

Research on Visual Color Matching Based on Kansei Engineering

Yan Lin

School of Art and Design
Fuzhou College of International Studies and Trade
Fuzhou, China 350001

Abstract—At present, the production and development of industry in the world has gradually drawn closer from focusing on products to focusing on customers, which is not only the feature of social progress, but also the inevitable trend of marketization. Especially in the context of oversupply, paying attention to the common and personalized needs of consumers can better promote the goal of high efficiency and quality in product sales. Based on this, Kansei Engineering has become a very important discipline, which has been highly concerned by many enterprises among all the elements related to Kansei Engineering, visual color is the most important. The research on the visual color matching of Kansei Engineering has become a project that the current industry pays more attention to and receives more attention and investment, which has an important impact on the research and development of related fields in the future.

Keywords—*Kansei Engineering; quantification; research method; emotional design*

I. INTRODUCTION

The development of industry is inevitably accompanied by the progress of society and economy. The ways and contents of industry to meet the needs of the society and the market also become an important force to promote social development. To this end, new disciplines related to this are constantly emerging and playing a role, forming a key tool for the effective connection between industry and social consumption demand. Compared with other disciplines related to engineering, Kansei Engineering has a special meaning and manifestation. Up to now, Kansei Engineering has gradually developed and become an indispensable subject in engineering marketing. It's of great importance for consumers to closely link products and demand, which has a certain role in promoting product marketing and industrial development.

II. OVERVIEW OF RELATED CONTENT OF KANSEI ENGINEERING

Product design is a concept with constantly changing connotation and extension. From the past focus on product function and performance to the current product form and color, etc. This development process can reflect the logical process of the whole market transformation. Due to more consideration of consumers' attention and acceptance, Kansei

Engineering has become an important and independent discipline, which is highly concerned by the current industry. Since the 1970s, industrial product design worldwide has developed to a new stage. The design concept has gradually developed from only considering the function or shape of the product to more humanistic direction. Even in some industrial products, humanistic factors have become the priority. Consumers' emotion towards the product will directly determine the purchase decision, and emotional demand has become an important way of demand. The proportion of emotional demand in the purchase decision of the product continues to rise. All kinds of product design should not only ensure the use of performance and function, but also add emotional design factors.

A. The Definition and Essence of Kansei Engineering

Kansei Engineering, in essence, is mainly derived from design engineering. It is a targeted improvement and optimization adopted in the process of industrial design to highlight the perceptual features of products in appearance, color and other aspects. Kansei Engineering is relatively new to China. However, it was highly recognized by market users at the initial stage, which greatly promoted the sales and use of products. As far as the current development of Kansei Engineering in China is concerned, it is still at the initial stage, and various achievements have not been systematically studied and sorted out.

1) The scientific analysis of perceptual needs:

The so-called perceptual demand mainly refers to the need based on emotion, which is a concept generated in opposition to the rational demand. According to Maslow's hierarchy of needs, the needs can be roughly divided into physiological needs, safety needs, social needs, respect needs and self-actualization needs. These needs are divided into high and low. Only when the bottom needs are fully satisfied can people seek to satisfy the needs of higher layers. Based on this theory, in the process of product design, it's necessary to pay attention to the development of consumer demand from low level to high level. The psychological and spiritual tendency of the consumer group was studied, and the material, character, color and operation of the product were further designed. In this way, consumers will gradually make their demands for products more comprehensive, and the ratio of emotional demands will be higher, so that rational

consumption and emotional consumption can be given full consideration.

Kansei Engineering organically integrates the correlation between human sensibility and product characteristics through certain technical means, and the specific process is to transform it into detailed form and perfect the design of each constituent element through the quantification and imagery of users' perceptual needs. Kansei Engineering is not only a kind of theory and technology, but also an artistic process of technology. In the process, there is not only full application of various engineering design technologies, but also artistic processes of these technologies. The specific effects are directly recognized by consumers. Therefore, Kansei Engineering design must be guided by consumers' perceptual needs, fully integrate relevant perceptual information and design elements, and express the product form in a quantitative way. The scientific nature of Kansei Engineering is embodied in quantitative and rational rules and theories. Through artistic innovation and development in specific designs, a more acceptable and influential mode and form can be formed. Perceptual design is a product form and feature formed on the basis of rational perceptual design.

