

Research on public goods management and interactive behavior

Yi Tang

(Nanjing Institute of Media and Communications, Nanjing, Jiangsu 210000)

Abstract: the design of public goods in the new era needs to follow the user-centered principle, function priority principle, environment-friendly principle and timely and efficient principle, grasp the future development trend of public goods, take into account the different use needs of different user groups, and provide direct or indirect psychological experience for the public through interactive design, In order to better meet its internal demand for public goods. Based on this, this paper expounds the principles that should be followed in the design of public goods and discusses the future development trend of public goods, and actively explores the design and management path of public goods from the perspective of interactive behavior.

Key words: public product design; Interactive behavior; User center

Introduction: the modernization of a city is largely reflected in the supporting design and scientific management of public health facilities. A scientific and effective public facilities system helps to shape the city brand image and enhance the collective civilization of the public. However, there are still some outstanding shortcomings in the design of public goods in China's urban planning at this stage, which are mainly reflected in the lack of understanding and innovation of public experience, public thinking and other aspects in the design and management of public goods by some public goods designers and managers, resulting in many public goods and public facilities focusing on construction, light maintenance, effectThe problem of light management is that it is difficult to provide personalized services according to user needs in some hot areas with high staff density and high reuse rate. Public mobility is the core of the overall layout of modern urban planning. Public product design needs to comprehensively analyze the characteristics of public behavior, fully investigate the differences of different elements, and establish an interactive system of public products to better meet the internal needs of the public for public products.

1 Design principles of public goods

1. user centered principle

The user centered principle emphasizes people-oriented and designs product functions from the user standpoint. Public goods serve a wide range of social groups, including all user groups with different characteristics, such as the elderly, infants, the disabled, pregnant women, etc. Therefore, the design of public goods should also fully cover all user groups and serve each potential user to the greatest extent. The design of public goods based on the user centered principle mainly includes human-computer relationship and interaction. Human machine relationship mainly refers to that the size and specification of public products can meet the human body data of different people by designing a variety of models and adding adjustable modules. Interactive mode means to dig deeper and more convenient ways to use public goods on the premise of realizing functions. Taking the design of public toilet facilities as an example, the earliest public toilet design only differentiated gender, but did not fully take into account the use needs of special groups such as the elderly, pregnant women, infants and the disabled. Nowadays, many public places have set up mother and baby rooms and toilets for the disabled. This change is the full embodiment of the user centered principle.

2. function priority principle

The foundation of product existence lies in its function, and the realization of function is the first important meaning of product. Compared with some market-oriented household goods, public goods are oriented to the public. In the process of design, development and production, they may consider more about how to better achieve the target function, how to simplify the product operation process under the premise of ensuring safety and accuracy, so that the products are easy to use, and less about the impact of economic factors. Taking the thermometer used in public places as an example, as a new access process, temperature detection has been widely used in shopping malls, office buildings and other crowded places in recent years. At first, the temperature detection method was that the detection personnel held a temperature gun to measure everyone's temperature. Later, there were more and more types of temperature measurement devices with more and more perfect functions, such as infrared temperature measurement devices, contactless temperature measurement devices, etc. the use of these devices and equipment not only improved the accuracy and reliability of the temperature detection results, At the same time, it also saves a lot of human resources and realizes the optimization of products from the perspective of function.

3. environmental friendly principle

The principle of environmental friendliness emphasizes the balance and integration between public goods and the environment, including whether the use of products will have a negative impact on the environment and whether the product shape matches the environment. On the one hand, according to Maslow's hierarchy of needs, people's material conditions in today's society have been greatly met, and their demand for public goods is no longer satisfied with the realization of basic functions, but more attention is paid to psychological satisfaction and high-level experience. For users, the appearance of the product is the most direct aspect that affects users' feelings about the product. Therefore, the public product design based on interactive behavior first needs to improve the appearance of the product. Appearance modeling includes not only product shape, but also product semantics, color, material, technology and other elements. Taking the public trash can as an example, the animal shaped trash can that used to be seen everywhere has gradually disappeared from the public view. On the one hand, its old shape and outdated materials have been difficult to meet the aesthetic needs of modern people. On the other hand, the lovely shape and function of the trash can lack the unity of intention, which is easy to lead to product semantic ambiguity.

