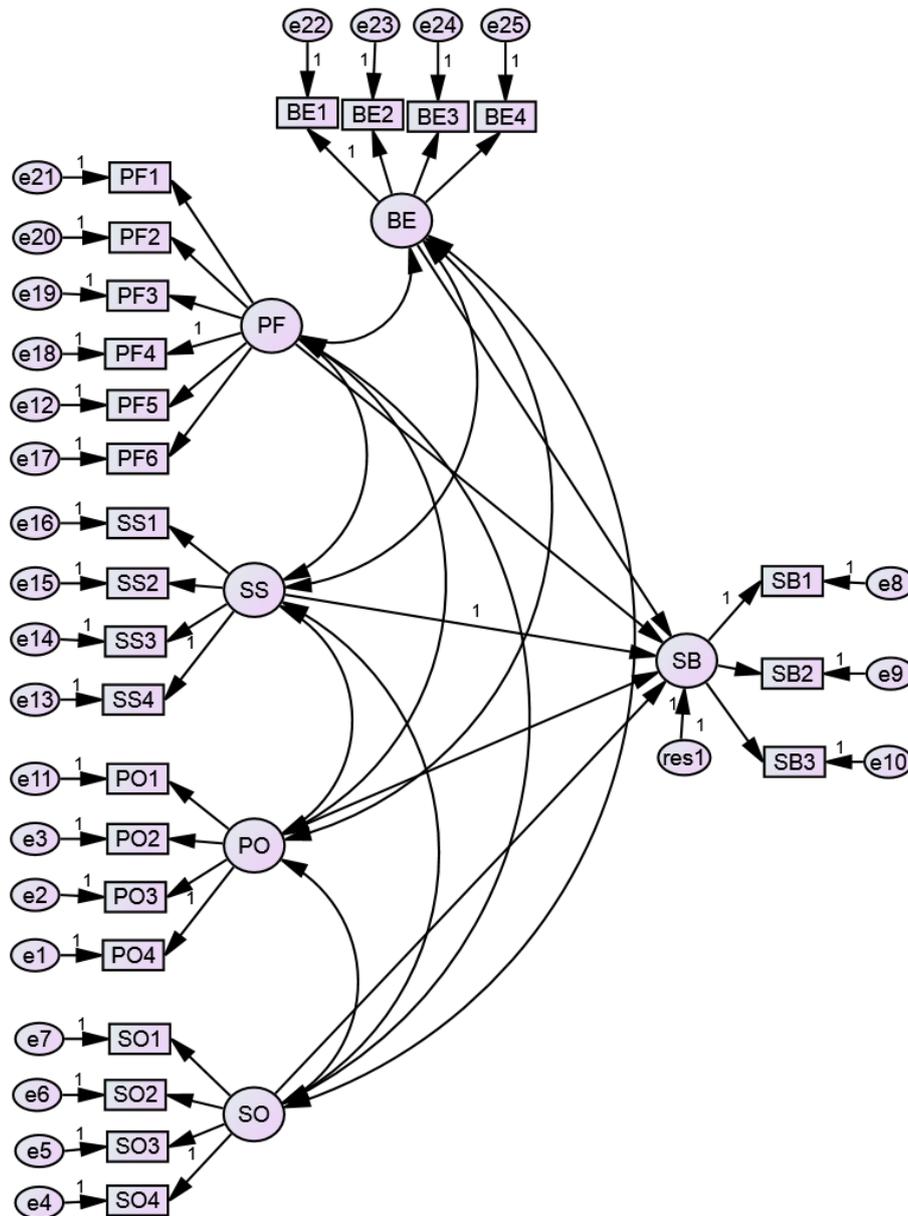


Figure 2. Conceptual Model

Noted: BE, PO, PF, SO, SS, SB represent the latent variables and BE 1, BE 2, BE 3, BE 4, PO 1, PO 2, PO 3, PO 4, PF 1, PF 2, PF 3, PF4, PF5, PF6, SO 1, SO 2, SO 3, SO4, SS 1, SS 2, SS 3, SS4, SB 1, SB 2, SB 3, represent the observed variables.

#### 1.4.2 Hypothesis

H1o: Brand Effect has no influence on online shopping behavior.

H1a: Brand Effect significantly influences online shopping behavior.

H2o: Product offering has no influence on online shopping behavior.

H2a: Product offering significantly influences online shopping behavior.

