# Influence of Online Shop Page Style on Consumers Purchase Intentions Based on Data mining technology and Eye Movement Movement Behavior

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**Abstract**

In the increasingly common online shopping nowadays, the use of data mining techniques to understand consumer preferences for browsing and contacting web pages is an important basis for the design of online store pages, which in turn has an impact on consumer purchase intentions. This paper takes consumers' purchase intention as the dependent variable, uses three elements of page color, content copy, and layout typography as the independent variables based on data mining techniques and theory of eye movement behavior, constructs the influence model, and puts forward seven research hypotheses. The method of questionnaire survey is used to obtain primary data. Through the SPSS statistical analysis method, the data are subjected to descriptive analysis, correlation analysis and regression analysis, so as to verify the regression model and research hypotheses. Through the statistical analysis of the questionnaire survey data, it is concluded that three major page style elements of page color, content copy, and layout typography have a positive impact on consumers' purchase intention, and the seven research hypotheses are proved to be valid. Through the theoretical and empirical research of data mining technology, based on the validation of the impact model and research hypotheses, three reference suggestions are proposed for online store page style design.

**Keywords**: Online store page design, data mining techniques, web style, consumer purchase intention, eye movement behavior theory.

## 1. Introduction

Data mining techniques are a collection of statistical methods and tools for analyzing large amounts of data collected by companies, discovering useful patterns and rules, and supporting marketing campaigns [1]. In the context of today's mature Internet development, the business system and industry of online stores are also approaching maturity. Under the huge number of online stores, there are different styles of store design and various types of products, and consumers have their own preferred styles, which will invariably intensify the competition among online stores. Online stores use data mining technology to understand the characteristics and preferences of consumers clicking and browsing the page, and then understand their needs for page design style, so as to design attractive style of online store pages, for online stores to increase traffic, customers, and promote sales.

In the page design of online store, style design occupies a dominant position. The formation of page style contains a variety of different elements, and focusing on different elements in the decoration can present different page styles and have a different impact on consumers' purchase intention. When consumers are

shopping online, their visual attention will be attracted by the different elements of the online store style, and consumers are willing to browse the online store with more attractive elements. This visual behavior of automatically capturing and filtering the browsing content is called "eye movement behavior". Based on the theory of eye movement behavior, the thesis will analyze the factors that consumers pay attention to the page style of online stores, and then study which page style factors have a more obvious influence on consumers' purchase intention when they shop in online stores. Some helpful advice is put forward for the online store in the page style design, so that the online store can be improved in the number of stores browsing as well as sales.

### 1.1 Concept and types of online store page design

Visual aesthetics need to be applied to the design of the store's page styles. Aesthetics is divided into subjective aesthetics and holistic aesthetics. When people perceive an object, it is based on the sensory factors of the object and the design of it, and these factors producing a pleasing experience is classified as subjective aesthetics. Observing the properties of the object itself, which is pleasing to all observers, is objective aesthetics. The overall aesthetics is that which produces a pleasurable experience from the interaction of the object's own factor properties and the experience and psychology of the observer at the time of observation. Wang suggested that the concept of holistic aesthetics can be better interpreted in online store design aesthetics by giving more prominence to the concept of holistic aesthetics in the page design of online stores [2].

Chen categorized the elements of overall aesthetics in terms of characteristics. From the required web page aesthetics, there are twelve corresponding elements, which contain unity, simplicity, balanced proportions, symmetry, balance, neatness, harmony, density, sense of order and so on. Aesthetics in performance is also divided into two different forms, including performance aesthetics and classical aesthetics, in which performance aesthetics mainly contains creativity, attractiveness, special effects factors and originality, etc. and classical aesthetics includes symmetry, clarity, neatness, beauty and pleasantness [3]. Different scholars, on the other hand, have different understandings of web page aesthetics, while Pan classified web page aesthetics into four different aspects which were technicality, colorfulness, diversity and simplicity [4]. Fu integrated and classified the elements of web aesthetics and divided the online store style into three main parts, which were page color, content copy, and layout typography, and categorized many other aesthetic elements into these three main parts [5].

### 1.2 Factors related to consumer purchase intention

#### 1.2.1 Consumer characteristics

Michael stated that consumer attributes were related to shopping experiences and different experiences produce different online shopping intentions. Based on different consumer attributes such as geography, age, salary, gender, etc., the respective purchase intentions are quite different [6]. Compared with older consumers, younger consumers are more willing to engage in online purchasing behavior who have a spirit of experimentation and adventure and are very tolerant of new things.

