

# Research on the Renovation Strategy of Dwelling Narrowness Space Based on Service Design

Shaopeng Wu, Yi Feng

School of Art and Design ,Fuzhou University of International Studies and Trade, Fujian Province, Fuzhou City, PR China 350200

**Abstract:** With the expansion of urban population, tight housing supply, rising housing prices, and increasingly popular dwelling narrowness housing, young people in the city are increasingly demanding housing experience. How to customize a good living space for young people is particularly important. This paper takes the service design as the theoretical basis and research method, and proposes a systematic service strategy for the design and transformation of the dwelling narrowness space. Firstly, analyze the current situation of the dwelling narrowness space, and sort out the service design theory; secondly, analyze, dismantle and reorganize the user behavior, service system construction and relevant stakeholders' interaction points in the renovation design of the dwelling narrowness space; Finally, the design of the dwelling space and the user process are analyzed, so as to propose strategies for customized space renovation design schemes suitable for different application scenarios.

**Keyword:** Service design; Interior design; Renovation of dwelling narrowness space; Strategy research

**Fund Project:** This article is the final result of the school-level scientific research project of Fuzhou university of International Studies and Trade, "Research on the Renovation Strategy of Dwelling Narrowness Space Based on Service Design" (No. FWX20020).

## Introduction

With the rapid development of China's economy and the continuous improvement of people's living standards, more people have entered the city, moving from bungalows and self-built houses to commercial houses. In recent years, due to the expansion of colleges and universities, the per capita education level has improved, the number of college graduates has continued to rise, and a large number of young people have entered the cities for employment. Affected by the above factors, most cities have high housing prices, and most young people can only live in small-sized houses. With the increasing complexity of residential space design, its design scheme should also be more systematic and holistic. Service design aims to create better experience and value for users through services.

## 1. Design of dwelling narrowness space and service design

### 1.1 Analysis of the current situation of dwelling narrowness space design

The State Council's "Notice on the Applicable Standards for the Construction of Centralized Rental Housing" pointed out that in order to meet the living needs of new citizens and young people (14-35 years old), optimizing the quality of the living space environment and taking into account the actual development is the current housing space renovation design reform. Support force, and put forward the requirements of effectively increasing the supply of affordable housing, housing design is one of its important links.

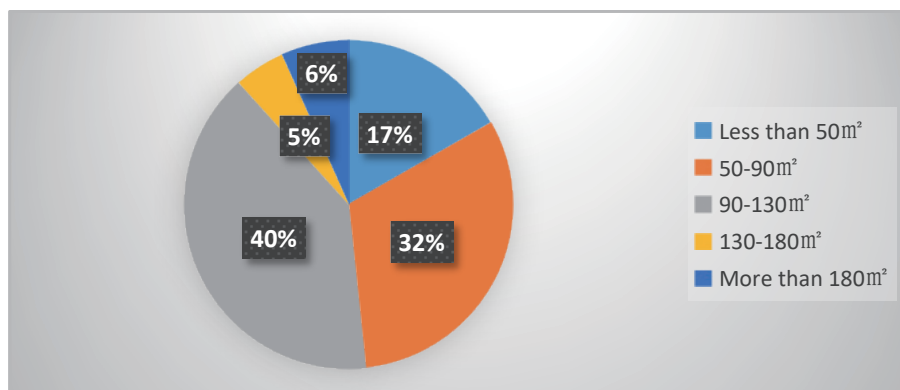


Figure 1 Data from: China Business Industry Research Institute

## 1.1 Tianfeng Securities Research Institute

Dwelling narrowness space mainly refers to small-sized dwellings (below 90m<sup>2</sup>). Through the research and analysis of the current residential area of people, it is found that the living area below 90M<sup>2</sup>accounts for nearly 50% (Figure 1)..Most of the consumer groups are mainly concentrated in the “80s-00s”. They have grown up with the rapid development of the information and network era, and they know how to use the information network that has been nearly perfected to obtain more information. And these “post-80s” who are full of individuality and advanced thinking are the main consumers, and their consumption behavior and consumption psychology have gradually become the main factors affecting most of the interior renovation market of narrow dwellings.

Service design emphasizes people as the center, and people are the foundation of service design. The needs of consumers guide the design trend of the living space environment. Therefore, in the design of residential space renovation services, the needs of consumers are the starting point of the value of space renovation. Analyze the motivation, and on this basis, construct a design strategy for the renovation of the dwelling narrowness space to enhance the living experience of the space. After research, it is found that the current direction of space design in the market is mainly biased towards large-scale and large-space design, and there is no relatively perfect design service strategy for the renovation of the dwelling space, resulting in the design scheme, material purchase and other links required for the transformation of the dwelling narrowness space. It is more scattered, and information interaction is more difficult, and it is impossible to concentrate such consumer groups.

