



Traditional Factors toward Sustainable Innovation and Marketability of Jingdezhen Ceramic Products

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Abstract

Jingdezhen, China, is well known for its centuries-old porcelain craftsmanship, producing exquisite ceramic products that embody profound traditional manufacturing wisdom. This study utilizes a qualitative case study methodology to explore how traditional factors can promote sustainable innovation and marketability in contemporary handicrafts. Thematic analysis was used to code the data from semi-structured interviews with 30 ceramic business owners, designers, and craftspeople in Jingdezhen. This study systematically identified nine key traditional factors, categorized into three dimensions: Process Technology (Traditional Ceramic Molding Processes, Improvement of Firing Process, Traditional Ceramic Decoration Processes); Morphological Symbol (Traditional Patterns and Subjects, Traditional Styling Reference, Auspicious Symbols of Traditional Conformity); and Cultural Value (Stick to Handmade, Cultural Acceptance, Cultural Revitalization). This study shows that creatively adapting and passing down these ancient elements is the primary way for Jingdezhen ceramics to remain culturally distinct, become more competitive, and grow sustainably in the global market. This study offers a theoretical foundation and practical guidelines for contemporary innovation in traditional craftsmanship.

Keywords: Traditional factors, Sustainable innovation, Marketability, Ceramic products, Jingdezhen

1. Introduction

1.1 Current Status of Jingdezhen Ceramic Industry

Jingdezhen, a city renowned as the "Porcelain Capital," boasts a long and rich history of ceramic industry development, dating back to the Han Dynasty. Through centuries of accumulation and refinement, Jingdezhen ceramics enjoy a high reputation both domestically and internationally (Zhang et al., 2020). Recently, with the nation's emphasis on the cultural industry and consumers' increasing pursuit of a high-quality life, the Jingdezhen ceramic industry has ushered in new development opportunities.

Currently, the Jingdezhen ceramic industry has established a complete industrial chain that integrates research and development, design, production, and sales. Statistics indicate that Jingdezhen currently has thousands of ceramic enterprises, employing hundreds of



thousands of people, with an annual output value of tens of billions of yuan (Jiao, 2022). Among them are time-honored brands with rich histories and masterful craftsmanship, as well as numerous emerging creative ceramic studios. Building upon traditional techniques, these enterprises continuously innovate their products, driving the sustainable development of the entire industry.

However, while developing rapidly, the Jingdezhen ceramic industry also faces many challenges. On the one hand, market competition is becoming increasingly fierce, with numerous domestic and international ceramic brands flooding the market, putting considerable pressure on Jingdezhen ceramics (Zhang et al., 2020). On the other hand, due to shifts in aesthetic preferences and elevated consumer expectations, traditional ceramic products are inadequate for contemporary demands (Li & Shen, 2021). Therefore, how to continuously innovate designs and improve quality while maintaining traditional characteristics has become an urgent problem for the Jingdezhen ceramics industry.

1.2 The Importance of Traditional Factors in Ceramic Design

Traditional factors occupy a crucial position in ceramic design. They are the heart of ceramic art and a key carrier of its culture. Firstly, traditional factors contain rich historical and cultural information that reflect the social landscape, ideologies, and aesthetic tastes of an era (Shafi et al., 2020). By studying and applying these elements, designers can better understand the essential characteristics of ceramic art, thereby creating works with profound cultural connotations.

Secondly, traditional factors provide an endless source of inspiration for ceramic design. Classic ancient works provide inspiration for shape, decoration, and color matching. For example, Song Dynasty celadon is renowned for its simple and elegant lines and warm, jade-like texture; Ming and Qing Dynasty polychrome porcelain is loved for its vibrant colors and lifelike images. These excellent traditional factors not only enrich the visual effects of ceramic products but also enhance their artistic and collectible value (Xiao et al., 2023).

Finally, traditional factors help shape a unique brand image. In the context of globalization, more companies are focusing on brand building to stand out amid fierce market competition (Guo & Tian, 2023). For Jingdezhen ceramics, making full use of its unique cultural resources and craftsmanship, and integrating traditional factors into product design can not only enhance brand recognition and competitiveness but also attract more consumer attention and support.

1.3 Research Question and Significance

This study will examine the application strategies for traditional factors in the innovation of Jingdezhen ceramic products, aiming to provide theoretical guidance and practical reference for this field. The core question is: How can traditional factors promote the sustainable innovation and marketability of Jingdezhen ceramic products? This research analyzes traditional factors to uncover their unique charm and potential value, which are then creatively transformed and developed into a new generation of ceramic products that embody both traditional cultural heritage and contemporary aesthetic trends.

This research has significant practical implications. First, this research helps protect and inherit the precious cultural heritage of Jingdezhen ceramics, allowing it to radiate new vitality in the modern era; second, it promotes the transformation and upgrading of the Jingdezhen ceramic industry, enhancing its market competitiveness and economic benefits; finally, it provides valuable lessons and inspiration for the innovative development of other traditional handicraft products.

2. Materials and Methods

This study employs a case study approach, focusing on the development of ceramic



products in Jingdezhen. Case studies are particularly effective across various research fields, allowing for in-depth exploration of specific topics. Creswell (2014) considers case studies a method within qualitative research, noting that it can serve as both the focus of the research and a product of the research process itself. This diverse understanding of case studies highlights its flexibility as a research method. Yin (2018) emphasizes that case studies are particularly suitable for research in which researchers cannot control behavioral events and focus on contemporary phenomena in real-life contexts. Therefore, selecting the case study approach makes sense, particularly given the intricate nature of the social phenomena under investigation.

