Mobile game interface design and game product development application

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Abstract

The mobile game interface is a window for players to manipulate the game kernel and understand the operation information of the game. The quality of the game interface determines the level of playability of the game. Due to the limitations of the mobile screen, the game interface covers limited information. If the game interface is designed without reasonable and efficient planning of all kinds of visual information of the interface, it will disturb the player's operation. In order to convey information reasonably and efficiently in designing game interface and explore its visual aesthetic law, this paper first expounds the specific meaning of game interface. Secondly, by combining the characteristics of mobile game interface design and players' visual cognition, the visual information elements involved in the game interface are analyzed. At last, from the perspective of improving the efficiency of visual information transmission, this paper probes into the design rules of various visual elements in mobile game interface design from three aspects: picture design, interface layout and precision operation.

Keywords

Mobile games; Interface; the UI. Design.

1. The background

With the further development of the Internet and the arrival of the smartphone era, almost everyone has a mobile phone, and more and more time is spent on the mobile phone. Mobile game takes full advantage of the fragmented time in people's lives for entertainment. On the other hand, social elements enhance the stickiness of mobile games. With the introduction of social relations in mobile games, it makes up for the lack of social and interactive features of previous mobile games, enhances the stickiness of users and extends the life cycle of games. The characteristics of mobile phones determine the high frequency of mobile games. Mobile phones are portable and real-time, which can meet the needs of users to play games anytime and anywhere. They are more sticky and integrated into life. Driven by these factors, the number of mobile game users grows rapidly.

In recent years, the mobile game industry has been developing rapidly. In order to enhance market competitiveness, game developers no longer only pay attention to the story and picture of the game, but also pay more attention to the interface design of the game. Game interface design is an inseparable connection with game players. It is a window for players to manipulate the game kernel and understand the operation information of the game. The quality of the game interface determines the level of playability of the game and determines the longevity of the game in the market. Due to the limitations of mobile phone screen, mobile game's interface design is different from that of end game and online game, and has its own set of design principles. In order to convey information reasonably, efficiently and accurately when designing the game interface and explore its visual aesthetic law, this paper first analyzes the topic. Secondly, the game interface design is analyzed. Finally, the successful cases were combined to carry out interface analysis and game peripheral product design analysis, as well as players' visual cognition and habitual operation, and the visual elements involved in the game interface were analyzed.

The development of mobile games has driven the development of game peripheral products, and game peripheral has become a rising sunrise industry. In the United States, South Korea and Europe, the game industry has four times the size of the game industry. Although the game industry in China started late, the game peripheral industry will develop better and better according to the current development trend. This is mainly based on the fact that China is a country with a large population, a large number of game players, an open market and a relatively complete light industry. According to the player's emotional cognition, they are very happy to get the legitimate side of a game they love.

Today, mobile games have become an important part of people's entertainment life. On the premise of satisfying entertainment, games should start from the aspects of vision, function and innovation to achieve new breakthroughs in mobile games. A successful mobile game is not only a game, but should be the latest industry development vane.

2. Characteristic analysis

Firstly, this design requires not only manual drawing, but also proficiency in Photoshop. It is a comprehensive embodiment of technology and hand drawing.

Secondly, in terms of the game interface design of Chinese mobile phones, the interface design of mobile games is very important. Considering my own practical situation, I combined the game UI design knowledge I learned with my visual communication design expertise, combined theory with practice, and applied what I learned to practice. Facing the society, facing the market, developing the design thinking, innovating the design concept and design method to design a unique virtual game night elf.

Thirdly, this topic includes the design of game peripheral products, which can effectively promote the game and has commercial value.

Fourthly, the game industry has broad development prospects. Part of the reason for choosing this design as graduation design is to see the huge market of the game industry.

With the rapid development of mobile Internet, online game users are migrating from PC to smartphone, and mobile games are developing better and better. The characteristics of mobile games determine its importance and development prospects in the game industry. First, a large potential user base. In every developed country except the United States, there are more cell phone users than computer users. The potential market for mobile gaming is bigger than any other platform. Second, portability and mobility: people always carry their mobile phones with them at all times, so mobile games are likely to be their first choice for leisure time. The characteristics of mobile phone portability and mobility can better meet the needs of users to play games anytime and anywhere. Users play games by waiting in line and waiting for cars. The characteristics of mobile game fragmentation are highlighted. Third, network support: because mobile phones are network devices, multiplayer online games can be implemented under certain constraints.

