The Application of Interaction Design to Human Emotion and Pleasure Based on Interactive Concepts

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ABSTRACT

With the continuous progress and development of science and technology, people's demand for interactive experience has continued to improve, and interactive concepts have become an important trend in the field of design today. It refers to designing and developing products, services or systems, and emphasizing the interaction between users and products, systems or environment is a method. It believes that users are not only users of products, but also active participants in the design process. It mainly includes interaction methods, feedback mechanisms, and personalization of interactive concepts. Emotional design is a deeper interactive design. It integrates emotional design concepts with interactive design that meets user emotional needs, and uses story, symbolic, metaphorical and other means to trigger users' emotional response. The interactive design aims to improve the user's experience through an easy -to - use, intuitive and pleasant interface design. It is not only to meet the user's functional needs, but also the impact on people and the sense of joy of human. The interactive design is the practice of defining and constructing an interactive experience. It is a new design method based on the development of new media technology and user experience. It combines multiple disciplines such as design, psychology, computer science to pursue fun and fun and fun and fun and fun. Novelty. The purpose of interactive design has improved the specific application and improvement of human emotions and pleasure, and improved the emotional experience of users. It is hoped that through this study, the use of interactive design will be used by human emotions and pleasure under interactive concepts, enhance user experience value and product value, and on the basis of interactive concepts Combining makes the public clearly recognize the importance and necessity of interactive design to people's pleasure. Through specific case analysis and other methods, discussions such as human -computer interaction, interactive videos, etc. can be used to analyze the importance of interactive design in human emotion in combination with cases in different fields. This research is intended to discuss the impact of interactive interactive design on people. Better interactive design can enhance the user's emotional experience and sense of joy, also helps users handle negative emotions, enhance users' satisfaction with products, enhance user participation and value of products or services, and promote innovation of products or services. In -depth research on the use of interactive design for people's pleasure, through interactive concepts and emotional design, it is of great significance for product functions and improvement of user experience.

Keywords: Interactive concepts, Interaction design, Human emotions, Pleasure, Affective design

EMOTIONAL EXPERIENCE IN INTERACTIVE DESIGN

With the improvement of people's living standards, people's demand for aesthetics is getting higher and higher. Simple functional design can no longer meet people's emotional needs. It is in this context that interactive design emerges. In the traditional design process, the product is often designed only from the functional level, through which the design can meet the user's needs, but not the user's emotions into the product. However, in the process of interactive design, in order to attract the attention of users and arouse their emotional resonance, we need to enhance the user's experience of using the product, so that the product in the interactive design of the user's emotional communication to achieve the best state. Therefore, under the interactive concept, the use of interactive design to integrate emotion into the product can better arouse the emotional resonance of users.

In interaction design, there exists an interactive relationship between users and products, which is a psychological communication relationship. Its goal is to take the user as the centre, analyse, research and evaluate the product according to the user's needs, expectations and behaviours, provide the user with a better experience and service, and continuously improve the design methods and concepts. Interaction design brings more satisfaction to consumers on the level of spiritual needs, and then triggers consumers to produce purchase behaviour (Zhang, 2013). Interaction design allows the entire design process of the product is based on a direct interaction between the consumer and the product, through the creation of a specific environment to arouse the emotional resonance and interest of consumers, thus promoting consumers to buy goods. Therefore, it is necessary to pay attention to the emotional experience in the process of interaction design.

Different people have different emotional needs for products, for example, male users and female users have mostly different emotional needs for products. Therefore, when designing a product, it is necessary to design the product according to the needs and characteristics of different users in order to improve the emotional experience of users.

The User's Emotional Experience During the Use of the Product is Divided Into Three Main Categories

Instant process experience is a kind of instant and short experience (Li, 2024). It can also be categorised into whether the product is easy to use, whether the interface is intuitive, and whether the operation is simple and easy to understand. Whether it can meet the user's needs and provide the expected functions and services. Product speed, response time, stability, etc. to meet the user's expectations, and so on. These aspects of the experience will directly affect the user's satisfaction and loyalty to the product. When users experience inconvenience, instability, insecurity, or displeasure when using a product, they may choose to abandon the use of the product and switch to another competitor's product. In this case, the quality of user experience plays a crucial role in determining user loyalty and product market share.

Product image experience a long-term accumulated experience (Li, 2024). The product image experience is a kind of experience accumulated over a long

period of time, which mainly refers to the comprehensive impression of the product fed back to the user many times in the process of long-term interaction with the product. The user's first impression of the product is often obtained through the product's appearance, advertising and other aspects, but with the increase in the use of time, the user will gradually have a more in-depth understanding of the product's performance, quality, service and other aspects. These impressions will continue to accumulate and strengthen, and ultimately form the user's fixed impression of the product. Improve product quality and service level, used to win the trust of users

Relationship experience which is also an experience accumulated over time (Li, 2024), product emotional relationship experience refers to the emotional connection and emotional experience generated by the user in the process of interacting with the product. It goes beyond the functionality and practicality of the product and involves the emotional bond between the user and the product. This experience is based on the user's emotional perception and emotional response to the product. When users have an emotional resonance with a product, they may develop fondness, dependence, loyalty or other positive emotions towards the product.