2.1 Sample Selection

This study aims to investigate the traditional factors that contribute to the sustainable innovation and marketability of Jingdezhen ceramic products. The sample will be selected from small and medium-sized enterprises (SMEs) in the production area. Currently, the most famous ceramic creative industry clusters in Jingdezhen are Ceramic Street, Sculpture Porcelain Factory, and Taoxichuan. These three clusters contain nearly a thousand SMEs. Their products typically combine traditional techniques with contemporary factors, making them closely related to the research topic. Therefore, the main participants in this study came from these three ceramic creative industry clusters. Purposeful and snowball sampling were used.

2.2 Data Collection

Data collection in this study primarily employed semi-structured in-depth interviews. The interview outlines focused on the respondents' understanding of traditional factors, their application practices, innovation methods, and market feedback (Table 1). Thirty participants from Jingdezhen ceramic SMEs were involved. They were aged between 33 and 45, most holding degrees in ceramic-related disciplines, primarily engaged in the design, production, and operation of daily-use ceramic products, with 6 to 20 years of work experience. Participants were divided into three expert groups: business owners, designers, and craftsmen. These roles often overlap in Jingdezhen ceramic SMEs, with individuals frequently holding multiple positions. A total of 30 interview records were collected and analyzed in this study.

Table 1: Research instrument development

Construct	Research Questions	Interview Questions
Background		1. How long have you been involved in producing ceramic products?
		2. What category of ceramic products do you produce?
		3. What is your role in the production of ceramic products?
Traditional Factors	How can traditional factors promote sustainable innovation and marketability of Jingdezhen ceramic products?	4. How do traditional factors, such as handicrafts, shapes, and decorations, influence the development of ceramic products?
		5. What traditional factors are you incorporated into the design of ceramic products?
		6. What is the value and significance of traditional factors in driving sustainable innovation and enhancing the marketability of ceramic products development?

3. Data Analysis

Thematic analysis is an important tool for qualitative data analysis. After organizing the data in the computer system, ATLAS.ti 24 software was used to create datasets and classify them according to key research objectives. This study followed the thematic analysis steps

outlined by Braun and Clarke (2006), including familiarizing oneself with the data, generating initial codes, searching for themes, examining them, defining and naming them, and writing reports. This method is consistent with Zairul's scheme for identifying important patterns or meanings derived from the data (Zairul, 2020).

Guided by the interpretivist paradigm, this study adopted systematic induction to reveal the essence behind the cases through thematic analysis of the research questions. Analysis of 30 interview transcripts yielded 17 codes and 5 categories (Figure 1). By explaining the relationship between codes, categories, and topics, the study systematically addressed the problem and identified traditional factors that contribute to the sustainable innovation and marketability of Jingdezhen ceramic products.



Figure 1: Theme 1 - Continuation and inheritance of traditional factors with their categories and codes

As shown in Figure 1, this theme encompasses five key categories: Inheritance and Development of Traditional Crafts—Molding and Firing; Inheritance and Development of Traditional Crafts—Decoration; Preservation of Traditional Shapes and Cultural Symbols; Cultural Value of Traditional Crafts; and Advantages of Ceramic Production Areas. This theme investigates the traditional factors in the development of Jingdezhen ceramic products to achieve sustainable innovation and marketability.

The development processes of Jingdezhen ceramic products, such as shaping, decoration, and firing, are their core characteristics. These processes have deep historical roots and represent the essence of Jingdezhen ceramic art. Research demonstrates the importance of these processes in contemporary production and points out that these traditional processes form the basis for product design and production.

3.1 Inheritance and Development of Traditional Crafts - Molding and Firing

The traditional molding and firing techniques of Jingdezhen are the foundation of its ceramic production. These techniques are rooted in history and embody the essence of Jingdezhen ceramic craftsmanship. Research shows the continued importance of these traditional techniques in contemporary ceramic manufacturing. This category includes the following two aspects:

3.1.1 Traditional Ceramic Molding Processes

Traditional techniques such as molding, trimming, and slip casting in Jingdezhen ceramics



play a vital role in preserving skills and culture. Simultaneously, these traditional techniques are continually adapting to modern market demands, leading to the emergence of unique and innovative development paths. First, basic processes such as throwing and trimming have continued for thousands of years and have become indispensable links in Jingdezhen ceramic production, reflecting Jingdezhen's unique shaping techniques and craftsmanship spirit. Second, shaping processes such as throwing and trimming place extremely high demands on the craftsmen's experience, feel, and aesthetic ability, reflecting the refinement and professionalism of Jingdezhen's craftsmanship. Furthermore, the production of various types of ceramics still heavily relies on these traditional shaping techniques. In the production of complex or large-scale works, these traditional methods remain irreplaceable, ensuring both the structural integrity of the product and the continuity of traditional craftsmanship. Finally, some artisans, by improving traditional shaping processes, have achieved a fusion of traditional and modern needs, enhancing the competitiveness and innovative potential of Jingdezhen ceramics in the market.