Zhang suggested that consumers' purchase intention was influenced by the consumer trust established by an online store [7]. The number of goods purchased from that online store, the level of knowledge about that online store, and the experience feeling of that online store are factors that constitute consumer satisfaction, which in turn affects the level of consumer trust, thus changing their purchase intention. Some studies have shown that online consumers are more influenced by their shopping experience, and that a bad online shopping experience will reduce future shopping behavior in that online store, while a pleasant shopping experience will increase consumers' purchase intention.

#### 1.2.2 Product attributes

According to Yan, consumers' intrinsic purchase intention is influenced by the degree of satisfaction of consumers' intrinsic motivational needs [8]. When analyzing the extrinsic and intrinsic attributes of a product, each attribute will have an impact on purchase intention to a different degree, such as the degree of practicality of the product, functionality, packaging quality and cost-effectiveness. Products with weak functional attributes have a negative impact on consumer purchase intentions and then the price will affect the purchase intention to a

greater extent. When the degree of practicality of the product reaches the intrinsic needs of consumers, the influence of other factors on purchase intention will be reduced.

#### 1.2.3 Purchasing platforms

Consumers place a great deal of importance on the platform's page design, good or bad reputation, and link security when shopping online. If the web style is recognized by consumers, it can increase their desire to shop and purchase intention. Jesse's research conclusion points out that websites should focus on the aesthetics of page design to build consumers' trust on the website, enhance consumers' browsing comfort, and display product-related information, which can influence their purchase intention [9]. Good design in terms of website structure and content, as well as easy and quick navigation setup can attract potential consumers. Ease of navigation is an important aspect of web design that is directly related to store traffic, which in turn plays a very important role in consumer behavior analysis.

### 1.3 Concept and types of eye movement behaviour

Yan suggested that there were three types of basic movements of the human eye: gaze, eye skipping, and following movements. Objects can only be seen clearly when both eyes remain oriented in the same direction and image the object intact on the retina, so this behavior is called gaze. The other skipping and following movements are eye maintenance movements performed to obtain clearer vision [10]. The basic types of eye movements are described below.

#### 1.3.1 Gazing

What gaze does is to accurately reflect the observed object into the central fossa of the eye. In fact, gaze does not literally focus on a single location. The eye is not completely immobile, and even when looking at a stationary object, it is generally accompanied by three different types of complex eye movements: small, random eye movements, drifting and quivering.

#### 1.3.2 Skipping

Prof. Javal of the University of Paris was the first to discover the eye skipping. The most sensitive position in the retina is the central fossa, and the beating of the eyeball is what allows the point to be focused on to fall on this position, thus allowing to see things more clearly, and this is called eye-skipping. When we look at things normally, we do not perceive the eyeballs to be jumping, but rather they feel like they are moving smoothly. For example, when browsing the web, you may think that your eyeballs are moving smoothly along each line, but they are actually jumping.

#### 1.3.3 Following movement

When studying a dynamic object, if the eyes are kept focused on the dynamic object and the head is held still, the eyes will move in accordance with the trajectory of the dynamic object, which is referred to as a following movement. On the contrary, it is also possible that the eye movements are compensating for the body movements, and such eye movements are called compensatory eye movements. Yan pointed out that all the movements made by the following eye movements have the same purpose, which is to make the imaging position of the central fossa more accurate, making the observed object clearer [10].

## 2. Analysis of Web Page Style Elements Affecting Consumers' Purchase Intention

Solomon has mentioned in the context of environmental marketing that the visual attributes (e.g., shape, color, stimulus elements, etc.) of a web page can influence consumers' attention span and thus their willingness to buy [11]. This suggests that consumers' willingness to buy is to a certain extent related to what they perceive with their eyes.

Javal informed that people have three different forms of eye movements when browsing a page, i.e., gaze, skipping, and following movements. Based on the eye movement behavior, Luo subdivided the eye movement trajectory of consumers when shopping and browsing into three forms of movement, i.e., three different forms of browsing: purposive searching, casual browsing, and switching between purposive and casual browsing [12].