2) *The actual design process that meets the consumer's emotional needs:*

If Kansei Engineering is to achieve the desired design effect, it must explore specific ways and means from the perspective of maximizing the satisfaction of consumer demand. In the actual design process, the following key steps should be taken to complete the corresponding design.

First, the perceptual characteristics of consumers towards products are quantified through specific methods of engineering rationality to form a mathematical model that can be effectively processed by computer and other tools. The second is to use the obtained data to form a specific statistical analysis chart, and further calculate the corresponding function relationship between the number of parameters, forming a general expression. Thirdly, the content of relevant elements is extracted according to the perceptual attributes corresponding to each quantitative data, which can be used as the basic reference data for Kansei Engineering design. The fourth is to complete products that better meet the emotional needs of consumers in accordance with relevant design theories, common sense, experience and technology.

B. The Field of Kansei Engineering

Kansei Engineering design is a comprehensive subject, involving and covering a wide range of application fields. It is formed after the cross integration of multiple subject contents, and its research object and category also maintain the comprehensive characteristics. The core goal of perceptual engineering is the rationalization of perceptual elements, which makes the perceptual content more disciplined. The result of quantification is that the cognitive interaction between man and machine can be realized, which will promote the rational application of perceptual processing effect. The core basic content is psychology and cognitive science. Specifically, the knowledge domain and

technical category of Kansei Engineering mainly include the following aspects:

The first is the research on human psychological feelings, perceptual emotions and other contents, so as to form a theoretical framework and knowledge and technology system with a certain foundation of Kansei Engineering. The second is the study of life science, which provides a direct physical basis for the formation and development of human perceptual cognition. The third is to dig deeply into the relevant research theories of consumer psychology, and then judge and master the needs of consumers at the perceptual level. Fourth, the knowledge content of product design and industrial manufacturing, which explores the relationship between the formation of consumer sensibility and the basic attributes of specific production products, including material, shape, color, technology, design and other factors. Fifth, based on the research results of product semantics, the relevant contents are helpful for the category analysis and semantic intention judgment of products. From these aspects, the research fields directly or indirectly involved by Kansei Engineering have corresponding knowledge contents in many disciplines and are closely related to some technical methods. Therefore, this discipline is essentially a practical one.

III. RESEARCH METHODS OF KANSEI ENGINEERING

The field of Kansei Engineering attaches great importance to the process of practice, and the selection of research methods is largely based on various empirical summaries in the field of Kansei Engineering. In the research of Kansei Engineering, it is necessary to identify some factors in products that can cause users' perceptual identification. These factors are the features and appearance of products that can be displayed after processing, and some scientific design methods can be used to improve and optimize the products accordingly. In the process of practice, Kansei Engineering can be simply divided into several different types of models according to the design approach, namely: Kansei Engineering support system, hierarchical classification, complex Kansei Engineering system and other main design methods, which are respectively described below.

A. Kansei Engineering Support System

Kansei Engineering support system is a computer-aided design method and system based on the computing function of a specific design system, which links product design with people's perceptual attributes. The main way of perceptual support system is to integrate information technology, artificial intelligence technology, neural network technology, fuzzy logic geometric method technology and so on with the help of the powerful function of computer, and use the integrated system comprehensively, so that the support system of inference model system is formed among various functions. The system exhibits a stable dynamic balance operation, and data in the database can be updated instantly, and new data is input at any time to ensure that the system database can adjust to new developments and new changes in perceptual cognition. For designers of Kansei Engineering,

this system is an important tool for Kansei Engineering design, and it can also be used as a reference for the exploration of consumers' emotional needs. Normally, Kansei Engineering support system needs to set up four major data databases, including perceptual vocabulary database, perceptual image database, knowledge database, design and color data database. Each database contains contents closely related to design, which is convenient for retrieval and use in the actual design process.