3.1.2 Improvement of Firing Process

The firing process is the most decisive and representative link in Jingdezhen ceramic production. It embodies the core technical characteristics of traditional porcelain-making while continuously incorporating contemporary innovations into its development. First, the advantage of Jingdezhen porcelain lies in its extremely high firing temperature (above approximately 1280°C), which allows the product to truly meet the standard of "porcelain" rather than "earthenware." High-temperature firing not only improves the density and translucency of the porcelain but also imparts the glaze a higher degree of oiliness and layering. Second, to improve the stability and visual appeal of the products, some artisans have achieved neutral reduction at approximately 1250°C through technical improvements, thus balancing the oiliness of the glaze with the structural stability of the product. In addition, some enterprises have experimented with modern techniques such as pit firing and smoking. Although these methods do not fall into the traditional firing category, they have developed new expressions in terms of visual appeal and aesthetics, attracting specific consumer groups. Finally, with improvements in the high-temperature resistance and temperature control precision of electric kilns, they are gradually becoming an important piece of equipment in modern workshops. The main difference between electric kilns and gas kilns lies in the glaze color, rather than the quality of the finished product, demonstrating a trend of integration between traditional and modern technologies. Therefore, through improvements and adjustments to traditional firing techniques and the introduction of modern techniques, Jingdezhen's traditional ceramic products have achieved a fusion of innovation and market demand.

3.2 Inheritance and Development of Traditional Crafts – Decoration

Traditional ceramic decoration techniques are one of the core characteristics of Jingdezhen ceramic products. The enduring classical decorative techniques have shaped the exquisite and delicate aesthetic qualities of Jingdezhen ceramics, making them renowned worldwide. Research shows that these ancient decorative methods form the basis of their product design and production. This category includes the following seven aspects:

3.2.1 Blue-and-white Craft

As the most renowned decorative technique in Jingdezhen, blue-and-white craft not only carries profound historical and cultural value but also demonstrates strong vitality and innovative potential in contemporary ceramic creation and market development. First, the blue-and-white craft symbolizes Jingdezhen ceramic art, actively pursuing innovation and integration while preserving tradition. For example, combining contemporary elements with the blue-and-white craft creates an artistic expression that blends tradition and modernity. Second, the celadon firing process is relatively simple, allowing for a single firing, reducing production difficulty and costs, and thereby enhancing market competitiveness and commercial value. Finally, the blue-and-white craft not only showcases the unique



aesthetics of regional culture but also contributes to global cultural dissemination, becoming an iconic symbol of Chinese ceramic art. Therefore, the blue-and-white craft, through the inheritance of tradition and innovation, continuously adapts to modern market demands. It also greatly enhances the worldwide influence of Jingdezhen ceramic products by acting as a carrier of cultural dissemination.

3.2.2 Sprinkled Blue Craft

The sprinkled blue craft is renowned for its distinctive visual effects and technical complexity, embodying the spirit of exploration in craftsmanship through both tradition and innovation. Firstly, the artistic appeal of the sprinkled blue craft stems from its highly complex technical demands and unique visual effects. Achieving the ideal "sapphire blue" hue requires extremely high standards for kiln temperature control, reducing atmosphere, and the vitrification degree of the glaze. Secondly, the research and restoration of traditional methods have injected new vitality into the craft of sprinkled blue. Studying the traditional sprinkled blue craft from the Xuande period has successfully restored the classic "snowflake blue" effect. Finally, the continuation of the sprinkled blue craft reflects the integration and innovative inheritance of traditional techniques in the contemporary context. For example, combining the blue and white craft with the sprinkled blue craft extends the cross-border reach from blue and white porcelain to sprinkled blue porcelain. Therefore, the inheritance and innovation of the sprinkled blue craft have significantly contributed to the unique value of Jingdezhen's traditional ceramic products in the global market.

3.2.3 Underglaze Painting Craft

The underglaze painting craft has demonstrated continuous vitality and innovative adaptability in its historical inheritance, regional integration, and modern transformation. Firstly, underglaze painting craft embodies the fusion of historical inheritance and regional characteristics. While originating in Liling, Hunan, Jingdezhen craftsmen have, by building upon its traditions and combining local raw materials and firing conditions, formed a distinctive underglaze painting craft system. Secondly, underglaze painting is not limited to the field of art ceramics but is also widely used in the production of daily-use ceramics, especially for hand-painted tableware. This cross-regional innovation preserves traditional aesthetics while meeting the functional and aesthetic needs of modern consumers. Finally, the craft of underglaze painting has undergone a successful modern transformation amid marketization, demonstrating Jingdezhen ceramics' flexibility and capacity to respond to modern consumer trends. Therefore, underglaze painting craft provides an innovative space for contemporary ceramic products.

3.2.4 Overglaze Painting Craft

Overglaze painting craft encompasses various decorative techniques, such as famille rose and enamel, and is one of the most iconic decorative methods in Jingdezhen ceramics. Through meticulous hand-painting and nuanced color gradations, overglaze painting works achieve exceptional artistic expression, endowing ceramic pieces with profound cultural symbolism and aesthetic value. Secondly, the craft of overglaze painting demonstrates a high degree of flexibility and technological integration in the innovation process. For example, while continuing traditional overglaze painting, new decorative techniques such as gilding and silvering have been introduced, giving traditional ceramics a new visual charm. Despite limited breakthroughs in overglaze painting materials and forms of expression, its traditional aesthetics remain highly vibrant. For example, since its development in the mid-Qing Dynasty, the famille rose technique has not changed much in terms of materials and forms of expression, yet its delicate, soft colors and enduring artistic appeal continue to give it extremely high market value in contemporary times. Finally, overglaze painting crafts are vital to the development of Jingdezhen ceramics' brand image. Traditional overglaze patterns, with their timeless aesthetic appeal, resonate with diverse consumer tastes and maintain a unique allure in a multifaceted market. Thus, the



overglaze painting technique fully embodies the artistic value and market potential of Jingdezhen ceramics.

