



# Research on Innovative Thinking of Intangible Cultural Heritage Textile Patterns Under the Background of Big Data

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**Abstract.** With the continuous development of China's comprehensive national strength, the country's economic level has undergone earth-shaking changes, especially the impact on the entire spiritual and cultural life has undergone major changes. The country is currently vigorously developing the construction of local characteristic culture, and all regions are stepping up to combine their own local characteristic products, customs, and tourism projects to further enhance their regional influence. This article focuses on the innovative thinking of intangible cultural heritage textile patterns under the background of big data, and through detailed introduction of its conceptual significance and related strategies, so as to achieve the purpose of further enhancing the intangible cultural heritage textile pattern innovation research.

**Keywords:** big data · textiles · pattern innovation

## 1 Introduction

At present, all localities are earnestly organizing and carrying out recommended activities for the practice of local customs with regional characteristics. In order to further develop the local characteristic tourism resources and promote the development and prosperity of the regional economy, in accordance with the relevant requirements of the government, strengthen the development and construction. Under current conditions, especially in the context of big data, the effective use of science and technology is very necessary. The research and innovative thinking of intangible cultural heritage textile patterns need to further exert the initiative of staff at all levels. It can carefully study the overall characteristics of its patterns, so as to effectively enhance creativity and ensure the uniqueness and effectiveness of the entire pattern. The research and design of textile patterns should ensure that it is further developed and innovated on the basis of local cultural characteristics. This kind of pattern design has more influence and regional cultural characteristics, which can increase the grade and level of textiles to a greater extent, and enhance its due influence.

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## 2 The Concept of Textile Pattern Under the Background of Big Data

The so-called intangible cultural heritage textile patterns in the context of big data refer to local NGOs or enterprises in order to comprehensively enhance the influence and effect of textiles. Under the condition of using big data, extensive search and sorting of distinctive schemes, and certain reforms and innovations of related patterns on the original basis achieve a bright feeling. In the context of big data, it should make full use of its advanced Internet technology and combine the reliable resources of the Internet to comprehensively apply valuable pattern information to textiles. For the entire pattern, it is not only a test of the wisdom of the staff, but also a practical test of the application of Internet technology. Under normal circumstances, the entire Internet technology is widely used in all aspects, and it plays a very important role in pattern design, pattern making, and pattern innovation.

## 3 The Significance of Intangible Cultural Heritage Textile Pattern Innovation Under the Background of Big Data

### 3.1 It is Conducive to Promoting the Overall Quality of Textiles

Comprehensively strengthening the innovation of intangible cultural heritage textile patterns under the background of big data plays a very important role in promoting the overall quality of the entire textile. In the current situation, for the entire textiles, it pays more attention to the development and research of cultural and artistic innovation, and researches on more creative patterns and new products, which can further promote the overall influence of the entire textile. Everyone knows that in the diverse social cultures, especially under the impact of some cultures in Western countries, some traditional cultures cannot be effectively protected and are increasingly ignored by the people. For a big country with five thousand years of splendid history and culture, it can be

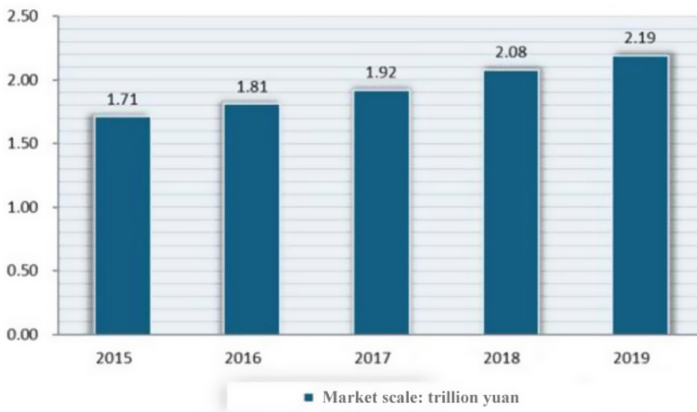


Fig. 1. Size of textile and clothing market in China

said that Chinese culture is broad and profound, and there are many traditional art resources that are worthy of our research and deep exploration [1]. Under the conditions of comprehensive utilization of local culture and full use of big data technology, it is possible to quickly create and produce textile pattern materials with more Chinese cultural and artistic characteristics to meet the needs and concerns of consumers.

