

A COMPARATIVE STUDY OF BANGKOK SUBWAY'S EXPECTED AND PERCEIVED SERVICE QUALITY: A COMPARISON BETWEEN THAI AND NON-THAI CUSTOMERS

Daniel Heiniger and Sirion Chaipoo Pirutana, Ph.D
Graduate School of Business, Assumption University

ABSTRACT

This study examined Bangkok Subway's expected and perceived service quality between Thai and non-Thai customers from either a European or North American country. Five dimensions of service quality including tangibles, reliability, responsiveness, assurance, and empathy as well as the demographic characteristics were analyzed. Data were collected from 396 respondents in 9 train stations. The analyses found that overall expectation is higher than perception at a similar level for Thai and non-Thai respondents. The demographic characteristics showed that a significant difference existed, especially in age, education and income.

INTRODUCTION

Bangkok has been long waiting for the introduction of the first subway route. The impact traffic has on people's lives is tremendous causing physical and mental stress. The first subway system helps all those living and working near the route to improve their quality of life. To ensure the subway system is used to its full capacity and that people driving cars along the route are switching to the train service, it is essential that service quality provides maximum satisfaction to customers. This will enable the highest possible economic return in order to ensure future expansion which is necessary to cover more than just a small part of the inner city. Thailand is moving towards globalization and foreign influence becomes more and more important. Therefore service quality is essential not only to Thai customers but also to foreigners.

A variety of research has been conducted on service quality (Bitner and Hubber, 1994; Bitner, 1990; Bolton and Drew, 1991a; Bolton and Drew, 1991b; Cronin and Taylor, 1992; Gronroos, 1990; Gronroos, 2000; Oliver 1980; Oliver, 1993; Parasuraman and Berry, 1990).

The SERVQUAL instrument, an instrument for measuring service quality developed by Parasuraman, Zeithaml and Berry (1988, 1990) was used to capture the five dimensions of service quality of Bangkok Subway.