In these three different forms of eye movement, there are respective web style design elements that are emphasized. The author integrates these elements with the three major elements in page design, namely page color, content copy, and layout typography, as proposed by Fu, and summarizes the design elements common between the two that affect consumers' purchase intention.

### 2.1 Page color

Luo argued that when people are browsing casually, the information captured by the eye and the focus of attention will be different [12]. Because the brain is sifting through information purposelessly at this point, the eye's information capture is random in nature. There is a kind of analysis in psychology called unintentional attention analysis combining itself with eye movement theory, which explains that when people unconsciously observe certain objects, they will obey the law of stimulus intensity. That is, the order of content capture is determined according to the strength of the stimulus of the displayed object, while color is the element that prioritizes the strength of stimulus. Ge similarly argued that color is the content that the eye gives the highest priority to for grasping, and the hue of the online store determines the first impression of the online store [13]. Consumers who prefer different color attributes produce different purchase intentions for different color combinations and propose the following three elements.

#### 2.1.1 Color integrity

Online store page color should be repeated in the base color and auxiliary color on the deliberation, which is to maintain the overall tone of the important step of consistency. Then a variety of colors harmoniously match, clearing the role of each color arrangement, so that the overall color in the web page reflects the unity and coordination.

#### 2.1.2 Color matching

Research has shown that the degree of matching between the design style of the online store page and the brand or product of the online store has a greater impact on the consumer's sense of shopping experience. Consumers have their own perceptions of most products, and when the color attributes of a product conflict with their existing perceptions, it will reduce consumers' shopping intentions.

#### 2.1.3 Color driven

What is captured visually can trigger other sensory stimuli, such as the shape and size of the image, the richness of the color, and the degree to which the meaning of the text is conveyed. Some research suggests that vividness is an important factor in page design. It can attract consumers' interest in the product, increase their pleasure, improve their favorability to the online store, and then change their purchase intention.

### 2.2 Content copy

When conducting purposeful research, all types of browsing and eye information capture are centered around the subjective feelings of the consumer. Consumers' attention should be captured more when they are browsing purposefully and crawling on targeted text. According to Guo, Yi (2018), the complexity of the text and the degree of information interaction are the main factors when designing the textual content of a page [14].

#### 2.2.1 Complexity

Complexity refers to the ease of designing a page with respect to the overall panels, introductory text, and selection options for consumers to understand and operate. Research on the impact of web page visual factors on consumer decision-making behavior has shown that the complexity of a web page can positively affect the user's mood when browsing the page freely.

#### 2.2.2 Degree of information interaction

The degree of information interaction refers to the degree of interaction that can take place between the web store page and the consumer. The online store itself is an interactive medium, and the consumer has a choice to interact on the site. This makes browsing less of a one-sided process. A good interaction between the online store and the consumer helps in online store browsing.

2.2.3 Layout

Tang proposed that under different browsing modes, eye browsing follows a law called "Gutenberg", which is a law summarized by the eye-tracking instrument. That is, a normal page can be divided into four areas. The upper left corner is the main visual area, the lower left corner belongs to the weak visual area, the upper right corner is the strong visual area, and the lower right corner belongs to the visual final stay area. Therefore, Tang proposed that in the interface design, it is necessary to pay attention to the overall layout and focus on the aesthetics of the page, and the key factors are the overall symmetry and the clarity of the page [15].

(1) Page symmetry

The use of symmetry is very frequent in web design and this feature is used as an important part of aesthetics [16]. Studies have shown that the higher the symmetry, the more appealing and pleasing it is to the consumer. It makes the overall page style present a stable and neat visual feeling, which can bring a pleasant visual effect.

(2) Page clarity

According to Tang, the clarity of the page is achieved through various navigation within the pages of the online store. When consumers browse the page, clear guidance will improve the effect of consumers' shopping experience, and consumers have a clear perception of the online store's goods and understand the browsing path of the goods they need within that online store [15].

## 3. Modelling Consumer Purchase Intention with Web Style Elements

### 3.1 Presentation of the model

Combining the research of scholars at home and abroad, consumer's purchase intention is selected as the dependent variable, and page color, content copy, and layout typography are taken as the independent variables. The selected variables and corresponding indicators are shown in Table 1.