## 1.2 Service Design Thinking

Service design and space design are two relatively independent entities. Service design is often based on the completion of space design, and according to the user’s usage habits, it can independently modify and solve some problems in space design. “Service occurs within a period of time, and service has its own unique process and progress. Grasp its efficiency and improve service quality.” Quality requirements are also increasing day by day. So it is very important to consider service design and space design at the same time. In the whole process of design, while looking for the focus and problem of each single node, using scattered and one-by-one solutions, its efficiency cannot match the pursuit of efficient social rhythm. For these design individuals, the focus should be on integrity, and the systematic and process-oriented service design ideas are in line with the current design concept.

## 1.3 The significance of service design to the design of dwelling narrowness space

As an important part of interior design, the living space focuses on the design of the “spirit of place”. The ultimate purpose of the design is to allow users to experience the different feelings and changes brought about by the design. The design of space will affect people’s psychological state, behavioral habits and character shaping and so on. Especially in small interior space, let the design enrich the user’s development of space possibilities as much as possible.

The service design will systematically integrate the design of the dwelling narrowness space. From design to construction to after-sales, consumers can also participate in the design and customize their needs. The holistic service process pushes the customized design to the public, allowing more people in need of customized services.

The inner structure of the dwelling narrowness space is often complex, and the room types are various. In the face of different house types, different layouts, and different water and electricity layouts, a reasonable design cannot be completely solved with a set of solutions. At the same time, in the selection of furniture, users are often not satisfied. And because the occupants themselves are relatively weak in economic capacity, they are unlikely to pay for the design alone, so it is of practical significance to explore the mutuality between service design and dwelling space design. It is very important to consider the direction of the design of the dwelling space and its specific design method. How to let users have a scientific, humanized and comfortable living space is the significance between service design and dwelling space design.

## 2. System construction and integration innovation of dwelling narrowness space renovation mode

Because there is no relatively complete system construction for the renovation of the dwelling narrowness space at present, it is difficult to build a service system for the transformation of the dwelling narrowness space to solve the problems it faces from a single perspective. What is really needed is that thinking on the problem should be analyzed from multiple dimensions and the information should be integrated in order to get a comprehensive solution. In the understanding of space transformation, it should be separated from the space design itself, and the understanding should be extended to users and tangible products, intangible services, space experience and so on. The goal of service design is user-centered experience innovation and optimization, through the sorting out of system relationships, such as “people-object-behavior, people-environment-society”, etc. The service design of the dwelling narrowness space design identifies the main core stakeholders, and carries out planning, organization and operation to improve work efficiency, and ultimately enhance the user’s sense of participation. As far as the main stakeholders are concerned, there are many complex demand relationships among the consumers, management, designers, material factories and other stakeholders involved in the transformation, and there are close relationships among the various stakeholders. While service design acts on all aspects of consumers, it deepens the interactive relationship between consumers, manufacturers and management. In the process of service, they can provide more effective information and sufficient communication with each other, and enhance consumers’ understanding of The cognition of interior space design and the enhancement of consumer experience, the three form a closed loop model (Figure 2).

In the current market, the process of interior space design and renovation is relatively simple, and the specific relationship types can be divided into consumer-designer,consumer-management(design company), consumer-manufacturer etc. Each contact chain is one-way and decentralized, and does not form a systematic process, which leads to the separation of stakeholders and the reduction of contacts in the service process, resulting in unequal information provision. When consumers design a space, some of the needs that will arise cannot be solved by a single link, including the form and style of design, the quality, price of materials, the provision of after-sales information and so on. In order to better construct the service process system of the dwelling narrowness space design,

