A Study on the Consulting Service Quality using Kano Model

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Abstract

Objectives: This study was carried out to rearrange and identify the characteristics of the quality elements of Consulting Service and aims to reinforce the competitive advantage after analyzing and improving it.

Methods/Statistical Analysis: As for the study method, the consulting service quality elements were arranged by theoretical consideration, adapted Kano model for each service quality factors, and classified them into quality element categories such as Attractive, Must-be, One dimensional, Indifferent and Reverse quality elements. Also, as for the influence of customer satisfaction and dissatisfaction, CS-Coefficient (Customer Satisfaction Coefficient) was utilized to verify the result.

Findings: This study reorganized the quality scale based on existing studies regarding consulting service quality, and classified the quality element scales defined by Kano model. In order to find quality awareness element for the competitive creation among the consulting service quality elements, the study adopted Kano model to see how to access to consulting service strategically as follows. First, among the 28 measurement items for the 6-scale elements, there were 3 attractive, 1 must-be, 1 questionable and 23 one-dimensional quality elements, and there were no reverse and indifferent quality elements. Second, the “E-1 (Consultant’s individual interest to customer)” was One-dimensional quality element in Kano analysis, but in Timko’s CS-Coefficient analysis, it was attractive quality element. Third, based on the fact that “E-1(Consultant’s individual interest to customer)” and “R-5 (Securing customer information and company secret)” belongs to attractive quality element, the consulting workers will be able to utilize it as useful information in strategically decision making when improving the service competitiveness.

Improvements/Applications: Distinguishing whether or not the subject group has the consulting service experience to examine the group difference is proposed for the future study.

Keywords: Consulting Service quality, Kano model, Timko’s CS-coefficient, Quality elements, Consulting service competitiveness

1. Introduction

The management consulting in Korea started in the 1980s and numerous medium-sized management consulting companies were founded during the 1990s, but most of the small sized consulting companies disappeared in the early 1998 due to IMF financial crisis. In the rapidly changing modern society, it is essential for consulting companies to put effort into increasing the service quality which the customers would satisfy by estimating the consulting service quality for the improvement of consulting quality. Due to the situation in customers’ point of view, the service enhancement of consulting company and consultant’s is a significant factor. The competitiveness of consulting is basically based on the customer satisfaction toward service, and only by searching for the needs of customer consistently and making them satisfied, the company will have the competitive power. It is very important to correctly understand the demand and value of customer. The existing studies were mostly about examining service...
quality, but this study rearranged consulting service quality element and studied the properties of each quality elements. As for the study method, the consulting service quality elements were arranged by theoretical consideration, adapted Kano model for each service quality factors, and classified them into quality element categories such as Attractive, Must-be, One dimensional, Indifferent and Reverse quality elements. Also, as for the influence of customer satisfaction and dissatisfaction, CS-Coefficient (Customer Satisfaction Coefficient) was utilized to verify the result. The goal of this study is to understand predominant competitive power of consulting company and consultants based on the distinguished quality properties through Kano model, and draw out the improvement factor and threatening factor to apply it to strategically decision making.

1.1 Service Quality

The subjective measurement acknowledged by individual is reflected to the service quality rather than objective measurement. However, the service quality is a measurement by customer, and the researchers commonly perceive that not only the result of measurement but also the whole process of service conducts successive action. There are differences in concept about the service quality for each researcher, and regarding the service quality, Garvin (1984), Ghobadian and Simon (1994) and others defined the service quality in 5 perspectives: Transcendent approach, Product-based approach, User-based approach, Manufacturing-based approach and Value-based approach. Due to the intangible property of service, it is rather difficult to define and estimate the level of service quality objectively, but generally the service quality is divided into actual service quality and acknowledged service quality which the acknowledge service quality based on the customer evaluation rather than the actual service quality has more significance.