2 Development trend of public goods

1. social servitization

With the rapid development of social economy and the continuous improvement of living standards, people put forward more and more stringent requirements for the design of public goods. From the single use of product functions to the development of high-level functions, from a single product to the gradual expansion of space products, with the continuous expansion of people's demand for products, its service demand is also changing. Therefore, the design of public goods based on interactive behavior first needs to innovate from the aspects of function and service, so as to continuously improve its aesthetic value and better meet the user's needs. At the same time, on the basis of realizing the function, it also needs to continuously improve its aesthetic value and gradually enhance the value of public goods. Secondly, the design of public goods in the new era should be oriented by the demand for social services, strengthen the function of the government in the supply and governance of public goods, and build a public service system led by the government and participated by all kinds of social subjects. Finally, strengthen the management, maintenance and updating of public goods and public facilities, so as to bring better service experience to the public and ensure that public goods and facilities can better serve the public.

2. diversified functions

At present, the functions of many public facilities in the market are relatively single. For example, the function of street lamps is only lighting, and the function of benches is only to meet people's rest needs. However, in the era of sharing economy, public goods not only have the use function, but also have the social service attribute of interconnection. Therefore, higher requirements are put forward for its function. For example, in shared space products, considering the different use needs of different user groups, public product designers should integrate and upgrade product functions according to the specific needs of different user groups, so as to improve product utilization and prevent resource waste. In addition, in the design of public products, the user experience should be optimized on the basis of fully considering the product use environment. Taking the public massage chair as an example, the design of the public massage chair based on interactive behavior should not only upgrade the technology, but also pay attention to the particularity of the use environment, meet the special needs of users such as shopping and charging, maintain the psychological safety of users, and ensure that users enjoy relatively safe personal space when using the public massage chair.

3. plastic arts

In terms of the current development of public product design, product modeling is mostly to meet the needs of users and realize the use function, but it is relatively insufficient in plastic art design. Public goods are deeply rooted in all fields of society and are the concentrated embodiment of social culture. In the era of sharing economy, some public goods began to circulate in a small range. Therefore, in order to better publicize the urban culture, we can combine the design of public products with the design of plastic arts, so as to enhance the aesthetic quality of public products and the influence of urban culture while improving the use efficiency of products.

3 Public product design based on interactive behavior

1. improve system design and reduce potential safety hazards

Public goods based on interactive behavior not only have the use function, but also have the social service attribute of interconnection. Therefore, in the design and management of public goods, the most important thing is to solve the safety problem. First of all, it is necessary to simplify the use and operation process of public goods, improve the fault tolerance rate of use behavior, form an operation closed loop, and avoid invalid operation; Secondly, strengthen the supervision of user information, improve the business ethics level of public product system maintenance personnel and management personnel, and ensure user information security in an all-round way; Finally, the government should take the lead to integrate the existing types of public goods and promote the integration of resources, so as to further improve the design of public goods system, improve system functions and reduce potential safety hazards.

2. strengthen design guidance and do well in design intervention

The continuous improvement of the quality of the public is an important basis for the continuous development and innovation of public products based on interactive behavior. In the era of sharing economy, all kinds of public goods have been deeply rooted in all aspects of social life, and people's moral level has also been significantly improved. But at present, there are still some problems of inadequate supervision and violent destruction in society. Therefore, in the design of public goods based on interactive behavior, we should do a good job in design guidance, operation intervention and other work, so as to standardize users' use behavior and improve users' use experience. At the same time, in the hardware design of public products, the design intervention content should be increased accordingly. For example, for some vulnerable parts of the product, the safety early warning should be done well, and the psychological hint to users should be deepened through effective early warning, so as to avoid the damage of public products or facilities caused by improper use of users. In addition, the punishment for malicious damage to public goods should be strengthened, and the management and maintenance of public goods should be done well.

3. develop characteristic products under the guidance of culture

In today's society, the cultural industry has been deeply developed and rapidly developed. As the epitome of urban culture, public goods have gradually become an important urban cultural symbol. Therefore, the design of public products based on interactive behavior should focus on the integration of cultural elements, artistic elements and natural elements in the product design while realizing the use function of the product and meeting the internal needs of users, and fully reflect the cultural charm of public products in combination with the display demands of urban public construction, To further enhance the emotional experience of users in the process of using public

goods. In addition, the integration of cultural elements into public goods can also endow cultural products with richer cultural connotations, promote the continuous improvement of the aesthetic value of public goods, so as to enhance the cultural expression of the city and make public goods more vitality.