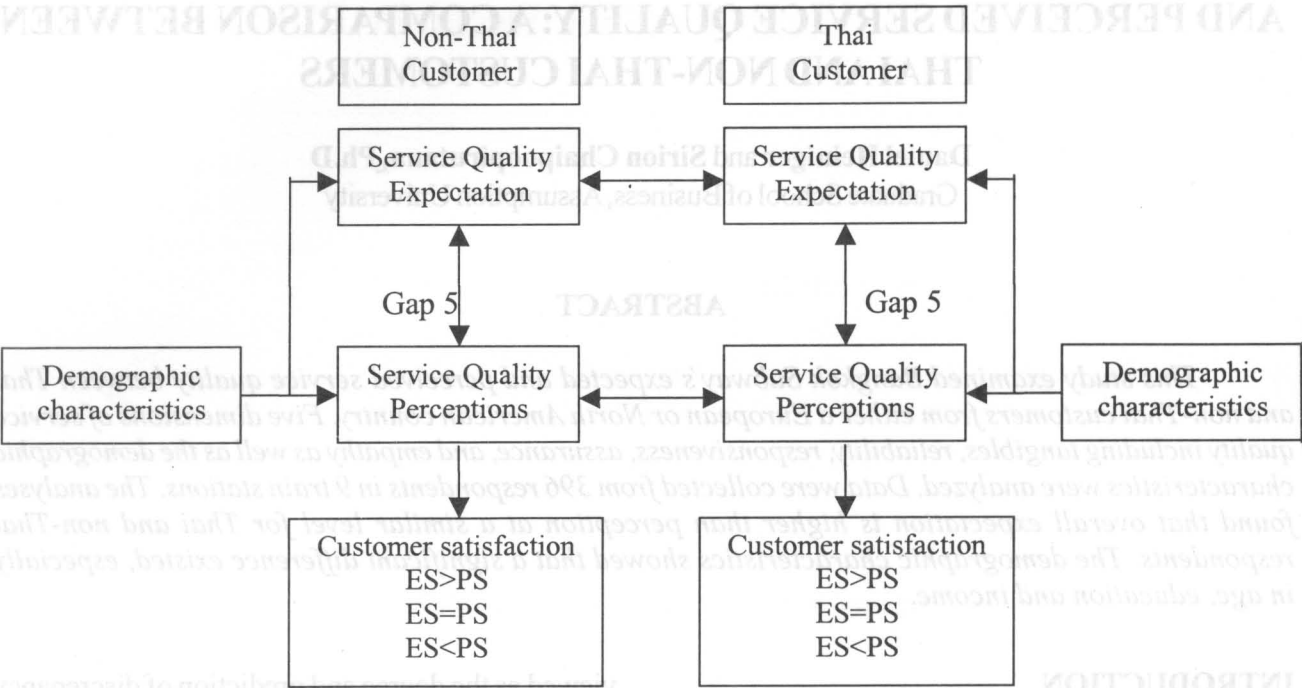
LITERATURE REVIEW

Parasuraman, Zeithaml, and Berry (1985, 1988) pointed out that perceived service quality is

viewed as the degree and prediction of discrepancy between customer's expectations and perceptions. Perceived service quality comes from customers' comparison of what they perceive actual service performance is. If performance equals or exceeds expectations, then the perceived service quality is satisfactory, otherwise it is unsatisfactory. Moreover, Oliver (1980) explained that customer satisfaction involved an evaluation and included an affective or emotional response. Even though alternative definitions exist, most definitions of customer satisfaction/dissatisfaction indicate that if customers perceptions meets expectations, the expectations is said to be confirmed and the customer is satisfied. If the perceptions and expectations are not equal, then the expectation is negatively disconfirmed. Bitner and Hubber (1994) indicated that service quality is the customers' overall impression of the relative inferiority or superiority of organization and services. The focus was on meeting of customers' expectations to perceptions of services actually received.

Parasuraman et.al.(1985) defined service quality as an overall evaluation of a specific service firm that results from comparing that firm's performance with customers' general expectations of how firms in that industry should perform. Through focus group interviews, the authors initially identified ten dimensions of service quality. The ten dimensions are access, communication, competency, courtesy, credibility, reliability, responsiveness, security, tangibles and understanding/knowing the customer. Through empirical validation and rigorous scale-development procedures, the researchers later

Figure 1 Conceptual Framework



reduced the ten dimensions to five independent dimensions of service quality: a) reliability, b) responsiveness, c) assurance, d) empathy, and e) tangibles.

CONCEPTUAL FRAMEWORK

The researcher developed the conceptual framework (Figure 1) based on the model of service quality by Parasuraman, Zeithaml and Berry (1990). The Gap five of service quality, which is the theoretical framework that is appropriate for this research, was used to measure the gap between customer expectations and perceived service quality from

Bangkok Subway’s customers. The researchers also developed an appropriate approach toward understanding and addressing the FIVE gaps of each dimension of service quality.

The service quality gap model of Zeithaml, Berry, and Parasuraman (1988) was used to develop SERVQUAL, a multi-item scale consisting of five dimensions of service quality (a) reliability, (b) responsiveness, (c) assurance, (d) empathy, and (e) tangibles. This two-part instrument had an initial section to record customers’ expectations (ES) followed by a second section to record customer’s perception (PS). A score for the quality of service was calculated by computing the differences (or Gaps)

Table 1 Respondents from selected train stations

Station	Thai respondents	Non-Thai respondents
Kamphaeng Phet	22	22
Phahon Yothin	22	22
Thailand Cultural Center	22	22
Rama IX	22	22
Sukhumvit	22	22
Queen Sirikit National Convention Centre	22	22
Lumpini	22	22
Silom	22	22
Hua Lamphong	22	22
Total respondents in each group	198	198
Total respondents	396	

between the ratings that customers assigned to paired expectation and perception statements. The score of service quality was calculated by averaging the scores of all categories (see Table 1).