The importance of an emotional relationship experience with a product is that it enhances user satisfaction, loyalty and word-of-mouth (Li, 2024). The relationship experience is also important because when users have a deep emotional connection with a product, they are more satisfied and willing to continue choosing that brand's products.

Interactive Experience Between Product and User

In the process of interaction design, the relationship between the product and the user can be divided into three levels: the first level is the "perception" between the product and the user, the second level is the "behaviour" between the product and the user, and the third level is the "experience" between the product and the user. The third level is the "experience" between the product and the user (You, 2011). Interactive experience can not only improve user satisfaction, but also deepen the user's understanding of the product and trust. By associating or combining the three levels of product and user, every user can feel the charm and personality of the product. The product design also allows users to adjust the appearance and function of the product according to their own preferences and needs. Through simple settings, users can turn the product into their own exclusive tool. Participate actively in the development and improvement of the product and create a more perfect interactive experience.

The Impact of Interaction Design on Users' Emotional Experience

Through creative interactions and delightful user interfaces, interaction design can not only increase users' satisfaction with a product or service, but also deeply affect their emotional state. First of all, interaction design can bring users a pleasant and interesting using experience. In the process of interacting with the product or service, users will feel a positive emotion and enhance their preference and emotional identification with the product;

interactive design can establish an emotional connection with users. Through creative interaction methods and the enhancement of user participation, interaction design can make users feel cared for and understood. So the impact of interaction design on users' emotional experience cannot be ignored. By providing a positive emotional experience, establishing an emotional connection and personalising the user experience, interaction design can enhance the user's emotional satisfaction and promote the user's identification and loyalty to the product or service. By adding emotional factors in the process of interactive design, it can make users feel emotions such as being concerned, cared for and pampered in the process of using the product, thus enhancing the interactive relationship and experience between the product and the user.

EMOTIONAL DESIGN

Emotional design mainly includes the digital interaction design of the product and some unconscious behaviours in the design, and the research related to the psychological changes of the users in the use of the product is also included (Wang, 2023). Emotional design is to design products through human feelings, so that users have emotional resonance when using products. Emotional design is a human-centered design method that focuses on human needs and behaviours, emphasizing human-centeredness and human purpose. If you need to make a better product, you first need to understand what emotion you want to express to the user and what emotion is generated between the user and the product.

Emotional design is divided into three levels: instinctive, behavioural and reflective (Norman, 2012).

Instinctive level: The instinctive level is a direct sensory experience that is a direct response to a representation, a direct instinctive response to the user's visual and first impression of the product. The instinctive level is prior to thinking and logical judgement. Including sensory and emotional, specifically, is what we say "good look", "smell", etc.

Behavioural level: The behavioural level refers to the effectiveness of a product's functionality, i.e. whether it is applicable and useful. If a product enables users to realise their ideas, for example, users can change the songs they want to listen to at will when using a music player. This is touchy-feely. Good behavioural design requires the four elements of functionality, ease of understanding, ease of use and feeling, and should be human-centred, focusing on understanding and meeting the needs of the people who actually use the product. Reflective level: The reflective level refers to the impact of the information, content and personal experiences transmitted by the product on the user. The ability of users to gain awareness, summarise, reflect, taste spread and recognition in an Internet product can be referred to as the reflective level.

Emotional design needs to meet the requirements of human instinctive level and behavioural level of the product, through specific things to express the human feelings shown on the product, the people's feelings for the product will be materialised, so that the user can feel the product to bring their own emotional experience.

In a nutshell, emotional design is a design approach that focuses on the emotional needs of the user, enhancing the connection between the user and the product, service, or environment by creating a positive emotional experience that increases user satisfaction and loyalty.

PRINCIPLES AND METHODS OF EMOTIONAL DESIGN APPLICATION IN INTERACTION DESIGN

With the development of Internet technology, smart products have gradually become popular, and people's lifestyles, consumer attitudes and so on have changed. Products not only need to meet the needs of people's daily life, but also to meet the needs of people's spiritual level. The application method of emotional design in products stimulates the emotional resonance of users, provides meaningful experiences, helps users discover the value of the product, and allows users to participate in it.