Table 1. Variables to be selected and corresponding indicators.

| Variable type | Variable name | Corresponding indicators |
|---|---|---|
| Implicit variable | Consumer purchase intention | Consumers are willing to buy products from online stores with this type of page style. |
| Independent variable | Page color | High page color integrity and consumer attention. |
| | | Page color matches the product and is more appealing to consumers. |
| | | Appropriate page colors drive consumer emotions. |
| | Content copy | Copywriting is more complex and attracts consumer attention. |
| | | Good degree of interaction with copywriting content and strong sense of consumer interaction. |
| | Layout | Good typographic symmetry for consumer comfort. |
| | | High clarity of page navigation to lead consumers to shop. |

Based on Table 1, the following hypotheses are proposed:

H1: High page color wholeness has a positive effect on consumers' purchase intention.

H2: High page color matching has a positive effect on consumers' purchase intention.

H3: A high level of page color drive has a positive effect on consumer purchase intention.

H4: More complex copy has a positive effect on consumers' purchase intention.

H5: A good degree of interaction with the copywriting content has a positive effect on the consumer's purchase intention.

H6: Good typographic symmetry has a positive effect on consumer purchase intention.

H7: High clarity of page navigation has a positive effect on consumers' purchase intention.

### 3.2 Questionnaire design and research methodology

3.2.1 Selection of survey respondents

In today's mature online store business system and industry, college students have been the main consumer group of online shopping. College students have their own characteristics. First of all, they like new things and showing themselves, which makes their consumption behavior more impulsive. Secondly, college students do not have economic pressure, have more disposable funds than other consumer groups, which increases their shopping desire. Finally, college students do not have the pressure of life and work at this stage, which makes them very free in behavior. Almost every day contacting with the Internet and online stores, online shopping is a very common behavior among college students. This is the reason why college students become a very active group of online shopping enthusiasts. Therefore, we choose college students as the main target of the questionnaire in this paper.

3.2.2 Questionnaire design process

The factors affecting consumers' purchase intention and the corresponding terms of each factor have been analyzed in the previous article. Next the author will refer to the measurement terms proved by scholars for the design of the questionnaire, and then add and modify the questionnaire by combining with the theory of eye movement behavior.

The questionnaire is divided into four main parts. The first part is to understand consumers' online shopping experience. The second part is the corresponding terms of the seven influences of webpage style on consumers' purchase intention. The third part is to determine consumers' purchase intention and behavior; and the last part is the basic information about consumers in order to distinguish the target group from the other groups. The questionnaire design and the analysis of basic data for this study were conducted on the Questionnaire Star website. 166 questionnaires were released through WeChat, QQ and other mobile platforms as well as direct access to the website, and 153 were effectively collected, with a recovery rate of 92.16%. The sample size of the survey is basically the same as the number needed for this research.

### 3.3 Data analysis of the questionnaire

3.3.1 Reliability test

The reliability of the questionnaire data was measured by Cronbach's coefficient through SPSS analysis software. Generally speaking, when the reliability coefficient is less than 0.5, it means that the reliability is low, and the questionnaire needs to be corrected. When the reliability coefficient is between 0.5 and 0.8, it means that the questionnaire is set up in a more reasonable way and when the reliability coefficient of the questionnaire is more than 0.8, it means that the questionnaire has a better degree of reliability.

Table 2. Reliability analysis.

| Name | Correction term total correlation (CITC) | Deleted alpha coefficients for item □ | Cronbach's coefficient □ |
|---|---|---|---|
| Integrity | 0.672 | 0.745 | 0.912 |
| Compatibility | 0.725 | 0.859 | |
| Driving force | 0.714 | 0.875 | |
| Complexity level | 0.698 | 0.779 | |
| Degree of interaction | 0.745 | 0.812 | |
| Symmetry | 0.673 | 0.762 | |
| Clarity | 0.685 | 0.854 | |
| Consumer Purchase Intention | 0.729 | 0.723 | |

As can be seen from Table 2, the reliability coefficient value is 0.912, which is larger than 0.8, indicating that the reliability of the questionnaire is good. The Cronbach's alpha coefficients for the four variables of matching,

driving, degree of interaction and clarity are all higher than 0.8, indicating that these four scale items have high reliability. The Cronbach's alpha coefficients for the four variables of integrity, complexity, symmetry and consumer purchase intention are all higher than 0.7, indicating that these four scale items have relatively high reliability. The above analysis shows that the variables in the questionnaire of this study are relatively stable and the data analysis is reliable.