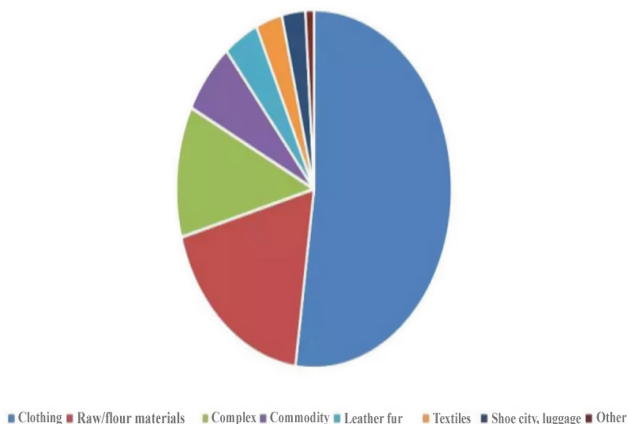


Fig. 2. The proportion of the number of professional markets of each category

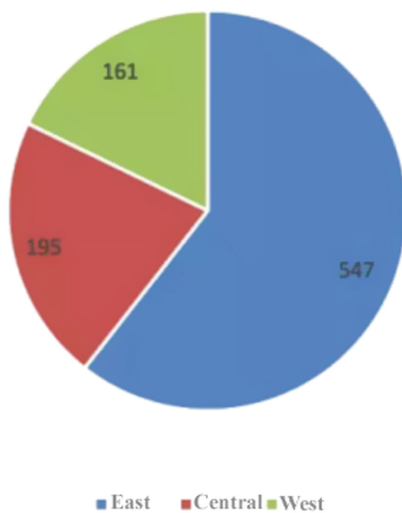


Fig. 3. Share of textile market share

### 3.2 It is Conducive to Improving the Economic Benefits of Textile Enterprises

For textile companies, in order to gain a firm foothold in the market, it is very important to comprehensively strengthen innovation research. Textiles must not only conduct in-depth research on the texture of fabrics, but more importantly, fully express the relevant innovations and creativity, so as to be more authoritative for the entire textile market. Under the background of making full use of big data, for the design and research of intangible cultural heritage textile patterns, highlight local characteristics and uniqueness, highlight the charm of culture and art, and ensure that the entire pattern is more meaningful and can attract everyone’s attention. Attracting everyone’s attention can be said to play an important role for enterprises. The economic benefits of textile enterprises are related to the work income of many practitioners [2]. Therefore, if the textile research and development work is carried out well, the economic benefits of textile enterprises will be better. Conversely, if the R&D work of textile companies is relatively lagging, for textile companies, especially in terms of operating income, it will become unsatisfactory, and even the problem of making ends meet. It can be seen that it is of great significance to strengthen the research of intangible cultural heritage textile pattern innovation under the background of big data (Figs. 1, 2, 3, 4 and 5).

### 3.3 It is Conducive to Promoting Regional Influence

Comprehensively strengthening the innovative research on intangible cultural heritage textile patterns under the background of big data can effectively enhance the cultural soft power and influence of the region. For intangible cultural heritage textiles, in order to truly improve the reputation and influence of products, in addition to ensuring its excellent product quality, it is more important to comprehensively improve its packaging effect. The research on the color, shape, size, and in-depth connotation of the pattern will increase the influence of the entire region. It plays an important role in effectively promoting the development and dissemination of regional characteristic culture and ensuring the development of regional industrial clusters [3]. Under the condition of big data, the speed of information dissemination is very fast, and the scope of dissemination



