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Designing Sustainability for All

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Business Model Design Based on the Concept of Sustainable Development

A Service Design of the Physical Idle Mall as an Example

ABSTRACT

In the first half of 2018, the total retail sales of consumer goods in China reached 18 trillion yuan, a year-on-year increase of 9.4%. In addition to what we often call the concept of consumption upgrades, the trading of idle goods is also highly anticipated. Reasonable reuse or sharing of old things reflects the concept of sustainable development. The article aims to study how to use commercial services to make old and more rational and effective use of sustainable development. The article studies consumer psychology and summarizes the problems of the network idle trading platform, compares and studies the advantages and disadvantages of the domestic and international flea market business models. Finally, a business model and service system for the sale of new used old goods with integrated physical stores was proposed.

THEORETICAL BASIS

People are familiar with the concept of "flea market", which originated in France. As there are many conveniences for buyers and sellers, the flea market has gradually spread to world. Through transactions in flea markets, sellers can sell goods that have been eliminated from the market, and buyers can also purchase excellent and cheap goods, while reducing waste of resources. At present, network become the most important sales channel that is second only to the traditional physical channels. Due to the limitations of online shopping, the hoarding of idle and unwelcome items is increasingly serious. On the contrary, the rational reuse or sharing of old items embodies the concept of sustainable development. Therefore, the online "flea market" has also become a member of the online shopping market. However, China's second-hand turnover still lack authoritative and accurate data. The network market in developed countries has a more complete intellectual property protection system, credit system and logistics distribution system than the domestic network market, with most mature mechanism for purchasing and selling second-hand products and the more advanced sense of sharing consumption.

Development of Second-hand Business

Problems Existing in China's Second-hand Trading Market

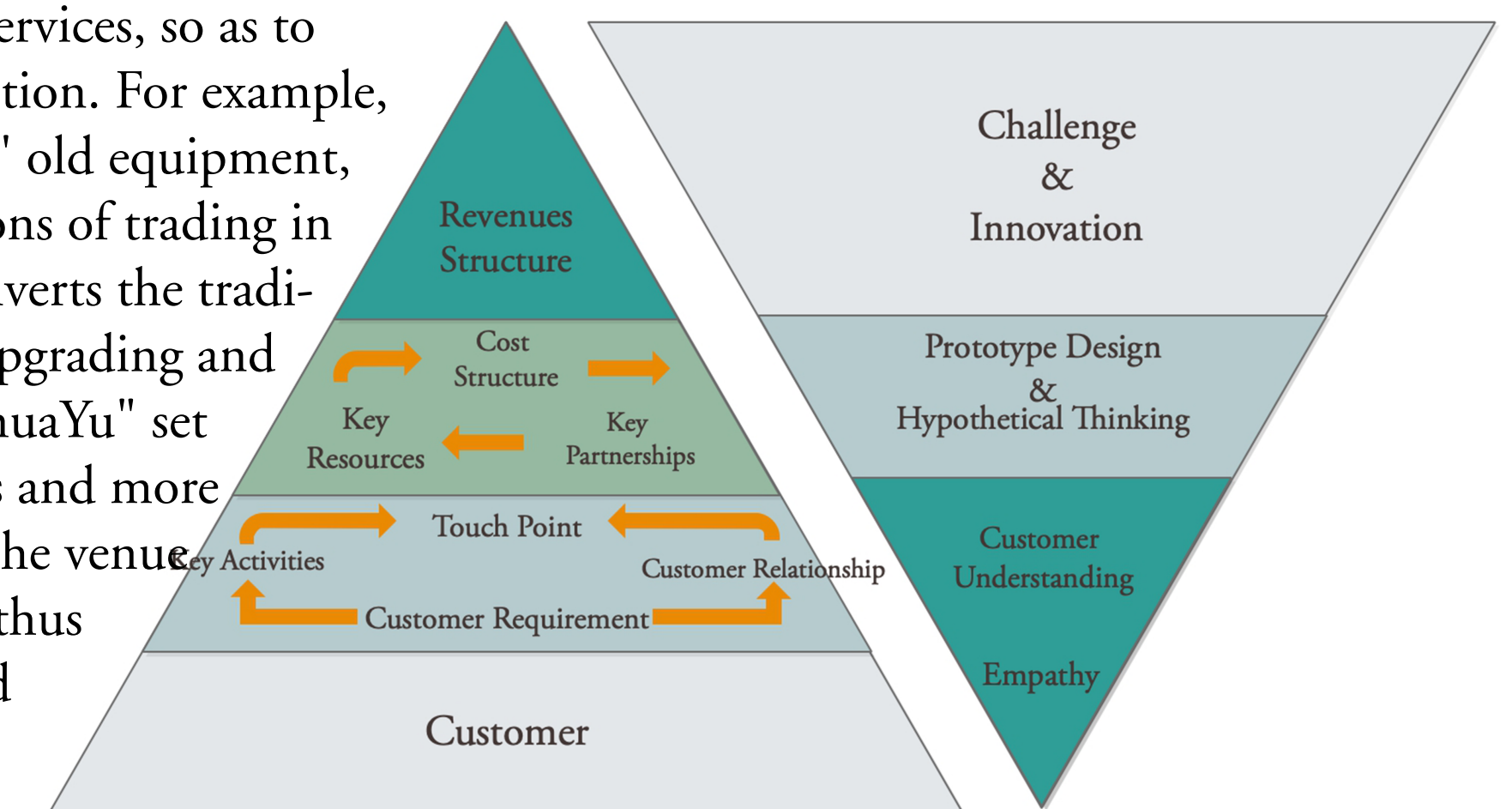
Asymmetric market information Uneven quality of commodities It is difficult for consumers to safeguard their rights Incomplete credit system