The huge economic benefits brought by mobile games have made many companies attach great importance to the design of mobile games, especially the game interface, which is the platform that most directly touches players. Many operations in the game interface are carried by the interface, and a good game interface can help players to get started quickly.

Firstly, compared with developed countries in Europe and America, our game interface design and game peripheral product design often lack ingenuity and creativity. No matter design conception, character design, scene design, or interface layout, it seems too ordinary, too monotonous, lack of creativity, not as European and American countries like game design players like, creative.

Secondly, the current Chinese game market is in urgent need of excellent game UI design talents and game peripheral product design talents. Faced with the problems and shortcomings of mobile game design in China, we should be soberly aware of, objectively look at and actively improve, and take users' needs as the driving force of our design. Good design is to serve people. Therefore, to design

unique game interface and peripheral products in line with the entertainment needs of players is the problem we should solve at the present stage.

The design of the mobile game night elf will solve this problem.

3. Analysis of mobile game interface design

3.1 Status and development prospect of mobile game market

With the continuous development of intelligent terminal performance and the emergence of various mobile games on mobile network platforms, the development of mobile game market has laid a foundation. In the future, the development of mobile game market will still maintain a good upward trend. At the present stage, the mobile game market in China is still in the expansion stage of games. While the mobile game user group expands, it still needs to constantly cultivate the consumption concept of game users. However, due to the large user base of mobile game in China, mobile game market in China will surpass Japan, the United States and other mature mobile game countries to become the world's largest mobile game market in recent years.

In the interface design of the game, due to the limitation of the phone's screen, interface and information capacity is limited, accordingly to the player's visual capacity is limited, therefore, in the game interface button, the requirement of design elements such as text, window will appear more strict, and the game designer in the interface design lack of such understanding, the large amount of information such as text, graphics, animation, added to the interface without a second thought, this is not in conformity with the visual aesthetic regularity of interface design, because the lack of primary and secondary picture layout for players to feel restless. Therefore, this industry needs a lot of excellent game interface designers.

With the development of The Times, the liberation of education thought, people are no longer bound by the traditional education thought, have been able to view the industry correctly, and have a correct understanding of the game designer. The growing number of users in the game industry has brought huge benefits to the game companies and attracted more people into the game industry. The constant development of game culture has led to the development of a series of game ancillary products, and diversified game products have been derived to drive the peripheral market of Chinese games.

3.2 Analysis of key points of mobile game interface design

3.2.1 Reasonable design of interface ICONS and text

Modern interaction design has gone from functionalism to pluralism and humanization. As an extremely universal and important expression of emotion, graphic design has been widely used in the field of art design. Graphics can speed up the user's perception and recognition of the target. Graphic symbols can be divided into three categories: natural graphics, figurative graphics and abstract graphics. Natural figure refers to the figure which is completely from the objective existence of nature without artificial modification. The figurative figure comes from nature, after summarizing and refining, it retains certain iconic features and has the characteristic of imitative. Abstract graphics belong to those completely created by human nature that do not exist or are highly simplified. The creation concept of this kind of graphics pursues the simple formal beauty of lines and shapes. Nowadays, the popular trend of mobile application interface design is flat and has high abstract tendency. This is because such graphic symbols are not only well recognized on the platform of mobile phone size, but also easy to be developed, which can effectively reduce the workload of the design team and facilitate cross-platform visual adaptation. However, we will find that the interface design of mobile games is not affected by this global trend. As compared with other applications, mobile game interface design requires the use of visual language to express its set worldview and cultural factors. Whether icon modeling, color, and texture should meet the requirements of the game environment, so that the game interface and scene role image and visual language harmony and unity. In the user interface design of mobile games, concrete graphics are more conducive to increase user's

immersion and game emotion cultivation, which has become an important means to create high-quality and friendly interfaces.

4. Simplicity of interface layout

The word "information overload" is no stranger to us, because in this exciting Internet age, modern life has been surrounded by all kinds of intelligent information products. The presentation medium of mobile games is the screen of mobile phone. Too many details will make users unable to grasp the most important details and even prevent them from reading the information they want. The simplicity of this design needs to be reflected not only in the layout of each static interface, but also in the logic of the interaction structure. Game users' pursuit of screen texture and need for immersion are also incomparable to other users. Therefore, different from other applications, mobile games should reduce data mapping as much as possible in the interface design, especially text mapping, to ensure that users can appreciate and experience the beauty and reality brought to them by the screen more.

