

## **Study of Service Quality in Bakery**

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**ABSTRACT** :Bakery market is successively shared and bakeries should develop unique characteristics, control customers' needs and satisfy the customers with quality in order to attract more customers and increase the profits. By Kano model analysis, this study obtained 7 items which can highly increase customer satisfaction and highly reduce customer dissatisfaction: employees' neat and tidy costumes and appearance ; interior modernized and professional devices ; specific interior facilities, circulation and signs ; employees treat customers' benefits as priority; employees understand individual customers' needs; employees can provide responsible service ; specific indication of prices of goods. Bakeries can improve these items in order to upgrade customer satisfaction.  
**KEYWORDS**-bakery, Kano model, service quality

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### **I INTRODUCTION**

Since bakery market is successively shared and the competition is more severe, the bakeries should develop their unique services, control customers' needs and provide satisfying service quality in order to attract more customers and obtain higher profits. This study classifies dimensions of service quality into Responsiveness, Tangible, Reliability, Empathy and Guarantee. According to questionnaires, it recognizes the "service quality attributes to improve outcomes" which increase customer satisfaction and reduce customer dissatisfaction. According to analytical result, it assists with the bakery to recognize the priority to improve service quality and enhance competitiveness. Thus, the bakery avoids executing inappropriate strategies with great amount of resources and time.

### **II LITERATURE REVIEW**

Literature review includes two parts: study of service quality and Kano two-dimensional quality model.

#### **2.1 Service quality**

Hung (2004) argued that service quality is consumers' overall evaluation on service quality provided by the enterprises. Hsu (2009) suggested that service quality is a kind of abstract concept. Consumers' subjective difference results in cognitive difference of services. It is the comparison between customers' expectation and actual perception after receiving the service. Wakefield (2001) defined service quality as the gap between expected service and perceived service. Service quality is divided into tangible and intangible ones. Tangible service includes not only physical service, but also physical facilities, devices and the employees' appearance. Intangible service includes service performance, such as trust, response, guarantee and empathy. Kuo(2003) argued that service quality cannot be comprehended and measured as product quality which can be objectively measured, such as endurance and faulty products. Park et al. (2004) defined service quality as customers' overall impression of the whole organization and its service efficiency. Parasuraman et al. (1988) suggested that service quality includes five dimensions: Reliability; (2) Responsiveness; (3) Reliability; (4) Empathy; (5) Tangible. Haywood-Farmer (1998) stated that service quality includes three dimensions: (1) device, process and procedure; (2) service personnel's behavior; (3) service personnel's professional judgment. According to the scale proposed by Parasuraman et al. (1988), this study divides service quality into Responsiveness, Tangible, Reliability, Empathy, and Guarantee.

#### **2.2 Kano two-dimensional quality model**

Kano 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 the classification of Two-dimensional Quality elements of revised Kano model, as shown in Table 1. The relatively highest frequency is Two-dimensional Quality of the quality attribute. Kano questionnaire investigates the

customers' perception with and without the quality items by questionnaire survey. The items of responses are "I like it that way", "Take it for granted", "It does not matter", "Can be tolerated" and "Dislike". Formula of factors is shown below:

C (1): Coefficient to increase Customer Satisfaction =  $(A+O)/(A+O+M+I)$

C (2): Coefficient to reduce Customer Dissatisfaction =  $(O+M)/(A+O+M+I) \times (-1)$

A: Attractive Quality; O: One-Dimensional Quality; M: Must-Be Quality; I: Indifferent Quality

### **III RESEARCH METHOD**

According to Parasuraman et al. (1988), this study classifies dimensions of service quality into Responsiveness, Tangible, Reliability, Empathy, and Guarantee. Items of service quality are modified based on questionnaires of Chung & Chen (2015), Ugboma et al. (2007) and Parasuraman et al. (1988) and according to business characteristics of bakery. Research subjects are customers of the bakery. From September 1 to October 31, 2019, this study retrieved 64 questionnaires. Variable items measured are the following: (1) Responsiveness: employees can immediately respond to customers' needs (Item1); employees can actively assist with customers (Item2); employees are willing to assist with the serve customers (Item3). (2) Tangible: employees' neat and tidy costumes and appearance (Item4); interior modernized and professional devices (Item5); specific interior facilities, circulation and signs (Item6); service facilities meet the customers' needs (Item7). (3) Reliability: employees can provide reliable service (Item8); employees can precisely accomplish the commitment to the customers (Item9); employees can do the things right once (Item10). (4) Empathy: employees actively concern about individual customers (Item11); employees treat customers' benefits as priority (Item12); employees understand individual customers' needs (Item13); it provides service in the bakery according to customers' needs (Item14). (5) Guarantee: employees can respond to customers' questions with sufficient professional knowledge (Item15); it provides comfortable service for customers in the bakery (Item16); employees can provide responsible service (Item17); specific indication of prices of goods (Item18).