B. Hierarchical Classification

Hierarchical classification refers to the process of people forming perceptual experience, which is quite different from other design methods. Hierarchical classification analysis adopts the layered analysis method from the perceptual design of industrial products, and its core design does not involve various mathematical operations. Therefore, its analysis method is the simplest one, and it is also the most widely used Kansei Engineering design analysis method in China. In the actual product Kansei Engineering design and development process, the research results are directly targeted at the performance attributes of the product, and these design methods are fully applied to the entire development and design process of industrial products, which can maximize the expression of users' emotional needs. Its concrete implementation mainly includes 4 steps according to time sequence:

The first step is to conduct market research on Kansei Engineering design for products. The methods used in the survey can be flexible and convenient, including market research, user interview, data collection and so on. In the second step, the design researchers have a full discussion on the survey data and results, and generally brainstorm to clearly express everyone's ideas. The discussion results will be summarized to form the 0-order perceptual concept of design. Third, in general, 0-order perceptual concepts are fragmented, abstract and difficult to understand. It is necessary to transform them into concepts, enrich and concretize them continuously, and then form first-order perceptual concept. This method is hierarchical, and the user's perceptual knowledge is decomposed downward to form a more easily described first-order perceptual concept. The fourth step is to decompose concepts level by level on the basis of first-order perceptual concepts, and further deduce relevant sub-concepts. The derived sub-concepts are further decomposed and gradually developed into a tree structure. The relationship of the whole tree structure can be made into a structure diagram, which is used for the specific design of the product.

C. Complex Kansei Engineering System

In actual Kansei Engineering design, Kansei Engineering support system is called inward Kansei Engineering because of its working mode. Its starting point and implementation are mainly designers. In actual design, designers usually provide some hand-drawn design sketches to the sampled product users for emotional recognition evaluation. There are many uncertainties in this process, so there is a problem of low efficiency. The main reason is that there is a big

cognitive deviation in the connection between the idea of the user and the designer, and both sides' expressions are inaccurate in their understanding of the other side. For this reason, it is necessary to build an auxiliary system to predict the perceptual cognition of users from the design sketch. This system is a non-inward design mode, namely the so-called reverse Kansei Engineering system. Its research target is market consumers, through the perceptual translation design of consumers, to form a specific scheme, and further complete various verifications.

This Kansei Engineering design system, which integrates the assistance of inward and reverse design, integrates divergent and centralized design ideas. In design into the evaluation process, this system is more efficient. According to this system, the designer can better understand and master the perceptual attributes of the designed product, and obtain the mathematical logic relationship between these attributes and the evaluation conducted by consumers' sensibility through analysis, and then determine the degree to which all the evaluations meet the designer's design intention. Complex Kansei Engineering system is often used in the actual design process, allowing designers and consumers to be separated at the same time. The practical application of the system provides great convenience. With this system, the designer can elaborate on the engineering design concepts of these products without going to the end product users, and without the large-scale energy and financial investment of market research. It is convenient to obtain the user's perceptual evaluation of the product.

IV. KANSEI ENGINEERING RESEARCH ON COLOR PSYCHOLOGY

From the perspective of psychology, color is the most important element of human perceptual cognition, which has a very important value and significance in the Kansei Engineering design of various industrial products. For the human body, the vast majority of information comes from visual information, and the most direct factor in visual information that can affect people's feelings and emotions is color information. Therefore, highlighting the Kansei Engineering design concept and specific practice of color cognition can form a powerful promoting effect on the whole Kansei Engineering design. At present, among the links involved in Kansei Engineering design, the design and use of color is the simplest and the design with the best effect.

A. Color Perception

Color is an impression based on the cooperation of eyes and brain, which describes the external attributes of objects formed by the reflection of visible light. Due to the great difference in the colors of various things, the human experience makes the cognition of colors closely related to many related things. The significance of colors is not only limited to the physiological perception, but also injected into the psychological understanding. Color perception is a form of feeling for the nature and use of color based on the influence of both physical and psychological factors. It is directly related to the human body's ability to accept light waves and the way of interpretation. Color is the physical

feedback of different wavelengths of visible light in the human eye and brain. The numerous and complicated changes of colors directly depend on the change of the wavelength of visible light they reflect. People's interpretation of colors comes from their own life experience, objective environment, physiological state, psychological factors, observation conditions, etc. These cognitive factors out of cultural and biological instinct determine the understanding of color connotation.

According to tradition, the solar spectrum in our natural life is mainly composed of red, orange, yellow, green, blue, blue and violet, and there is no accurate standard for the colors in the spectrum, which is also a broad wavelength range. For example, orange, from the perspective of color, is the color between red and yellow. It is an interval color that can be called aurantium. Each color is just a common concept in color, with great uncertainty. But the perception formed by this concept has both a common and a personal aspect for everyone. Taking the common side as the basis of Kansei Engineering color design, more consumers will form favorable impression on the product and even have a greater purchasing tendency. Therefore, the importance of color design is self-evident.

