

# Barriers to the Adoption of Surplus Food Blind Box Platforms Among Consumers in Shanghai, China

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## **Abstract**

A surplus food blind box refers to a package in which merchants bundle unsold food from the day, still within its safety and shelf-life period, and sell it at a discounted price in the form of a blind box. Compared with the stable and operational surplus food blind box platforms established in Europe and other regions, China has yet to develop a mature, widely adopted model with nationwide coverage. Although domestic pilot platforms such as “XiShi Magic Food Bag”(惜食魔法袋) have been launched in some cities, offering preliminary practices based on “unknown combinations and discounted prices,” these efforts remain at the trial stage and have limited reach among consumers. This study was conducted by quota sampling through a professional survey company, and the subjects were consumers in the Shanghai area who had previously purchased takeaway food. A total of 300 questionnaires were collected and 298 valid ones were returned, with a response rate of 99.33%. This study is grounded in the Technology Acceptance Model (TAM) and constructs a conceptual framework comprising six key variables: perceived risk, platform trust, perceived ease of use, green attitude, price consciousness, and behavioral intention. It aims to explore the factors influencing consumers’ intention to use surplus food blind box platforms. Using literature review and questionnaire survey data, the study employs SPSS 30.0 to conduct correlation analysis, regression analysis, and mediation testing. Results indicate that perceived ease of use, green attitude, and price consciousness significantly and positively influence consumers’ behavioral intention. The research results also show that the higher the perceived risk, the lower the consumers’ intention to adopt surplus food blind box platforms. Platform trust plays a partial mediating role in both the “perceived risk → behavioral intention” and “perceived ease of use → behavioral intention” pathways. These findings provide valuable insights for promoting the adoption of surplus food blind box platforms and advancing sustainable consumption.

## **Keywords**

Surplus Food Blind Box, Behavioral Intention, Sustainable Consumption