3.2.5 Color Glaze Craft

The color glaze craft not only embodies profound cultural traditions and artistic heritage but also demonstrates remarkable innovation and integration in contemporary creation and market practice. First, as a high-temperature reduction glaze, the color glaze achieves natural color flow through temperature variations, imparting a unique visual aesthetic to ceramic works. Second, the craft of color glaze is continuously refined and innovated within traditional production practices. For example, using the traditional wood-ash glaze technique and controlling the clay-to-glaze ratio, a natural, pure white texture can be achieved. This minimalist style, devoid of painting, embodies the aesthetic spirit of "painting with glaze" in Jingdezhen's traditional craftsmanship, highlighting respect for the essence of materials and the beauty of nature. Finally, through innovation in glaze formulation, control of the reduction atmosphere, and integration with other techniques, Jingdezhen's color glaze craft, while retaining its traditional essence, has transformed from cultural heritage to modern art and commercial value. Therefore, Jingdezhen's color glaze craft achieves a seamless integration of tradition and modernity, providing crucial support for the sustainable innovation of Jingdezhen ceramics.

3.2.6 Engraving Craft

As a classic decorative technique, engraving provides an important path for the innovation and market expansion of ceramic decoration by inheriting traditional culture and integrating modern techniques. First, the craft of engraving dates back to the Tang Dynasty. Through meticulous engraving of lines, patterns, and textures, it not only enhances the decorative and layered qualities of ceramic works but also reflects the artistic cultivation and creative personality of individual craftsmen. Second, Jingdezhen's engraving tradition, which includes the celadon carving technique, has its own unique local traits and artistic value. Hutian Kiln, renowned for its engraving craft, is famous for its celadon carving technique, characterized by delicate and soft lines and elegant patterns, making it an important symbol of Jingdezhen ceramic culture. Research indicates that many artisans continue to use engraving as their primary decorative technique in contemporary ceramic creation. Despite the continuous development of modern mechanization and new technologies, hand-carved designs, with their unique artistic beauty and tactile charm, still hold an important position in the market and artistic creation. Finally, traditional engraving techniques are achieving contemporary development through innovative integration. By improving glaze colors and engraving techniques, and combining traditional methods with modern aesthetic concepts, a unique product system can be formed. Therefore, engraving crafts play an irreplaceable role in both the historical inheritance and contemporary application of Jingdezhen ceramics.

3.2.7 Molded Embossing Craft

As an important component of traditional decorative techniques in Jingdezhen ceramics, molded embossing craft not only carries a long history and cultural value but also demonstrates unique artistic charm and market potential in contemporary ceramic creations. The molded embossing craft can be traced back to the Shang and Zhou dynasties and was widely used in ceramic decoration; its development has witnessed the evolution of Chinese ceramic craftsmanship and the inheritance of aesthetic values. Firstly, the molded embossing craft uses mold design and pressing technology to create decorative patterns on ceramic bodies. This "imprinting instead of carving" approach enhances production efficiency while preserving the delicate texture of handcrafted work. Secondly, the molded embossing craft adds depth and sculptural quality to ceramic works, creating a delicate relief effect in the patterns. This three-dimensional decoration enriches the visual language of ceramics and reflects the craftsman's precise control over form, pattern, and



light and shadow, showcasing the traditional aesthetic concept of "the unity of form and decoration." Finally, in contemporary ceramic art, the craft of molded embossing fuses traditional craftsmanship with personalized design. For instance, through distinctive mold patterns and embossing forms, each ceramic piece gains its own unique identity. Thus, the molded embossing craft infuses Jingdezhen ceramics with a sense of history while meeting modern consumers' demands for uniqueness and practicality.

3.3 Preservation of Traditional Shapes and Cultural Symbols

Traditional shapes are an important characteristic of Jingdezhen ceramic products. Research reveals that the design process retains many traditional shapes, including covered bowls, vases, and teapots. These shapes have practical value and contain cultural symbolism. Furthermore, modern design draws on traditional cultural symbols such as auspicious clouds, dragons, and phoenixes. Designers reinterpret these symbols, giving new life to products while preserving cultural heritage. This category covers the following three aspects:

3.3.1 Traditional Styling Reference

Traditional styling reference is one of the important directions of contemporary ceramic innovation in Jingdezhen. It reflects in-depth thinking and a creative balance between craftsmen and designers on the relationship among aesthetics, functionality, and modern aesthetic needs, grounded in respect for tradition. Research indicates that traditional shapes have endured through the ages precisely because they have withstood the test of time and aesthetic scrutiny, possessing perfect proportions and stylistic logic. These shapes often carry profound cultural imagery and craft wisdom, thus becoming important references for contemporary design innovation. Secondly, simplification and reconstruction have become the main design strategies for modernizing traditional shapes. The simplicity and elegance of ancient vessel forms possess timeless aesthetic value. Through the "form reconstruction" of modern design concepts, not only is the beauty of traditional shapes preserved, but new functions and aesthetic vitality are also infused into them. Furthermore, contemporary ceramic design draws inspiration not only from traditional Jingdezhen vessel forms but also from the stylistic languages of traditional crafts such as lacquerware, bronzeware, and jadeware. This cross-media, cross-cultural design thinking extends vessel language, enabling traditional forms to resonate with the broader Chinese cultural system and to form a new design vocabulary. Therefore, in inheriting classic vessel forms, traditional Jingdezhen ceramic products achieve a clever fusion of tradition and modernity through adjustments to proportions, lines, and functions. This design strategy not only inherits traditional culture but also creates a unique, competitive brand language in the globalized modern market.

