

Exploration of Business Model Optimization and Satisfaction Factors in Product Design for the Elderly

Jie Zhou

*Faculty of Creative Industries, City University Malaysia, 46100 Petaling Jaya, Selangor, Malaysia
1194349781@qq.com, mohd.mustafa@city.edu.my*

Keywords: Elderly; business model; satisfaction factors; user experience

Abstract: The purpose of this paper is to study in depth the business model optimization and satisfaction factors of product design for the elderly. Through an empirical study in Guangdong Province, we analyze the challenges and opportunities of product design for the elderly in the current business environment. In terms of satisfaction, we focus on key factors such as product features, service quality and user experience, and explore how they interact with each other and how they affect the overall satisfaction of the elderly. In terms of business models, we analyze the impact of market trends, competitive landscape, and innovation models on product design and user experience. By digging deeper into the relationship between these factors, this study aims to provide effective business model optimization strategies for future product design for the elderly in Guangdong Province and to improve user satisfaction. The results of the study will hopefully provide useful references for academic research and practice in related fields.

1. Introduction

With the advance of aging, this paper focuses on the business model and satisfaction of product design for the elderly in Guangdong Province. Through empirical research, we explore the challenges in the business environment, analyze the impact of product features and service quality on satisfaction, and examine the market trends and competitive landscape of product design for the elderly in Guangdong. Through these in-depth analyses, we aim to provide innovative business models for products for the elderly in Guangdong Province and to improve user satisfaction, providing substantive strategies and useful insights for the industry. According to the Ministry of Civil Affairs ^[1], it is predicted that between 2021 and 2025, the elderly population in China will reach 300 million, and the aging of the population is deepening. In the smart era, with the update of technology and people's pursuit of quality life, traditional products are gradually replaced by smart products, which bring new surprises to users in terms of function, but also increase the complexity of their operation. For the elderly users with declining physical functions, this undoubtedly increases their difficulty in accepting and using smart products, which also creates the phenomenon of digital divide that makes it difficult for the elderly to integrate into the Internet.

In the Circular on Effectively Resolving Difficulties in the Use of Intelligent Technology by the Elderly and Facilitating the Use of Intelligent Products and Services by the Elderly ^[2] issued by the

Ministry of Industry and Information Technology (MIIT), it is pointed out that efforts should be made to eliminate the difficulties that the elderly face in the use of intelligent products and services in their daily lives, so as to have a greater sense of acquisition, happiness and security.

2. Business Model Optimization

In the field of product design for the elderly in Guangdong Province, business model optimization is the key to achieving sustainable development. Taking Jingdong Digital Science, MicroMedicine and Dahua Sanchuang as examples, these three companies have made remarkable achievements in terms of business models.

With intelligent health monitoring and living assistance devices at its core, Jingdong Digital Technology has optimized the business model of product design for the elderly by building a care-oriented business model. Its intelligent technology provides comprehensive health monitoring solutions for elderly users, highlighting the care-oriented nature of the business model and thus enhancing user satisfaction.

MicroMed is emerging in the field of digital health services, especially in the health management of the elderly. Through digital health services, MicroHealth has not only expanded the boundaries of its business model, but also innovated in care and service. This further emphasizes the advantages of the business model in terms of care orientation and user experience.

Dahua Sanchuang specializes in smart home solutions for the elderly, covering a wide range of product areas. The company has achieved business model optimization in product design through business model innovation that meets the needs of the elderly in their lives. This reflects the fact that business model optimization needs to be closely integrated with user needs, especially the special needs of the elderly, in order to increase the actual value of products.

Taken together, these three cases highlight the critical importance of business model optimization in product design for the elderly. By focusing on user needs, innovating care-oriented business models, and expanding business boundaries, these companies have not only improved the quality of product design for older adults, but also laid a solid foundation for sustainable development. This further emphasizes the importance of business models, which are critical to achieving sustainable development in product design for the elderly.