B. The Color Changes in Temperature

According to people's different psychological feelings about colors, all colors can be roughly divided into three types in chromatics: the first is warm color, just as its name implies, it is the color that gives a person warm feeling, basically include red, orange; the second is cold color, it is the color that is opposite to warm color, and these colors give a person cold feeling, basically include green, blue; third, neutral colors that in the middle of warm and cool colors. These colors are both warm and cold. However, the overall performance is not so strong for cold and warm, these colors include purple, yellow, black, gray, white. In Kansei Engineering design, warm colors can give people a very intimate and warm feeling. And the design that uses cool color makes person feel distance and cool. People's feelings about color and warmth are also affected by light intensity and adjacent colors. In order to express the exact perceptual knowledge, it is often necessary to use complex color matching design to decide the color to be used according to needs. At the same time, there is also a relative degree of color warmth. A warm color is cooler than a warmer color. Therefore, the color design of the product should also consider the color matching with the environment related to the application of the product and other equipment, so that its design value can be fully explored.

C. Color Symbol

The association of color formation is the origin of color symbol. The practical significance of color symbol is mainly affected by a series of factors such as gender, age, personality, occupation, culture, nationality, religion, living environment and life experience, and has a certain relative stability. Specifically, the color symbol contains two important directions.

1) *Figurative symbol*: Figurative symbol means that people will directly connect colors with some concrete things in nature and life by observing a certain color. For example, when people see red, they will think of some red features, such as blood, sun and rosy clouds, etc., while when they see green, they will naturally think of grass and trees, etc. These specific things can be effectively connected through color. This is an obvious design idea for consumers in terms of Kansei Engineering design.

2) *Abstract symbol*: Abstract symbol and figurative symbol are two opposite concepts, which are complementary to each other. To be specific, abstract symbol means that when people observe a certain color, they will associate color with some abstract concepts in personality, culture and other aspects. For example, rational, elegant, objective, noble and so on. These symbolized things do not have a direct relationship with color, but some ideas and understandings formed through the influence of culture and experience.

D. The Specific Application of Color Psychology in Perceptual Engineering Design

People's perceptual perception of color determines the acceptance of products of different color designs in the market. In product design, color design is a very important Kansei Engineering design content. Through effective organization of color intention, multiple factors can be organically integrated to form a complementary effect, so as to achieve the best visual effect. Psychological studies have clearly shown that the symbolic significance of color will be reflected in people's specific observation process. When the product function and color attribute reach a harmonious state, positive stimulation will be generated to the consumer's brain and associations that are conducive to product acceptance will be generated. The steps for color design of products through Kansei Engineering are as follows: the first is to make clear the specific situation of the product in the color presentation, and analyze the color keynote and color matching applicable to the product; the second is to use psychological and ergonomic knowledge and methods to evaluate consumers' feelings about product color, determine consumers' psychological tendency to different colors, and analyze target consumers' color sensitivity; the third is to complete the rational transformation of consumers' sensibility and becomes the final design standard of product color based on the relevant description of the color sensibility of the product; fourthly, the software algorithm provided by the computer aided system is used for quantitative processing to turn the perceptual scale of consumers into the standard of engineering design, and to establish and perfect the mode related to Kansei Engineering and the corresponding human-computer interaction design system; and finally, complete all the color design work, and according to the product marketing situation to optimize the color design necessary adjustment, to meet the needs of different sales markets update.

V. KANSEI ENGINEERING COLOR EMOTION DESIGN METHOD

The main way of Kansei Engineering to meet users' preferences in color emotional design is to quantify users' color sensibility. After that, all kinds of logical processing can be carried out to form a rational design tool for the development of new products, which is also the way to improve the color performance of products.

A. *The Mathematical Quantification Processing of User Emotion*

To be precise, quantification not only represents the processing results of perceptual cognition, but also involves a process of measurement through which changes in response in some specific sensory fields can be effectively represented by different values. Quantification is the digital processing of emotional analog quantities such as color preference. Quantification is the way and process of digital expression of user emotion and product appearance. In order to achieve this goal, Kansei Engineering needs to adopt advanced information processing tools and equipment and use some accurate information algorithms to quantify consumers' perceptual cognition of products to form important parameters that can be directly used in specific appearance design.