3.3.2 Traditional Patterns and Subjects

Traditional patterns and subjects play a crucial role in connecting history and modernity, and integrating culture and art in contemporary Jingdezhen ceramic creation. Craftsmen and designers, while inheriting traditional decorative languages, refine, reconstruct, and integrate them across media, allowing traditional cultural symbols to radiate new artistic vitality and aesthetic value in the contemporary context. Research indicates that natural themes and traditional painting elements constitute the cultural DNA of Jingdezhen ceramic decoration, including themes such as flowers, fish, and lotus leaves. These patterns are not merely decorative elements but also a continuation of the traditional cultural aesthetic of "harmony between man and nature." Secondly, while retaining traditional symbols (such as Ruyi, cloud, and flame patterns), the traditional decorative vocabulary is refined and simplified to form a design language that aligns with contemporary aesthetics. This modern interpretation of "simplification" not only preserves traditional charm but also enhances the work's fashionability and recognizability. Thirdly, cross-cultural and cross-media artistic integration expands the expressive dimensions of traditional themes. For example, patterns from Chinese painting, embroidery, and woodblock prints are incorporated into ceramic



creations. This integration not only extends the artistic boundaries of ceramic decoration but also highlights the value of intangible cultural heritage elements in contemporary design for recreation and cultural regeneration. Furthermore, the reinterpretation of traditional themes in terms of color, material, and form reflects both artistic and market value. For example, combining floral and bird motifs with turquoise and gilded decorations creates an elegant, noble visual effect, while borrowing the decorative language of classical bronze ornaments establishes a dialogue between traditional and modern materials. These creations not only enhance the artistic expression of the works but also improve their market recognition and collectible value. Finally, traditional culture remains the source of inspiration and the core concept for Jingdezhen ceramic creations. Research shows that traditional themes are not only reflected in patterns and decorations but also influence the shape design and overall artistic conception. Therefore, by refining traditional patterns, integrating modern aesthetics, and combining with intangible cultural heritage, traditional Jingdezhen ceramic products not only retain their traditional cultural value but also radiate new vitality in the modern market.

3.3.3 Auspicious Symbols of Traditional Conformity

Traditional auspicious symbolism has important cultural, aesthetic, and market value in Jingdezhen ceramic designs. Through the selection, transformation, and re-creation of auspicious symbols, designers enable ceramic works to continue the spirit of traditional Chinese culture while better meeting the emotional identification and aesthetic needs of modern consumers. First, auspicious symbols in ceramic design embody the combination of cultural identity and market orientation. Designers carefully consider the receptiveness of auspicious symbols within traditional culture when selecting decorative motifs. This design choice reflects the artisans' profound understanding of consumer cultural psychology and demonstrates the adaptability and inclusiveness of traditional culture within modern aesthetics. Secondly, auspicious symbols not only serve as decorative elements but also extend form and design concepts. For example, in styling, traditional Chinese auspicious symbols are structurally transformed, extending from planar patterns into three-dimensional design language. This fusion of "symbol-form" makes ceramic works more symbolic and narrative in their visual expression, endowing them with deeper cultural connotations and artistic tension. Furthermore, the application of auspicious themes in color, composition, and festival culture enhances emotional expression and cultural atmosphere. This festival design, which centers on auspicious culture, not only meets the demands of festive consumption but also strengthens the symbolic value and emotional function of ceramics as cultural gifts. Finally, the re-creation of traditional auspicious patterns embodies the integration of cultural inheritance and innovation. Traditional patterns such as banana leaf patterns have always carried lyrical and auspicious meanings; their continuation and innovation in modern works are both a tribute to traditional culture and a response to the contemporary aesthetic context. Therefore, by inheriting and transforming traditional symbols, Jingdezhen ceramic products not only strengthen cultural identity but also endow themselves with unique emotional and aesthetic value, enabling them to stand out in the modern market.

3.4 Cultural Value of Traditional Crafts

Traditional handicrafts are not only a mode of production but also a form of cultural inheritance. Research shows that Jingdezhen traditional ceramic products possess irreplaceable cultural value, a key factor distinguishing them from other ceramic products. The product's appearance and functionality, as well as every detail of the production process, reflect this cultural value. For example, the uniqueness of hand-thrown pottery and hand-painted patterns endows each product with unrepeatable artistic value, a uniqueness highly valued in emerging markets. This category encompasses the following three aspects:



3.4.1 Cultural Acceptance

Cultural acceptance is one of the core forces driving the continued development of Jingdezhen traditional ceramics. In the contemporary market context, traditional ceramics, through profound cultural accumulation, widespread social recognition, and continuous innovative contemporary expression, have constructed a powerful cultural value system and market competitive advantage. First, a deep cultural foundation and widespread social recognition provide a natural market basis for traditional ceramics. For example, traditional categories such as blue-and-white porcelain have achieved high cultural recognition and brand symbolism in China and internationally. Public familiarity with and recognition of traditional crafts such as blue-and-white and famille-rose porcelain make these products easier to enter the market, demonstrating the "inherent dissemination power" of traditional culture in the contemporary consumer context. Secondly, the aesthetic value of traditional culture and its contemporary expressive power are key to enhancing the competitiveness of the ceramic market. Jingdezhen's profound ceramic cultural heritage ensures that traditional hand-painted patterns retain strong visual appeal and aesthetic vitality in the contemporary era. Through the transformation and reinterpretation of modern design language, traditional crafts can better align with the aesthetic tastes and lifestyles of modern people, thus revitalizing them. Thirdly, traditional culture is not only an aesthetic symbol but also the spiritual core of ceramic works. The value of ceramics lies not only in its techniques and forms but also in the Chinese cultural spirit, historical memory, and humanistic imagery it conveys. Furthermore, promoting and inheriting traditional ceramic culture is a shared responsibility and mission of designers. Creating ceramic products allows more people to understand Jingdezhen's ceramic culture. The integration of traditional factors not only enhances the cultural value of ceramic works but also significantly strengthens their market value and collection potential. Finally, the widespread recognition of traditional culture provides continuous impetus for innovation in ceramic art. For example, themes such as flower-and-bird paintings, which possess traditional beauty and universal aesthetic resonance, still have strong vitality. This indicates that, in today's increasingly diverse public aesthetics, traditional cultural symbols can still foster emotional consensus and serve as an important bridge between tradition and modernity. Therefore, the cultural value of traditional handicrafts lies in their profound historical heritage, widespread cultural recognition, and high market acceptance. The contemporary expression of traditional crafts and cultural inheritance enhances product market competitiveness and endows them with greater cultural value and social significance.

3.4.2 Cultural Revitalization

Cultural revitalization is the core issue of the inheritance and innovation of Jingdezhen's traditional ceramic craftsmanship, reflecting a multi-layered value system from individual creation to social and cultural responsibility, and from design innovation to national policy support. Traditional crafts are not only a continuation of historical heritage but also an important practical path for contemporary cultural confidence and cultural regeneration. First, design innovation has become a key driver of the cultural revival of traditional crafts. Although the raw materials and processes of ceramics are largely the same, the added value of products depends on design innovation. The value of Jingdezhen's traditional ceramic craftsmanship is no longer solely reflected in the techniques themselves but in how to imbue them with new cultural connotations and market competitiveness through design re-creation. Second, the implementation of national intangible cultural heritage projects has provided policy impetus for the preservation of traditional skills, thereby enhancing public awareness and market demand. This institutional support elevates traditional crafts from local crafts to national-level cultural heritage projects, providing protection mechanisms and development platforms for craft inheritors. Third, Jingdezhen's traditional crafts are irreplaceable, embodying unique cultural genes in materials, techniques, and aesthetic systems, and are an important part of local culture and even world cultural heritage. Furthermore, the artisan community's inheritance of these millennia-old skills is not only an artistic pursuit but also a responsibility for cultural preservation, reflecting



individual artisans' sense of cultural responsibility to society as a whole. This sense of responsibility provides spiritual support for cultural revival. Finally, the significance of Jingdezhen's traditional crafts lies in enabling more people to understand, learn, and participate in the reproduction and dissemination of ceramic heritage, thereby transforming "local intangible cultural heritage" into "public cultural and educational resources." This path of "discipline-based" and "popularization" provides a new direction for the sustainable inheritance of traditional crafts. Therefore, design innovation, intangible cultural heritage protection, cultural dissemination, and market demand fully reflect the cultural value of Jingdezhen traditional ceramic products. Through in-depth cultivation and creative transformation of traditional crafts, not only is cultural revival promoted, but also rich cultural resources are provided for marketization and innovation.

3.4.3 Stick to Handmade

Stick to handmade is the soul of Jingdezhen ceramic craftsmanship and its fundamental characteristic that distinguishes it from industrialized production. Handcrafting not only embodies the artisan's aesthetic pursuit and cultural consciousness but also carries the spiritual essence of Jingdezhen's millennia-old porcelain tradition, playing a vital role in preserving cultural heritage and driving economic development. First, handcrafting reflects the artistic value of uniqueness. Handmade pieces possess an unparalleled beauty, with each work bearing the maker's individuality and emotional imprint. Second, Jingdezhen ceramics are positioned for small-batch, refined production, with quality and uniqueness as their core competitiveness, rather than pursuing high industrial output. Therefore, handcrafting is not only a continuation of tradition but also a crucial way for Jingdezhen ceramics to maintain its high-end, artistic positioning in the modern market. Moreover, handcrafting embodies cultural heritage and the spirit of craftsmanship. It represents a reverence for and commitment to the craft itself. If mechanization replaces handcrafting, it will not only diminish the artistic value of ceramic products but also undermine the very foundation of Jingdezhen's traditional ceramic culture. Finally, handcrafting occupies a central position in emotional value and market recognition. Consumers experience the exchange of craftsmanship and emotion in handmade products, a unique competitive advantage for handcrafted ceramics in the modern market. Jingdezhen's vast artisan community not only underpins the local economy and employment but also sustains the city's cultural heritage chain, highlighting the social and economic value of handmade production. Therefore, handcrafting is the key factor enabling Jingdezhen ceramics to maintain its distinctive competitiveness in the market, while simultaneously bearing the responsibility of cultural preservation and social stewardship.

