

# Research on the Design of Gamification Public Seats in Shopping Malls Based on Service Design Thinking

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**Abstract:** The present is the era of the fourth economic type of experience economy. People have higher requirements for leisure and experience in shopping malls. Public seating will be the key areas of shopping malls. First of all, in view of the single form and unreasonable design of public seats in shopping malls, innovative designs are made on the shape, color and appearance of public seats. Secondly, from the perspective of service design, combined with gamification design methods, design the shopping mall's public seating. Give additional functions to public seats, provide new services for children and young people, and provide new design methods for improving the services of shopping malls and public seats.

**Keywords:** Service Design; Public Seating; Gamification; User Experience

## I. INTRODUCTION

With the acceleration of the pace of life, contemporary people will become impetuous. They can relax in entertainment while waiting in the mall. The design of gamified public seats is based on the psychological needs of consumers and is based on the concept of service design.

## II. DESIGN STATUS OF PUBLIC SEATING IN SHOPPING MALLS

Public seating is an important part of a large department store. It is not only a display of the mall's image, but also a fusion of the shopping mall's landscape, and at the same time it has a functional role. Therefore, public seating has attracted more and more attention from consumers. As a part of the shopping mall, the public seats in the shopping mall are divided into age groups, which can be divided into children, youth, middle-aged and elderly. After field investigations and online questionnaires, it is found that there are currently two main problems with public seats in shopping malls. The number is small and cannot meet the demand of passenger flow. The problems are particularly prominent during holidays and traveling with the elderly and children: lack of systemicity and integrity; monotonous forms and colors, and insufficient shapes to satisfy various consumer groups (such as young people, children) ) Personalized needs for rest methods and preferences. Analyze and research the above problems, consider the design of seats from multiple angles, and improve the user experience under the service design thinking.

## III. ANALYSIS OF CONSUMERS' SERVICE DEMANDS IN SHOPPING MALLS

The International Design Research Association defines the definition of service design: "From the perspective of users, it includes usefulness, usability, and ease of use, and from the

perspective of service providers, it includes effectiveness, efficiency, and distinctiveness." In China, although the research on service design thinking is still in its infancy, this does not mean that service design thinking has no development prospects in China. With the development of the times, people's demand for commercial space is also changing, and commercial space is not only concerned Commercial containers for consumption have begun to have a certain degree of humanistic care. Services are mainly manifested in paying attention to user experience. In 1998, American economists Joseph Pine and James Gilmore pointed out: "Experience economy is that enterprises use service as the stage, commodities as props, and consumers as the center. From life and context Set out to shape the sensory experience and thinking identity, and thereby capture the attention of consumers, create activities worthy of consumers' memories, provide an unforgettable experience for consumers, change their consumption behavior, and help Products find new survival value and space".

## IV. THE APPLICATION OF GAMIFICATION IN THE DESIGN OF PUBLIC SEATS

Gamification was first proposed by Richard Bartle in 1980. Its original meaning is "to turn things (or work) that are not games into games", which was formally proposed at the 2011 GDC conference. Specifically, it is a method of applying game thinking and mechanisms to other fields to guide users to deeper communication and interactive participation. The research on gamification abroad is relatively early. In the book Reality is broken (2012), Jane McGonigal mentioned that game design products can guide our lives. Based on this discussion, American Amy Joe King proposed in "Product Gamification" (2019) that when gamification is applied to products, it is the most effective way for users' interests. Gamification design thinking is to study the psychological needs of users and conform to contemporary design trends. However, there is a lack of research on gamified seating at home and abroad. The application of gamification thinking to seating design is bound to be a major trend in the development of seating design.

Seating furniture is the most frequently used furniture. Seating furniture mainly includes sofas, chairs, stools, etc., which are the products that are closest to the human body and have the longest contact time among many furniture. The design of gamified seats includes fun, gameplay, and interactivity.

Interesting: Interesting seat not only takes children as the design object, but also takes into account the psychological needs of adults. The "Puppy Chair" designed by the famous design master Ailuo Anio is a very interesting piece of

furniture. Children can use it as a Trojan horse game, and adults can also seek it out. It is a kind of childlike fun, and it is also a beautiful work of art when placed at home. It is a classic fun seat.

**Interactivity:** In the context of entering the "new economy" era in the 21st century, my country's existing seat types have also become diversified, such as modular seats and DIY seats. "Research on the Interactive Design of the Perceptual Level of the "Home Dining Table Show"" researches the interactive experience of people on furniture products from the perceptual perspective.