These parameters can directly describe or define some perceptual characteristics of consumers themselves. These perceptual contents may be the result of consumers' active thinking, or they may be the subconscious outpouring of consumers. These perceptual contents may be described from the perspective of the user, or it may simply be evaluated as an objective existence. The designer's job is not to create goodwill for the product, but to create emotional persuasiveness in its application and purchase. Therefore, Kansei Engineering is not aimed at the psychological comfort of consumers, but should be a design tool to stimulate the use and purchase. The whole design is not only helpful for designers to have more interpretation of consumers' sensibility, but also a necessary channel for sales to grasp consumers' color appreciation.

B. *Consumer Color Emotion Quantification Method*

The exact degree of quantification, that is, the actual effect of quantification processing, is determined by the specific methods consumers adopt to quantify the emotion of products. Under the current technical background, there are three main methods of quantification, which are described in detail below.

1) *Semantic difference analysis*: As the name implies, semantic difference analysis is a method of connotation analysis based on semantic difference. Specifically, it is to distinguish the connotation and connection under the appearance of color through the description of semantic color perception. It is based on people's color feelings and associations. For example, people often feel warm when they see red, and feel cold when the color becomes black. People often associate bright colors with wide, and dim

colors with narrow, and the example of this respect is very much. And this situation exists all over the world, this characteristic has the identity beyond the national and cultural, which shows that human semantic identity and universality. Since the birth of the semantic difference analysis method, it has greatly promoted the psychological research, and it is an important technical content to study people's perceptual cognition from the psychological perspective.

2) *Eye tracking technology*: When a person looks at the color of an object, the eye will make some subtle adjustments and changes due to the different colors. These subtle adjustments and changes form the content that can be effectively extracted by the computer system to track the changes of the eye at any time, so as to predict the user's needs and degree of attention. The whole implementation process is to track of pupil fovea, to determine the tracker visual path as well as the psychological concerns, in some places of residence time is also a very important indicator, the content can be through the computer processing to the person's visual preferences and viewing habits were analyzed, and the visual sense of detailed performance data obtained. In engineering design, eye tracking technology are often applied to various aspects such as product appearance color of consumer perception test, help enterprise to optimize a product packaging color composition design, but also conducive to enterprise for consumers tendency of sensory and other important information, provide technical support for enterprise accurate marketing, product concept and appearance color accurate positioning.

3) *Combined analysis*: The combined analysis method mentioned here mainly simulates the effect of consumers' perceptual cognition of color on the whole purchase decision, and then obtains the effect of various appearance factors on consumers' purchase behavior. For consumers, this is a process of comprehensive arrangement of various influencing information, especially color information. When the comprehensive influence of these factors exceeds their psychological expectation threshold, they will decide to buy. By adjusting the color design scheme of the product, making a statistical comparison of the marketing before and after the adjustment, and excluding the influence of other interfering factors, specific data of the effectiveness of the color design of the product can be obtained, which can be taken as an important indicator parameter of the actual production.

VI. SPECIFIC APPLICATION OF KANSEI ENGINEERING IN VISUAL COLOR MATCHING DESIGN

No matter from the psychological point of view or from life practice, the expression of color has a stronger recognition, which is more direct and effective than the appeal of product form to users, and is the most important element of users' first impression of the product. Therefore, visual color matching is the practice that most industrial products need to study and implement seriously. However, in

the specific practice process, color matching design is not only a technology, but also contains the elements of art and innovation. Meanwhile, experience is also of great help to the whole design.

A. Product Color Matching Design Method Based on Kansei Engineering

For similar products, the color matching design has become a key design for product segmentation in the case of little difference in function and performance. Therefore, the color matching of the product should not be too similar. It should reflect the uniqueness of the product and meet the emotional needs of consumers and users. The whole color matching design should not only meet the basic requirements of the product presentation in psychology and other aspects, but also have their own unique innovation to make the product matching color not stick to one pattern, thus promoting the sales of the product. For the specific design process of Kansei Engineering, the most important work content is to study and analyze the consumer preferences collected through market research and other means, and refine them into several core emotional words, and these emotional words about color matching are the keynote of color design later. All color schemes should be adjusted and optimized around these keynote colors to form more effective market acceptance and recognition. After that, relevant evaluation rules in psychology and ergonomics are used to make inferential analysis of consumers' specific needs in color matching. The consumers' intention and feeling of product color matching are further converted into the specific design content of product color matching and presented as the most basic 3 elements of color design, namely hue, purity and lightness. Finally, the color matching design based on the color matching law of the product color to form a product color and form in line with the emotional needs of consumers. For consumers' product color intention, a variety of methods can be used, including direct questionnaires and some survey reports in the media.