Fig. 4. Annual turnover growth rate of the textile industry

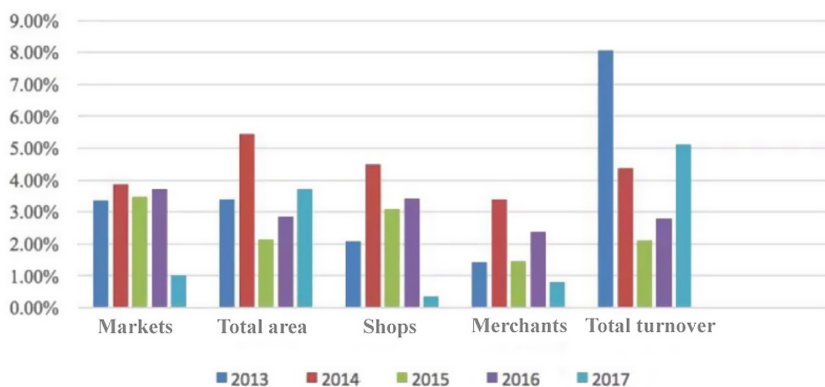


Fig. 5. Comparison of market quantity, area, shops, merchants and transaction rate

is also very wide. Therefore, although the work is small for the comprehensive strengthening of textile pattern research, it is of great significance and impact. It can become a business card for the local image, and it can also become a booster for the local economic and cultural development. Therefore, it is necessary for all levels and departments to seriously solve the problem in the process of relevant research, and effectively promote the influence of the entire region.

## 4 Innovative Thinking of Intangible Cultural Heritage Textile Patterns Under the Background of Big Data

### 4.1 Effectively Enrich and Expand Creative Materials

For the research and production of the entire pattern, it must always highlight the enrichment and expansion of creative materials. The sources of materials are very wide and can be collected, sorted, and innovated. In short, only the material is in place, and through different comparisons, it can ensure that the effective material can be used. This will be relatively easy for pattern design and production. In the context of big data, how to make better use of the big data platform and how to integrate the big data platform organically with pattern design and production through technical means is something that every textile pattern designer and producer should seriously consider and complete. As one of the most basic sources of inspiration for patterns, materials play a very important role in the conception and production of the entire pattern. The content involved in the pattern is very wide, and there are patterns that are easy to think of, and patterns that are easy to see. But if someone wants to create high-quality and high-level patterns, it needs to conduct serious analysis and research. It needs to work hard and stand the test of time, so that the entire pattern creation work will be more convincing and influential.

For example, a textile company should make full use of big data in the process of designing and making patterns to make the whole work more solid. Especially in the process of searching for materials, it should make full use of Internet resources, collect relevant materials and production methods in a large amount, and collect materials

to ensure the versatility and practicality of the materials. In the process of collecting, the design of the pattern should highlight the integration of local characteristics and the entire production of the pattern. The method of collecting materials should be conducted through extensive research, solicitation of various regions, counties and cities, various industries, various departments, and various groups. For example, in the process of using the Internet for material collection, the integrity should be emphasized to ensure its due value. It can fully mobilize the internal staff of the enterprise to collect and organize a large number of picture materials to effectively ensure the practicability and aesthetics of the materials [4]. Under the condition of big data, people should also make precise search preparations based on people's preference for pattern types, analyze and sort out those patterns that have high clicks and can effectively satisfy different consumer types, and combine them in the process of pattern creation. This will get unexpected results.

## **4.2 Look Carefully and Inspire the Creation**

In order to strengthen the production of textile patterns in the context of big data, it is necessary to conduct targeted research and identification from the entire process of graphic materials. The creative inspiration comes from the understanding of life, the experiment in life, and the hard work. For the entire textile pattern creation work, only by further enhancing the intensity of observation and analysis, making full efforts, and conducting targeted research and analysis, can it achieve better results. Under the current situation, it is necessary to conduct serious analysis and observation for the management personnel, front-line production personnel, creative designers, etc., to analyze and study a large amount of picture information from the overall perspective, from the side perspective, and from the back perspective. On the basis of observation, through my overall control of the effect of the pattern, the central idea represented by the entire pattern is expressed. In this way, for textiles, it can greatly increase its in-depth significance and influence. The research and deepening of textile patterns is of great significance to textiles and has far-reaching influence [5].

