Research Article

Applying the Kano Model to Explore Demand for Service Quality in Convenience Store

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Abstract: The market for convenience stores is gradually approaching saturation, prompting operators to delve into customer needs and expectations to increase store visit frequency and revenue. This study applied the Kano model to identify four key factors that significantly enhance customer satisfaction while diminishing dissatisfaction:(1) employees can provide reliable service; (2) provide services that make customers feel at ease; (3) employees can provide responsible service; (4) a specific indication of prices of goods. Operators can strategically concentrate on these aspects to improve service quality, thereby enhancing customer satisfaction and driving revenue growth.

Keywords: Convenience Store, Kano Model, Service Quality

I. INTRODUCTION

According to Taiwan's Institution for Economic Research, convenience stores fall under the category of the "supermarket and other general merchandise retailing industry." This industry encompasses all sectors involved in providing food retailing, household necessities, and fresh and processed food combinations. It also includes businesses offering convenience goods, such as fast food, beverages, daily necessities, and service commodities, focusing on meeting customer convenience needs while operating a chain mode. With the convenience store market facing saturation and fierce competition, operators must understand customer preferences deeply to draw more customers and increase profitability. This study was based on the scale proposed by Parasuraman et al. (1988) and took the customers of the convenience store as the respondents of the questionnaire. The analysis results of this study can help convenience store operators identify the key items to improve the quality of service and provide J convenience store with strategies for improvement in order to improve the quality of service and revenues.

II. LITERATURE REVIEW

The Kano quality model and research on service quality were the two sections of the literature review.

A. Service Quality

Kankam (2023) regards researchers as having studied various definitions of service quality, and all agree that it entails meeting client needs. Bateson and Hoffman (2002) stated that consumers' perception of a service provider's performance over an extended period of time determines its quality. Wakefield (2001) stated that service quality is the difference between the expectation of services and the actual services. According to Parasuraman et al. (1988), service quality consists of five major dimensions: (1) assurance, (2) responsiveness, (3) reliability, (4) empathy, and (5) tangible. The service quality measurement items in this study were based on the questionnaires of Chung (2018), Ugboma et al. (2007), and Parasuraman et al. (1988) and modified for the characteristics of convenience stores.

B. Kano Quality Model

Matzler and Hinterhuber (1998) proposed a two-dimensional table of the classification of quality elements (as shown in Table 1), which was modified from the Kano model. The categorization of quality elements can be determined according to Table 1. The formula to calculate the coefficient of Matzler and Hinterhuber (1998) is as follows:

SII (Satisfaction increment index) = (A+O)/(A+O+M+I)

DDI (Dissatisfaction decrement index) = (O+M)/(A+O+M+I) × (-1)

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

I：Indifferent Quality ；R：Reverse Quality；Q：Questionable

Table 1: Categories of Two-Dimensional Quality Elements of Matzler and Hinterhuber

Negative Positive	Like	Must-be	Neutral	Live with	Dislike
Like	Q	A	A	A	O
Must-be	R	I	I	I	M

Neutral	R	I	I	I	M
Live with	R	I	I	I	M
Dislike	R	R	R	R	Q

III. RESEARCH METHOD

Service quality items are adjusted in accordance with Chung (2018), Ugboma et al. (2007), and Parasuraman et al. (1988) surveys. Consumers of the shop serve as the research participants. 32 questionnaires were retrieved for this study between June 1 and June 31, 2023. The following are measured variable items: (1) Responsiveness: workers are able to react quickly to the needs of clients (item 1), actively assist clients (item 2), and are eager to help clients (item 3). The second is tangible and includes things like staff members' well-groomed outfits and demeanor (item 4), specialized interior spaces, signage, and circulation (item 6), and customer-focused service facilities (item 7). (3) Reliability: Workers are able to deliver dependable service (item 8), fulfill their obligations to clients exactly (item 9), and complete tasks correctly the first time (item 10). (4) Empathy: employees are actively concerned about individual customers (item 11); employees treat customers' benefits as a priority item 12); employees comprehend individual customers' wants (item 13); employees deliver service according to customers' demands (item 14). (5) Assurance: Workers are capable of answering inquiries from clients with adequate expertise (item 15), offering services that put clients at rest (item 16), offering responsible assistance (item 17), and providing a detailed breakdown of product costs (item 18).

IV. RESEARCH RESULTS

The service quality items in this study were categorized as two-dimensional qualities, of which 15 items were categorized as attractive qualities, and 3 items were categorized as one-dimensional qualities (as shown in Table 2). The items that can highly increase customer satisfaction and reduce customer dissatisfaction (as shown in Table 2) include that staff can help customers solve problems, provide customers with reassuring service, provide conscientious service. The price of goods is clearly marked. To maintain high operating quality and optimize profitability, operators may want to make improvements on these issues.

IV. CONCLUSION

Convenience store patrons are the study's participants. The farm can use these "items of service quality improvement with outcomes" as a guide to developing service quality enhancement plans by applying Kano's two-dimensional quality model. Four "service quality improvement with outcomes" components that raise client happiness and decrease dissatisfaction among consumers are acquired by this study: employees can provide reliable service (item 8); provide services that make customers feel at ease (item 16); (3) employees can provide responsible service (item 17); (4) a specific indication of prices of goods (item 18). J convenience store must maintain good service quality for these items in order to result in maximum profits**.**

Table 2: Kano Customer Satisfaction Coefficients

Item	A	O	M	I	R	Q	Category	SII	DDI
1	10	12	0	6	1	3	O	0.786	*-0.429
2	17	10	1	2	0	2	A	*0.9	-0.367
3	14	10	1	5	0	2	A	0.8	-0.367
4	12	10	4	4	0	2	A	0.733	*-0.467
5	13	10	0	7	0	2	A	0.767	-0.333
6	16	8	1	3	1	3	A	*0.857	-0.321
7	18	7	0	4	0	3	A	*0.862	-0.241
8	15	12	0	2	0	3	A	*0.931	*-0.414
9	16	9	0	4	0	3	A	*0.862	-0.310
10	19	7	0	3	1	2	A	*0.897	-0.241
11	16	8	1	4	0	3	A	0.828	-0.310
12	15	10	0	5	0	2	A	0.833	-0.333
13	15	8	0	7	0	2	A	0.767	-0.267
14	14	11	0	5	0	2	A	0.833	-0.367
15	18	8	2	2	0	2	A	*0.867	-0.333
16	14	11	2	2	0	3	A	*0.862	*-0.448
17	12	15	1	1	0	3	O	*0.931	*-0.552
18	9	17	1	3	0	2	O	*0.867	*-0.6
Total average								0.844	-0.372

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

R：Reverse Quality ； Q：Questionable

SII (Satisfaction increment index) = (A+O)/(A+O+M+I)

DDI (Dissatisfaction decrement index) = (-1) ×(O+M)/(A+O+M+I)

* Denotes absolute value of coefficient > absolute value of the mean of total coefficient

V. REFERENCES

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