The most common measurement model is SERVQUAL model by PZB. They defined service quality as the examination expectation of customer toward service and the difference of acknowledgement after the service, and developed it into SERVQUAL model which is composed of 5 scales as seen in Table 1.

| Scale | Definition |
|-------|------------|
| 1 Reliability | Ability to accurately provide and let customer trust the promised service. |
| 2 Confidence | Ability to provide knowledge, sincerity, trust of service provider. |
| 3 Materiality | Appearances such as materialized facility, equipment, personnel and communication tool. |
| 4 Appreciation | Ability to provide individual interest and affection to customer. |
| 5 Responsiveness | Ability to willingly help customer and provide immediate service. |

However, the SERVPERF model which indicated limits of SERVQUAL model, and only measuring “the service performance” excluding “expected service quality” was proposed as the new alternative for service quality measurement model. In developed SURVPERF model only measuring the performance and weighted SERVPERF which adapted performance item priority and argued only by measuring the level of quality with performance item is more sufficient than other measurement item. Meanwhile, Korean Standard-Service Quality Index (KS-SQI) was jointly developed by Korean Standards Association and Seoul National University Business Lab to measure service quality reflecting the service industry of Korea and characteristics of Korean customers, which is currently used to measure service quality of 61 business types of general service industry, division of public administrative service industry.

2. Research Trend of Consulting Service Quality

The study by developed 8-element items for business consulting service quality. The 8 elements are ethicality, reliability, responsiveness, confidence, appreciation, voluntary participation, communication and fame. The concept of reliability, responsiveness and appreciation is equal to one is SERVQUAL. Ethicality refers to how ethical the business consulting provider is to the customer in the service provision process. Voluntary
participation refers to how much the consultant lead the participation of customer in the consulting process. The communication refers to communication between customer and business consulting provider, and the fame is the significant condition for the measurement of service quality to primary customer, and for the repeated customer, it gives confidence to customers by reassuring the quality. It represented the business consulting service quality by professionalism, reliability, appreciation, and materiality. They supplemented professionalism rather than confidence in 5 scales of SERVQUAL, and removed responsiveness. It constituted 6-scale service quality for IT consulting with 4 scales from SERVQUAL, reliability, responsiveness, guarantee and appreciation with extra processing and education elements. It constituted 6-scale service quality for IT consulting with 4 scales from SERVQUAL, reliability, guarantee, and appreciation with extra processing and education elements. It constituted 6-scale service quality for IT consulting with 4 scales from SERVQUAL, reliability, guarantee, and appreciation with extra processing and education elements. It constituted 6-scale service quality for IT consulting with 4 scales from SERVQUAL, reliability, guarantee, and appreciation with extra processing and education elements. It constituted 6-scale service quality for IT consulting with 4 scales from SERVQUAL, reliability, guarantee, and appreciation with extra processing and education elements.

3. Kano Model

Kano model is the customer satisfaction model developed in a product planning theory relevant to product development in the 1980s by Professor Noriaki Kano of Rika University in Japan. Professor Kano provided two dimensional quality element measurement models which show satisfaction/dissatisfaction to the objective performance of product and subjective acknowledgement of user in order to surpass the limit of one dimensional quality element measurement by checking satisfaction/dissatisfaction by customer demand show in Figure 1.

3.1 Indifferent Quality Element

The indifferent quality element indicates to service quality element irrelevant to customer satisfaction when not satisfying the customer's expectation. When marketing manager fail to understand the customer needs and utilize the indifferent quality element to the concept of new product or major message of marketing communication, it is very like to fail in the market.

3.2 Reverse Quality Element

The reverse quality element refers to the element which the satisfaction of customer expectation and satisfaction works in reversed way. In other words, even though the service provider put ones effort to the increase expectation satisfaction, the customer sometime could feel the result dissatisfying. This occurs because not all the customers have same taste.

3.3 One-Dimensional Quality Element

One-dimensional quality element is the one always required by customers such as the basic performance and design of product due which shows the better the service is, the higher the satisfaction is, and the worse the service is, the lower the satisfaction is.

3.4 Must-be Quality Element

The must-be quality element is the element which makes customers not satisfied when the demand
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is met because it is the must-be basic service, and makes customer feel dissatisfied when not meeting the demand. When this element is not met, the customer complaint of dissatisfaction can increase, so must be cautious.

3.5 Attractive Quality Element
The attractive quality element increases the satisfaction when the expectation is met, while even when the expectation is not met, there’s almost no dissatisfaction. This element is the important element which gives exceeding satisfaction to customers with special surprise events, to be the source of customer impression and competitiveness of rival company.

4. Proposed Work

4.1 Selecting Consulting Service Measurement Elements
The consulting service quality factors were added such as the leadership of consultants and educational competence based on the basic model of SERVQUAL as shown in Table 2.

