

Research on the Sustainable Development of Traditional Crafts Under the Perspective of Service Design

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Abstract

Nowadays, along with time and technological advancements, the development of intelligent industry and industrialization is gradually replacing traditional crafts, which leads to the gradual shrinkage or even disappearance of traditional crafts. However, traditional crafts' unique cultural values and individual creativity are irreplaceable. As a result, it is critical to investigate the direction of traditional crafts' long-term growth. To better adapt to the changing times, this paper proposes to use service design thinking to build a sustainable development path for traditional crafts. This paper presents the use of service design thinking to create a sustainable development path for traditional crafts based on inheritance, committed to innovation, explores new modes of traditional craft development, and highlights the modern value of traditional crafts. It gives craftsmen a sense of cultural belonging and identity, thus ensuring and promoting the continuity of craft development. It is significant for the long-term survival of traditional crafts.

Keywords: Traditional Craft, Service Design, Sustainability, Value Innovation

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Introduction

A new service-oriented economy has challenged the traditional product development model. Still, it has also pointed the way to a new era of innovation, influencing and reconfiguring people's values and experience perceptions. This ubiquitous service model is a systematic combination and layout of the physical and non-physical elements of the service components. Thus, generating new service values and leading to deal innovation, shifting the traditional product competition to service competition, and gradually transforming the product production economy into a service-based economy.

A. Bottlenecks in the development of traditional crafts

The arrival of the new economic era has caused considerable changes in people's lifestyles and ways of thinking. To a certain extent, the understanding and use of crafts have also changed. As a result, many traditional crafts are gradually being eliminated or even disappearing from public view. Their unique cultural value and individual creativity are irreplaceable as crafts that carry culture. Therefore, it is vital to study the long-term direction of traditional skills. Before doing so, we need to understand the difficulties faced by conventional crafts to target and crack them. The following are some of the main dilemmas traditional crafts face.

1) The technical production of crafts is a problem for the transmission of skills

The technical production of crafts is crucial to passing on craft culture. Some craftspeople today need help with how to balance tradition and innovation. For example, the technical production heritage of traditional crafts is one-way in nature. Also, traditional craftspeople usually teach apprentices on a one-to-one basis and pass on relevant production techniques, which leads to the one-way and narrow nature of the technical production heritage of traditional crafts. At the same time, some old-fashioned production techniques have been solidified in the transmission process. It is challenging to innovate them to meet current needs, which leads to a need for more sustainable innovation in crafts.

2) Low literacy of craftspeople

In the past, most craftspeople chose crafts because they did not have the opportunity to receive higher education or were engaged in producing specific skills on a family basis, which usually did not require a high educational background. Conversely, this has resulted in craft practitioners only being able to engage in low-end cultural creations, making it difficult for them to innovate in the design and production of cultural connotations from a higher cultural perspective.

3) Crafts lack deep-seated cultural connotations

Currently, the market is flooded with "low-end" handicraft products, reflecting the creators' lack of understanding of the deeper cultural connotations behind crafts and how to promote their sustainable development through innovation. Often the only way to promote sustainable development is to imitate the designs of other crafts or to design skills on the surface of the culture. Therefore, the sustainable development of traditional crafts needs to understand the deeper cultural connotations. Secondly, the production of crafts needs to be combined with the needs of the service era, using service design to promote the development of crafts in the

direction of healthy and sustainable innovation from the professional perspective of service and design.

B. Service Design

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1) The concept of service design

The concept of service design is often understood differently by designers and experts from different fields. For example, in 2008, the Copenhagen School of Interaction Design in Denmark described service design as a discipline that aims to design comprehensive, systematic user processes and pointed to systemic nature as a characteristic of service design. Professor Maag defines service design as designing processes in complex systems and creating shared value with stakeholders. According to Stephen Moritz[3], author of *Service Design - A Practical Pathway to an Evolutionary Field*, service design is essentially expressed in creative experience design, which primarily serves as a bridge. And with the help of new ways of connecting different organizations to make a practical design easy to use. The academic term service design has yet to be universally defined. As Mark Stickdorn, co-author of 'This is service design thinking,' says: "If you ask different people what service design is, you'll get different answers."