3.3.2 Validity test

The validity of the questionnaire data was tested using factor analysis in SPSS analysis software. Table 3 shows the results of KMO measure and Bartlett's spherical test of the questionnaire. When the KMO is greater than 0.7, it means that the data is suitable for factor analysis. Table 3 shows that the KMO value of the questionnaire is 0.794, indicating that the data passed the validity test. According to Bartlett's spherical test, the approximate chi-square value is 2534.773 and the Sig value of the probability of concordance is 0.000, which is less than 0.05 and reaches the level of significance, proving that the questionnaire passed the validity test.

Table 3. KMO and Bartlett test.

| The Kaiser-Meyer-Olkin measure of sampling adequacy | | .794 |
|---|---|---|
| Bartlett's test of sphericity | Approximate chi-square (math.) | 2534.773 |
| | df | 14 |
| | sig. | .000 |

3.3.3 Regression modeling

Taking consumers' purchase intention as the dependent variable Y, and integrity, compatibility, driving, complexity, interaction, symmetry, and clarity as the independent variables $X_1$ - $X_7$ respectively. The regression model is constructed in the form of $Y = \alpha_1X_1 + \alpha_2X_2 + \alpha_3X_3 + \alpha_4X_4 + \alpha_5X_5 + \alpha_6X_6 + \alpha_7X_7 + C + \mu$, where $\mu$ is the disturbance term.

3.3.4 Descriptive analysis

We performed a descriptive analysis of the survey data to identify patterns inherent in the data for further analysis of the data.

Table 4. Results of the descriptive analysis - base indicators.

| Variant | Average | Standard deviation | Sample size |
|---|---|---|---|
| Integrity | 2.842 | 0.924 | 153 |
| Compatibility | 3.524 | 1.022 | 153 |
| Driving force | 3.125 | 1.014 | 153 |
| Complexity level | 3.324 | 0.902 | 153 |
| Degree of interaction | 3.112 | 1.012 | 153 |
| Symmetry | 2.712 | 1.016 | 153 |
| Clarity | 3.612 | 1.065 | 153 |
| Consumer Purchase Intention | 2.957 | 1.025 | 153 |

As can be seen from Table 4, there are no outliers in the data, and the data fluctuate within 3 standard deviations of the mean. The mean value of compatibility is 3.524, and the mean value of clarity is 3.612, which means that survey respondents are influenced by the compatibility and clarity of the style of online store page. The mean values of drive, complexity, and interactivity are all higher than 3.0, indicating that drive, complexity, and interactivity of online store page also have some influence on the sample consumers. The mean value of integrity and symmetry is less than 3.0, which is 2.842 and 2.712 respectively, indicating that consumers perceive the influence of integrity and symmetry of online store page as low. The standard deviation of consumers' integrity and complexity is less than 1.0, which implies that consumers in the sample are more consistent in their emphasis on web page integrity and complexity. The standard deviation of the other variables is greater than 1.0, which suggests that consumers are relatively dispersed in their emphasis.

3.3.5 Correlation analysis

Based on a large number of raw data statistics, we analyze whether there is a correlation between the seven variables and dependent variable, and the manifestation and closeness of the relationship. Generally speaking, when the value of correlation coefficient is between 0 and 1, it indicates that there is a positive correlation between the variables.

Table 5 shows the values of correlation coefficients between purchase intention and the factors, from which it can be seen that the Pearson correlation coefficients between the eight variables of integrity, compatibility, drive, complexity, interaction, symmetry, clarity and consumer purchase intention are all greater than 0, and at the same time the Sig. values are all 0.000.

Table 5. Correlation analysis-Pearson correlation coefficients.

| Variants | Integrity | Compatibility | Driving force | Complexity level | Degree of interaction | Symmetry | Clarity | Consumer purchase intention |
|---|---|---|---|---|---|---|---|---|
| Integrity | 1 | | | | | | | |
| Compatibility | .716** | 1 | | | | | | |
| Driving force | .647** | .798** | 1 | | | | | |
| Complexity level | .803** | .664** | .548** | 1 | | | | |
| Degree of interaction | .854** | .761** | .681** | .815** | 1 | | | |
| Symmetry | .634** | .823** | .597** | .715** | .565** | 1 | | |
| Clarity | .744** | .623** | .597** | .842** | .719** | .851** | 1 | |
| Consumer purchase intention | .698** | .742** | .756** | .842** | .793** | .604** | .745** | 1 |

To summarize, at the 0.01 level of significance, the integrity, compatibility, drive, complexity, interaction, symmetry and clarity are all in the same direction as the change of consumer purchase intention. The seven variables are positively correlated with the purchase intention of consumers, so there is a significant linear relationship between these seven factors and the purchase intention of consumers.

