UI Brand Design of Fixed Mobile Phone Brand

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Abstract

Smart phones affect and change everyone 's life. The innovative design of UI mobile phone interface design attempts to effectively connect user needs with product development process rate through timely updates of small programs and APP software interface design. In addition, after entering the micro era of mobile Internet, the UI design system of mobile phone is gradually improved. The application of visual art elements in mobile phone interface design is a breakthrough in user interface design. Therefore, this paper makes an in-depth study and analysis of the composition of visual art elements in today 's mobile phone UI interface design.

Keywords : UI ; interface design ; visual Communication Design.

1.Introduction

1.1 research background

It has been more than 30 years since the development of mobile phones. The weight and volume of mobile devices have undergone tremendous changes. Most importantly, the functions of mobile phones are becoming more and more abundant. The progress of science and the advent of the 4G era have brought subversive changes to our mobile phone use, which have changed people 's traditional understanding of mobile devices. Mobile phones have gradually become an indispensable device in people 's lives, providing convenience for human beings. People no longer only use the communication function of mobile phones, but also use mobile phones for consumption, entertainment, query, memo, navigation and so on. The advent of the 4G era and the progress of science and technology have greatly changed the equipment in our hands. The singleness of mobile phones has changed to diversification, which inevitably puts forward better requirements for the interaction design and interface design of mobile phones.

1.2 Research contents and methods

1.2.1 Research Contents

Starting from the basic concept of interface design, combined with the example of mobile phone application interface, the research and exploration of multiple angles are carried out. The concept of mobile phone interface design, user type analysis, visual design and interaction design are discussed respectively to find out the design factors that affect the user experience, and how these factors are integrated into the navigation, form, search, table, chart, feedback and other design elements of mobile phone applications. Finally, summarize the role of plane visual language in the interaction research of mobile phone user interface design, and look forward to its future development trend.

1.2.2 Research Methods

1.Literature survey method : By consulting UI interface design and other related books and papers, increase the knowledge

reserve, guide the way and method of the structure arrangement of this paper, and ensure the diversity and flexibility of the research content to solve the problem. Read articles and books on the UI interface design of fixed mobile phone brands, further understand the UI interface design, and propose countermeasures to improve the UI interface design of fixed mobile phone brands from the actual situation.

2.Case analysis : Taking the UI interface design of fixed mobile phone brand as an example, this paper analyzes the role of UI interface design in the development of mobile phone, and provides experience and data for the research of this paper. Through the development of the UI interface design of the fixed mobile phone brand in the research of the thesis, it is applied to the actual operation and the theory is tested in practice.

1.3 Research significance

In recent years, with the development of network technology, mobile devices represented by mobile phones have entered public life and brought great convenience to people 's lives. Mobile UI interface design, especially mobile phone UI interface design has become the focus of the design industry, especially the industrial design industry and software interface design industry. Mobile phone UI interface design has its own general principles and methods to follow. Therefore, we need to strengthen the research on mobile phone UI interface design, and make a certain degree of innovation in text, color, image, layout and other aspects, so as to deepen the application of visual communication design in mobile phone UI design, and better improve the visual communication effect and user experience.

2.Mobile phone UI interface design

2.1 Mobile UI interface definition

Interface UI is referred to as User Interface. Interface design is a comprehensive discipline that combines aesthetics, computer science, psychology, behavior science, ergonomics, informatics, and marketing. It emphasizes that human-machine-environment is designed as a system.

UI design, also known as interface design, generally refers to the man-machine software. The overall design of interaction, operation logic and beautiful interface. Mobile phone UI interface set the design of the mobile phone software operation interface. In general, we want mobile phone UI interface design can achieve three functions. One is to make the user (That is, the information receiver) forms a connection with the mobile device. This connection generally through the design can be reflected, such as mobile phone interface design needs reflect the affinity, so that users and mobile phones to establish a psychological gap between the general effect. Second, the need for mobile phone UI interface design is simple, easy to understand. This

interface design of mobile devices is required to allow most or all users can clearly know the meaning of interface design logo, such as mobile phone interface in the basic functions such as short message, because of the more forming impression, so in the Its basic original impression can be innovated, but not unrestrained.