The Dictionary of Design, published under the auspices of the International Design Research Association, defines service design as "the design of services from the standpoint of the user" [4-5]. Service design was viewed as a systemic design thinking approach within the design field that coordinates numerous stakeholders to create innovative and systematic planning by constructing service providers and related touch points to improve the service experience and user experience from the user's perspective.

2) Service and product relationships

2.1) Integration of products and services

In the era of the service economy, new values and meanings are integrated into products. Only by integrating services into products can new values be generated and systematic service products under the requirements of the new economy be realized.

2.2) The difference between tangible products and intangible services

Generally speaking, products are visible and concrete substances, while services are primarily abstract and invisible immaterial substances. Services are usually created by both the product provider and the customer. This 'abstract, invisible immaterial' service differs from a product

in that a product is a material entity that can be seen, touched, and felt by the consumer; a service, on the other hand, is invisible, intangible, and present in the process of using a product.

Secondly, according to scholars such as Russell, there are four unique features of services, such as Intangibility, Inseparability, Heterogeneity, and Non-persistent. Table 1 below shows the difference between a product and a service.

The difference between a product and a service	
product	service
Physical, tangible, touchable, figurative	Immaterial, intangible, invisible, abstract
Material entities generated through production	It is not necessary to be able to obtain it using production
Ability to store	Not necessarily <u>storable</u>
There is a segregation relationship between production and goods consumption.	There is an inseparable relationship between production and consumption.
There is a different relationship between the production process and the consumer buying it.	Services are created during the user's use of a specific product and represent an interactive, inseparable relationship between the service and the customer.

Table 1. The difference between a product and a service

2.3) Focus of investigation in service design

User-centredness is the central thinking of service design[6]. The entire design process should focus on the user, designed to achieve the user's behavioral needs. Therefore, the essential thing in service design is analyzing the user's needs. Also, emphasize the understanding of the user's context, and require a holistic and systematic grasp of the interaction with the user through the establishment of a series of service "links" to discover the user's pain points in the use process and to explore the opportunities. From there, crafts can be developed with this in mind.

2.4) Methods and tools for service design

Service design aims to understand users better and match their experience needs to serve them better. Service design can only use traditional design methods and research tools if it is different. Instead, it needs to use knowledge from various fields. Service design has developed some of its forms and tools through creating, refining, and updating service design content by scholars from different areas. For example, brainstorming, user journey mapping, user experience flow mapping, user profiling, service blueprinting, service context mapping, service system mapping, and stakeholder mapping are standard methods in service design. Nonetheless, due to the complexity and uniqueness of the study object, alternative methodologies and tools should be used in practical applications for other design objects.

- 1) Brainstorming method: This method is applied to solving problems in service design. Specifically, the participants present ideas and suggestions for improvement around a specific issue. The participants can be managers from the company, stakeholders, or service designers.

- 2) The User Journey Map is a tool for visualizing the interaction process of users and products from the user's point of view, and its essential components include user roles, timelines, touchpoints, user expectations, and actual user experiences. The user's experience in a given environment is recorded in a different chronological order. In this process, the critical 'touchpoints' generated by the user's contact with the service form a systematic service flow. They map the user journey. Thus helping designers identify the user's pain and satisfaction points throughout the trip and providing design opportunities and ideas to solve the problem.
- 3) Service Blueprint, a tool for describing service systems and processes in detail, is a common and accurate way of describing service design based on user behavior. That is because it focuses not only on the front-end user interaction behavior but also on the back-end service behavior and support processes. It documents user behavior and puts the focus on the internal coordination process.
- 4) User experience flow chart: this method essentially means analyzing the specific process of a user doing something and the user experience and feelings after each procedure. The first part is a flow chart of user behavior, and this method is mainly based on interview analysis. The second part is the user emotion change diagram. This diagram explicitly describes the user's experience and feelings during the interaction of the touch points in each process, giving the designer a more intuitive feel. The third part analyzes opportunity points (or pain points). The designer analyses the local area and uncovers problems in the service process, thus creating opportunities for innovation.
- 5) User profiling is an indispensable tool in service design. It is a tool to describe users' needs and is generally used in the early stages of design. In particular, the research team will first look into many users for the study and analysis. Then, they will divide the users into different types based on their behavior and views by matching their names, photos, behavior traits, and scene descriptions. The research is then divided into user groups, and finally, user personas and profiles are created for each user group. Although these user personas are fictitious, they are based on studying real user motivations and behavior. This simple and intuitive approach to user research not only helps designers gain better insight into users and make design decisions, but this type of approach can also help stakeholders in projects better tailor their approach to innovation.
- 6) Service context diagrams: A tool for describing the user's environment and behavioral flow in detail from a global perspective, similar to a storyboard or comic strip, for a specific service context. This approach is essential for studying of services that contain a context for user experience use. It can be used at any stage of the service design process and can be used as a tool to evaluate, understand, and analyze the entire service system.
- 7) Stakeholder mapping: is a way of translating the interrelationships between these different interest groups into visual diagrams that are analyzed to obtain conclusions from the stakeholder perspective, facilitating further extraction of specific needs and pain points for service design.