3.5 Advantages of Ceramic Production Areas

Jingdezhen has a long history of porcelain-making. As the porcelain capital of China and even the world, it possesses unique advantages in the sustainable development and marketization of its ceramic products. This category encompasses the following two aspects:

3.5.1 Industrial Chain Advantage

Jingdezhen's ceramic industrial chain advantages are a crucial supporting force for its status as the world's ceramic capital. These advantages are not only reflected in its well-developed production system and abundant resources but also in the synergistic effects of its industrial ecosystem, the professional level of its talent pool, and the deep integration of traditional craftsmanship with modern industrial mechanisms. First, Jingdezhen possesses uniquely advantageous production conditions. The convenient access to raw materials such as clay and glazes, along with the accumulated technical expertise in traditional processes, provides unparalleled convenience and sustainability for ceramic production. This localized production not only reduces transportation and raw material costs but also ensures the regional consistency and cultural distinctiveness of ceramic products in terms of texture and style. Second, Jingdezhen boasts a comprehensive



ceramic industry chain, encompassing raw material supply, production, firing, painting, sales, and export, forming a self-contained, end-to-end industrial chain. SMEs can operate efficiently within this system, swiftly accessing the resources and professional support they need, thereby significantly enhancing production efficiency and market responsiveness. Furthermore, Jingdezhen boasts a large concentration of skilled artisans and technical labor, ensuring that each production stage is staffed by its own professional craftsmen. This high concentration of talent ensures exceptional craftsmanship and facilitates the intergenerational transmission of knowledge and skills. Jingdezhen's focus on refined artisanal techniques creates a unique cultural environment that is a core resource difficult for other regions to replicate. Finally, while Jingdezhen is not a global leader in large-scale industrial production, it remains a leader in traditional crafts. This indicates that Jingdezhen's competitive advantage lies not in quantity but in quality and cultural depth. Therefore, the industrial chain advantage of Jingdezhen ceramics lies in its abundant human resources, convenient local raw materials, and profound traditional craft heritage. These advantages enable Jingdezhen to maintain its leading position in the global ceramics industry and provide strong support for its future development.

3.5.2 Human Resources Advantage

Human resources advantage is the core supporting force for the continued prosperity and innovative development of the Jingdezhen ceramics industry. This advantage is reflected not only in the inheritance and accumulation of craftsmanship but also in the systematization of the industrial division of labor, the specialization of talent structures, and the talent-driven mechanism for technological innovation. First, the ten major porcelain factories in Jingdezhen in the past trained a large number of professional workers, who are still engaged in related production activities today, forming a unique group of craftsmen inheritors. This historical accumulation provides Jingdezhen's ceramic industry with a deep reserve of human resources, enabling the intergenerational continuation and continuous optimization of traditional techniques. Second, the Jingdezhen ceramic industry features a comprehensive range of specializations with a clear division of labor. Dedicated artisans handle each stage, from clay preparation and wheel-throwing to carving and painting. This refined division of labor enables every process to be executed efficiently by experienced craftsmen, boosting production efficiency, supporting innovation in techniques, and enabling personalized customization. This precision of the industrial structure makes Jingdezhen a ceramic cluster that combines traditional handcraftsmanship with modern industrial characteristics. Furthermore, a high-level team of craftsmen is the core guarantee for the quality and innovation of Jingdezhen ceramics. The craftsmanship of local workers directly determines the product's final effect and innovation potential; this talent-intensive advantage makes Jingdezhen a talent hub for the innovation of traditional crafts. Finally, leveraging its traditional techniques and artisan resources, Jingdezhen has developed an antique-style ceramics industry with economies of scale and brand influence. This model transforms traditional handicrafts into a competitive industrial system, preserving the cultural charm of handmade production while promoting sustainable development in ceramics production. Therefore, Jingdezhen's human resource advantages give it significant competitiveness and strong development potential in the continuous innovation and marketization of its traditional ceramics industry.

4 Discussion

Figure 1 illustrates the five traditional factors of Jingdezhen ceramic products: (1) Inheritance and Development of Traditional Crafts—Molding and Firing; (2) Inheritance and Development of Traditional Crafts—Decoration; (3) Preservation of Traditional Shapes and Cultural Symbols; (4) Cultural Value of Traditional Crafts; (5) Advantages of Ceramic Production Areas. Among these factors, (1), (2), (3), and (4) represent traditional elements in ceramic product design that are significant components of this study, while (5) pertains to the regional advantages in ceramic production management, which will not be addressed in this research. Among them, (2) includes seven elements: Blue and White Craft, Sprinkle

Blue Craft, Underglaze Painting Craft, Overglaze Painting Craft, Color Glaze Craft, Engraving Craft, and Molded Embossing Craft. These elements are specific aspects of Jingdezhen's traditional ceramic decoration craftsmanship, so they are combined into a single theme: Traditional Ceramic Decoration Processes. Since (1) and (2) are both related to the inheritance and development of traditional crafts, they can be combined into one theme, which includes three elements: Traditional Ceramic Molding Processes, Improvement of Firing Process, and Traditional Ceramic Decoration Processes. Therefore, nine traditional factors in Jingdezhen traditional ceramic products can be summarized into three dimensions (see Figure 2).