3.3.6 Regression analysis

From the correlation analysis above, it is known that there is a significant correlation between all the factors and purchase intention. The regression model is next validated by regression analysis. Usually there may be multicollinearity of variables in the test model. When the variance inflation factor is less than 10, it means that there is no problem of covariance among the variables. When the factor is greater than 10, it means that there is serious multicollinearity in the regression model. After the SPSS analysis, the maximum value of all variance inflation VIFs is 2.22, indicating that there are no variables to be excluded.

Table 6. Results of regression analysis.

| Variant | Non-standardized coefficient | | T | P | VIF | $R^2$ | F |
|---|---|---|---|---|---|---|---|
| | B | Standard error | | | | | |
| Constant | 0.452 | 0.031 | 4.310 | 0.042 | - | 0.413 | 12.542 (0.000) |
| Integrity | 0.128 | 0.087 | 1.134 | 0.048 | 1.761 | | |
| Compatibility | 0.376 | 0.097 | 3.543 | 0.023 | 1.866 | | |
| Driving force | 0.364 | 0.089 | 2.849 | 0.031 | 1.912 | | |
| Complexity level | 0.468 | 0.098 | 3.872 | 0.017 | 2.034 | | |
| Degree of interaction | 0.372 | 0.085 | 2.889 | 0.024 | 1.775 | | |
| Symmetry | 0.107 | 0.099 | 1.152 | 0.043 | 1.894 | | |
| Clarity | 0.574 | 0.083 | 3.954 | 0.009 | 2.015 | | |

Note: The dependent variable is consumers' willingness to buy. D-W value is 2.524, $p<0.05$.

As can be seen from Table 6, the P-value of the seven variables is less than 0.05. According to the original hypothesis, that is, there is a significant linear relationship between all the seven independent variables and the dependent variable, i.e., integrity, compatibility, driving, complexity, interaction, symmetry and clarity all have a positive influence on consumers' purchase intention. $R^2$ is 0.413, which indicates that the regression equation

has a better fit. Therefore, the multiple regression equation of consumer's purchase intention with seven influencing factors can be summarized as follows.

$Y=0.452+0.128X_1+0.376X_2+0.364X_3+0.468X_4+0.372X_5+0.107X_6+0.574X_7$

The regression equation can be interpreted as follows. There is a corresponding increase of 0.128, 0.376, 0.364, 0.468, 0.372, 0.107, 0.574 units in the consumer's purchase intention.for each unit increase in X1 - X7.

## 4. Research Results

After analyzing the raw data from the questionnaires using SPSS software, the corresponding findings, which verified the hypotheses previously proposed, are briefly summarized in Table 7.

Table 7. Summary of assumptions

| Number | Hypothetical content | Results |
|---|---|---|
| H1 | There is a positive effect on consumer purchase intention when the page color integrity is high. | Established |
| H2 | Page color compatibility has a positive effect on consumer purchase intention when it is high. | Established |
| H3 | Page color has a positive impact on consumer purchase intent when it is driven to a high degree. | Established |
| H4 | More complex copy has a positive effect on consumer purchase intentions. | Established |
| H5 | A good level of copywriting content interaction has a positive impact on consumer purchase intent. | Established |
| H6 | There is a positive effect on consumer purchase intention when typographic symmetry is good. | Established |
| H7 | Page navigation has a positive impact on consumer purchase intent when it is clear. | Established |

### 4.1 Color matching with products can enhance consumers' purchase intention

The base color can determine the foundation of the style of an online store, but also to leave consumers the first impression of the online store. Product image and online store color are interrelated. When consumers browse the online store, the products they need first appear in the brain imagination, and the color of the eye for grabbing will be matched to the products. When the two do not match, it will confuse the consumer's browsing experience. On the contrary, the coordination of color and product matching will bring consumers a pleasant browsing experience, which can increase the consumer's intention to buy.