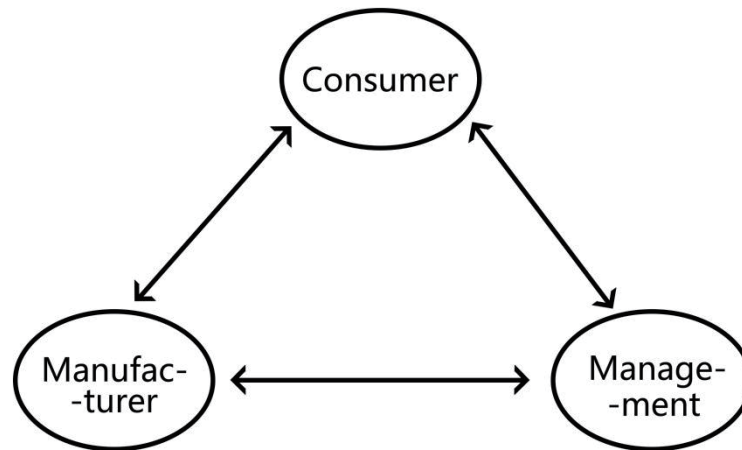


Figure 2 Consumer, Manufacturer and Management Relationship Diagram

the above factors need to be considered. Consumers have not been able to obtain effective information quickly in the presentation of design proposals, material selection, provision of facilities and information, and application of technology. So, integrate facilities, information flow, services, material supply, management, after-sales and other related elements to provide new overall solutions, thereby further changing the existing operation mode and forming a stakeholder relationship. The refined form of cooperation and information exchange between them create new markets and reduce wasted consumption of enterprise management and resource costs.

Service design should be committed to the construction of product service system, so that touch points become new opportunities to expand the value space of projects. Improving the user experience of consumers at various stages can effectively improve the service quality of this research strategy and help create a perfect service experience. From the perspective of the overall view, it is committed to improving every contact point and link in the service design process, so that consumers can enhance their sense of identity in the process of experiencing the service, and enhance the service design value of the renovation of the dwelling narrowness space.

### 3. Service design strategies for the renovation of dwelling narrowness spaces

With the help of contemporary digital communication and network technology, a new product service system is constructed. By integrating designers, material factories, construction companies and management, the operation system of the service system is reconstructed and a user flow chart is drawn (Figure 3). Visual processing is carried out from the beginning of the design requirements to the completion of the design. The systematic design improves the efficiency and experience of consumers, and introduces consumers into different situations with the flow of the timeline.

#### 3.1 Subdivision service scope

Based on the different problems of consumers' needs, the needs of consumers are classified, different product orientations are set, and a self-service system is formed, which is divided into two modules: "furniture soft decoration" and "whole house decoration". However, this kind of module classification is too simple, and the brief differentiation cannot enable consumers to accurately search for their needs in the process of use, so on this basis, the main two categories continue to be differentiated into several sub-categories, which can be further selected by consumers. When consumers enter the service design system, they can choose furniture design or whole house decoration design according to their own needs, and then choose according to the process prompts, and the system will push according to the consumer's choice. Consumers can customize the design style or customize the furniture according to their actual situation until the consumer's choice is complete. After the consumer communicates with the management, revises the order, confirms the order and pays the payment or prepays the deposit, and finally the system integrates the order information for feedback. This link integrates the scattered consumers in the original market, concentrates the number of orders, realizes the demand collection of such consumers, and meets consumers' needs for small space and small apartment renovation.

#### 3.2 Cooperative division of labor strategy

This link is usually accompanied by a lot of order information, which cannot be completed by the management alone. In the previous link, the needs of consumers are classified, and on this basis, the management should also classify the orders. For the production of orders, it is necessary to use the method of classification and refinement of cooperation with designers, enterprises and material factories, so as to outsource orders to create benefits while reducing the management of factories, and to expand business and training in the later stage. Consolidate the foundation of new consumer groups. Although the whole-house decoration has greater economic benefits, the product has a long service cycle. The service cycle refers to the time when consumers change their space use rights. There is less demand for whole-house decoration solutions. Therefore, for whole-house decoration of consumers we should build higher quality services. As for the demand for furniture soft decoration, the market demand is relatively large. However, according to the consumer group, most consumers are college students and young people who have just entered the society, and their purchasing power is not high. In response to this problem, the management should work with the design team to create more furniture suitable for the living space to meet such consumption. users' needs. In summary, for consumers with different needs, they are classified and refined, and then targeted measures are taken to achieve the system construction of "consumer-management-enterprise", further increase interaction with consumer groups, and promote The development of its model.

### 3.3 After-sales service and information exchange and sharing

After-sales service should connect system management and after-sales service of merchants, and provide consumers with a platform for feedback and exchanges. When consumers check and confirm the decoration, if they have any objection to the furniture or decoration construction, they can give feedback in time. The management receives the feedback and adjusts the furniture or decoration construction, and pays the balance after the consumer confirms that it is correct. Users can also read articles about the use of small spaces and the design of dwellings narrowness space that are regularly pushed in the program. The management backstage organizes consumer feedback issues and conducts data analysis on the preferences of the pushed articles, makes regular rectifications, and regularly launches new products.