INTRODUCTION

Through the investigation of the development of related second-hand businesses at home and abroad, the paper has defined the second-hand business that China needs to develop in line with the concept of sustainable development. This paper also explores the problems in China's secondary market, puts forward a new business model of second-hand idle commodities based on foreign excellent cases, that is, a business model that integrates offline sales of physical stores and online service cooperation. Moreover, combined with the design thinking of service design, it's has also created a sustainable business model with customer demand as the centre, and the recycling, sorting and selling as the standard procedures, as well as advocating the concept of sustainable development and sharing as the value proposition.

Practical Cases and Service Design Concept of Second-hand Business

The concept of product service system is to transform tangible products into intangible services, so as to reduce the environmental impact brought by the waste of resources and product consumption. For example, "Apple Giveback", it offers discount prices for Apple's own old products and competitors' old equipment, as well as waste recycling options for antique mobile phones that do not meet the conditions of trading in the old for the new; "Plum" also provides diversified services to obtain more users, and converts the traditional second-hand trading demand into a consumption scene of "fashion consumption upgrading and rapid cycle iteration" through strong product category, technology and data drive; "DuoZhuaYu" set up a temporary offline bookstore in Beijing with a traffic volume of about 3,500 in 6 days and more than 20,000 books being sold which is much higher than that of traditional bookstores. The venue of the bookstore plays beautiful jazz music, and books are divided according to difficulty, thus attracting the attention of many readers. This online platform learned from Japan's second-hand bookstore "Bookoff".