Principles of Emotional Design in Interaction Design

Firstly, we need to understand the positioning and function of the product. Understand the positioning of the product in order to better carry out the functional design and optimisation, where it can be carried out through market research and competitor analysis. Secondly, we need to consider the use of the product scene. Users will have different needs and emotions in different scenarios. At the same time, we also need to consider the user in the use of the process of problems, can be timely feedback and solution. The purpose of emotional design is to let the user can you through the product's sense of satisfaction security. And sense of belonging. So that users can better understand themselves and satisfy themselves.

We can do this by focusing on the user, understanding their needs, expectations and emotional state, and designing an interactive experience that meets their emotional needs. Establish emotional connection, through visual, auditory and tactile elements, to establish an emotional connection with the user, so that the user feels comfortable and happy. When designing the interaction process, we endeavour to create a positive emotional experience, trying to avoid bringing negative emotions to the user, and instead create positive and pleasant feelings. Through emotional guidance, the use of emotional prompts and guidance during the interaction process helps users to better understand and use the product. Through personalised design, provide a personalised interaction experience based on the user's individual preferences and habits, making the user feel valued and cared for. Designers can better apply emotional design in interaction design to enhance user satisfaction and loyalty.

Satisfy the emotional needs of users and build a sense of identity (Chen, 2023). Understand users' needs, expectations, and emotional states, and design interactions that meet their psychological and emotional needs. Increase consistency and predictability, maintain consistency and predictability in interaction design so that users can easily understand and operate. Increase the use of emotional elements, use emotional elements appropriately.

Anthropomorphic Design (Chen, 2023). With the development of the economy users pay more and more attention to the emotional experience, anthropomorphic design is also in the application of the principles of emotional design is an integral part of the emotional interaction in the anthropomorphic perspective is divided into the basic layer, interaction layer and personality layer (Gao et al., 2015).

The Application Method of Emotional Design in Interaction Design

It is necessary to investigate and analyse the user's emotional needs, emotional needs to design the interaction function and visual design to improve the emotional needs (Li, 2017) and through storytelling design, contextual design and other elements to enhance the emotional connection and experience between the user and the product, so that the interaction process is more vivid and interesting. It can make users feel concerned and recognised, and enhance user satisfaction.

INFLUENCING FACTORS IN EMOTIONAL DESIGN

Emotions are attitudes part of this whole, and it is related to the attitudes of the inward-looking feelings, the Intention has a coherent consistency and is a more physiologically complex and stable physiological evaluation and experience. In interaction design, if both positive and negative emotions of the user towards the product are fully expressed, it will lead to higher satisfaction and happiness of the user.

1. Design content users are the most direct beneficiaries of the product use process, but also the user of the product. During the product design process, we should fully consider the needs and experiences of content users to ensure that the product can meet their expectations and requirements. In order to achieve this goal, we need to have a deep understanding of the characteristics and needs of content users. Through user studies and research, we can understand their usage habits, preferences and expectations so that we can better design the product's features and interface. We need to actively listen to users' opinions and suggestions and incorporate them into the process of product design and development in order to enhance the quality and value of our products.

   Users are a crucial part of product design. Only by prioritising their needs and experiences can we design products that truly meet users' expectations and bring them a better experience and value.

2. There are many factors in emotional design that have an impact on human emotions Emotions at the sensory level are those instinctively evoked by sensory experiences when a person interacts with objects. The senses include sight, hearing, touch, taste and smell. At this level, a person receives external stimuli and responds directly through reflexes Other factors include visual elements in design, interactive experiences, branding and personality, social and cultural contexts, personal emotions and needs. Different people may have different emotional responses to the same design elements because each person's emotions and experiences

are unique. Therefore, in emotional design, understanding the group characteristics and individual differences of target users is not only a basic requirement, but also the key to achieving emotional resonance and personalised experience.

3. User experience, as one of the important factors affecting the emotional experience of interaction design, must be given enough attention. In today's digital era, users have higher and higher expectations for products or services, and they not only pursue the satisfaction of functions, but also pay more attention to the emotional experience in the process of using. Only by continuously optimising user experience can we win users' trust and satisfaction and enhance the competitiveness of our products or services. To sum up, user experience is an important factor that cannot be ignored in interaction design.

CONCLUSION

As the ways of interaction between users and products become more and more diversified, and as users' expectations and demands for products continue to rise, simple functional design can no longer satisfy users' comprehensive experience. The introduction of emotional design enables products to better establish an emotional connection with users and deliver a richer and more delicate emotional experience in the interaction. Incorporating emotion into the interaction design of the product can effectively enhance the user experience of the product. This not only requires product designers to strive for excellence in functionality, but also needs to focus on the emotional needs of users, and create opportunities to establish emotional connections with users through design means. Only in this way can the product truly win the hearts of users and gain continuous recognition and support.

Interactive concepts and emotional design to keep the product is can improve product functionality and enhance the user experience. It is important in the process of continuous development.

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