

Difficulties in the Improvement of Garment Design Equipment Technology based on Multidimensional Intelligence Theory

Yipin Huang

Zhejiang GIUSEPPE Co., Ltd. Product Development Department, Wenzhou, China

Abstract. In the 21st century, with the acceleration of the global economic integration process, the clothing sector has also undergone rapid changes. Three-dimensional cutting is a brand-new fashion design model. Intelligent clothing design is a new and new model in the design field. Due to the novelty of its design concept, this type of clothing design has certain difficulties. Therefore, smart clothing design focuses on customer-centricity in design patterns. Only by fully incorporating the customer's ideas into the design can an organic combination of technology and fashion design be achieved. Promote the development of new smart clothing in the apparel sector and promote the all-round development of the apparel sector.

Keywords: Multidimensional intelligence theory, Clothing design, 3D equipment, Technical improvement.

1. Introduction

Smart clothing generally refers to clothing that can simulate a living system, sense changes in the external or internal environment, and respond to it dynamically or passively through a feedback mechanism. It is mainly realized by two aspects of smart textiles and electronic smart technology. In recent years, with the rapid development of science and technology and the continuous improvement of people's living standards, the unique comfort and fashion characteristics of modern clothing can no longer satisfy people's pursuit of higher and more convenient clothing, such as: real-time monitoring of physical conditions, Instant entertainment games, more convenient communication methods, etc., these conditions have promoted people's attention to modern clothing design, clothing new product research field has also been broadened, design structure system has also become more complete, modern clothing design is moving towards intelligence Development, science and technology, innovation and other multi-directional development. The realization of smart clothing design requires the cross-application of multi-disciplinary cutting-edge technology, and the development of smart clothing revolves around "smart" development.

Intelligent clothing design pays attention to individualized design in design, adheres to individualized design, and combines individualized design concepts to meet customer needs. For example, in the process of related clothing design, some new technology and materials are added, and some new technologies are used. Fashion design can integrate new technology into intelligent clothing, paying attention to the application of new technology, such as transferring data to related clothing, using micro-joints and shirts to combine some data for GPS tracking and timely mastering Relevant circumstances, the improvement of intelligent clothing, the use of personalized methods, fully in line with the needs of the public, to ensure the novelty of intelligent clothing, and ultimately achieve personalized display. In the design of intelligent clothing, focusing on the organic combination of technology and clothing, many intelligent clothing integrates some emerging technology into it, greatly improving the utilization efficiency of clothing, making intelligent clothing more safety-oriented in design. The organic combination of clothing and clothing has realized the organic integration of new technology and clothing, and the application of intelligent means to achieve the balance of art. This has a new concept for consumers, especially in the design of clothing, incorporating some technology. It makes consumers have greater demand for intelligent clothing, realizes the organic combination of technology and clothing, and promotes the demand for intelligent clothing design, which makes intelligent clothing have a better development trend.

2. The Proposed Methodology

2.1 Multidimensional Intelligence Theory.

The theory of multiple intelligence was proposed by the psychologist of the Harvard University School of Education, Howard Gardner, in 1983. Gardner proposed this theory by studying the traumatic patients in the brain who discovered their differences in their ability to learn. Traditionally, schools have only emphasized the development of students in both logic-mathematics and language (mainly reading and writing). But this is not the whole of human intelligence. Different people will have different intelligent combinations. For example, the space sense (space intelligence) of architects and sculptors is strong, the physical strength of athletes and ballerinas (smart body intelligence) is strong, the interpersonal intelligence of public relations is strong, and writer's Introspective intelligence is strong.

Traditional intelligence theory believes that language ability and mathematical logic ability are the core of intelligence, and intelligence is a kind of ability that exists in the integration of the two. In response to this narrow definition of intelligence that is only at the operational level and does not reveal the full picture and nature of intelligence, researchers have re-invented the concept of intelligence from different fields of psychology since the 1970s. The most influential one is the ternary intelligence theory (analytical intelligence, creative intelligence, practical intelligence) proposed by Robert Stenberg, a psychologist at Yale University.

