

## Identification of Factors Influencing Consumers Willing to Use on Shared Lunch Boxes

Sili Wang<sup>1</sup> and Jianjun Wang<sup>2</sup>

<sup>1</sup>School of Economics and Management (School of Tourism), Dalian University, Dalian 116622, P. R. China

<sup>2</sup>Guangzhou College of Technology and Business, Guangzhou 510850, P. R. China  
wanglili@msn.cn

### Introduction

With the development of the network and the transformation of people's lifestyles, takeaway has become an indispensable part of people's lives. This study takes the shared lunch box as the main solution to take out lunch box pollution, and uses descriptive statistics and factor analysis to study consumers' willingness to use shared lunch boxes and the influencing factors. The results show that consumers have a high acceptance of shared lunch boxes, environmental protection, visual, communication and recommendation are the main factor promoting consumers to use shared lunch boxes.

### Research Questions

Aim 1: Consumer awareness and acceptance of shared lunch boxes.

Aim 2: Promoting factors for customers to accept shared lunch boxes.

Aim 3: The influence of influencing factors on the willingness to use the shared lunch box.

Aim 4: To offer suitable suggestions to promote the shared lunch boxes.

### Methodologies

This study mainly used convenient sampling, random research methods to obtain questionnaires. The questionnaire included basic information, an analysis of the acceptance of factors related to shared lunch boxes, and an analysis of factors influencing the choice of shared lunch boxes. A total of 473 questionnaires were distributed, and 435 valid questionnaires were collected. Efficiency is 92%. Following the practice of most scholars, this study uses SPSS software to present the current status of research questions and identify factors influencing consumers' choice of shared lunch boxes through percentage and factor analysis.

### Tables

Table 1. The degree of support for shared lunch boxes

Particulars	No. of Consumers	Percentage to Total
Supported	339	78%
Unsupported	96	22%

Table 2. Results for factor analysis

Particulars	Level							
Price	Speed of deposit return	.785	.220	-.175	.105	-.162	-.286	.011
	Reasonably priced	.763	.102	-.065	.211	-.027	.093	.297
	Price and quality match	.744	.133	.267	-.190	.208	.049	-.151
	The discount is big enough	.644	.344	.193	-.089	-.048	-.113	.323
Effective customer service channels		.259	.845	-.086	.197	.167	-.061	.057
	Problems can be solved quickly	.405	.744	-.269	.261	.085	.051	-.015
Communication	Effective communication channels	.126	.581	.249	-.059	-.025	.329	.244
	advertisement	.115	.573	.359	-.029	.364	.154	.082
Environmental protection	Environmentally friendly	.043	.111	.738	.086	.138	.098	-.132
	Cleanliness	.004	-.002	.731	.170	.010	.137	.049
Recommendation	heat insulating ability	.017	-.091	.663	.338	-.074	.158	.093
	People surrounded are using most people around are using	-.012	.224	.137	.819	.249	-.013	.022
Visual	People recommend it to me	-.052	-.090	.266	.757	.137	.077	.098
	Specific needs	.140	.007	-.040	.174	.830	.103	.170
Government endorsement	Packaging visuals	.066	.185	.136	.118	.808	-.053	.209
	good-looking	-.001	.230	.018	.353	.585	.402	.094
Recycling channel	government propaganda	.119	-.035	.042	.152	.070	.816	-.015
	government support	.093	.193	.314	.079	.054	.696	.175
Recycling channel	government endorsement	.029	.061	.193	-.153	.069	.611	.348
	The operation process is simple	.127	.075	.093	.115	.242	.130	.816
Recycling channel	many recycling channels	.101	.107	-.125	.083	.188	.191	.767

Table 3. Results for regression analysis

Model	Unstandardized Coefficient	Standardized Coefficients	t	sig	R <sup>2</sup>	DW
	B	Beta				
Constant	-.249	.159				
Environmental protection	.344	.064	.214	5.355	.000	
Visual	-.112	.053	-.092	2.111	.035	
Price	-.106	.064	-.069	1.656	.099	1.932
Recycling channel	.041	.050	.032	.821	.412	
Communication	.688	.049	.630	14.172	.000	
Recommendation	.234	.063	.154	3.690	.000	
Government endorsement	.077	.061	.049	1.265	.207	

Dependent variable: Willing to use shared lunch box

### Conclusion

In this study, the principal factor analysis method with the largest rotation of orthogonal variance was used to determine the variables affecting consumers' willingness to use shared lunch boxes, and a total of 7 factors were obtained, as shown in the table. Factor F1 is environmental protection, F2 is visual demand, F3 is price, F4 is recycling channel, F5 is communication, F6 is recommendation and F7 is government intervention.

Environmental protection, visual, communication and recommendation are main effect factors for consumers to use.