For example, in the process of creating textile patterns, a certain textile company should organize special personnel to conduct research and observation on the collected materials. First of all, in the process of observation, it should conduct in-depth research on the origin, content, size, proportion and meaning of related similar patterns through the Internet system to ensure that the pattern can be more targeted and more serious in the process of observation. It can observe carefully to ensure that in the process of observation. It can finally create your own innovative patterns based on the patterns that appear. In the process of observation, a grouping method should be adopted, and the opinions of two or even three groups should be summarized separately, and then everyone should brainstorm and share the highlights of the observation. In this way, the discovery of inspiration can be more complete and it is also conducive to the problems that everyone needs to pay attention to in the process of observation, so as to find more inspiration and create more valuable and meaningful innovative pattern designs.

### 4.3 Actively Apply Diversified Creative Methods

To strengthen the research on innovative thinking of textile patterns in the context of big data, it is more important to actively apply diversified creative methods and make creative methods flexible, simple and practical. This is very connotative for the whole creation. In the process of diversified creation, it is necessary to emphasize the grasp of the theme, which can effectively ensure the innovation, and there can be no fixed thinking. It is necessary to broaden the horizon and further open the thinking. At the same time, for diversified creative methods, the focus is on the background of big data. The content of big data can be very rich in resources. There are domestic and foreign ones, traditional ones, modern ones, professional ones and amateur ones, national ones and the general public, and so on. This requires the creative staff to give full play to everyone's ingenuity to ensure that the entire creative process, creative ideas, and creative methods are justified, persuasive, influential, and more appealing.

For example, in the process of organizing personnel to create patterns, textile companies need to apply diversified creative methods to the work of innovative thinking. Only in this way can the whole inspiration be kept on line and kept on file. Enterprises should comprehensively use modern technology, traditional technology, technology and other methods to create. In the process of using traditional techniques to create, as enterprise technicians in the process of innovation, they should pay attention to the grasp of the details. All the lines that need fine processing need to be worked slowly, and the process of designing patterns needs to be specially carried out label. In the process of making use of modern technology to create, it should highlight the popularity and design patterns that are easy to understand and acceptable to the public, so that they can effectively and quickly occupy the market. In the process of using technology to create, it should take the patterns that young people prefer as the key content for comprehensive creative creation.

## 5 Conclusion

In summary, comprehensively strengthening the innovative thinking of intangible cultural heritage textile patterns under the background of big data plays a very important role in the effective study of intangible cultural heritage textile patterns and ensuring the plasticity of the patterns. For the current enterprises, including the entire regional work, they need to be treated seriously, strict requirements, and strive to achieve greater results. In order to effectively ensure the influence and popularity of the pattern, it is also necessary for units at all levels to grasp the focus of their work and persevere in constant attention, so as to have a better development and inheritance.

## References

1. Chen Yanxin, Zhang Lei. Research on the innovative application of modern decorative patterns in home textile design *J. Clothing Guide*, 2021, 10(01): 110–117.
2. Han Zhiyuan. Innovation and Development of Weaving and Dyeing Technology in Yuan Dynasty *J. Knowledge of Literature and History*, 2020(06): 5–12.

3. Shi Chen. The application and research of woodblock New Year pictures in modern textiles [D]. Hubei Academy of Fine Arts, 2019.
4. Li Jiyang. Research on Jiangsu Intangible Cultural Heritage Innovation Model under the Background of Big Data——Taking Suzhou Intangible Cultural Heritage as an Example J. Ginseng: the second half of the month, 2019, 000(008): P.88–89.
5. Sun Shun Yao, Liao Fang. The protection of intangible cultural heritage Hunan embroidery and product innovation design under the background of big data J. Creation and Review (12 issues): 116–119.

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