Random innovation. Third, the mobile phone UI interface design needs to give users a beautiful feeling. This requires the phone UI interface design on the one hand need to meet the basic aesthetic characteristics Point, neither too complicated nor too simple, must have a certain beauty. Learning the basis of design, on the other hand, it needs to conform to the traditional aesthetic concept, that is, there should be a certain amount of investigation for the user group, can find them in the aesthetic. Some common characteristics.

This science emerged with the development of computer technology. Mobile phone UI interaction design is the most mobile application products. Explicit design. It is the final step in the design of mobile Internet application products. Until

this work is completed, the whole work. Become a visual state. Mobile UI interface interaction design is the process of transforming the designer 's code into the user 's cognition. Hand the interaction design of the machine UI is not only the beautification of the visual function, but also the visual reorganization of these functions. In addition to aesthetic requirements, there are more complex systematic requirements that need to be considered by UI interface designers. Mobile UI interface interaction .The design is mainly reflected in the interaction between people and mobile phone products. This kind of behavior is to analyze, predict and make mobile phones.The interface better caters to human behavior. Interaction design is people-centered, considering people 's feelings, different backgrounds, regions and ages. Conduct a comprehensive analysis, pay attention to the user 's experience and psychological activities in the operation process, so that users can use the software to generate pleasant mood, in line with the user 's habits, improve the efficiency of the use of products.

2.2 UI user and interface relationship

2.2.1 Mobile phone user needs analysis

In the face of different audiences, users have been out of the era of ignorance of smartphones. In each mobile phone product, the unique functionality stimulates the direct factor for consumers to purchase. User demand was first proposed by American political scientist Harold Lasswell (Harold Lasswell 1902-1979) five W model, is one of the basic model of communication studies. The content is : who, says what, through what channel, to whom, with what effect.

The mobile phone UI interface is an operating platform for human-machine interaction, that is, the medium for users and machines to transmit information to each other. That is, the interface between man and machine. In life, such an interface appears in every aspect of our life, such as the dial interface in the clock, according to different user needs, replace different interface styles ; when driving, the steering wheel and the dashboard interface, the designer seized this interface to display, providing users with more concise and intuitive information ; tV remote control, screen and computer keyboard are also based on functional interface, which makes the relationship between users and interface inseparable.

As the main information carrier, the text is transmitted in the UI interface of the mobile phone.

It plays an important role in the design of mobile phone UI interface. An integral part of. In the mobile phone UI interface text design, should pay attention to the following aspects. First, as the use of interface information.When explaining, the text needs to accurately reflect the operating performance. For example, many now mobile phones use touch screen human-computer interaction interface, so in the design of such letters when describing the text, the text is required to accurately reflect the operability on the one hand. On the other hand, text design requires beauty, generosity, neatness, fonts.

The selection and size of can meet the characteristics of most users, and can not be used without common fonts or too large, too small text. Second, as a software interface when designing the text, you need to reflect the characteristics of the software. In the boundary of design software.When the face, generally inlaid text in the image, the text as a company or the software name is marked. The text design at this time often requires. There are some significant characteristics. For example, in the mobile phone software interface design. Need to pay attention to this point, the text is generally the functional characteristics of the software, such as

On the interface of the software, it marks ' some news ', ' some housekeeper ', etc. Of course, under the software interface of the mobile phone, the software is usually marked the name, but the font and size of the name is often different due to the phone.Displays different fonts and sizes. Third, in the design of software operation interface The main functions or

characteristics are generally reflected in the text.

2.2.2 UI interface design classification

So we can divide UI into two categories : hardware interface and software interface. In smart phones, software interface users have a demand for mobile phone performance, and the demand for UI interface will also increase. Not only the role of beautifying the interface, mobile phone interface design needs to locate the use group, use situation, use form, so that the interface becomes more humane, more interesting, more convenient and more comfortable.

2.2.3 Mobile UI user and interface design relationship

The UI interface is an operating platform for human-machine interaction, that is, the medium for users and machines to transmit information to each other. That is, the interface between man and machine. In our life, such an interface appears in every link of our life, such as driving, steering wheel and dashboard interface. The designer seizes this interface to display, provides users with more concise and intuitive information, and makes the relationship between users and the interface inseparable.