In the 1980s, the multi-intelligence theory put forward by Gardner, a cognitive psychologist at Harvard University, defined intelligence as the ability of people to solve problems and create them in specific situations. He believes that each of us has eight main intelligences: language intelligence, logic-intelligence, space intelligence, motion intelligence, music intelligence, interpersonal intelligence, introspective intelligence, and natural observation intelligence. He proposed the concept of "smart home evaluation", which expanded the foundation of student learning assessment; he advocated "scenarioization" assessment, which corrected the functions and methods of previous education evaluation. Gardner's theory of multiple intelligences is a powerful challenge to the traditional "one-dollar intelligence" concept, giving people a refreshing sense. Especially in the current new curriculum reform, when most teachers are confused about student evaluation, his theory will undoubtedly give us a lot of inspiration.

2.2 Three-dimensional Cutting Equipment.

LookStailorX is the world's first 3D apparel design software that, combined with existing apparel CAD software, can make a dramatic leap in apparel design. The three-dimensional cutting software LookStailorX is a new type of professional software. The development time is not long. The application is limited to the design of clothing. Many colleges and universities have not started teaching this software yet. Jiangxi Fashion Institute has not promoted this software on a large scale. However, this software is widely used in enterprises, flexible and convenient to operate, accurate in sampling, and well received by enterprises. LookStailorX generates two-dimensional pieces from three-dimensional clothing shapes through simple operations, and students master the basic operating modes during the learning process. Using LookStailorX software to do the following is the best test of your own learning software.

The level of style design directly affects the wearing effect of the clothing. The most direct way for consumers to look at the clothing is to wear it on the body. Therefore, adding the LookStailorX software learning application to the style design can make adjustments on the simulated human body at any time, which further highlights the clothing. The design elements of the style are worn on the person. LookStailorX software is very convenient to operate, you can directly change any design line, outline of clothes, provincial road, fabric line, etc. on the human body. This is the biggest advantage of LookStailorX software. What effect do you want to achieve? At the same time, the effect of each side of the garment will also come out, and the corresponding pieces will also come out, which greatly saves the design time and saves the time of playing. Therefore, in today's high-speed development,

these high-tech products for enterprises are truly creating value space for them to create time and create life.

In the provincial road processing of garment CAD automatic grading, the basic provincial processing of the pattern is based on the law of the human body structure, and the corresponding structural adjustment of the clothing basic pattern is carried out to realize the diversified design of the clothing pattern. However, in the basic provincial processing of garment CAD design, it is affected by the difference in the grading rules of different types of clothing, and the basic provincial processing method and its location selection will change. The basic provincial processing of garment CAD automatic grading is to adopt the provincial deflation method in order to meet the size design rules of basic clothing institutions, including provincial, provincial and provincial deflation. The setting of the deepening of the province should be determined according to the proportion of the proportion of different structural parts in the basic pattern of the garment. The reduction of the provincial position should be determined by the position and proportion of the provincial road in the basic structure of the pattern. Since the grading process of the paper does not affect the province, it is usually not scaled up in the provincial process.

2.3 Smart Clothing Design Equipment.

Compared with ordinary clothing, smart clothing is a fusion of electronic technology equipment and clothing technology. The two can only meet the needs of consumers and become successful if they achieve perfect integration without affecting the aesthetic needs of clothing and wearing comfort. Design the product. Because smart clothing is developed with the continuous development of smart technology, it is greatly affected by technology. B. Ariyatun used the rich picture technology of soft system to determine the key issues in the development of new smart clothing products, namely the imbalance between technology development and clothing technology application, and the smart equipment and fashion brought by this imbalance cannot be in smart clothing. Achieve complete integration. Therefore, the key to smart clothing design is to combine the technology and clothing under the conditions of users.

With the continuous advancement of technology, the characteristics of smart clothing with large size and single function have been significantly improved, which has improved the convenience of wearing, such as the wear ability of thin and light electronic devices combined with clothing for mobile phones, MP3, etc. Apparel, micro-electronic system technology using micro-wireless electronic or sensing devices to hide or integrate into fabric technology, electronic clothing, etc. The design of smart clothing based on clothing should change the electronic technology equipment according to the wearing of the clothing and its own conditions in order to adapt to the characteristics of the clothing itself.

In the future of rapid development of science and technology, we will increase the proportion of research on apparel materials and promote the intelligent, comfortable and optimal development of materials research. Finally, embodied in smart devices, it requires flexible and miniaturized smart devices, so as to achieve the subtle and invisible connection technology in the combination of the two. At the same time, the development of sustainable and durable endurance equipment is also the focus of smart garment development and design.