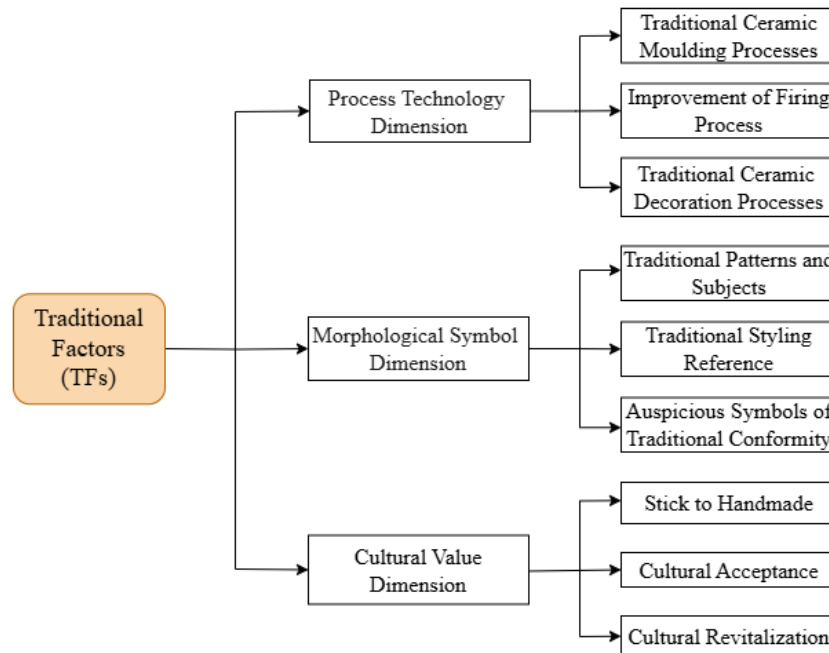


Figure 2: The traditional factors of Jingdezhen ceramic products

To achieve sustainable innovation and marketability for Jingdezhen ceramic products, a key strategy is to continue leveraging traditional factors. This strategy emphasizes protecting the core cultural values, aesthetic principles, and craftsmanship of Jingdezhen ceramics, which serve as a globally recognized symbol of Chinese intangible cultural heritage. It stresses not only the inheritance of material techniques such as kiln firing and hand-painting, but also the inheritance of intangible cultural expressions embedded in ceramic narratives, symbolic meanings, and regional identity.

Firstly, traditional handicrafts, especially ceramics, are not merely practical products but cultural products embodying history, artistic philosophy, and intergenerational craftsmanship (Yang et al., 2018). These crafts play a crucial role in maintaining regional identity, inheriting intangible knowledge, and enhancing social cohesion (Rodrigues et al., 2023; Wang, 2023). This study, by identifying two key elements—"cultural identity" and "cultural revival"—specifically reveals the intrinsic driving force behind the construction of a cultural value system for Jingdezhen ceramics in the contemporary market context, deepening the understanding of the empowering mechanism of traditional craft culture. Secondly, the continuity of traditional craft practices is crucial for cultural resilience, community pride, and sustainable local development (Pierantoni, 2018). However, this continuity must transcend static replication. Jin et al. (2024) emphasize that inheritance should be dynamic, allowing for reinterpretation while respecting tradition and adapting to the contemporary environment. This study's detailed analysis of blank-making, firing, and various decorative techniques under the category of "Inheritance and Development of Traditional Crafts" provides rich empirical evidence for this "dynamic inheritance" theory,



demonstrating that innovative integration is a necessary form of inheritance. Furthermore, education and community engagement are key to the transmission of traditional craft knowledge (Guo & Ahn, 2021; Pöllänen, 2013). In this regard, this strategy aligns with best practices, calling for a strengthened ceramic education system in Jingdezhen. This method ensures that the younger generation not only masters the skills but also develops a profound cultural appreciation for the art and philosophy behind traditional ceramics. Lastly, this study underscores that safeguarding traditional values need not conflict with innovation. Sustainable innovation achieves its greatest success when rooted in culture—treating cultural heritage as a source of creativity rather than a constraint (Jin et al., 2024; Shafi et al., 2022). This study ultimately identifies nine key elements and three dimensions (Process Technology, Morphological Symbols, and Cultural Value) that together form an integrated framework. Therefore, the continuation and inheritance of traditional design elements are not static preservation efforts but rather the foundation for creating ceramic products that are culturally relevant, market-responsive, and emotionally resonant.

5. Conclusion

The preceding analysis and discussion yield a thorough response to the research question, underscoring that the perpetuation and inheritance of traditional factors constitute a principal design strategy for achieving sustainable development and the commercialization of traditional handcrafted products. The traditional ceramic craftsmanship of Jingdezhen embodies a rich intangible cultural heritage, representing the collective wisdom of generations of artisans. It continues to play a vital role in the innovative design of ceramic products. The application of these traditional factors enhances the distinctiveness and market competitiveness of ceramic products, ensuring their cultural relevance and economic viability.

The theoretical contribution of this study lies in constructing, through empirical research, a multidimensional framework encompassing process technology, morphological symbols, and cultural values. It systematically analyzes the mechanisms by which traditional factors shape contemporary product innovation and marketization. At the practical level, the findings of this study not only provide Jingdezhen ceramic designers and artisans with design principles rooted in traditional culture but also help business managers formulate sustainable production and brand strategies, and help policymakers formulate decision-making references to support the inheritance of intangible cultural heritage and industrial innovation.

This study also has certain limitations. First, although the qualitative case study yields insightful findings, larger-scale quantitative research is necessary to test their universality. Second, the study primarily focuses on the supply-side perspective (designers, craftsmen, and business owners). Future research could incorporate consumer perceptions and demands to gain a more comprehensive understanding of market viability. In summary, these insights lay the foundation for a strategic development framework to ensure the sustainable development and market viability of Jingdezhen ceramic products. They also provide a reference path for the innovative development of similar traditional craft industries.

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