Research on Demand for Service Quality of Campsite

Yi-Chan Chung¹, Shu-Fang Lin², Chin-Kuei Chou³

^{1,2,3} Graduate Institute of Business administration, Yuanpei University of Medical Technology, Taiwan Corresponding Author: Yi-Chan Chung

Abstract: This research used IPA method to confirm "Improved Items of Service Quality in Priority" and then used Kano model to establish "Improved Items of Benefit Service Quality" so as to provide operators to identify service quality demand and the business strategy of improving Service Quality). This research made customers in H Camp Site as the research subjects through the questionnaire survey and a total of 300 questionnaires were released, with 247 valid questionnaires. The research results are as follows: it is found from IPA analysis that the improved items in priority are "Staff will not ignore the response to customers due to being busy", "Internal facilities, power line and guidance notice are clear" and "Service facilities conform to requirements of customers", which customers attach great importance to, but the performance of H Camp Site is poor and the operators shall improve it in priority. According to the analysis with Kano, "Service Quality Items for Benefit Improvement" for increase in customer satisfaction and decrease in customer dissatisfaction simultaneously has 5 items, which are "Staff can respond to demand of customers rapidly", "Staff are willing to assist and serve customers", and "Staff can provide reliable services", and operators can sustain the maintenance of good service quality in terms of these quality items so as to obtain the greatest benefits. **Keywords:** service quality, quality factors, IPA analysis

Date of Submission: 27-11-2018

Date of acceptance: 08-12-2018

I. Introduction

In Taiwan, campsites grow one after another. According to statistics of RV Camp. org (2018), the largest camping database in Taiwan, at present, there are 1709 campsites on the island. In comparison to more than 800 campsites five years old, it has increased by one time. Chen (2017) stated that camping can release job stress, allow people to make new friend and enjoy family time. Camping indirectly leads to infinite business opportunities for related goods and campsites. Camping companies not only provide campsites, but also propose other services, such as hiking, cultural experience, ecological tour, agricultural experience, parent-children activities, adventurous activities, etc. In order to attract more tourists, the companies increase more modern devices to satisfy tourists' needs. In severely competitive camping industry, more complete service quality and customers' satisfaction with service quality are prior factors in the market. This study treats customers of campsite H as subjects. Campsite H is the mountain campsite located at an altitude of 1100 meter. It is surrounded by primitive forest and there are ancient hiking routes and forest paths. However, since mountain campsites of medium altitude in northern Taiwan are constructed one after another, the competition grows. How to recognize demand for campsite service quality and provide suggestions for improvement is the key of this study. Research purposes are shown below: (1) by Kano two-dimensional model, it explores service quality of camping company and recognizes the advantages to improve service quality; (2) by Importance-Performance Analysis, it probes into satisfaction with and importance of service quality for customers to recognize prior items of improvement; (3) according to research findings, it recognizes demand for service quality and provides suggestions to enhance service quality.

II. Literature Review

Literature review includes 3 parts: study of service quality, Importance-Performance Analysis (IPA) and Kano model.

2.1 Service quality

Lovelock and Wirtz (2011) treated service quality as customers' experience and evaluation in consumption process. Yang (2002) defined service below: service providers offer their techniques, expertise, knowledge, information, devices, time or place to customers and manage the affairs, solve problems, entertain or serve customers to please them. Wakefield (2001) classified service quality into tangible and intangible services. Tangible service includes not only physical output, but also physical equipment, devices and personnel's

appearance. Intangible service refers to service performance, including trust, response, guarantee and empathy. Parasuraman et al. (1988) argued that service quality includes 5 dimensions: (1) Assurance; (2) Responsiveness; (3) Reliability; (4) Empathy; (5) Tangible. Haywood-Farmer (1988) suggested three dimensions of service quality: (1) equipment, process and procedure; (2) service personnel's behavior; (3) service personnel's professional judgment. According to SERVQUAL scale proposed by Parasuraman et al. (1988), this study divides measurement dimensions of service quality into responsiveness, Tangible, Reliability, Empathy and assurance. Measurement of five dimensions of service quality in this study is based on and revised from questionnaires of Mohsin & Ryan (2005), Chung & Chen (2015), Deng & Lee (2007) and Parasuraman et al. (1988) according to characteristics of campsite.

