

Knowledge technology, Perceived convenience, Self-Efficacy, Perceived ease of use, and Behavioral intention to use in fast food restaurants in Beijing, China

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ABSTRACT

The research investigated the knowledge technology, perceived convenience, self-efficacy, perceived ease of use, and behavioral intention to use in fast food restaurants in Beijing, China. The conceptual framework was developed from the literature review, survey, and other contemporary research in human resource management and consumer behavior. Accordingly, the researchers consider the importance of knowledge technology, perceived convenience, self-efficacy, perceived ease of use, and behavioral intention to use in fast food restaurants in Beijing, China. In this, the researchers employed the quantitative research approaches. The instruments of research were the steps of a questionnaire. Data were collected from 385 people who are entrepreneurs of fastfood restaurant in Beijing. The data collected were analyzed using descriptive statistics as mean, standard deviation, and percentage on the basis of observing the actual behavior intention to use for fastfood restaurant in Beijing, China studied through all operational links in efficiency. Findings are applications of knowledge technology, perceived convenience, self-efficacy, perceived ease of use, and behavioral intention to use are mostly-level.

INTRODUCTION

The modern fast food (FF) industry in China started when the first KFC restaurant opened in Beijing in 1987. Over the past two decades, the industry grew rapidly, due to rapid developments of China's economy, urbanization, increased family income, shifts in social norms (e.g., shifting from eating at home to more frequently eating out), strong marketing strategies by the FF industry, increased FF service providers, improvements in chain store and franchising management, and new brands and food choices. The FF industry had estimated revenues of \$94.2 billion in 2013, making up about 20.0% of the total catering sub-sector revenue in China.

The majority of fast-food restaurants in China are privately owned (e.g., 76% in 2012). American fast-food restaurants expanded rapidly in China, especially in the past decade. The following key Western fast-food restaurants show the expansion: (a) KFC is the largest foreign brand in China in terms of the number of restaurants, which were distributed in over 1000 cities in 2015, covering all provinces in China except for Tibet; (b) McDonald's opened its first restaurant in Shenzhen in 1990. In 2013, it owned over 2000 outlets; and (c) Pizza Hut opened its first store in Beijing in 1990. In 2015, Pizza Hut became the largest Western casual dining brand in China.

Domestic Chinese style fast-food restaurants in China have expanded as well, and have been largely affected by Western fast-food restaurants. They together have stimulated demand for fast-food restaurants in China. The main types of Chinese style fast-food restaurants include: (a) the Malan Noodle fast-food restaurants Chain, founded in 1995, is the largest domestic fast-food restaurants chain, but is much smaller than the American fast-food restaurants chains like KFC and McDonald's. In 2008, Malan Noodle had over 400 chain

stores in China; (b) Chinese-style rice sets, quick-service restaurants and take-out facilities operate independently and are located in various settings including shopping centers and streets. They account for over one-third of the fast-food restaurants industry revenue; and (c) there are other Chinese-style noodle and dumpling stores that are particularly preferred for breakfast and lunch. These key domestic fast-food restaurants generated 43% of the total fast-food restaurants industry revenue in 2013.

METHODOLOGY

The study of factors affecting teenage consumers' behavioral intentions in fast food restaurants in Beijing, China, the researcher has studied documents, textbooks, concepts, theories, and related research consistent with the study's objectives. This research is quantitative research in the format is survey research. The research tool was a questionnaire. Data was collected by instrument-based interviews. The scope of the population is Chinese customer who teenage come to order fast food restaurants in Beijing, China which the researcher did not know the exact number during the research. The researcher chooses the three top fast food restaurants in serving in Beijing, China, including KFC fast-food restaurants, Dicos fast-food restaurants, McDonald fast-food restaurants from 1 July -1 August 2023. The sampling is 385 people by the formula W.G. Cochran (1953). The selected sample used in this study was for Chinese teenage customer who come to order fast food restaurant in Beijing and use only 3 restaurant on Mondays, Wednesdays, and Fridays for 4 weeks in 1 August – 1 September 2023, but the exact population was unknown. Therefore, a calculation method was used using the formula W.G. Cochran (1953) at a confidence level of 95% with a tolerance of $\pm 5\%$. Knowledge technology, Perceived convenience, Self-Efficacy, Perceived ease of use, and Behavioral intention to use of Chinese teenage customer who come to order fast food restaurant in Beijing the mean (\bar{X}) and the standard deviation (S.D.) were analyzed using a 5-interval approximation scale to count and weight each performance level and the performance level of the sample group of respondents by assigning numbers instead of weights. The researcher used a 5-level estimation scale by choosing the Likert method and at each level,