4.2 Survey Composition and Data Processing Method
The subject group of this study is the graduate school students in doctor’s course and consultants. Among 140 surveys distributed, 108 copies were collected. Excluding 18 with insincere copies, 90 surveys were used

| Table 2. Consulting service quality measurement elements |
| Researcher | Measurement elements | Note |
| 9 | Ethicality, reliability, responsiveness, confidence, appreciation, voluntary participation, communication, fame | SERVQUAL and more |
| 1 | Professionalism, reliability, appreciation, materiality | Exclude “Confidence” from SERVQUAL |
| 10 | Reliability, responsiveness, confidence, appreciation, processing, education | 4 scales from SERVQUAL |
| 11 | Reliability, confidence, materiality, appreciation and responsiveness, consultant leadership, consultant educational competence | SERVQUAL and more |
| 13 | Materiality, reliability, responsiveness, confidence, appreciation | SERVQUAL |
| 14 | Materiality, reliability, responsiveness, confidence, appreciation | SERVQUAL |

| Table 3. Consulting service quality measurement details |
| Scale | ID | Details |
| Materiality | T-1 | Provide fine data and material appropriate for consulting |
| | T-2 | Proper attire and appearance of consultant |
| | T-3 | Sincerity and kindness of consultant |
| | T-4 | Fine personal impression of consultant |
| Reliability | R-1 | Consulting company processing work in promised time |
| | R-2 | Have interest and solve the customer service. |
| | R-3 | Trust and depend on consulting company |
| | R-4 | Provide service within time. |
| | R-5 | Secure customer information or company secret |
| Responsiveness | RE-1 | Notify when the process will be done. |
| | RE-2 | Provide immediate service |
| | RE-3 | Consultant helps customer spontaneously at anytime |
| | RE-4 | Immediate response to customer demand |
| | RE-5 | Explain the work process anytime |
| Confidence | A-1 | Trust consultant |
| | A-2 | Consultant fully understands the customer demand |
| | A-3 | Consultant who is polite and humble |
| | A-4 | Consultant with full knowledge to answer to customer question. |
| | A-5 | Confidence of consulting company in managing stable project |
| Appreciation | E-1 | Consultant who has individual interest to customers |
| | E-2 | Consultant who make appointment convenient to customer |
| | E-3 | Employee of consulting company caring customer individually |
| | E-4 | Consulting company sincerely caring customer benefit. |
| | E-5 | Employee of consulting company understanding customer demand |
| Others | ET-1 | Consultant professionalism |
| | ET-2 | Consultant education competence |
| | ET-3 | Consultant morality |
| | ET-4 | Consultant reputation |
to the survey analysis. Kano survey restructured the sub elements of measurement element of researchers in Table 2. With 24 details in 5 scales and extra 4 elements there was overall 28 Kano survey details as seen in Table 3.

The quality element of collected survey is classified into each frequency of quality element using Kano measurement table as Table 4.

4.3 Characteristics of Respondent

The characteristic of respondent is described in Table 5. As for gender, male (90.0%) was larger than female (10.0%), as for age, 40s (40.0%) was the largest, and 50s (36.7%), 30s (20.0%) followed. As for the business type the order was from office job (63.3%), others (16.7%), research jobs (13.3%) and self-employment (6.7%), and the one with consulting experience (86.7%) was larger than the one who has no experience (13.3%).

4.4 Kano Quality Element Classifications

The consulting service quality elements were classified as in Table 6 by Kano model quality element measurement table. When looking into the analysis result, among overall 288 details, there were 1 Must-be quality, 1 Questionable results, 3 Attractive quality, and rest of 23 were One-dimensional quality element. In other words, the service item about “securing customer information or company secret” is recognized as Must-be quality element, and “convenient use of customer”, “consultant’s individual interest to customer”, “consultant reputation” were classified as Attractive quality element.

4.5 Timko’s Customer Satisfaction Coefficient

Due to the fact that Kano analysis only uses the frequency mode to classify the data, it is unable to distinguish the differences of relative quality element to same service. CS-coefficient of Timko’s is a coefficient which shows how much the customer satisfaction and dissatisfaction influences from the provided service, which when the satisfaction is high, it is “+1” and when the dissatisfaction is high, it is close to “-1”. By using Kano survey, the coefficient for customer satisfaction/dissatisfaction was calculated just like Figure 2, and it shows the degree of influence.