2.2 Importance-Performance Analysis

Importance-Performance Analysis (IPA) was initially developed by Martilla and James (1977). It was applied to automobile dealers in order to recognize customers' opinions or suggestions to services provided. Myers (2001) stated that IPA is useful technique for enterprise managers. Enterprises thus can measure current market positioning, operational situation and competitive advantages and improve operational model and future production and marketing strategies. Magal&Levenbury (2005) indicated that IPA is mainly applied to measure subjects' expectation toward the behavior or statements and evaluate actual satisfaction. In IPA, first of all, means of customers' views on importance and performance of services are calculated and drawn in two-dimensional matrix. IPA matrix is divided into four quadrants, I, II, III, IV, as shown in Figure 1 (Martilla and James, 1977).

- 1.Quadrant I -Concentrate Here: it is highly important; however, the score of actual perception is low. Thus, service providers should improve this aspect.
- 2.Quadrant II -Keep Up the Good Work: scores of importance and performance are high and it should Keep Up the Good Work.
- 3.Quadrant III -Low Priority: the quadrant is not valued by customers and current perceived performance is low. It is secondary weakness source of the enterprises.
- 4.Quadrant IV -Possible Overkill: Importance is low and performance is high. The quadrant shows excessive supply and the resources can be applied to other aspects of improvement.

High Importance

| Low Performance | Quadrant I Concentrate Here | Quadrant II Keep Up the Good Work | High Daufarmanaa | | | |
|-----------------|--------------------------------|--------------------------------------|------------------|--|--|--|
| | Quadrant III LowPriority | Quadrant IV Possible Overkill | High Performance | | | |
| Low Importance | | | | | | |

Figure 1 IPA matrix

2.3Kano two-dimensional quality model

In Kano two-dimensional quality model, quality items are classified 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) and Reverse Quality Element (R). Kano questionnaire means to recognize customers' positive and negative perception of quality items by questionnaire survey. The items of response refer to "I like it that way", "Take it for granted", "It does not matter", "Can be tolerated" and "Dislike". Matzler and Hinterhuber (1998) proposed modified two-dimensional quality elements categories of Kano model as shown in Table 1. Table 1 reveals categories of quality attributes, including Attractive Quality, One-Dimensional Quality, Must-Be Quality, Indifferent Quality and Reverse Quality. Each quality attribute leads to accumulated frequency of two-dimensional quality category. The relatively highest frequency refers to two-dimensional quality category of the said quality attribute. Matzler and interhuber (1998) also proposed "customer satisfaction coefficient" to validate the degrees of increased customer satisfaction and reduced dissatisfaction when improving certain quality attribute element as criteria to enhance service quality. Formula to calculate coefficients is shown below:

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

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

- A: Attractive Quality; O: One-Dimensional Quality; M: Must-Be Quality; I: Indifferent Quality;
- R: Reverse Quality; Q: Questionable result