RESULTS

Personal characteristics of Chinese customer in Beijing, China

Table 1 Personal characteristics of Chinese teenage customer in Beijing, China

Characteristics of Chinese customer	Number (n=385)	Percentage
Gender		
Male	230	59.74
Female	155	40.26
Age		
18 - 25 Year	113	29.35
26 – 35 year	63	16.36
36 – 45 year	126	32.73
More than 46 year	83	21.56

Marital status		
single	129	33.51
married	138	35.84
divorced	118	30.65
Degree of education		
lower than bachelor's degree	115	
Bachelor's degree	127	29.87
Graduated	143	32.99
		37.14
Working time		
1-3 years	120	30.91
4-6 years	187	49.09
More than 7 years	78	20.00
Monthly income		
1000-3000 Yuan	127	32.99
3001-5000 Yuan	146	37.92
5001-8000 Yuan	112	29.09

From the table 4.1, the perspective of gender, male are significantly higher than female, accounting for 59.74 percentage, and female 40.26 percentage.

Regarding the age of Chinese customer, the highest proportion was 36-45 years old, accounting for 32.73%, followed by Chinese customer aged 18-25 years and Chinese customer aged 26-35 years, accounting for 29.35% and 16.36%, respectively, and Chinese customer over 46 years old. Representing 21.56% said that fast food restaurants Chinese customer who responded to the survey were generally middle age.

Regarding marital status, 35.84% were single, 33.51% were divorced, and 30.65% were related to the age distribution. The company had many young Chinese customer.

From the perspective of educational background, Chinese customer in Beijing China generally have lower than bachelor's degree, Bachelor's degree, and postgraduate accounting for 29.87, 32.99 and 37.14% respectively.

From the perspective of working years, the Chinese customer in Beijing China are generally in the range of 1-3 years, 4-6 years of employment, accounting for 30.91 and 49.09 respectively, and the employees who have worked for more than 7 years also account for a certain proportion, 20.00%.

In terms of monthly income, 37.92% of Chinese customer in Beijing China have a monthly income of 3000-5000 Yuan, 29.09% of Chinese customer have a monthly income of 5000-8000 Yuan, and only 32.99% of Chinese customer have a monthly income of 1000-3000 Yuan, indicating that the average monthly income of Chinese customer has basically reached the middle-income level.

The opinion level results on factors affecting teenage consumers' behavioral intentions in fast food restaurants in Beijing, China.

To study Knowledge technology, Perceived convenience, Self-Efficacy, Perceived ease of use, and Behavioral intention to use in fast food restaurants in Beijing, China

1. Knowledge Technology

Table 2 the level of opinion about the Knowledge Technology

Knowledge Technology	Mean	S.D.	Level	Rank
1. I know that ordering food through self-service technology platforms is convenient.	3.777	.554	most	5
2. I know that ordering food through self-service technology platforms is financially safe.	4.229	.612	mostly	1
3. I know that food orders through self-service technology platforms will be delivered quickly.	4.215	.553	mostly	2
4. I know that ordering food through self-service platforms technology receives the correct product according to the order	3.884	.666	most	4
5. I know that ordering food through self-service technology platforms is not a problem of misuse or damage	3.985	.635	most	3
Total	4.018	.604	most	

From Table 2, the mean and standard deviation of the opinion level of the Knowledge Technology variable is at a high level, with the mean value at a most level being 4.018. Comprehensive from all aspects, the average of the mostly side is "I know that ordering food through self-service technology platforms is financially safe.", most level average of 4.229, followed by "I know that food orders through self-service technology platforms will be delivered quickly" most level of average of 4.215, "I know that ordering food through self-service technology platforms is not a problem of misuse or damage" most level of average of 3.985, "I know that ordering food through self-service platforms technology receives the correct product according to the order" most level of average of 3.884, the last is "I know that ordering food through self-service technology platforms is convenient", the average is 3.777, in the most level.

2. Perceived ease of use

Table 3 the level of opinion about Perceived ease of use

Perceived ease of use	Mean	S.D.	Level	Rank
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1. It is very easy for me to ordering food using the self-service technology platform.	3.995	.611	most	4
2. I can learn to order food through the self-service technology platform in just a few minutes.	4.102	.628	most	3
3. It only takes me a few minutes to ordering food through the self-service technology platform.	4.365	.568	mostly	1
4. I can ordering food through the self-service platform technology while traveling.	4.222	.671	mostly	2
Total	4.171	.632	most	

From Table 3, the mean and standard deviation of the opinion level of the Perceived ease of use variable is at a high level, with the mean value at a most level being 4.171. Comprehensive from all aspects, the average of the mostly side is " It only takes me a few minutes to ordering food through the self-service technology platform", mostly level average of 4.365, followed by "I can ordering food through the self-service platform technology while traveling" mostly level of average of 4.222, "I can learn to ordering food through the self-service technology platform in just a few minutes" most level of average of 4.102, the last is "It is very easy for me to ordering food using the self-service technology platform", the average is 3.995, in the most level.