In the specific design, several key links need to be grasped: first, the deconstruction of product form, through which the functional modules of the product are separated, and the production of color matching samples based on these functional modules. It should be noted that these functional modules are both relatively independent and integral parts of a whole, which should be fully considered in the color matching design. Secondly, in the process of product perceptual semantic positioning, the description of product color matching is the key to determine the image of product color matching. These descriptions should not only have a certain height, but also have direct guidance for specific design. It seems that the technology is simple, but actually it is very difficult to do well. The success of product color matching design depends on these positioning descriptions to a large extent. Finally, for the technical implementation of product color matching design, computer-aided design is a necessary choice. The perceptual standard is converted into quantitative value through CAD, and the software algorithm adopted has a direct impact on the final color matching scheme. More powerful processing power makes the

calculation results more comprehensive and more targeted, which is more helpful for the final design effect.

B. Example Analysis of Kansei Engineering Product Color Matching Design

Kansei Engineering design is characterized by practice and application. Kansei Engineering color matching design of products in different industries has its own uniqueness. Some specific cases can be used to analyze the product color matching design process, so as to have a more profound understanding of the whole Kansei Engineering color matching design.

1) Application in color matching design of power tools:

Power tools are small mechanical and electrical products, the product features are more prominent, stable and safety is the first element of design. For this reason, some darker colors are usually used in the actual color matching design, which can meet the safety, deep and severe emotional needs of consumers. Products are also considered to have the same product characteristics by consumers because of these color matching designs. At the same time, it can also adopt very eye-catching and gorgeous color design. The color design concept is to highlight the products' lightness, flexibility and cool, so as to meet the psychological needs of consumers in this aspect. A comparison of these two designs shows that they have their own consumer groups. The main consumer group of traditional black design is also those users who pay more attention to safety features, while the consumer group of dazzle color design is the young people, they need to make public personality, dazzle color matching can be used as their effective expression of their own personality tools and ways, so it will be welcomed by them. Besides, the nameplate color of these power tools is also a very important design point. The reasonable choice of color can echo with the matching color of the tools and form a prominent role of making the finishing point. Moreover, most nameplates set their background color to a dark tone, especially in the case of black, which can highlight the visual attention of the nameplate and help promote the brand. It's necessary to consider the nameplate and the tool body with same or close color matching, so that the overall visual effect of the entire tool is more consistent, the product is more beautiful.

2) Application in machine tool color matching design:

The color matching design of machine tools and power tools is very different. The main reason is that the color of the machine requires a lot of functional considerations. The color is helpful for the long-term correct operation of the machine. This color matching scheme is the color matching design that users need most. For machine tools, the positioning of its image is mostly related to stable, solid, precise, reliable and other words, so its color matching should not be too gorgeous, but also not too dull. Gorgeous increase the intensity of people, which is not conducive to the operation of machine tools, and too boring is also easy

to cause the operator to be inattentive, which is also not conducive to the operation of the machine. Under normal circumstances, its color scheme should follow the design principle of low purity and high lightness, mainly with cool tone, interspersed with some intermediate color. Fixed large parts such as machine bases can be chosen for solid and heavy colors, such as black or dark grey, for a strong stability and reliability. For places where the workbench operators are in frequent contact, it's possible to consider some light-colored color schemes to help relieve dullness. For some control switches and obvious markings, it is necessary to adopt some colors with large background contrast, which can cause the operator to pay full attention.

VII. CONCLUSION

In summary, the current social development has infiltrated individualized designs into various fields of industrial production. Sensitive engineering design to meet the emotional needs of consumers is a very important trend, making consumers' demand for products has gradually developed from excellent functions and performance to better comprehensive system. In particular, the emotional design of some everyday products, such as mobile phones, is obviously important. Among all perceptual designs, color design is one of the most important contents, mainly because color plays a more direct stimulating role in the formation of visual first impression. Color matching design based on Kansei Engineering can effectively promote consumers to form purchase decisions, highlight creativity, and make consumers' use process full of love.

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