C. The concept of sustainability in service design

The critical principle of service design is 'user-focused research,' so sustainability in the context of service design lies in the fact that the entry point for sustainable innovation and

development is not a particular group of people. But the broader environment in which humans live requires design innovation through integrating multiple resources. It is a numerous service platform for both designers and traditional craft artisans, as well as for enterprises and governments. By building a tangible and intangible service platform, sustainable innovation development based on crafts is achieved, driving the inheritance of traditional crafts, the realization of value innovation, and the promotion of cultural soft power.

D. Methodology for sustainable research on crafts from a service design perspectives

1) Stakeholder Analysis

Linking up the stakeholders in the whole service process, such as users, platform service providers, non-genetic inheritors, and the government, to promote sustainable innovation of crafts can be better.

2) Building a blueprint for user group services

Different user groups have other characteristics, resulting in differences in user behavior, and these differences will lead to further contact points and experience effects in the service design process. Therefore, user group service blueprints should be constructed about the characteristics of different user groups.

3) In-depth research into the lifestyles of craft users

Presently, the need for in-depth research into the lifestyles of craft users is limiting the development of traditional crafts. To innovate the sustainable long-term growth of traditional skills requires research into customer needs and current lifestyles and establishing a user research system. While meeting the users' needs, the product's service experience should be innovated, contributing to crafts' sustainable and long-term development.

4) Constructing a more profound innovation of the traditional craft service model

One of the advantages of service design is that it can produce new service models. Traditional crafts were mainly made and then sold, but this past model of craft development no longer meets the requirements of today's service design economy.

Therefore, there is a need for in-depth service innovation, which should be combined with current lifestyles to improve and perfect. For example, DIY crafts are a popular form of craft experience. This craft service model provides a platform for children who want to learn crafts and offers courses that allow craftspeople to earn training fees and expand the dissemination of related crafts. This in-depth and innovative service model provides craftsmen with a diverse and sustainable long-term development approach.

5) Building brand communication for crafts

Brand communication mainly refers to some original designs to promote the unique design style and brand cultural connotation of the relevant products through their product design and brand design. Therefore, handicraft brand culture can be constructed, relevant handicraft brands can be established to achieve a good brand culture, corporate culture, and craft

culture, and ultimately drive the sustainable long-term development of handicraft service design through handicraft brand communication.

6) Behavioral and psychological experience service design

Physical behavior and psychological feelings are the two levels of examination of users under the perspective of service design, both of which are based on the use of product functions. Therefore, regarding user experience, crafts that trigger users' spiritual resonance through the productive output of cultural content should focus on users' behavioral and psychological experiences regarding service design. So that they conform to the product experience objectives of usability, ease of use, and emotionality.

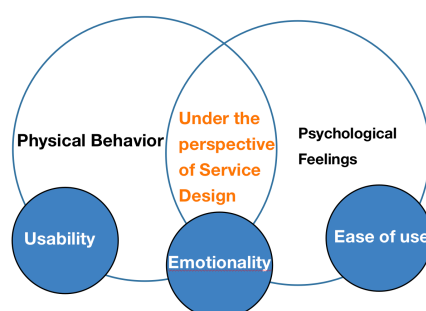


Figure 1. Physical behavior and psychological feelings under the perspective of service design

7) Visual service design

In addition to having a basic functional service design, crafts must also consider a visual service design. That is because the visual effect of a craft product is closely related to its specific information content. The visual aspect of a craft product with a service process is primarily a platform for interaction between the user and the service provider. Simple visual graphics can make serving users more fluid and easy to communicate, which is also an effective way to drive the sustainable development of crafts through visual design.

