# Applying the Kano model to explore the quality requirements of fast food restaurant

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**ABSTRACT:** The fast-food restaurant market is gradually reaching saturation. It is necessary to understand customer needs and satisfy customers with quality to attract more customers. This study applied the Kano model analysis and found that items that can both highly increase customer satisfaction and highly reduce customer dissatisfaction include three items: providing detailed instructions for employee meetings; clear internal facilities, movement routes, and guidance notices: The work can truly fulfill its commitment to customers. The fast-food restaurant can improve these items to improve customer satisfaction and increase revenue. **KEYWORDS-** fast food restaurant, Kano model, service quality

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### **I INTRODUCTION**

As the fast food restaurant market is gradually reaching saturation, operators need to understand customer needs and satisfy customers with the quality of their services so that they can be more competitive. Based on the SERVQUAL scale proposed by Parasuraman et al. (1988), this study divides the measurement aspects of service quality into responsiveness, tangibility, reliability, caring, and assurance. Based on the questionnaire data to find benefits and improve service quality attributes. Based on the results of this analysis, we can identify the priorities for improving service quality and provide the company with a basis for formulating competitive strategies.

#### 2.1 Service Quality

#### **IILITERATURE REVIEW**

Kotler et al. (2009) indicated that Services or products should meet customers' needs and improve their satisfaction through quality. Parasuraman et al. (1985) and Bateson & Hoffman (2002) pointed out that service quality is based on customers' perceptions and expectations. measured by the service gap between them. Parasuraman et al. (1988) believe that service quality includes five major aspects, including Reliability; (2) Responsiveness; (3) Reliability; (4) Empathy; and (5) Tangible. The service quality measurement items in this study refer to the questionnaires of Phan & Phan (2021), Chung & Chen (2015), Ugboma et al. (2007), Parasuraman et al. (1988), and are modified according to the characteristics of fast food restaurants.

#### 2.2 Kano model

Kano's two-dimensional quality model divides quality items into five categories (Kano et al., 1984), including Attractive Quality Element (A), One-Dimensional Quality Element (O), Must-Be Quality Element,(M), Indifferent Quality Element (I), Reverse Quality Element (R). Matzler and Hinterhuber (1998) proposed a two-dimensional quality factor classification table modified by the Kano model, as shown in Table 1. Matzler and Hinterhuber (1998) also proposed the "customer satisfaction coefficient", and the coefficient calculation formula is as follows:

C (1): Satisfaction increment index = (A+O)/(A+O+M+I)

C (2): Dissatisfaction decrement index =  $(O+M)/(A+O+M+I) \times (-1)$ 

A: Attractive quality, O: One-dimensional quality, M: Must-be quality, I: Indifferent quality

## III RESEARCH METHOD

The quality measurement items in this study refer to the questionnaires of Phan & Phan (2021), Chung

& Chen (2015), Ugboma et al. (2007), Parasuraman et al. (1988), and are modified according to the operational characteristics of fast food restaurant R. The research subjects were customers in the store, and 36 questionnaires were collected from March 1 to March 30, 2024. The measured variable items include: (1) Responsiveness: Content includes: employees can respond quickly to customer needs (Item1); employees will provide detailed instructions (Item2); proactively assist and serve customers (Item3). (2) Tangibility: Content includes: employees keep neat clothing and appearance (Item 4); have modern and professional equipment internally (Item 5); internal facilities, circulation and guidance notices are clear (Item 6); service facilities meet customer needs (Item10). (3) Reliability: Contents include: employees can try their best to help customers solve problems (Item8); employees can truly fulfill their commitments to customers (Item9); employees can do things right the first time (Item10). (4) Caring: Content includes: employees will take the initiative to provide individual care to customers (Item11); employees will give priority to customers' interests (Item12); employees will understand individual customer needs (Item13); the workplace will understand customers Required services need to be provided (Item14). (5) Guarantee: Contents include: sufficient professional knowledge to respond to customer questions (Item 15); the workplace provides services that reassure customers (Item 16); employees can provide responsible services (Item 17); product prices are marked (Item 18).