3.Visual effect analysis of mobile phone UI interface

Both Google Android and Apple i OS operating systems of smart phones are divided into vertical and horizontal directions with pixels as points under the standard size of low density, high density, medium density and special density of mobile phone screen.

3.1 Basic elements and functions of interface

How to coordinate the switching and combination between the status bar, the navigation bar, the main menu bar, the content area and the label lies in the bridge between the designer and the brand smart phone, enhances the foundation of the powerful functional display activities of the mobile phone, and enhances the interaction between the user and the product.

(1) Status bar (status bar)

To display the signal, operator, power and other areas showing the status of the phone.

(2) Navigation bar (navigation)

Displays the name of the current interface, including the corresponding function or the jump button between pages.

1 Tag navigation. Tag navigation is located at the bottom of the page, usually contains 5 tags is more appropriate number. It will occupy a certain height of space, suitable for frequent switching in different paging.

2Drawer navigation mode. Located in the menu bar after the current hidden page, click on the indicator entrance to pull out the menu like a drawer. Save the page display space, the user more attention to the current page. For example, in the China Construction Bank APP, the content is not frequently switched, and the setting, about and other content are hidden.

3 Palace navigation. Mostly located in the secondary page, as a graphical form of content list. Auxiliary first-level page content provides guidance for users, but it cannot allow users to see the content in the first time. Users only rely on memory to select on this page.

4 Hybrid integrated navigation. The top of this navigation uses the form of a palace to show the quick entrance of the page. The unique page and the text prompt link display do not need to have a horizontal relationship with other pages. When the user needs to focus on the content and needs some quick entrances to connect to certain pages, it can adopt integrated navigation, which is flexible and can adapt to the rapid adjustment of the architecture.

5 List navigation.

Located in the secondary page, the structure is clear, easy to understand, calm and efficient, can help users quickly locate to the corresponding page, can be grouped by spacing, title, etc. Similar to palace navigation, it is an indispensable information bearing mode in APP design.

6 Tab Navigation.

For secondary pages, similar to the tag navigation function, tab navigation can be used when there are many application levels. Typical scenarios are used to change the current view, or to classify the current page content.

3.2 Interface visual element design

Based on the principle of user psychological needs, through the visual interface from the aspects of style, icon function and modeling, the color matching of the block, the placement and sorting of the block layout rules, and the presentation of each unit of the mobile phone one by one. At the same time, using the introduction of font usage specifications, word spacing, spacing and alignment methods in graphic design, it conforms to the arrangement rules, forms the visual flow of lines to make the layout easy to read, avoids the feeling of scattered mess, and can provide users with visual beauty experience.

With the continuous improvement of material living conditions, people pay more attention to the beauty of mobile phone UI interface while pursuing high cost performance. Therefore, the requirements of mobile phone developers for interface design are also increasing. UI design includes a wide range, including the theme of the mobile phone interface, icon properties, sliding screen mode, etc., which are closely related to the user experience.In today 's fierce competition in the mobile phone industry, how to help enterprises improve their competitiveness is an important issue that every practitioner in the current mobile phone industry should think of. The key to solving this problem is how to win customers ' trust and recognition of the current mobile phone brand through various distinctive ways. To solve this problem, first of all, we should improve the user 's experience of mobile phones. Only when the quality is hard enough and the experience is good enough can the brand be more convincing and win a place in the mobile phone market for brand promotion and promotion. Secondly, the generous appearance and the related content of the combination of the visual art elements of the mobile phone UI interface and the mobile phone itself are also noteworthy, which also makes the relevant mobile phone brands obtain better market competitiveness. Thirdly, the visual art elements of the UI interface design of the mobile phone should also be able to help the UI interface achieve a concise and influential overall layout. This not only needs to take into account the user 's specific use needs, but also requires the entire interface structure to have a good information dissemination ability. The unified visual style of the mobile phone UI interface helps users organize the complex page information of the mobile phone UI interface when conducting the mobile phone page experience. Using the ' common destiny principle ' to control the similar visual art elements such as text elements, color elements and graphic elements in the overall interface, the overall interface style is an important element for related integration, so as to use the user 's visual cues to help users better understand the designer 's relevant design concepts.