5. Mobile game interface design and game peripheral product design

5.1 Analysis of similar competitive products

In the interface design of a new game, the first thing to do is to analyze competing products, analyzing the advantages and disadvantages of similar products, user downloads, game attention and other data.

In the design of information layout, element throne can be a good example. In addition to the creativity of the game system itself, the detailed design of the interface layout is also an important reason for its popularity. The layout of the main interface of the element throne and the rich text level give users a good reading and operation experience. The arrangement of ICONS on the interface follows the user's operating habit. Mobile games are limited by the screen, which is extremely expensive. On the screen of mobile phones, especially on the main interface, every word and icon has its own meaning, and no space is wasted.

From the second-level interface, we can see that Chinese fonts boldly try several combinations of font size, such design even violates the principle of unified interface font size. Due to the limitations of usage mode, fonts that are usually less than 18 can not be accepted in mobile phone interface. However, in this interface, we can see that the different font size exactly reflects the level of text and the prominence of the subject, so that users can quickly identify the importance of the information.

5.2 Inspiration of game peripheral product design brought by successful case "world of warcraft

"World of warcraft has dominated the world since launch network game boss position, bring the storm company revenue each year more than half of the profits, because for the user experience in game development and fully grasp of flow theory and application, it aims to provide players with an extremely challenging and pleasant flow experience, with the players to get carried away, these in the virtual world. From the successful case of world of warcraft, we can think about how it makes perfect use of the core and essence of the theory of immersion, so as to bring players a kind of ecstasy and ecstasy, so that players are attracted to it repeatedly. "" this approach certainly has a lot of implications for our product design. First of all, let the product itself give users a clear feedback. Dr. Donald's design psychology has a more in-depth explanation of the feedback when explaining the execution and evaluation cycle. During the evaluation phase of this cycle, users compare the differences between what is happening and what they expect to happen. Timely feedback helps the user evaluate whether previous actions help move closer to the goal so that the user can re-adjust the action or move on to the next step. Secondly. The operation of the product should not be too small or too complicated or complicated to match the operation skill of the user. Immersive experiences occur only when challenges and skills are in balance and both reach a certain level of intensity, which is the average level of challenges and possible skills an individual faces. At last. A good product, it will help the user to produce "immersion experience", the higher the value of a product's user experience, the higher the likelihood of user generated immersion, so users will continue to work hard to continue to

get this kind of feeling, also leads to great dependence and viscous products, products of the user experience will be a huge success.

5.3 Design of ICONS in the game interface of night elf

The main interface is designed according to the style of the game and the main color of the game. The style and color of the icon need to be considered when designing the function icon. The style must be consistent with the whole style of the game. Since the game style of "night elf" tends to be Korean and Korean version style and has a part of magic color, the design of the whole icon also tends to this point.(Figure1-8)
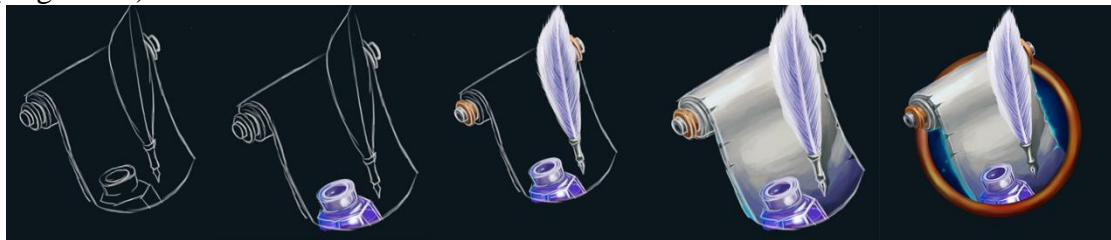