#### **IV. RESEARCH RESULTS**

This study uses the calculation of Matzler and Hinterhuber's (1998) customer satisfaction coefficient to find a total of three "efficiency improvement service quality projects" that can simultaneously increase customer satisfaction and reduce customer dissatisfaction (Table 2). Including detailed instructions provided by the labor union (Item 2); clear internal facilities, movement routes, and guidance notices (Item 6): workers can truly fulfill their commitments to customers (Item 9). The results obtained based on this analysis can help R fast food restaurants identify priorities for improving service quality, thereby enhancing the company's competitiveness. In addition, a two-dimensional quality classification was made for service quality items, of which 12 items were classified as attractive qualities; and 6 items were classified as one-dimensional qualities (Table 2).

#### V. CONCLUSION

This study takes R fast food restaurant customers as the research object. It uses Kano's two-dimensional quality model to identify "efficiency improvement service quality projects" to provide operators with ways to improve service quality and formulate business strategies for future development. This study found that there are three "efficiency improvement service quality projects" that can simultaneously increase customer satisfaction and reduce customer dissatisfaction. Business operators must target these efficiency-quality projects to maintain good service quality to obtain maximum benefits.

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Negative Positive	I like it that way	Take it for granted	It does not matter	Can be tolerated	Dislike	
I like it that way	Uncertain	Attractive Quality	Attractive Quality	Attractive Quality	One-Dimensional Quality	
Take it for granted	Reverse Quality	Indifferent Quality	Indifferent Quality	Indifferent Quality	Must-Be Quality	
It does not matter	Reverse Quality	Indifferent Quality	Indifferent Quality	Indifferent Quality	Must-Be Quality	
Can be tolerated	Reverse Quality	Indifferent Quality	Indifferent Quality	Indifferent Quality	Must-Be Quality	
Dislike	Reverse Quality	Reverse Quality	Reverse Quality	Reverse Quality	Uncertain	

Table 1 Categories of two-dimensional quality elements of Matzler and Hinterhuber

 Table2 Kano classification and customer satisfaction coefficient table

Item	А	0	М	I	R	Q	Category	C(1)	C(2)
1	15	13	1	4	0	3	Α	0.848	-0.424
2	13	17	1	3	0	2	0	₩0.882	<b>※-0.529</b>
3	17	13	0	3	0	3	Α	×0.909	-0.394
4	10	15	3	6	0	2	0	0.735	<b>※-0.529</b>
5	15	12	2	5	0	2	Α	0.794	-0.412
6	14	15	0	3	1	3	0	×0.906	<b>※-0.469</b>
7	18	11	1	3	1	2	Α	×0.879	-0.364
8	16	11	2	4	0	3	Α	0.818	-0.394
9	11	19	1	2	1	2	0	×0.909	<b>※-0.606</b>
10	18	11	0	3	0	4	Α	×0.906	-0.344
11	18	10	0	6	0	2	Α	0.824	-0.294
12	13	15	1	5	0	2	0	0.824	<b>※-0.471</b>
13	17	11	0	5	0	3	Α	0.848	-0.333
14	18	12	1	2	0	3	Α	<b>※</b> 0.909	-0.394
15	18	10	1	5	0	2	Α	0.824	-0.324
16	17	13	1	3	0	2	Α	₩0.882	-0.412
17	14	13	4	2	1	2	Α	0.818	<b>※-0.515</b>
18	11	17	2	3	0	3	0	0.848	<b>※-0.576</b>
Total average								0.854	-0.432

A: Attractive quality, O: One-dimensional quality, M: Must-be quality, I: Indifferent quality

C(1): Increase customer satisfaction coefficient = (A+O)/(A+O+M+I)

C(2): Reduce customer dissatisfaction coefficient =  $(O+M)/(A+O+M+I)\times(-1)$ 

% Absolute value of table coefficient>Absolute value of overall coefficient average