III. Research Method

Questionnaires of this study were distributed from September to December 2017 and respondents were customers of campsite H. This study distributed 300 questionnaires and retrieved 247 valid samples. Questionnaire includes 3 parts. Part 1: customers' service quality satisfaction and importance, including (1) responsiveness; (2) tangible; (3) reliability; (4) empathy and (5) assurance. Part 2: questionnaire of Kano model. Five items are proposed for customers regarding the perception of quality items and they include "I like it that way", "Take it for granted", "It does not matter", "Can be tolerated" and "Dislike". Part 3: basic information, including Gender, Age, Educational background and Occupation. This study classifies service quality as responsiveness, tangible, reliability, empathy and assurance and the items are the following: (1) responsiveness: service personnel can immediately respond to customers' demands; service personnel are not too busy to respond to customers; service personnel provide operation description in detail; service personnel are willing to assist with and serve customers. (2) tangible: service personnel's dress and appearance are neat and tidy; interior modern and professional equipment; bright and tidy appearance of facilities; specific signs of interior facilities, circulation and instruction; service facilities match customers' needs. (3) reliability: service personnel make their efforts to solve customers' problems; service personnel accomplish their commitment to customers; service personnel accomplish the things at once; service personnel provide reliable service. (4) empathy: service personnel actively concern about individual customers; service personnel treat customers' benefits as priority; service personnel recognize individual customers' needs; service personnel provide service according to customers' needs. (5) assurance: service personnel can respond to customers' questions by sufficient professional knowledge; reliable service provided in workplace to customers; service personnel provide responsible service; service personnel's behavior enhances customers' confidence.

Scoring of Importance-Performance Analysis is based on Likert 5-point scale. Satisfaction with service quality items is scored by subjects' answers. "Strongly agree" is 5 points, "Agree" is 4 points, "Fair" is 3, "Disagree" is 2 and "Strongly disagree" is 1. Importance is scored according to subjects' answers. "Strongly important" is 5, "important" is 4, "Fair" is 3, "not important" is 2 and "extremely unimportant" is 1. When score is higher, it means it is more important.

Scoring of Kano model is based on items of perception of service quality. The items include "I like it that way", "Take it for granted", "It does not matter", "Can be tolerated" and "Dislike". Quality is categorized according to different answers. Items adopted in this study are based on review of domestic and foreign related literatures. Before distributing questionnaires, this study discusses with people in practical circle to validate the meanings. It practices pretest and modifies questionnaire content to develop the validity. Nunnally(1978) argued that in exploratory research, reliability above 0.7 is acceptable; according to Table 2, in this study, Cronbach's α of questionnaire are at least 0.7. It reveals positive internal consistency of the scale.

IV. Results Analysis

According to questionnaire survey result, this study conducts analysis. In 247 questionnaires, there are 107 males and 140 females. As to age, 19 subjects are below 20 years old, 50 subjects are 21~30 years old, 74 subjects are 31~40 years old; 74 subjects are 41~50 years old, 26 subjects are 51~60 years old and 4 subjects are above (including) 60 years old. They are mostly 21~50 years old. As to education, they are mostly graduated from college/university (158 subjects). 37 subjects are senior high school and vocational school. 33 subjects are above graduate school and 19 subjects are below (including) junior high school. As to occupation, the most is industry and commerce (118 subjects) and the following are Service industry (42 subjects), Military, governmental employees and teachers (27 subjects), Housekeeping (20 subjects), Student (20 subjects), others (11 subjects), retirement (7 subjects) and agriculture, forestry, fishery and animal husbandry (2 subjects). The subjects are mostly in industry, commerce and service industry. There are 160 subjects and percentage is 64.7%.

4.1 Importance and satisfaction analysis of service quality

By Importance-Performance Analysis, this study explores difference of customers' importance and satisfaction regarding service attributes, recognizes advantages and weakness of service quality and assists with the campsite to find the improvement direction and priority in order to enhance service quality. As to satisfaction and importance analysis of service quality items, the measurement is based on a Likert 5-point scale. Importance and satisfaction analysis of service quality is shown in Table 3.

In IPA, there are 9 items in Zone of Keep Up the Good Work, as shown below. Item 1, Item 4, Item 7, Item 10, Item 11, Item 13, Item 19, Item 20, Item 21. They are the services with high importance and performance for customers and are the advantages of campsite. It should Keep Up the Good Work. There are two items in Zone of Possible Overkill. Item 5, Item 6, in this quadrant, performance of service is high; however, customers' importance is low. The campsite should avoid wasting excessive resources on unnecessary business. There are 7 items in Zone of Low Priority. Item 3, Item 12, Item 14, Item 15, Item 16, Item 17, Item 18. For customers, in

comparison to other items, their importance and satisfaction are lower. The campsite can review these aspects. There are 3 items in Zone of Concentrate Here. Item 9. It means these items are extremely important for customers. However, service satisfaction with the campsite is lower. The campsite should review and modify these aspects.