8) Communication and feedback service design

Through feedback and communication, end outcomes and service efficacy may be confirmed. The benefit of handicraft products needs to meet the needs of multiple levels. Firstly, it is necessary to design the service process and content to meet the service needs of the target group. Secondly, it is also essential for the service content to fulfill the social responsibility of crafts to spread culture and promote traditional crafts. On the other hand, dissemination, and feedback can encourage service improvement and refinement, avoiding detachment from user needs, thus effectively ensuring and enhancing the innovative value of the service content.

Therefore, crafts under service design thinking need to consider dissemination and feedback design to adapt to users' service needs. Crafts achieve cultural and technological impact through communication channels, combined with feedback results from user experiences to validate the relevant service outcomes. This service design can better validate the effectiveness of the service experience of crafts.

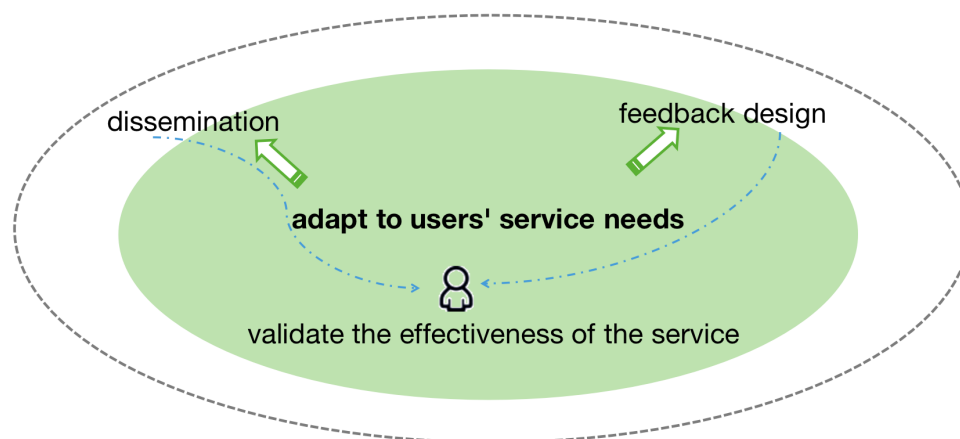


Figure 2. Crafts under service design thinking need to consider dissemination and feedback design to adapt to users' service needs

9) Sustainable service design for value co-creation

Service design for crafts is a two-way interaction, and its value creation requires the joint participation of handicraft makers, users, and relevant stakeholders. It is necessary to use service design methods such as service blueprints to build a craft service system to guide users and crafts to communicate with each other and improve the value of the experience. And on that basis, to co-create the value of the experience. To foster the growth of this innovation's value in a way that is both beneficial and long-lasting.

10) Systematic service design that combines multiple touchpoints

The service experience of crafts is a combination of multiple levels and multiple touchpoints, which leads users to form different service experiences at different levels and between different touchpoints. The touchpoints provide a way for these otherwise intangible service interactions to become more evident and meaningful. Ultimately, a systematic service design for crafts can be formed through the combination of multiple touchpoints, thus driving the sustainable long-term development of crafts.

Conclusion

In the service economy, products and services have become one. Service design has outstanding advantages in solving complex problems and coordinating long-term development, so it has become a systemic design theory at the forefront of the current socio-economic form. Traditional crafts are an essential material carrier of culture. As times change, changes in people's aesthetic and consumption habits have led to related problems in the development of crafts. Traditional crafts have also been exploring new design ideas and methods. In the context of the recent economic era of service design, service design thinking, techniques, and tools need to be used to help crafts develop better in the long run. This paper summarizes the key points that hinder the development of traditional crafts and introduces service design thinking into the innovative and sustainable development of crafts, thus exploring a new path for handicraft development and promoting handicraft heritage and sustainable development.

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