3. Self-Efficacy

Table 4 the level of opinion about after Self-Efficacy

Self-Efficacy	Mean	S.D.	Level	Rank
1. I like ordering food through self-service technology platforms.	4.102	.634	most	5
2. I order food through self-service technology platforms rather than in-store.	4.117	.612	most	4
3. I feel that ordering food through self-service technology platforms has more products to easy choose from than in the store.	4.128	.698	most	3
4. I feel that ordering food through the self-service technology platforms is more comparable.	4.237	.646	mostly	2
5. I prefer ordering food through a self-service technology platforms rather than going to service from the store.	4.429	.599	mostly	1
Total	4.203	.638	most	

From Table 4, the mean and standard deviation of the opinion level of the Self-Efficacy variable is at a mostly level, with the mean value at a mostly level being 4.203. Comprehensive

from all aspects, the average of the mostly side is "I prefer ordering food through a self-service technology platforms rather than going to service from the store", mostly level average of 4.429, followed by "I feel that ordering food through the self-service technology platforms is more comparable" mostly level of average of 4.237, "I feel that ordering food through self-service technology platforms has more products to easy choose from than in the store" most level of average of 4.128, "I order food through self-service technology platforms rather than in-store" most level of average of 4.117, the last is "I like ordering food through self-service technology platforms", the average is 4.102, in the most level.

4. Perceived Convenience

Table 5 the level of opinion about Perceived Convenience

Perceived Convenience	Mean	S.D.	Level	Rank
1. Service is considered convenient when it saves time for consumers.	3.988	.548	most	5
2 .Using a self-service technology platform reduces product lead times.	4.114	.612	most	4
3 .Using the self-service technology platform, it is easy to order food.	3.811	.636	most	6
4 .Using self-service technology platforms provides convenience to buyers.	4.343	.638	mostly	1
5. Using social media platforms to get products quickly.	4.287	.654	mostly	2
6. I am confident that the products sold on self-service technology platforms are good quality	4.211	.681	mostly	3
Total	4.126	.628	most	

From Table 5, the mean and standard deviation of the opinion level of the perceived convenience variable is at a most level, with the mean value at a mostly level being 4.126. Comprehensive from all aspects, the average of the mostly side is "Using self-service technology platforms provides convenience to buyers", mostly level average of 4.343, followed by "Using social media platforms to get products quickly" mostly level of average of 4.287, "I am confident that the products sold on self-service technology platforms are good quality" mostly level of average of 4.211, "Using a self-service technology platform reduces product lead times" most level of average of 4.114, "Service is considered convenient when it saves time for consumers" most level of average of 3.988, the last is "Using the self-service technology platform, it is easy to order food", the average is 3.811, in the most level.

5. Behavioral intention to use

Table 6 the level of opinion about the Behavioral intention to use

Behavioral intention to use	Mean	S.D.	Level	Rank
1. I have an intention to order food through self-service technology platforms only.	4.109	.632	most	4
2. I intend to order food through a self-service technology platform even though there are many alternatives.	4.324	.621	mostly	1
3. I have the intention of order food through a self-service technology platform even though I find the same product at another store.	4.238	.588	mostly	2
4. I intend to recommend order food through self-service technology platform to friends and relatives.	4.144	.632	most	3
Total	4.204	.618	most	

From Table 6, the mean and standard deviation of the opinion level of the behavioral intention to use variable is at a mostly level, with the mean value at a mostly level being 4.203. Comprehensive from all aspects, the average of the mostly side is "I intend to order food through a self-service technology platform even though there are many alternatives", mostly level average of 4.324, followed by "I have the intention of order food through a self-service technology platform even though I find the same product at another store" mostly level of average of 4.238, "I intend to recommend order food through self-service technology platform to friends and relatives" most level of average of 4.144, the last is "I have an intention to order food through self-service technology platforms only", the average is 4.109, in the most level.

CONCLUSION

The mean and standard deviation of opinion levels regarding factors affecting behavioral intention to use are at a most overall level, with a most-level mean at 4.144. From each variable, we found that the mostly average was Behavioral intention to use (4.204), at a mostly level, followed by Self-Efficacy (4.203), at a mostly level, perceived ease of use (4.171) at a most level, perceived convenience (4.126), at a most level, and the lowest was knowledge technology, with an average of 4.018.

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