4.2Service quality items of effective improvement

By two-dimensional quality element categories of Matzler and Hinterhuber (1998)and calculation of "customer satisfaction coefficient", this study obtains five "service quality items of effective improvement" which can both increase customer satisfaction and lower customer dissatisfaction (Table4). The campsite can keep up good service quality of these items to obtain maximum benefits. In addition, it categorizes two-dimensional quality of service quality items of campsite H. 12 items are allocated as Attractive Quality, whereas 9 items refer to One-Dimensional Quality (Table4).

V. Conclusion and Suggestions

This study treats customers of campsite H as subjects. By Importance-Performance Analysis and Kano two-dimensional quality model, it obtains "Concentrate Here service quality items" and "service quality items of effective improvement" for the campsite to improve service quality and develop operational strategy of future development. According to result of Importance-Performance Analysis, there are three items of Concentrate Here: service personnel are not too busy to respond to customers; specific signs of interior facilities, circulation and instruction and service facilities match customers' needs. These items are Concentrate Here service quality. Suggestions for the improvement are as follows: (1) service personnel are not too busy to respond to customers: the campsite should strengthen employees' service attitude and concept and skill training in order to upgrade service quality; (2) Specific signs of interior facilities, circulation and instruction: the campsite should thoroughly examine the place and the routes from the city to the campsite. Are the signs on the confusing sections or intersections sufficient or obvious? Are the instruction of circulation, signs and warning signs in the campsite clear? Besides, for the concern of potential danger for customers in camping process, it should construct the signs or inform customers in advance; (3) service facilities match customers' needs: facilities in the campsite should be based on the concerns of safety, hygiene and convenience (such as bathroom, lighting, basins, parking place and recreational equipment) and provide customers' human service in order to enhance customers' trust and loyalty. Furthermore, this study obtains five "service quality items of effective improvement" to both increase customer satisfaction and lower customer dissatisfaction as "service personnel can immediately respond to customers' demands", "service personnel are willing to assist with and serve customers", "bright and tidy appearance of facilities", "service personnel make their efforts to solve customers' problems" and "service personnel provide reliable service". The campsite must keep up good service quality of these items in order to acquire maximum benefits.

References

- [1] Chen, T.C. 2017. The Standards of Campgrounds Establishment in Taiwan: A Qualitative Study of Recreational Camping. National Taiwan Sport University.
- [2] Chung Y.C. and Chen H.C., 2015. Study on the correlation among service quality, relationship quality and customer satisfaction- A case study of H hotel. International Journal of Latest Research in Science and Technology, 44(4), 1-7
- [3] Deng, W.J. and Lee, Y.C., 2007. Applying Kano Model and IPA to Identify Critical Service Quality Attributes for Hot Springs Hotel in Peitou. Journal of Quality, 14(1), 99-113.
- [4] Haywood-Farmer, J., 1988. A conceptual model of service quality. International. Journal of Operations and Production Management, 8(6), 19-29.
- [5] Kano, N., Seraku, N., Takahashi, F. and Tsuji, S., 1984. Attractive quality and must-be quality. Journal of the Japanese Society for Quality Control, 14(2), 39-48
- [6] Lovelock, C. H. and Wirtz J.,2011. Services Marketing New York, Prentice Hall.
- [7] Magal, S.R. and Levenburg, N.M., 2005. Using importance-performance analysis to evaluate e-business strategies among small businesses. In Proceedings of the 38th Hawaii International Conference on System Sciences.
- [8] Martilla, J. A. and James, J. C., 1977. Importance-Performance Analysis. Journal of Marketing, 41(1), 77-79.
- [9] Matzler, K. and Hinterhuber, H. H., 1998. How to make product deve-lopment projects more successful by integrating Kano's model of customer satisfaction into quality function deployment, Technovation, 18(1), 25-38.
- [10] Mohsin, A., and Ryan, C., 2005. Service quality assessment of 4-star hotels in Darwin, Northern Territory, Australia. Journal of Hospitality & Tourism Management, 12,25-36.
- [11] Myers, J.,2001. Measuring customer satisfaction: Hot buttons and other measurement issues. Chicago: American Marketing Association.
- [12] Nunnally, J. C., 1978. Psychometric Theory. New York: McGraw-Hill.
- [13] Parasuraman, A., Zeithaml, V.A. and Berry, L.L,1988. SERVQUAL: a multiple-item scale for measuring consumer perception of service quality. Journal of Retailing, 64 (1), 12-40.
- [14] Wakefield, R. L., 2001. Service quality. The Cpa Journal, 71(8), 58-60.
- [15] Yang, C. C., 2002. Quality Management of Service Industry, Taipei City: Publishing Committee of Chinese Society for Quality.