3.2.1 Interface style

The appearance of interface design style is closely related to the characteristics of product brand. Among them, flattening and materialization are the mainstream forms of interface design style. Pseudo-materialization highlights the characteristics of each icon and page, and mostly uses shadows and layer styles for application. It has strong realism and poor integration with the overall interface. Flat style is to refine the pseudo-materialized style again. Whether it is icon or APP design, flat style will make users feel more coordinated in the whole design. Some of the pseudo-materialized and complicated designs,

including shadows, layer styles and material omissions, run through the interface in a flat and simple form. Both styles have advantages and disadvantages, but the design style is only a tool, and the ' usability ' of the product is the focus of the design itself.

3.2.2 Interface icon function and modeling design

After determining the theme and style of the interface, collect materials, and carefully observe the relevance of things and themes. Extract the iconic meaning of the icon, the symbol, cognition and generality of the icon, so that users can accurately understand the meaning of the icon to represent things for operation. The modeling design of the interface icon can adopt the design order of first local and then overall, or first overall and then local, grasp the detailed features of the local graphics, and grasp the morphological characteristics of the overall graphics, so as to achieve a comprehensive and correct understanding of the object object. The overall shape of the icon, to do a comprehensive observation, a comprehensive grasp of the icon shape, color and texture. It is also necessary to do detailed observation on one or several distinctive and characteristic parts of the icon.

Vivid, concise, innovative and semantic graphics are often more general and intuitive than text, which is one of the most clear ways for human beings to disseminate information. With the rapid development of modern science and technology, in this era of reading pictures, we often carry out silent information dissemination and communication through graphics and pictures. Graphic elements can be more stable than text elements, and more straightforward and concise than color elements to express the meaning of designers. Because graphic elements are not bound by geographical restrictions and language barriers, they are elements that everyone can understand. For cultural differences can also play a gradual difference effect, become a world language, in the role of information dissemination is a picture of the effect.

Therefore, the mobile phone UI interface design uses the most intuitive visual communication graphic elements to show the specific and sensible image world, which can cover a wider range to convey better artistic results. However, graphic elements are not perfect. Design, as a subjective product, its excellent design works must be able to help users and designers establish emotional communication, so that designers and users can produce a certain degree of emotional resonance in the design works. The premise of such resonance is that in the designer 's design works, the user 's emotional resonance needs to take the design work as a special link and connect between the designer and the user. This emotional resonance can bring the design work to a deeper level. The experience of sensory and visual elements, however. This design art elements only rely on graphic elements is fundamentally impossible.

3.3.3 Interface design

The combination of mobile Internet has changed people 's behavior patterns. Mobile phones do not just stay in interpersonal communication tools. Receive unlimited and 4G / 5G data signals anytime and anywhere in a mobile environment, silent in the fingertip interactive life. With the continuous innovation of mobile phone equipment, it can meet the diversified and personalized needs of users and truly realize the innovation of human-machine integration. The collection of interactive software provides a good display platform for interface interaction design. For example : Photoshop a web page layout extension, through this plug-in you can quickly build a web page layout ; sketch intelligent cutting tool, according to the size of the target container given by the user, automatically calculates the edge attribute and width of the icon, scales and sticks the icon, adds the cutting layer, automatically generates the finished product cutting based on the resolution of @ 1x / @ 2x / @ 3x, and saves it with one key. Using the Internet software to display the application in the interface design, it is convenient for users to integrate the mobile phone interface design more

intuitively.The needs of different users and the functions of mobile phone applications determine different guides. Aviation design patterns, interactive design framework is to establish a reasonable navigation base.On the basis. When designing the navigation of mobile apps, designers should organize all the messages.List one by one, and find the most core according to the positioning of mobile phone software. The navigation function is placed on the first layer, followed by the second and third layers. Some software should not exceed three layers, such as weather forecast, alarm, etc. Software with query function and some mobile apps designed for elderly users. The most common forms of navigation are divided into the following types, which we describe one by one. The label navigation in the mobile phone UI interface design is evolved from the computer. The function of label navigation is to use the label form to the most core functions in the mobile app are listed in the form of tags, and users can freely switch between multiple web pages in tag navigation. Tag navigation is the most practical and frequent navigation form in mobile phone UI interface design.

