Application Research of Digital Media Technology in Ceramic Product Design

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Abstract. Digital media technology is different from general digital technology, its own comprehensive is extremely strong, can organic combination and artistic, cultured is calculated, general digital technology and digital media technology exquisite combination of art and digital content, through digital content and effective performance art, also can be converted to a digital, art content to facilitate the design work, design work gradually into the public class, people can through the way of combination number, independent to make art and design. It also means that the era of national design is coming in the future. Although the content is not artistic enough, it represents the public's pursuit of art, and also strengthens the individuality of ceramic products, so as to better meet the private customized needs of customers. Therefore, this paper will start with the advantages of digital media technology in ceramic product design, and fully launch the application research of digital media technology in ceramic product design.

Keywords: Digital Media Technology, Ceramic Product Design, Product Design Innovation

1. Introduction
Ceramic products in China have a profound cultural and artistic heritage, China's ancient ceramic products, mostly hand-fired, with a certain artistic quality, the price of each period of representative classic ceramic products is estimated by tens of millions of starting. Taking the blue and white porcelain of the Yuan Dynasty as an example, it has maintained the highest auction price of ceramics in history, and its unique artistic expression form represents the highest achievement of ceramic art. Ceramic products have always been playing an important role in our life. In the course of its history, each stage of development has presented different cultural connotations and pursuits. From the beginning to meet the needs of life to the later pursuit of artistic aesthetic taste of products. Because of the difference of lifestyle and aesthetic Angle, although the form of ceramic products is blossoming, the purpose of design is always centered on "practicality". Nowadays, the design and production of ceramic products not only pursue practical value and economic value, but also pay more attention to its aesthetic value. In order to promote the innovation and development of ceramic products, digital media technology can be applied to the design innovation of ceramic products to enhance the production innovation effect of actual ceramic products through such technology.
2. The Advantages of Digital Media Technology in Ceramic Product Design

2.1 Using Digital Language to Realize the Unification of Data Content
Digital media technology is a new technology based on computer technology. One of its main characteristics is that content can be unified. For digital media technology, any content can be turned into digital language, such as text, voice, images, video, can be to restore it into through information technology, a digital language on the basis of the digital speech itself is pure digital, only through the different permutation and combination, may produce different, and the image, word, etc., is the number of permutation and combination forms [1]. At present, digital media technology is to unify ceramic product design by reducing it to the basic digital language. In other words, it is a process of decomposition and by reducing it to the original structure. For example, all things are composed of atoms. If all things are smashed into the structure of atoms, then all things are the same without any difference. However, by arranging them in some special ways, the content of their differences can be known.

2.2 Digital Media Technology Has Turned Ordinary People into Designers
In the design of traditional ceramic products, the biggest problem is the need for a certain level of art, because the modeling, patterns, paintings, inscriptions of ceramic products has their own characteristics of ontology language, and the creation of works with different forms of artistic expression requires profound artistic accomplishment and rich practical ability. With the development of science and technology, integrating digital media technology into ceramic product design, the design of ceramic products can be completed directly by using digital language arrangement. The public do not need to know painting, calligraphy, pottery, as long as the computer input relevant instructions, can let the computer according to their own needs to combine the product content, when the combination meets people's needs, determine its content. The product can then be produced according to the instructions given in the corresponding digital language. Therefore, traditional ceramic product design is the accumulation of artistic content, while after the integration of digital media technology, the public's ceramic product design can adopt the form of autonomous jigsaw puzzle, choose their favorite shape, calligraphy and painting to complete the combination. However, the problem is that such design method can only be based on the content stored in digital media. The design beyond the content stored in digital media cannot be completed. Therefore, a certain data foundation is needed to complete the corresponding content; otherwise, the design cannot be carried out.

2.3 Personalized Customized Design to Enhance the Competitiveness of Products
All the time, ceramic product design and customization have no product competitiveness, because the complex production process of ceramic products, personalized customized design, production costs are too high, leading to the ceramic products on the market in order to save costs, most of the products are identical. However, the integration of digital media technology has completely changed this situation. As long as customers have their own needs, they can achieve product design through digital language compilation to ensure that the design content meets the needs of customers, which also improves the market competitiveness of ceramic products.

2.4 Promote the Standard Batch Production of Ceramic Products
In the production process of ceramic products, it is divided into manual production and mechanical batch production, and the manual molding is basically not the same for every ceramic work. Even if mechanical production is the same, there are some subtle differences. However, after the integration of digital media technology into ceramic product design, a completely different situation appears. As long as effective digital language arrangement can be adopted, the ceramic products produced can be more accurately guaranteed to be completely consistent, which is convenient for mass production of unified style, and the output of ceramic products can be improved [2].
3. Application of Digital Media Technology in Ceramic Product Design

3.1 Initial Design Application
The application of digital media technology in ceramic product design has become the core path for the development of ceramic product industry, which is mainly to enhance the effect of design through new technical content and ensure to meet the needs of customers for design. Among them, in ceramic product design, the preliminary preparation is particularly important. It lays a foundation for subsequent design, and sufficient preparation can reduce the design time consumption. Its main content is the highly expanded database. Due to the large amount of data content in the ceramic industry, each family has its own device type, calligraphy and painting, patterns, etc., and even famous designers' design manuscripts. In order to ensure the effect of digital media technology, such design contents need to be fully integrated into the database. In the process of use, the corresponding data can be quickly called out, so as to ensure the improvement of the design effect, as well as the design speed. Therefore, it is often said that the use of digital media technology for ceramic product designers to save the initial preparation time, and the use of this technology also contributes to the efficiency of the design work. Mainly because of the high accumulation of a large amount of data content, designers can refer to a lot of content, most of the content may coincide with the designer's ideas, so designers can obtain the design content through the integration of data and application combination. Although the artistic expression form of ceramic products lacks innovation, it is of great help to the mass production and rapid upgrading of ceramic products [3].