| Negative question Positive question | | Take it for granted | It does not matter | Can be tolerated | Dislike |
|-------------------------------------|---|---------------------|--------------------|------------------|---------|
| I like it that way | Q | А | А | А | 0 |
| Take it for granted | R | Ι | Ι | Ι | М |
| It does not matter | R | Ι | Ι | Ι | М |
| Can be tolerated | R | Ι | Ι | Ι | М |
| Dislike | R | R | R | R | Q |

Table1: Two-dimensional quality elements categories of Kano model

Table2: The Cronbach's α coefficients for all variables in this study

| Questionnaire Dimensions | Cronbach's α | | | |
|--------------------------|--------------|------------|--|--|
| Questionnaire Dimensions | Satisfaction | Importance | | |
| Responsiveness | 0.882 | 0.852 | | |
| Tangible | 0.843 | 0.838 | | |
| Reliability | 0.904 | 0.876 | | |
| Empathy | 0.863 | 0.812 | | |
| Assurance | 0.891 | 0.827 | | |

| Item | Service attributes | Satisfaction | Importance | |
|---------|--|--------------|------------|--|
| nem | | Mean | Mean | |
| 1 | Service personnel can immediately respond to customers' demands | 4.4130 | 4.4049 | |
| 2 | Service personnel are not too busy to respond to customers | 4.3117 | 4.3158 | |
| 3 | Service personnel provide operation description in detail | 4.2105 | 4.2713 | |
| 4 | Service personnel are willing to assist with and serve customers | 4.4818 | 4.4251 | |
| 5 | Service personnel's dress and appearance are neat and tidy | 4.3279 | 4.0769 | |
| 6 | Interior modern and professional equipment | 4.3972 | 4.0283 | |
| 7 | Bright and tidy appearance of facilities | 4.3887 | 4.3765 | |
| 8 | Specific signs of interior facilities, circulation and instruction | 4.2955 | 4.4089 | |
| 9 | Service facilities match customers' needs | 4.3198 | 4.3482 | |
| 10 | Service personnel make their efforts to solve customers' problems | 4.4372 | 4.4534 | |
| 11 | Service personnel accomplish their commitment to customers | 4.3765 | 4.413 | |
| 12 | Service personnel accomplish the things at once | 4.3077 | 4.1781 | |
| 13 | Service personnel provide reliable service | 4.4089 | 4.4049 | |
| 14 | Service personnel actively concern about individual customers | 4.1012 | 3.9798 | |
| 15. | Service personnel treat customers' benefits as priority | 4.1984 | 4.1579 | |
| 16. | Service personnel recognize individual customers' needs | 4.0688 | 4.0405 | |
| 17. | Service personnel provide service according to customers' needs | 4.2794 | 4.251 | |
| 18. | Service personnel can respond to customers' questions by sufficient professional knowledge | 4.3077 | 4.2186 | |
| 19. | Reliable service provided in workplace to customers | 4.4291 | 4.4049 | |
| 20. | Service personnel provide responsible service | 4.4251 | 4.3684 | |
| 21. | Service personnel's behavior enhances customers' confidence | 4.332 | 4.2834 | |
| Average | | 4.3247 | 4.2767 | |