Figure1 task icon design

Figure2 task icon design

Figure 3 weapon icon design

Figure 4 activity icon design

Figure 5 store icon design

Figure 6 illustrates the icon design
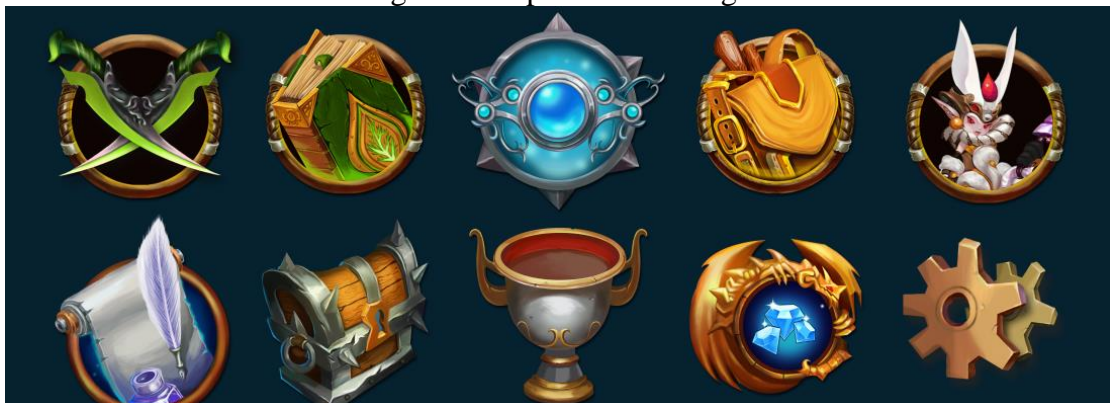

Figure 7 knapsack icon design

Figure 8 shows the design of all functional ICONS

5.4 "night elf" game character design

The night elf game characters are mainly divided into three categories, which are demon, elf and beast pets. According to the positioning of three types of roles, two representative characters are designed for each type. In order to distinguish the race of the roles, each type of role has its own unique ethnic characteristics when designed. When designing the role, we need to collect various materials and materials to get inspiration from life and practice. The following picture shows part of the effect. (figure 9-14)

Fig.9 the design process of the demon warrior fig.1

Fig.10 the design process of demon warrior fig.2
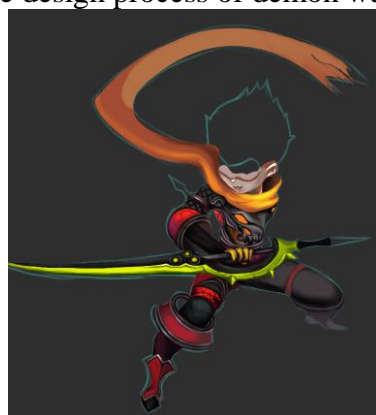

Fig.11 design process of demon warrior fig.3

FIG. 12 design sketch of demon warrior

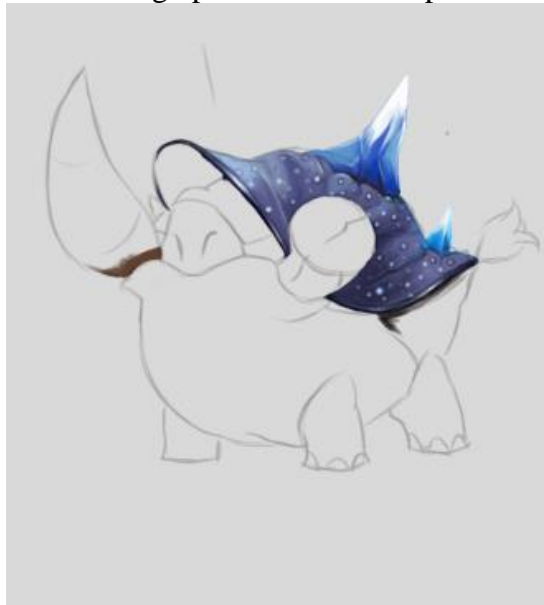FIG. 13 design process of animal pets FIG. 1

FIG. 14 design process of animal pets FIG. 2

6. Conclusion

A good game peripheral product will definitely immerse the user and experience the user experience brought by the product. The better the user experience, the user will immerse himself in the experience brought by the product, and then the user will have dependence and stickiness on the game peripheral products. Then the development of game peripheral products will be better and better.

According to all kinds of knowledge collected before, I sorted out the data, and finally I designed the interface of the mobile game night elf and the peripheral products. In the early stage of the design, the positioning of the game style was carried out first, and the theme color of the game screen was determined. Secondly, design the game interface ICONS and game characters according to the game style; Third, the game interface layout design; Finally, the game peripheral products are designed with the game elements designed at the early stage.

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