In order to achieve the purpose of service design, let the contact points of stakeholders generate more effective information communication and cooperation, and adapt to the changing social needs. For the development of the service design system itself, it is also necessary to consciously make strategic adjustments or rectification. And launch more functions with public welfare social services, serve more people, improve the industry structure, and help the renovation and design of dwelling narrowness spaces to play more social roles.

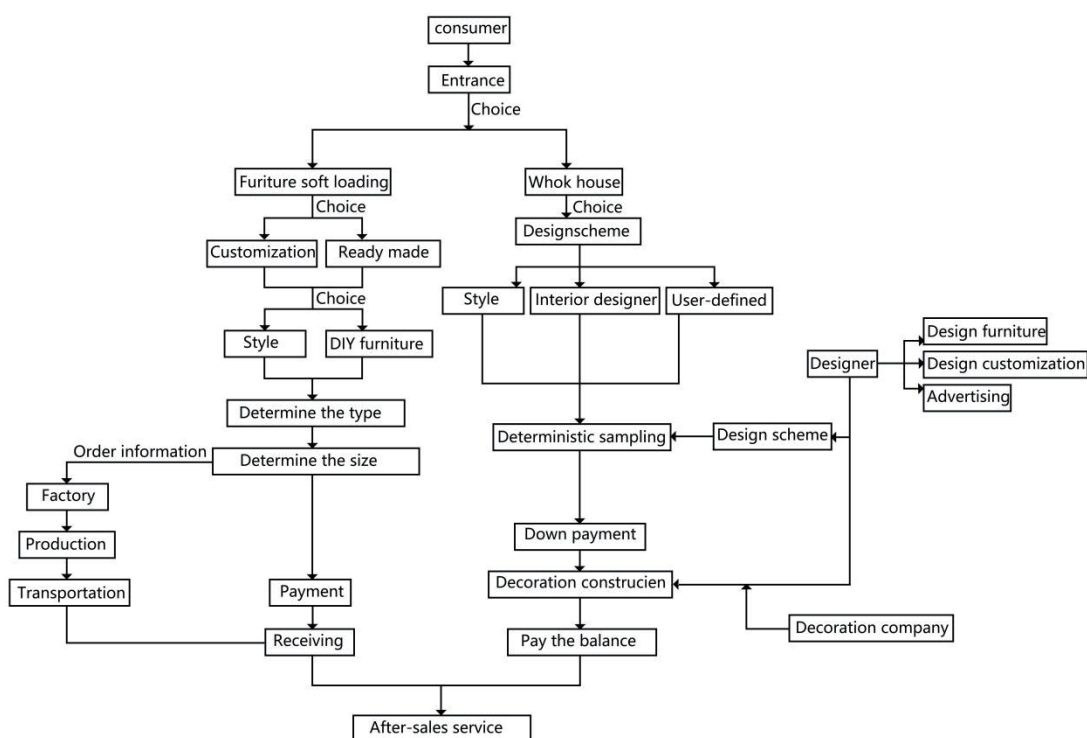


Figure 3 User flow chart of the design and renovation of the dwelling narrowness space

## 4. Conclusion

What is the function of design, how does design work in society, and what are the solutions. From the perspective of service design, this paper explores the innovative application strategy of the design process of dwelling space, and proposes the application of service design operation mode in the design industry of dwelling space. Service design and space design interact and interact with each other. Under the design framework and concept of service design, a personalized, humanized and integrated space design development strategy is formed.

In the narrow interior space, simple furniture arrangement can no longer meet people's requirements for the aesthetics of daily life. Adhering to the concept of service design, making overall changes and innovations in living space design, and providing service strategies that can be used for reference can inspire designers Research ideas, move towards the goal of designing more diverse and individual living spaces, and create a better life for urban youth.

## References:

- [1] Schneider, Jakob. This is service design thinking[M]. BIS Publishers, 2011-5-1.
- [2] ZHOU Xi. 4D Systemic View of Product Sustainable Design[J]. Packaging Engineering, 2020, 41(14): 10-15.
- [3] LI Yin-tong, ZANG Hui. The Interior Space Optimization Design of Humble Abode Residential Strategy Research[J]. Art and Design, 2014, 2(08): 73-75.
- [4] XIN Xiang-yang, CAO Jian-zhong. Positioning Service Design[J]. Packaging Engineering, 2018, 39(18): 43-49.
- [5] Ding Xiong, Zhou Wenjie, Liu Shan. Analysis and Research on Journey Visualization Tools in Service Design[J]. Zhuangshi, 2021(03): 80-83.