4. deepen the design practice and improve the use experience

The design of public products based on interactive behavior has its own particularity. In product design and management, we should pay attention to users' emotional experience and sensory experience. Sensory experience is mainly transmitted through vision, hearing, touch and so on. Specifically, in the design of public products, it is mainly reflected in product shape, product material, product color and so on. Therefore, the design of public products based on interactive behavior should pay attention to the unity of product color and brand elements, so as to deepen users' impression and cognition of public products. The design of public products based on interactive behavior and the continuous innovation of product design methods help users get a better use experience, such as optimizing product materials and bringing better use experience to users. In addition, the core of interactive behavior is emotional experience, which meets the emotional belonging needs of users for public goods. In the era of sharing economy, public goods are facing the prominent problems of product homogeneity and lack of emotional experience. To solve this problem, public product design based on interactive behavior should optimize product design from the perspectives of strengthening humanized design, paying attention to place transformation, and coordinating the relationship between product and ecological environment. Such as standardizing user behavior through product design to maintain urban public order; The designer of public products can also follow the concept of sustainable development, pay attention to the flexibility of the use environment of public products, and improve the adaptability and matching between public products and the local ecological environment, based on the comprehensive consideration of the objective conditions such as local climate and resources, so as to promote the change of users' life style and bring users a better use experience.

4 Conclusion

The continuous optimization of the public management system is an important prerequisite for achieving high-quality and efficient public service capabilities. As an important support of the basic material level in the social service system, public goods is one of the important standards to measure the ability of social public service. In the design of public products, we should carry out interactive design according to the specific needs of the product and the corresponding design principles. By optimizing the design and management of public products, we can provide better services for the public, so as to promote the continuous improvement of users' satisfaction and trust in the public management system.

References:

- [1] Boxun Wu Global environmental public goods management: types, difficulties and solutions [j]Poyang Lake journal, 2022 (4): 10
- [2] Xiao Jin,Xiangzhou He Reasons and Countermeasures of high cost of public goods and services in China [j]2021 (4): 87-91
- [3] Jing Yang,Sisi Zhang Analysis on the path of management and maintenance of rural public goods in China [j]Journal of Anshun University, 2017 (4)
- [4] Zhuquan Wang Public resource allocation and government social capital [j]Monthly journal of accounting, 2022 (3): 16-21
- [5] Xiangzhi Kong Rural public goods supply from the perspective of comprehensive well-off [j]2021 (6): 14-28
- [6] Qinming Yu,Xiaofan Lu,Lili Huo The value implication and practice path of traditional Chinese medicine in helping to build a human health community [j] Health soft science, 2022 (009): 036
- [7] Baoyu Huang On the commonweal and commerciality in the reform of medical and health system [j]Brand research, 2022 (022): 000
- [8] Yunliang Chen,Jiamiao Chen Research on health and Social Care Act 2012 in the UK [j]2021 (6): 56-67
- [9] Qiang Xin,Shaobiao Wen China and global health governance from the perspective of "health Silk Road" [j]Modern international relations, 2020 (6): 10
- [10] Daqing Shen,Jingyun Shen,Xuewen Zhang, etal Research on the effective supply of grass-roots public health products based on the theory of social responsibility [j]China health industry, 2019, 16 (23): 3
- [11] Xiangqian Gong,Yahan Fan The path of international law for the construction of human health community and China's plan [j]Zhongzhou journal, 2022 (6): 44-51
- [12] Dewan An,Jianhong Zhang The current situation, challenges and Countermeasures of health governance mechanism construction of the "belt and road initiative" [j]Regional and global development, 2022, 6 (3): 21
- [13] Dexing Qiu,Congli Wu,Zhongping Zhu, etal Exploration on the practice of fine management of basic public health services under the new situation -- a case study of Guangming District, Shenzhen [j]China primary health care, 2022 (009): 036
- [14] Mingfang Yang,Hui Yin,Yinuo Sun, etal The role of non state actors in promoting the R & D and accessibility of public goods -- a case study of Chinese children's nutrition package [j]Health soft science, 2022 (010): 036
- [15] Hengjia Zhang Performance evaluation and optimization path of basic public health service policies in Western China [j]China rural health, 2022, 14 (1): 29-32

About the author: Tang Yi, male, Han nationality, from Nanjing, Jiangsu Province, education: Master of Arts, professional title: Associate Professor, mainly engaged in product design and product interaction related research.

Research on social information service of public health products, a general project of philosophy and social sciences research in Jiangsu Universities in 2020, No.: 2020sja2298