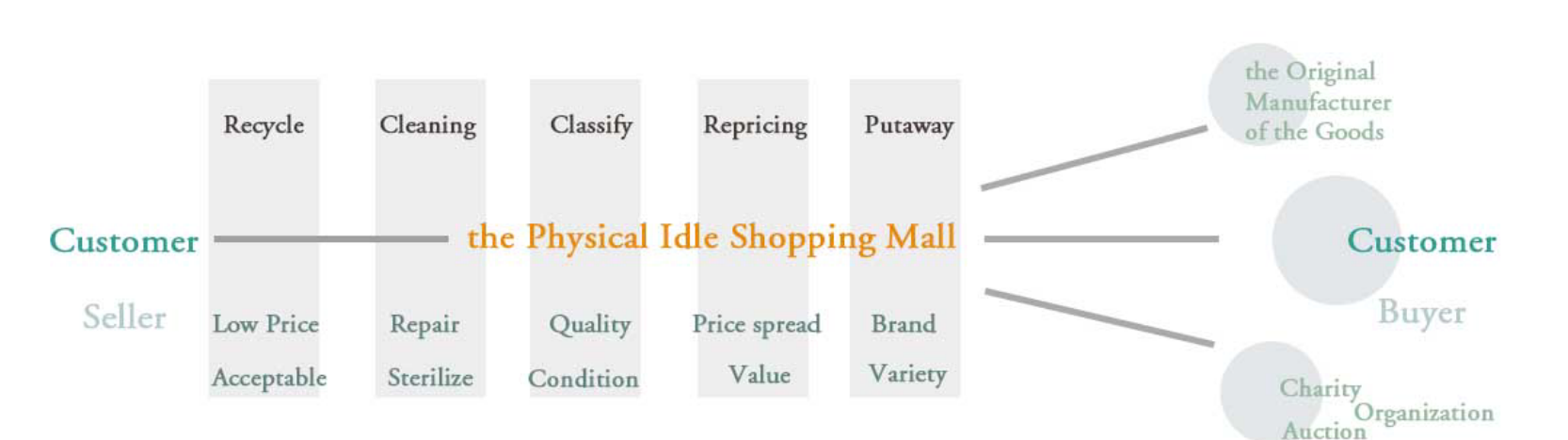


SERVICE DESIGN & BUSINESS MODEL of PHYSICAL IDLE SHOPPING MALL

Value Discovery

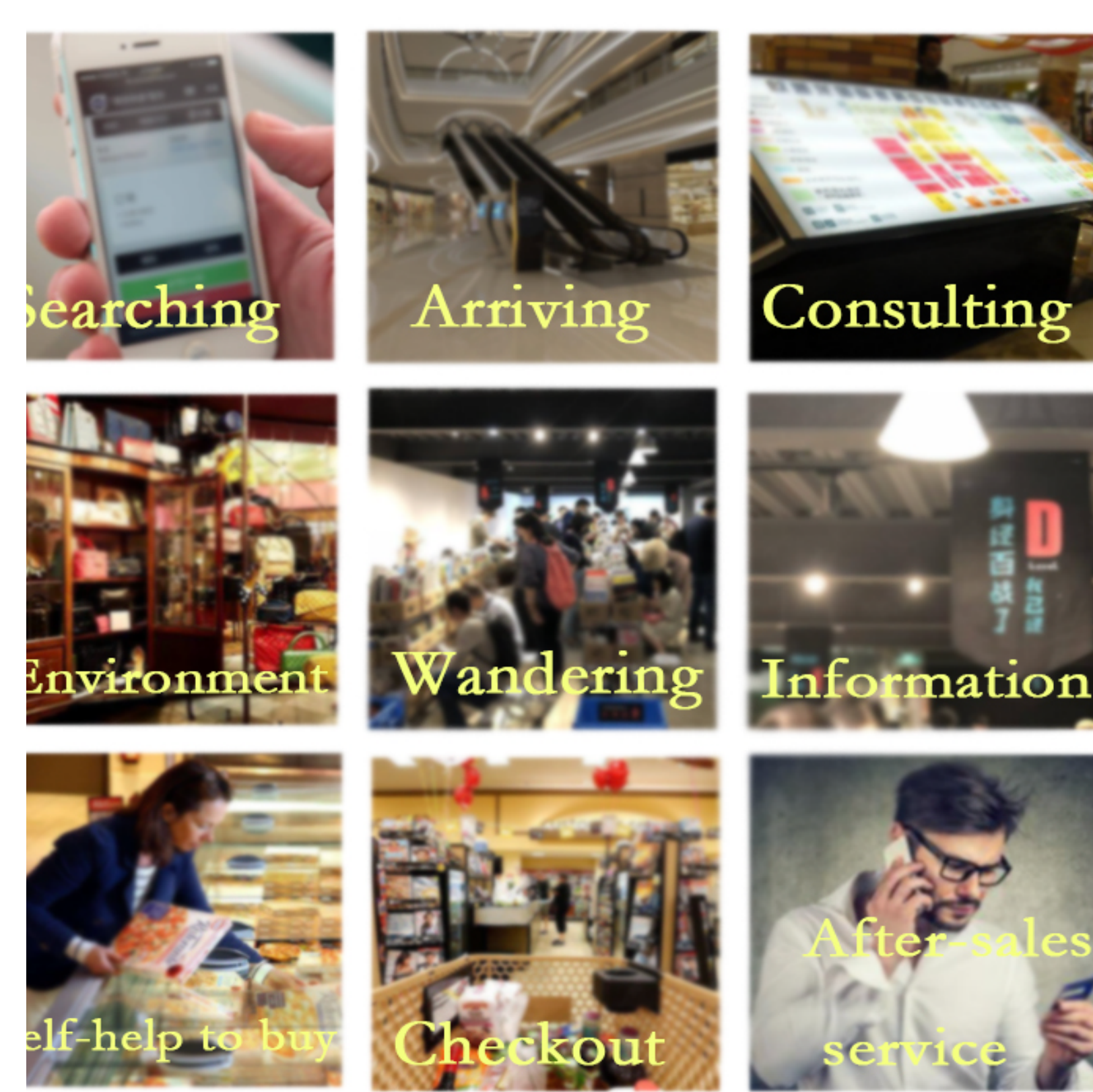
According to "Quest mobile data", as of the end of 2017, the number of second-hand transaction users in China was close to 40 million, while the penetration rate of mobile Internet was only 3.6%, the number of second-hand trading users in China is 80% lower than that in the second tier, while the users under the age of 24 is 50%. Consequently, young Chinese users are pursuing the improvement of material life, instead of fully realizing the sustainable development and sharing. Therefore, the current second-hand business service design has a deeper objective, that is, to convey the awareness of sustainable development and sharing to the whole society.