**Gameplay:** The game seat can be attributed to the addition of interesting elements in the design of the seat. The shape of the furniture is variable during the use of the seat, and it is full of fun experience. Chen Yan (2016) "Interesting Research on Modern Furniture Design" proposes that furniture design should have a unique personality and emotional cultural connotation; consumers can also intervene in such a fun design, giving consumers a feeling of being in the game. Works "fight-use space" (Lijiang Cup winners, author: Huang Jialin, Xiong Decheng) indoor playground for children waiting chair design, inspired by the works of Tangram, modular design, easy to design a series of removable, flexible combination of stool.

## V. DESIGN OF GAMIFICATION PUBLIC SEATS IN SHOPPING MALLS UNDER SERVICE DESIGN THINKING

The most basic purpose of public seats is to help people adapt to the environment and meet the various needs of people in the mall space to the greatest extent, so the public seats in the mall have the characteristics of publicity and communication. **Publicity:** The most important factor of indoor public seating is to create a public space environment. It is an important part of public space and must meet the needs of different people. Therefore, it is also public; **communicative:** Public seats need to meet the needs of communication between people and the environment, such as sitting and resting, waiting, storing or talking. Through the questionnaire survey, it is found that most shopping consumers in shopping malls are women, aged between 20-30, and their needs are divided into three types: 1. It is inconvenient to take care of children while resting; 2. Seat hygiene issues; 3. Requirements for seat design. Such as material, shape, color, size. Carry out analysis and research based on service design thinking, and improve the shopping mall public seats to a certain extent to enhance the user experience and satisfaction.

### (1) Modeling

The styling design aspect of gamified public seats. Generally, the shapes of public seats include strips, single-concave shapes, arcs, circles, etc., but the shapes of gamified public seats are not necessarily a combination of traditional seating surfaces and four legs, such as: exaggerated, Designing with abstract techniques can be associated with animal images, plant images, cartoon characters, etc., or some concrete and abstract patterns are used in the part of the modeling, which must be lively and interesting visually, and stimulate interest in user experience.

### (2) Material

It is very important to choose the material of the design seat, which directly determines the durability and comfort of the seat. The materials used for public seats include stone, metal,

wood, plastic, and iron. The materials have their own advantages and disadvantages. The specific choice should be determined according to the environment, function, and use object. As the main users of gamified public seats, children and young people have certain special characteristics. They not only need to satisfy children's longing for nature, but more importantly, they must be safe and environmentally friendly. For example: wood has a good touch, non-slip soft, comfortable to use and easy to process, giving people a natural and simple feeling, and is often used in the design of children's park public seats; environmentally friendly wood-plastic composite materials with wood and The dual characteristics of plastic will not cause secondary pollution to the environment. It is a new material with a wide range of uses and broad prospects. Due to its closeness to solid wood, it is also a very good choice for children's seat materials.

### (3) Color

Children are very sensitive to colors, and their favorite colors are pure primary colors. Different colors bring different experiences to children. However, in terms of the color style of public seats, it is not good to be colorful. It should be noted that the color design can be bright and bright, but not fancy, which may cause visual fatigue.

### (4) Games

In the design of the seat, there are two kinds of interactions, one is the interaction between people, which is expressed in a way of mutual cooperation or competition, and the other is the interaction between people and the seat, which is expressed as a way of completing tasks and challenges. Through the game mode displayed by public seats, people who are not used are attracted to participate in the challenge, so as to achieve the effect of people-to-person interaction and relaxation and entertainment.

When designing public seats, it is necessary to also consider providing convenience for people to interact. The main performance is that the seat should be convenient to sit on, and can sit comfortably for a long time. According to the number of people to communicate, choose the appropriate seating space. People generally like to sit side by side when talking in the rest area, which facilitates communication while looking after children. Through the design of the seat shape, it can meet the needs of people's communication and other activities.

## VI. CONCLUSION

At present, the domestic waiting space design basically meets the needs of the waiters for the use of functions, but the consideration of the psychological feelings of the waiters is slightly insufficient, and the deep relationship between the design elements of the waiting space and the psychological feelings of the waiters is lacking: gamified seat The design considers many aspects such as form, structure, proportion, scale, etc., to effectively meet people's various material and spiritual needs in public space. For the shopping mall space, starting from people's behavior patterns, meeting people's behavior and psychological needs through the design of public seats is a beneficial way to create a rest space and improve the image of the mall.

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