The emergence and development of smart clothing has developed with the development of science and technology. The rapid development of science and technology has determined the enormous development potential of smart clothing. At present, the main problem in the development of smart clothing is the imbalance in the development of clothing technology and technology, which makes the interactive research and integration of electronic technology and clothing relatively lagging behind. Although there are many obstacles at present, the characteristics of smart clothing determine that it will develop in the future in the direction of diversification of functions, product segmentation, and systematic design. The existing research on smart clothing is more focused on the development and application of smart devices, so with the rapid development of technology, the emergence of new smart devices must affect the development direction of smart clothing.

The emergence and development of smart clothing is ultimately faced by its users and consumers, to meet the different needs of consumers. The starting point and destination of product design is the final consumers. Different consumers have different consumption habits and individual needs. The design of smart clothing only follows the "people-oriented" design concept to understand and meet the different needs of different consumers. Only to attract the attention of consumers and get the recognition of consumers. In the future, smart clothing will be more accurate and more targeted, and will be the same as modern consumers who have different "styles" and "models" for different consumers to meet different needs and functions. At the same time, the design of smart clothing in the future also has smart customized clothing that is customized according to customer needs, which can be more in line with personal living habits, intelligent needs and aesthetic concepts. At the same time, the customization of smart clothing can alleviate the conflict between its long development time and the rapid change of fashion concept.

2.4 Clothing Design Pattern Improvement.

The use value of the product can only be reflected after the final consumer purchases and uses it, so each product is ultimately inseparable from the service to the society, and clothing is no exception. For smart clothing, it is necessary to specify the scope of the final consumer object in the design process, and to understand the consumer's consumer demand or current market demand, and then design for the market demand. For example, famous designer J. Rantanen learned through extensive research that the snow rescue team is facing risks such as loss, severe cold, accidents and failures during the rescue process. After learning the information, the designer further analyzed the causes and solutions of the problem, combined with the smart clothing design concept, designed the smart clothing with strong cold resistance, hidden electronic equipment, low energy consumption and light weight. The problem of the snow rescue team was solved well. This example illustrates the importance of understanding human needs in smart clothing. In addition, it is necessary to pay attention to cultural needs, use needs, aesthetic needs, etc., according to different needs and content, combined with design concepts, can make smart clothing practical and economic value.

Intelligent clothing focuses on the integration of relevant technology and technology to ensure the safety of intelligent clothing, which can better reflect the advantages of intelligent clothing design, actively carry out in-depth research, and explore its future development trend. . In the design concept of intelligent clothing design, it pays attention to the development of relevant scientific and technological performance, meets the needs of customers, and pays attention to the related concepts of intelligentization and fashion design, and actively develops various performances of clothing. Integrate technology from an intelligent perspective, continuously develop relevant performance, and focus on meeting customer needs in design. Breaking the traditional ideological constraints and creating personalized clothing for the needs of mass development. Technology development is carried out while meeting customer needs, and development focuses on the manufacturing of related processes to meet the needs of the future development of smart clothing design. In the future development of smart clothing, we should pay attention to the use of electronic technology, and select electronic technology according to the needs of customers to meet the needs of the public. Only in this way can we avoid the harm caused by clothes to the human body.

In the future development of intelligent clothing design, we must pay attention to the integration of technology and technology, pay attention to relevant clothing design requirements, meet customer needs, and pay attention to development prospects. For example, the research on intelligence should be integrated into relevant technology. Incorporating the individual differences of the customer's masses, focusing on the integration of ideas and related factors in fashion design. Intelligent clothing design from all aspects can meet the needs of customers and design satisfactory clothing. Actively researching the organic integration of smart clothing and electronic technology has made China's future smart clothing R & D and technology breakthrough have a certain long-term trend, and achieving independent research and development is conducive to the development of intelligent clothing with a longer-term development.

3. Conclusion

Smart clothing is a cross-disciplinary technology that has been rapidly developed. At present, there is still a great lack of performance in the combination of smart equipment and clothing. Give full play to the development potential and market value of clothing equipment. For the design and development of smart clothing in the future, we should adhere to the people-oriented design concept, adhere to the information technology innovation, material composite innovation, clothing technology innovation as the direction, with independent innovation as the core to achieve the comprehensive development of smart clothing.

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