How to circulate more kinds of second-hand goods through the combination of online and offline transactions? Through a questionnaire study of 100 college students' views on e-commerce, physical shopping malls and second-hand trading Apps, the paper found that the young people think that it is better to donate or exchange or trade idle items than to throw them away. Surely, they also hope to buy good and cheap second-hand goods at low prices. Based on the needs of users, this paper uses the mode of converting second-hand businesses from a single online transaction to a combination of online transactions and offline physical stores for service design.



Business Model Analysis & Product Service System Design

Key Partnerships <ul style="list-style-type: none"> 1. Relevant Government Department 2. Products' Source Manufacturers 3. Charitable Funds 4. Auction Company 5. Famous Hypermarket 	Key Activities <ul style="list-style-type: none"> 1. Idle Stores 2. Online Store 3. Diversification 	Value Propositions <ul style="list-style-type: none"> 1. Advocating Sustainable Development 2. Raise People's Awareness of Sharing 3. Save Energy & Protect the Environment 4. Improve Life Quality 	Customer Relationships <ul style="list-style-type: none"> 1. Recycling & Selling 2. Sort & Reprice 3. Self-service & Online 	Customer Segments <ul style="list-style-type: none"> 1. Young People (Students) 2. Housewives 3. Woman 4. Environmentally Conscious People 5. People with a Sense of Sharing 6. A Lover of Luxury or Some Other Object
Cost Structure <ul style="list-style-type: none"> 1. Human Cost 2. Site & Management Costs 3. Marketing Cost 	Revenue Streams <ul style="list-style-type: none"> 1. Purchase & Sale Price Differentials 2. Transaction Information Platform Service Revenue 3. Advertising Revenue 			



CONCLUSION

To sum up, it is the requirement of the development of the times to integrate design thinking such as service design into the establishment of business models. Reasonable use of second-hand goods in life can not only reduce unnecessary waste, but also give full play to the greater value of products and make significant contributions to the shortage of resources and sustainable development. Based on this concept, this paper proposes a new second-hand trading business model and introduces the main contact points in its service system. As people's awareness of sharing gradually increases, people's demand for second-hand transactions will also increase correspondingly. Therefore, the establishment of a reasonable and comfortable trading environment for users is the primary concerns of designers. Basically, this article only introduces the service design of the physical idle mall in theory without covering all its contents. Consequently, how to establish and plan the complete life cycle of "recycling - sorting - selling" of second-hand goods is still the direction that needs further research in the future.



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