4.Mobile phone UI user needs and final product display

The final product display part mainly carries out efficient packaging and testing on the rationality of interaction design and the aesthetics of graphic design. Only limited to the designer 's experience or the aesthetic judgment of a single user group, it will bring serious risk sales to the product. Therefore, according to the characteristics of the target user group, the group is tested, and the product performance and function, interface color matching, font selection are designed and planned and big data statistics are carried out. Mobile phone UI interface design and smart phone operating system are the most critical part of the entire mobile Internet industry chain. It provides people with a variety of nutrients covering home, learning, medical care, travel, work consumption and other aspects, which has a decisive impact on the mobile Internet industry chain.In the UI interface design of mobile phone, the function of navigation is to jump from the current page to the user 's target page.

The navigation system of smart phone software is composed of main interface navigation and secondary navigation. The main interface navigation is the global navigation.

Secondary navigation is a navigation on a page or module, which assists the main interface navigation, Is a mobile phone app.A particularly important part of the design process. The navigation bar has two uses : one is to guide different views in the application ; second, provides management items for controls in the view. In the mobile phone UI interface design, designers should be based on different products and users.Different levels of demand and product levels, to choose a reasonable form of navigation, a reasonable form of navigation is the mobile phone UI. A prerequisite for mutual design, there is no reasonable form of navigation, then the interaction design is the water without a source of wood. Navigation shape selection is an important part of mobile phone UI interface design.

5.Research conclusion

All in all, in the design of mobile phone UI interface, the application of visual art elements should consider more about the user 's feelings and aesthetic effects to combine the technical and artistic effects of mobile phones. As an indispensable part of our life, mobile phone UI design can help to better transmit information, to serve users to meet their communication needs, entertainment needs and visual needs, to add color to people 's lives, to achieve a high degree of integration of spiritual aesthetics and humanistic care, and to create a more rapid mobile phone reading function.

Visual communication design is the designer through a certain visual symbols, through the way of receiving certain information through the observation of the information receiver. In sight,there are two important concepts in sensory communication design. One is visual symbol. One is design. Visual symbols are what people can directly perceive and

observe. The image and other elements of the symbol, it is the main part of the information transmission, but also Is the basis of visual communication. Generally speaking, visual symbols mainly include three Elements, text, images and logos. Text is that people in The text used in daily communication actually constitutes the information load of visual communication. It includes Chinese, English and other languages. Image is image The image carrier that transmits the information required for the reaction, in general, the image is intuitive A way of responding to information that different images convey to the recipient of the information. Different information, of course, the image is often more directly than the text to convey the letter. Breath. Logo is a special design symbol, the more commercial things. The more unique the product conveys commercial information, the more the logo has become brand image representation. The design is the designer through the text, the picture a combination of images and symbols in different ways, and then will want to express the information. Merging into a unique design method, thereby transmitting information to information receptioner's.

We are in the process of using mobile phone software the feeling and experience are interactive experience. With the development of mobile phone UI interface interaction design, a variety of functions and in.More and more mobile apps are used in different occasions, and there are countless mobile apps with the same function. People are downloading mobile apps. At the same time, more and more attention is paid to the interactive experience brought by products to users. Excellent interaction design is not the designer 's wishful thinking, and it is designed according to the needs of users and for the purpose of improving user experience. Traditional mobile phone interface is usually designed by designers according to their own the design knowledge and understanding of the software are designed to design a mobile phone interface that meets the needs of all users. But with the development of mobile phone interaction, this single design pattern can not adapt to the progress of the times and the growing number of users. Mobile UI interface interaction design is developing in the direction of diversification and customization. Development of all mobile apps.They should actively adapt to the development of the times, study the user 's psychology, operation habits, cultural background, etc., to meet the needs of users. The expectation of mobile phone software design makes users better integrate into the interaction design of mobile phone UI interface.

With the continuous development and innovation of science and technology, the mobile Internet ushered in a period of rapid development, mobile phones have surpassed computers to become

The smart devices that humans rely on most. A wide variety of hardware and software has been developed, human life has been completely changed by the mobile Internet change. Interaction design makes our phones more emotional, we can feel the ' temperature ' in all types of mobile phone software. From the perspective of plane visual language, this article is guided by interaction design to improve the user experience when using smart devices. Finally, the specific methods to improve the interaction design of mobile phone UI interface are obtained.

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