H3o: Platform Feature has no influence on online shopping behavior.

H3a: Platform Feature significantly influences online shopping behavior.

H4o: Special Offer has no influence on online shopping behavior.

H4a: Special Offer significantly influences online shopping behavior.

H5o: Shopping security has no influence on online shopping behavior.

H5a: Shopping security significantly influences online shopping behavior.

## **2. Method**

This research is conducted the influencing factors on online-shopping behavior (LAZADA, SHOPEE and JD). The applied methodology was derived from the quantitative approach, which included the survey method of data collection through questionnaires. After that, the data was analyzed by using the Structural Equation Modeling (SEM) methodology to test structural relationship of influential factors.

### *2.1 Research Instrument*

Use questionnaire surveys to collect relevant research data. And constructed a questionnaire from related journals and articles, involving variables including shopping safety, platform characteristics, personalized service, product supply, brand effect and shopping behavior. These items can be seen in the English version and the Chinese version of the questionnaire.

### *2.2 Reliability Test*

The questionnaire is collected from 30 questionnaire samples to test its reliability. The reliability test is that I used SPSS to perform statistical analysis of the Cronbach  $\alpha$  coefficient. The Cronbach's Alpha coefficient, which was used for reliability testing. The SPSS program was used to test the reliability of variables in multiple factors of 30 interviewees. The value of Cronbach's Alpha is determined between  $0 \leq \alpha \leq 1$ . The higher the value, the stronger the reliability. The Cronbach  $\alpha$  coefficient value of the questionnaire must be greater than 0.65 for all the questionnaires to be reliable and consistent. The following table summarizes the criteria for Cronbach's  $\alpha$  coefficient.

As shown in the table below: Criteria of Cronbach`s alpha coefficient

Cronbach's alpha coefficient	Reliability Level	Desirability Level
0.81 – 1.00	Excellent	Robust
0.65 – 0.80	Relatively High	Good
0.56 – 0.64	Slight Low	Tolerable
0.41 – 0.55	Unsatisfactory	Bad
Less than 0.40	Low	Unacceptable

### 2.2.1 Testing Research Instrument

The researcher then collected 30 pilot testing of questionnaires and utilized them by computing the Cronbach`s Alpha Coefficient for each factor to test the reliability of the questionnaire. The Cronbach`s Alpha Coefficient of Brand effect (BE1, BE2, BE3, BE4) equaled to 0.737, Product offering (PO1, PO2, PO3,PO4) equaled to 0.743, Platform feature (PF1, PF2, PF3, PF4, PF5, PF6) equaled to 0.872, Special offer (SO1, SO2, SO3, SO4) equaled to 0.772, Shopping security (SS1, SS2, SS3, SS4) equaled to 0.798, Shopping behavior (SB1, SB2, SB3) equaled to 0.682. The general rule of thumb is that a Cronbach`s alpha of .70 and above is good, .80 and above is better, and .90 and above is best (Cronbach`s Alpha). Table 3.3 below shows the summary of the value of Cronbach`s Alpha (a) discussed above.

As shown in the following table: Cronbach's Alpha (a) has provided an important contribution to the highly competitive online shopping platform, and has already been able to understand the choice of online shopping platform and the research of influencing factors at a glance.

Scale	Cronbach`s Alpha
Brand effect (BE1, BE2, BE3, BE4)	.737
Product offering (PO1, PO2, PO3, PO4)	.743
Platform feature (PF1, PF2, PF3, PF4, PF5, PF6)	.872
Special offer (SO1, SO2, SO3, SO4)	.772
Shopping security (SS1, SS2, SS3, SS4)	.798
Shopping behavior (SB1, SB2, SB3)	.682

### 2.3 Data Collection Procedure

This research obtains information from multiple databases, including related books, related academic papers, journals, reports, websites, etc. This data is real and direct data collected from interviewees. Researchers use questionnaires to collect data. Researchers have obtained more relevant information on a large number of articles, publications and with the help of their supervisors. Afterwards (with the help of the instructor) use SEM to calculate the overall sample. As a result, 400 sets of questionnaires were collected from April 2021 to May 2021. Before analyzing the data, the researchers corrected and checked the questionnaire content and data with the help of the masses and experts.