Table 3: Analysis of service quality importance and satisfaction

| Table 4. Kano two-uniensional quanty categories and customer satisfaction coefficients | | | | | | | | | |
|--|-----|-----|----|----|---|-----|----------|------|-------|
| Item | А | 0 | М | I | R | Q | Category | C(1) | C(2) |
| * 1 | 80 | 129 | 17 | 15 | 1 | 5 | 0 | 0.87 | -0.61 |
| 2 | 93 | 81 | 27 | 36 | 5 | 5 | А | 0.73 | -0.46 |
| 3 | 99 | 88 | 22 | 35 | 0 | 3 | А | 0.77 | -0.45 |
| * 4 | 82 | 130 | 15 | 16 | 2 | 2 | 0 | 0.87 | -0.6 |
| 5 | 102 | 61 | 17 | 66 | 0 | 1 | А | 0.66 | -0.32 |
| 6 | 135 | 60 | 7 | 42 | 1 | 2 | А | 0.8 | -0.27 |
| * 7 | 88 | 115 | 27 | 15 | 1 | 1 | 0 | 0.83 | -0.58 |
| 8 | 68 | 100 | 41 | 37 | 0 | 1 | 0 | 0.68 | -0.57 |
| 9 | 110 | 92 | 13 | 29 | 2 | 1 | Α | 0.83 | -0.43 |
| * 10 | 90 | 113 | 25 | 18 | 1 | 0 | 0 | 0.82 | -0.57 |
| 11 | 73 | 109 | 42 | 22 | 1 | 0 | 0 | 0.74 | -0.61 |
| 12 | 149 | 59 | 8 | 30 | 1 | 0 | Α | 0.85 | -0.27 |
| * 13 | 100 | 113 | 14 | 20 | 0 | 0 | 0 | 0.86 | -0.51 |
| 14 | 151 | 48 | 5 | 43 | 0 | 0 | А | 0.81 | -0.21 |
| 15 | 130 | 76 | 10 | 30 | 0 | 1 | А | 0.84 | -0.35 |
| 16 | 157 | 46 | 5 | 39 | 0 | 0 | А | 0.82 | -0.21 |
| 17 | 136 | 74 | 12 | 25 | 0 | 0 | А | 0.85 | -0.35 |
| 18 | 119 | 69 | 20 | 39 | 0 | 0 | А | 0.76 | -0.36 |
| 19 | 77 | 120 | 29 | 21 | 0 | 0 | 0 | 0.8 | -0.6 |
| 20 | 70 | 118 | 36 | 23 | 0 | 0 | 0 | 0.76 | -0.62 |
| 21 | 104 | 87 | 11 | 45 | 0 | 0 | А | 0.77 | -0.4 |
| Total average | | | | | | 0.8 | -0.45 | | |

Table 4: Kano two-dimensional quality categories and customer satisfaction coefficients

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

 $Q: Questionable \ result \ ; \ C(1): \ Increased \ customer \ satisfaction \ coefficient; \ C(2): \ reduced \ customer \ dissatisfaction \ coefficient.$

Shadow and bold: Total accumulated categorization frequency is the relatively highest.

Shadow: absolute value of coefficient is higher than total mean of overall coefficients.

* Service quality items of effective improvement

Yi-Chan Chung, Shu-Fang Lin and Chin-Kuei Chou, "Research on Demand for Service Quality of Campsite" IOSR Journal of Business and Management (IOSR-JBM), Vol. 20, No. 12, 2018, pp. 10-15.