3. Analysis of satisfaction factors

(1) Influence of product characteristics on satisfaction with product design for the elderly

In product design for the elderly, product features are one of the key factors that directly affect user satisfaction. The design of product features needs to take into account practicality and ease of use to meet the special needs of the elderly. Taking Jingdong Digital as an example, its smart health monitoring device has a clear interface and simple operation, which is carefully designed for the lifestyles of the elderly. This meticulous attention to product features directly increases older people's satisfaction with the product. Numerous studies have been conducted to show that this theoretical framework encompasses social, psychological and organizational issues, particularly the relationship between family, self-esteem, performance and needs, and human rights^[3]

(2) Importance of service quality in product design satisfaction among older persons

Service quality plays a crucial role in product design for the elderly. From the digital health services of MicroMedicine to the smart home solutions of Dahua Sanchuang, good service quality directly affects the user's overall experience of the product. Regular home visit services, digital healthcare consulting, and after-sales support for smart devices are all means to improve service quality, which in turn improves the satisfaction of product design for the elderly.

(3) The role of user experience in product design satisfaction among older adults

Satisfaction with product design for the elderly is not only dependent on product features and service quality, but also directly affected by user experience. User experience not only includes the simplicity of product operation, but also involves the humanized design of the product and the interactive experience with the user. For example, Dahua Sanchuang's smart home solution puts user experience at the core of its design, creating a more friendly product interaction experience for elderly users through voice recognition and intelligent control. This design concept that focuses on user experience directly improves product satisfaction.

After synthesizing the above three aspects of the analysis of the factors of satisfaction in product design for the elderly, it is not difficult to find that product features, service quality and user experience are three key factors that complement each other. They are intertwined and constitute the cornerstone of satisfaction in product design for the elderly. Further digging into the intrinsic connection of these factors can provide powerful guidance for the design of products that better meet the needs of the elderly and promote the innovation and development of the field of product design for the elderly.

4. Market Trends and Competitive Landscape

(1) Impact of market trends on the design of products for older persons

The field of product design for the elderly is profoundly influenced by market trends. With the accelerated development of China's aging society, the needs of the elderly for health, convenience and high quality of life are gradually coming to the fore. This has led to a shift in the elderly product design market towards a smarter, more caring and personalized direction. Taking Smart Life as an example, it has a keen understanding of market trends and has launched a series of smart products to fulfill the pursuit of convenient life for the elderly through a deep understanding of their needs. Therefore, a deep understanding of market trends has become a key strategy in product design for the elderly.

(2) Competitive landscape shaping the design of products for older persons

The competitive landscape of the geriatric product design market directly shapes the direction of the industry. In a highly competitive market, companies need to remain competitive through innovation, differentiation and efficient operations. Companies such as Jingdong Digital, MicroMedicine and Dahua Sanchuang have stood out from the competition, each establishing a more solid market position through specialization in different areas. Jingdong Digital Technology features intelligent health monitoring, MicroMed focuses on digital health services, and Dahua Sanchuang specializes in smart home solutions, forming a competitive landscape with its own distinctive features.

(3) The role of innovation models in market competition

Innovation models play a crucial role in the competitive market of product design for the elderly. It is not only the innovation of products, but also the innovation of business models and services. For example, Ying An Kang's innovation in business model is manifested in the rapid product update and iteration and the provision of personalized services, which enables the enterprise to maintain a competitive advantage in the market. The innovative model not only brings differentiated competition in the market, but also promotes the overall progress and evolution of the product design market for the elderly.

(4) Prospects for the future direction of the industry

Looking ahead, the product design market for the elderly will continue to develop in the direction of intelligence, personalization and full-service. With the continuous progress of science and technology, intelligent products will better meet the needs of the elderly. Personalized design and service will become the core competitiveness of product design. At the same time, cross-border

cooperation and open innovation mode will further promote the development of the product design market for the elderly, forming a more diversified and ecological pattern.

Comprehensively discussing the market trend and competition pattern of product design for the elderly in the above four aspects, we deeply realize the indispensability of market trend, competition pattern and innovation mode in product design for the elderly. In the outlook for the future, grasping market trends, responding flexibly to the competitive landscape, and continuously innovating models will be an important path for enterprises to succeed in the field of product design for the elderly.