## *2.4 Statistical Methods for Data Analysis*

Structural equation modeling (SEM) is a comprehensive statistical method, which is used to test the hypothesis of the relationship between observed variables and potential variables / summarize the basic elements of SEM method / provide non-technical introduction of SEM method for students who study and receive basic inferential statistical training / refer to the standard statistical methods in social and behavioral sciences, such as correlation There are two important variable types in multiple regression and analysis of variance (h, 1995), namely latent variable and observed variable. For latent variables, "the nature of latent variables is essentially related to the nature of index variables used to define them". For observational variables, "observational variables (sometimes referred to as observational variables or measurement variables) are measured by researchers (observational variables: definition). Structural equation model has three advantages: (1) clear evaluation of measurement error; (2) estimation of potential (unobserved) variables by variables; And (3) model testing, in which the structure can be applied and evaluated on the data (Kaplan, 2008).

## **3. Research Findings and Data Analysis**

This research aims to study the choices and influencing factors that affect online shopping. This article is conducted a survey of 400 professionals and people who love online shopping and collect data, which will be measured and verified through data analysis SPSS.

### *3.1 The Value of the Cronbach's Alpha Coefficient*

The value of the Cronbach's Alpha Coefficient in this study of n400 is repeated as the following as summarized in the below table. Brand effecte.737, Product offering.743, Platform feature .872, Special offer.772, Shopping security.798, Shopping behavior .682. "Cronbach's alpha results should give you a number from 0 to 1, but you can get negative numbers as well. A negative number indicates that something is wrong with your data-perhaps you forgot to reverse score some items. The value of Cronbach's alpha coefficient of the questionnaire must be greater than 0.70 for all parts, therefore the questionnaire is considered as reliable (Taber, 2018).

### *3.2 Statistics and Data Analysis*

#### **3.2.1 SEM Results**

The chi-square value of 285.739 with 263 degrees of freedom is non-significant at the .05 level: its p-value is .160. This finding suggests that model fits the data acceptably in the population from which we drew our sample. Corroborating evidence is provided by the RMSEA fit statistic – the obtained value of .014 is well below the desired .06 cutoff. Similarly, the Tucker-Lewis Index (TLI) result of .998 as well as GFI (.952) and CFI (.998) are considerably above the .95 threshold denoting satisfactory model fit. Therefore, the model seems to fit well according to the descriptive measures of fit.

**CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	62	285.739	263	.160	1.086
Saturated model	325	.000	0		
Independence model	25	11598.374	300	.000	38.661

**RMSEA**

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.014	.000	.024	1.000
Independence model	.293	.288	.297	.000

**RMR, GFI**

Model	RMR	GFI	AGFI	PGFI
Default model	.020	.952	.941	.770
Saturated model	.000	1.000		
Independence model	.971	.079	.002	.073

**Baseline Comparisons**

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.975	.972	.998	.998	.998
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

More importantly, Platform (PF) and Brand (BE) seem to have significant effects on online-shopping behavior due to their p-values are both less than .05

			Estimate	S.E.	C.R.	P
SB	<---	PF	-20.355	9.586	-2.123	.034
SB	<---	SS	1.000			
SB	<---	PO	-14.633	15.437	-.948	.343
SB	<---	SO	.665	36.162	.018	.985
SB	<---	BE	33.779	12.324	2.741	.006

**4. Discussion**
**4.1 Summary of Research**

This study focuses on a set of potential influencing factors on user online shopping behavior including Brand effect, Product offering, Platform feature, Special offer, and Shopping security. We use Structural Equation Modeling to capture structural relationship of all these variables on online shopping behavior. The findings of SEM show that our model fit well with the data based on SEM criteria and brand and platform feature are the most important factors that would influence consumer's online shopping behavior.

**4.2 Managerial Implications**

Now online shopping platforms should make customers more aware, familiar, confident and possibly trust their brands in the brand building process. In addition, they should work harder to find platform features and defects, which are not only attractive to customers, but also can

better communicate and provide faster, better displays and better required services.

#### 4.3 Research Limitations and Recommendations for Future Research

Although this study identified factors that seem to significantly influence online shopping behavior. But it has not affected future research. The selection set of popular online platforms should be expanded to see if there are some unique influencing factors that may affect those niche online platforms that may only target specific market segments, such as certain professionals, students, young couples, retirees and specific groups of people. In addition, the model should include more variables to capture the tangible and intangible aspects of consumers, and the sampling frame should be further expanded to cover all the fast-growing heavy online shoppers around the world today.

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