3.2 Design Medium Applications
Ceramic product design is generally divided into three stages, the first stage is the preparation work. The second stage is essentially the core design extreme. In this stage, it is mainly the summary of various ideas and contents, so as to complete the design of reserve, which is the main part. With the integration of digital media technology, the importance of the medium term has not changed at all. So the middle stage is a crucial link in the design of ceramic products. Today the 3D design software in digital media technology is introduced, because it has the characteristics of specific image, accuracy and strong operability, it can really materialize the product design. Is generally through the early use of digital media technology database of digital language input to the 3D design software, to ensure that the 3D design software can effectively restore the relevant content, to ensure that can be seen in the 3D design in the actual content, greatly reduce the need to draw a draft problems before, also let whole design content become more readily available. In particular, it solves the problems existing in traditional design. Ceramic product designers display their creative ideas with THREE-DIMENSIONAL software and process three-dimensional effects on two-dimensional images, so as to make product design more intuitive and vivid and achieve the maximum expected effect. In addition, in the production of THREE-DIMENSIONAL images, every detail can also be shown. If there are problems in some details, they will be directly presented. Meanwhile, if the composition cannot be completed, corresponding Suggestions will be put forward to inform the data that there are errors and the design cannot be carried out. And in this process, the designer can timely modify the design according to the feedback problems, and constantly improve, so as to promote the completion of the finalization of the later period, enrich the expression of ceramic product design. Compared with the original method of repeatedly revising the basic manuscript, the new design method only needs to adjust the corresponding digital language. The content changes are simpler and can basically meet the actual needs [4].

3.3 Application in Later Stage of Design
The greatest advantage of using digital media technology to complete the design of ceramic works is that it can make the design more expressive, so as to intuitively see the problem and see the final performance [5]. If is performance meets the requirements, you can directly for production, if performance does not meet the actual requirements, you can continue to adjust the design, overall is
very free, is not originally Planarization drawings cannot modified waste time resource problems, and automatic calculation based on the technology of digital media function, also do not need to repeatedly checked data content. Therefore, in some cases, digital media technology plays a more important role when ceramic product design enters the stage of post-integration processing. Mainly is this stage thoroughly understood the corresponding content, and will not appear content or cannot see the situation, then the production of products and see the effect is exactly the same. The 3D modeling, laminating and rendering efficiency in digital media technology can make the product design more intuitive and expressive. In other words, in digital media technology, more technical content makes the overall product performance more restored, and has the function of simulating reality, so that the effect of the object can also be shown in the design. To some extent, this makes up for the lack of authenticity in past designs [6]. The main reason is that in hand-painted works, all drawings are two-dimensional drawings. Even three-dimensional drawings cannot be truly presented due to the characteristics of paintings. Therefore, in the design of modern ceramic products, the content of traditional hand-painted design must be gradually replaced by digital technology. Moreover, digital media technology can make product design have dynamic effect, which is conducive to consumers' understanding and judgment, and has been recognized more and more. In other words, in the display stage before product production, the actual effect of the product is better displayed, so that customers can intuitively see the model of the ceramic products they will buy, including the specific modeling, decoration, glaze and other specific parameters [7].

3.4 Application of Design Induction

In the application process of digital media technology, sometimes in order to better realize the rapid upgrading of products or the research and development of the same series of products, rapid production can be completed by means of design and induction. Each finished design content will be stored by digital media technology. If you want to exit the corresponding series of products, you can change one set of data to realize the production of the series of products. For example, after the completion of the design of a product, if you want to design supporting products, keep the text and pattern of the product itself unchanged, but change the data content of the device type, and the teapot designed by itself can also be matched with the tea set, so as to complete the mass ceramic product design, saving the time of repeated design. At the same time, in view of some data problems, as long as a little adjustment, the ceramic product industry from the whole change, whether the design or production, can achieve mass output, so that it has a better market consumption prospects [8-10].

4. Conclusion

To sum up, the core of digital media technology is to convert text, audio and video, image, etc. into fixed and orderly digital arrangement and combination through computer technology, so as to form a complete unified content. In the subsequent use, only the corresponding data can be called out, without the need for redesign. It can save the design time of ceramic products, especially the design of a single product, and can achieve the replication and production of ceramics very well. As long as the basic data is complete, the output can be unlimited at any time, which cannot be done in other ways. At the same time, the high degree of freedom based on digital media technology also makes designers' requirements begin to decline. The public can also choose different combinations to complete the design. Although this kind of design does not have strong artistic sense, However, in line with personal aesthetic sense, in general, it can meet the high-end customized output demand of ceramic products, ensure that the price of ceramic products can rise, and promote the overall development of the ceramic product industry. Therefore, the integration of digital media technology into ceramic product design is a great challenge for ceramic product designers and a turning point for ceramic product design.

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