### 4.2 More complex copywriting content attracts consumer attention

When consumers are browsing the web, the simpler the content is, the less likely it is to attract their attention. However, when complex content appears on the visual surface, it will lead to an increase in the performance of the eye and the brain in grasping information and stimulate their positive emotions. Therefore, compared to simple web content design, complex web design is more likely to stimulate consumers' attention. After strengthening the attention, it can indirectly transform the mindset and finally influence the purchase intention.

### 4.3 Clear page navigation guide can enhance consumers' desire to buy

When consumers are not clear about the way to search for the product they need, it will reduce the desire to buy the item. If there is a clear guide design on the page of the online store, the visual signs and content depiction are clear and accurate, consumers can according to the guide to search for the goods they need simply and quickly. Then, it will allow consumers to maintain their own desire to shop, to a certain extent, to increase the possibility of consumers to buy.

### 4.4 Overall degree of color has a positive effect on consumer purchase intention

The degree of unity of overall color collocation of online store not only directly affects the coordination of the page, but also gives customers a different psychological feeling on browsing, which in turn affects customer's search for the target product. In the color design, integrity and harmony of the collocation is very critical. The

higher the color unity, the easier it is for consumers to enhance their attention to the web page, and the easier it is to increase their willingness to buy.

### 4.5 Interactive design of online stores can trigger consumers' enjoyment

The process of consumers just browsing the page is one-sided. If we can add interactive design, it can enhance the sense of participation and fun. By designing interactive buttons on the web store page, consumers can make their own choices, such as jumping to other pages according to their wishes. Consumers browsing the web page can be timely response to their choices, which is a pleasant process. It can increase the consumer's browsing pleasure and better grasp the attention of consumers.

### 4.6 Right color drives consumer emotions

Consumers have a fixed perception of certain products or brands based on previous experience. Cognitive dissonance refers to the conflict between the information consumers are exposed to and their inherent perceptions. This can make the consumer feel confused, which in turn decreases the consumer's intention to buy. Online store page in the color design can be imitated or used with some product-related elements to enhance the consumer's perceptual sense of identity.

### 4.7 There is a relationship between symmetry of the page and consumer purchase intention

The layout of a page affects the order in which consumers view it. Symmetry belongs to the classic characteristics of aesthetics and has a very important role in attracting users' attention. The higher the symmetry of the page, the more attraction and pleasure it brings to consumers, which in turn promotes consumers' purchase intention.

## 5. Conclusions

According to the results of the previous study, it can be seen that consumers have different reactions in the face of different online store page style designs. Through the method of data mining to categorize customers, using regression analysis, decision tree and other computer data analysis techniques to construct a model of the impact of web page style on consumer purchase intention, from which conclusions are drawn and suggestions are made for the design of online store page style.

### 5.1 Focus on product and color matching

The tone color is the foundation of an online store style, but also the first impression left to consumers. Consumers' memories of the online store are dominated by the tone color. Online store page color confusion will negatively affect the consumer's browsing experience. Therefore, the online store in the color selection, should pay attention to the product and color matching, to achieve the match and harmony between the product and color. The overall color matching requires attention to the degree of driving various colors, so that the different relationships formed between colors trigger visual impact. Page design should make full use of the various characteristics of color, presenting a rich picture, so that consumers feel visually pleasing.

### 5.2 Structurally oriented typographic layout

Clear and symmetrical typography can bring a soothing feeling to the eyes, which is conducive to the eye's grasp of information. Balanced design can make the picture harmonious and beautiful, pleasing to the visual mood of consumers, and then positively affect the consumer's willingness to buy. Online stores should do a good job of the overall layout of the page plate, focusing on the balance of the various parts of the page, should also harmonize symmetry and clarity. In highlighting the unique style of the online store at the same time, the style should bring the consumer visual sensory comfort.

### 5.3 Well-designed copywriting content

Copy editing is done as much as possible from the store logo selected to keep the overall interest considering a harmonious match on various elements such as pictures, promotions, price information, and so on. For the

overall copywriting design, the design needs to match all kinds of colors into the content to form their own unique copywriting style. Online store page should be designed more complex content and interactive information, so that consumers are attracted by the content of the text, slowly guided on the web page for deeper reading. Thus, consumers are prompted to find the demand for goods and take the purchase behavior.

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