5. The future of the product design market for the elderly depends largely on innovation

With the deepening of the aging society, product design for the elderly is no longer just about meeting basic functions, but also about combining innovative technologies and caring concepts to meet the diverse needs of the elderly. Innovation-oriented design requires companies to find new breakthroughs in product features, service quality and user experience, and provide more convenient and humanized solutions through technological means.

(1) In-depth analysis of the competitive landscape of the market

The competitive landscape of the geriatric product design market directly shapes the direction of the entire industry. Analyzing companies such as Jingdong Digital Technology, Micromedicine, and Dahua Sanchuang, we can see that each company has established a specialized market position in different areas. An in-depth analysis of the competitive landscape of the market requires a comprehensive consideration of a company's strategy, product innovation, market share, and customer satisfaction, among other aspects. Through an in-depth understanding of the competitive landscape, companies can better plan their development strategies and find their position in the market.

(2) Market development for product design for the elderly in the context of sustainable competition

In a competitive market environment, sustainable competition is key to the development of the market for product design for older persons. Companies need to continue to innovate, adapt to market changes, improve product quality and focus not only on current needs but also on future trends. In the development outlook, sustainable competition will drive the geriatric product design industry to pay more attention to environmental protection, social responsibility and long-term value realization. Only on a sustainable basis can the geriatric product design market achieve sound development.

Through in-depth analysis of the Product Design for the Elderly market under innovation orientation, competitive landscape and sustainable competition, we can not only better understand the dynamics of the industry, but also provide strong strategic guidance for enterprises. Innovation is the driving force behind the continuous progress of the product design market for the elderly, while an in-depth analysis of the competitive landscape will help companies find differentiated competitive advantages. In the context of sustainable competition, companies need to plan and execute strategies with a long-term perspective in order to stand out in the fierce market competition.

6. Reach a verdict

From the perspective of comprehensive innovation orientation, in-depth analysis of market competition pattern, and sustainable competition, the product design market for the elderly is ushering in a brand new period of development. Innovation has become a key engine for industry progress, and enterprises should focus on combining technological innovation with caring concepts

to meet the challenges of an aging society with smarter and more caring products and services. The in-depth analysis of the competitive landscape of the market emphasizes the need for enterprises to position themselves accurately and gain a foothold in the competition through product differentiation and specialized services. The specialization of different enterprises in different fields forms a diversified market ecology, providing more diversified choices for the elderly.

Sustainable competition has been identified as the key to future development, which forces companies to maintain sharp market insights in both the short and long term. In a competitive environment, the only way to be invincible in the market is to constantly innovate, adapt to market changes, and improve product quality and service levels. Sustainable competition reflects the responsibility of enterprises in social responsibility and environmental protection, which is in line with the special nature of product design for the elderly and makes the industry more socially valuable.

Overall, the market for product design for the elderly is emerging as a dynamic and promising area. The power of innovation promotes the continuous upgrading of products, the diversification of the market competition pattern meets the needs of the elderly at different levels, and the requirements of sustainable competition are reminding enterprises to pay more attention to the social impact and long-term benefits in their operations. Against this backdrop of development, industry participants should work together to build a bright future for the product design market for the elderly with keen insight, innovative thinking and sustainable development strategies.

References

- [1] Ministry of Civil Affairs. Ministry of Civil Affairs holds regular press conference for the fourth quarter of 2020 [EB/OL]. <http://www.mca.gov.cn/article/xw/mtbd/202010/20201000030017.shtml>, 2021-10-26/2022-04-20.
- [2] Ministry of Industry and Information Technology. Notice on Effectively Solving the Difficulties of the Elderly in Applying Intelligent Technology and Facilitating the Use of Intelligent Products and Services by the Elderly [EB/OL]. Letter No.18 [2021] of the Ministry of Industry and Information Technology. https://www.miit.gov.cn/jgsj/xgj/wjfb/art/2021/art_f34ef0284e164abbb3c6ef193aa20586.html
- [3] Caulton J R. The development and use of the theory of ERG: a literature review [J]. *Emerging Leadership Journeys*, 2012, 5(1):2-8.