According to this classification, as for the “A-1 (provide fine data and material)”, it is one-dimensional element in Kano classification, while it is the most close service to “+1” and “-1” in Timko’s coefficient, which means it has the largest influence in satisfaction/dissatisfaction, and therefore the most basic element. As a while, the “E-1 (Consultant's individual interest to customer)” shows lower dissatisfaction coefficient, but when increasing the satisfaction by giving more interest, it can be the origin of stronger competence to rival business, so this element needs significant looking. As for that “E-2 (Set appointment convenient for customer)” is the attractive quality element, but the satisfaction coefficient was
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| Details | A | M | O | R | Q | I | Category |
|---------|---|---|---|---|---|---|----------|
| T-1     | 12| 27| 42| 0 | 6 | 3 | one-dimensional |
| T-2     | 3 | 9 | 39| 24| 9 | 6 | one-dimensional |
| T-3     | 3 | 27| 60| 0 | 0 | 0 | one-dimensional |
| T-4     | 30| 12| 36| 0 | 3 | 9 | one-dimensional |
| R-1     | 9 | 36| 42| 0 | 0 | 3 | one-dimensional |
| R-2     | 9 | 27| 54| 0 | 0 | 0 | one-dimensional |
| R-3     | 12| 12| 24| 0 | 33| 9 | questionable |
| R-4     | 6 | 0 | 36| 33| 3 | 12| one-dimensional |
| R-5     | 3 | 45| 33| 0 | 0 | 0 | must-be |
| RE-1    | 9 | 27| 45| 0 | 0 | 9 | one-dimensional |
| RE-2    | 27| 15| 42| 0 | 0 | 6 | one-dimensional |
| RE-3    | 30| 12| 45| 0 | 0 | 3 | one-dimensional |
| RE-4    | 12| 24| 51| 0 | 0 | 3 | one-dimensional |
| RE-5    | 30| 9 | 42| 0 | 0 | 9 | one-dimensional |
| A-1     | 9 | 3 | 69| 3 | 3 | 3 | one-dimensional |
| A-2     | 6 | 30| 54| 0 | 0 | 0 | one-dimensional |
| A-3     | 6 | 24| 51| 6 | 0 | 3 | one-dimensional |
| A-4     | 3 | 30| 51| 0 | 0 | 6 | one-dimensional |
| A-5     | 6 | 30| 45| 3 | 0 | 6 | one-dimensional |
| E-1     | 27| 6 | 36| 0 | 0 | 21| one-dimensional |
| E-2     | 32| 18| 28| 0 | 0 | 12| Attractive |
| E-3     | 48| 0 | 36| 0 | 0 | 6 | Attractive |
| E-4     | 30| 6 | 48| 0 | 0 | 6 | one-dimensional |
| E-5     | 18| 9 | 51| 0 | 0 | 12| one-dimensional |
| ET-1    | 18| 30| 39| 0 | 0 | 3 | one-dimensional |
| ET-2    | 18| 18| 42| 0 | 0 | 12| one-dimensional |
| ET-3    | 0 | 24| 57| 3 | 0 | 6 | one-dimensional |
| ET-4    | 48| 3 | 18| 0 | 0 | 21| Attractive |

not highly relevant. Also, “R-5 (securing customer information and company secret)” is a quality element which will increase customer dissatisfaction when not managed to the value close to “−1”.

Figure 2. Service element classification using Timko’s coefficient.

5. Conclusion

This study reorganized the quality scale based on existing studies regarding consulting service quality, and classified the quality element scales defined by Kano model. In order to find quality awareness element for the competitiveness creation among the consulting service quality elements, the study adopted Kano model to see how to access to consulting service strategically. And the result is as follows.

First, among the 28 measurement items for the 6-scale elements, there were 3 attractive quality elements, 1 must-be quality element, and 24 one-dimensional quality elements, and there were no reverse and indifferent quality elements.
Second, the “E-1(Consultant’s individual interest to customer)” was one-dimensional quality element in Kano analysis, but in Timko’s CS-coefficient analysis, it was attractive quality element.

Third, based on the fact that “E-1(Consultant’s individual interest to customer)” and “R-5(Securing customer information and company secret)” belongs to attractive quality element, the consulting workers will be able to utilize it as useful information in strategically decision making when improving the service competitiveness.

Despite the positive study result, the limitation of this study is that there are subjects who did not directly experience the consulting service among the study subject. Thus, distinguishing the whether or not the subject group has the consulting service experience to examine the group difference is proposed for the future study. Also, there could be lack of understanding in Kano model survey due to questioning in pair wise comparison question of positive and negative, it is worth considering to improving the respondent’s understanding toward survey by conducting prior education to respondents in the future study.

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