### **IV. RESEARCH RESULTS**

By calculation of "Customer Satisfaction Factor" of Matzler and Hinterhuber (1998), this study obtains 7 "service quality items to improve the outcomes" which can both increase customer satisfaction and reduce customer dissatisfaction (see Table 2). Bakery can maintain positive service quality of these quality items to obtain maximum outcome. In addition, it classifies Two-dimensional Quality of service quality items of Bakery H and 15 items are allocated as Attractive Quality; 3 items are allocated as One-dimensional Quality (see Table 2). Items which can highly increase customer satisfaction and highly reduce customer dissatisfaction include employees' neat and tidy costumes and appearance (Item4); interior modernized and professional devices (Item5); specific interior facilities, circulation and signs (Item6); employees treat customers' benefits as priority (Item12); employees understand individual customers' needs (Item13); employees can provide responsible service (Item17); specific indication of prices of goods (Item18). According to the analytical result, it obtains the priority to improve service quality in order to upgrade business competitiveness.

### **V. CONCLUSION AND SUGGESTIONS**

This study treats customers of Bakery H as subjects. By Kano Two-dimensional Quality model, it obtains 7 "service quality items to improve the outcome" to both increase customer satisfaction and reduce customer dissatisfaction. Items to highly increase customer satisfaction and highly reduce customer dissatisfaction refer to employees' neat and tidy costumes and appearance (Item4); interior modernized and professional devices (Item5); specific interior facilities, circulation and signs (Item6); employees treat customers' benefits as priority (Item12); employees understand individual customers' needs (Item13); employees can provide responsible service (Item17); specific indication of prices of goods (Item18). The bakery must improve these quality items and continue the positive service quality in order to obtain the maximum outcomes.

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**Table1: Categories of two-dimensional quality elements of Matzler and Hinterhuber**

<b>Negative</b>	I like it that way	Take it for granted	It does not matter	Can be tolerated	Dislike
<b>Positive</b>	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

**Table2: Attributes of Kano Two-dimensional Quality and Customer Satisfaction Factors**

Item	A	O	M	I	R	Q	Category	C(1)	C(2)
1	40	16	3	4	1	0	A	*0.889	-0.302
2	32	21	5	4	1	1	A	0.855	-0.419
3	23	28	6	5	2	0	O	0.823	*-0.548
4	30	23	6	2	2	1	A	*0.869	*-0.475
5	21	33	4	4	1	1	O	*0.871	*-0.597
6	31	26	3	3	1	0	A	*0.905	*-0.460
7	33	20	6	3	1	1	A	0.855	-0.419
8	31	20	7	4	2	0	A	0.823	*-0.435
9	32	24	3	4	1	0	A	*0.889	-0.429
10	32	20	5	4	2	1	A	0.852	-0.410
11	36	16	4	6	2	0	A	0.839	-0.323
12	33	24	4	3	0	0	A	*0.891	*-0.438
13	31	24	4	4	0	1	A	*0.873	*-0.444
14	33	20	5	3	2	1	A	*0.869	-0.410
15	34	21	3	5	0	1	A	*0.873	-0.381
16	37	11	6	5	3	2	A	0.814	-0.288
17	26	29	5	3	0	1	O	*0.873	*-0.540
18	31	26	3	3	1	0	A	*0.905	*-0.460
<b>Total average</b>								<b>0.865</b>	<b>-0.432</b>

Note:A: Attractive Quality; O: One-Dimensional Quality; M: Must-Be Quality; I:Indifferent Quality;  
 R: Reverse Quality; Q: uncertain; C (1): Increased customer satisfaction coefficient;  
 C (2): reduced customer dissatisfaction coefficient.  
 \* denotes absolute value of coefficient > absolute value of mean of total coefficient

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