Research Hypothesis

The following hypotheses were tested within this study:

H₁: There is no significant difference in perceived service quality of non-Thai customers due to demographic characteristic.

Hypothesis 1 included 6 sub hypotheses with the demographic characteristic gender, age, education, occupation, income, and marital status.

H₂: There is no significant difference in perceived service quality of Thai customers due to demographic characteristic.

Hypothesis 2 included 6 sub hypotheses with the demographic characteristic gender, age, education, occupation, income, and marital status.

H₃: There is no significant difference in expectation of service quality between non-Thai and Thai customers of Bangkok Subway.

H₄: There is no significant difference in perception of service quality between non-Thai and Thai customers of Bangkok Subway.

H₅: There is no significant difference between expectation and perception of service quality for non-Thai customers of Bangkok Subway.

H₆: There is no significant difference between expectation and perception of service quality for Thai customers of Bangkok Subway.

H₇: There is no significant difference in Bangkok Subway's service quality between non-Thai and Thai customers.

Hypothesis 7 included 5 sub hypotheses with the service quality dimension tangibles, reliability, responsiveness, assurance, and empathy.

RESEARCH METHODOLOGY

In this descriptive research, cross sectional survey was utilized to gather data by personal interviews from respondents using the subway services. The questionnaires were gathered using a three step sampling procedure which included random sampling to select the stations, quota sampling to ensure the various subgroups in the population and convenience sampling to obtain samples most conveniently available. Table 1 illustrates the number of respondents at the selected stations.

Each questionnaire consisted of three parts: (1) Screening to ensure the right target population was chosen, (2) Demographic characteristics including gender, age, education, occupation, income and marital status, and (3) Expectation and perception of service quality with two sections of 22 items each that record expectation and perception of service quality. The 22 questions were based on response to a five-point semantic differential, using a Likert scale format ranging from strongly disagree (1) to strongly agree (5).

A pretest using Cronbach's coefficient alpha scale to test internal consistency of the questions assessing each dimension of service quality was applied. Forty respondents were interviewed and the result showed that all questions can be considered acceptable.

The data have been analyzed using SPSS using several techniques including descriptive analysis, analysis of variance, dependent t-test, and independent t-test.

RESULTS AND CONCLUSION

The result of the research showed that from the two groups of respondents, non-Thai and Thai, customer segmentation is different. Thai customers were mainly characterized as those having a bachelor's degree or high school degree or less, income of lower than 10,000 Baht and age between 30 and 39. All types of non-Thai customers using Bangkok Subway cannot specifically be grouped into categories. It was interesting to note that many non-Thai respondents were above 50 years old, possessed a master's degree or more and had an income of more than 6,000 US\$.

Moreover, the researcher concluded that there was very little difference between non-Thai and Thai customers of Bangkok Subway in perceiving and expecting service quality over all 5 dimensions including tangibles, reliability, responsiveness, assurance and empathy.

Overall, customers were not satisfied with the service quality and expectation exceeded perception with an average SERVQUAL score (E-P) of -0.48. This did represent a rather small gap, nonetheless, service quality needs improving to fully satisfy customers. The dimension tangibles clearly had the smallest gap between service quality expectation and perception with non-Thai customers having the smallest gap of -0.12 followed by Thai respondents with a gap of -0.32.

RECOMMENDATIONS

From the research outcome it becomes clear that: 1) Bangkok Subway needs to find ways to attract more customers as the subway system is not fully utilized and, 2) to find strategies to improve its service quality.

From the results the researcher concludes that public transport is seen by many Thai people as being for the lower income groups. This image needs to be changed. If some important people in Thailand (VIPs) would be willing to use the Bangkok Subway services on a daily basis, the company could use this in a public relations campaign to show that its services is used by important people. This could include well-known celebrities, politicians, successful businesspeople, etc. Such a campaign could influence people to think that it's smart or cool to use the Bangkok Subway and will help create a change in peoples' travel behavior.

From the respondents' feedback there are several recommendations for improving service quality. Bangkok Subway needs improvements of its current maps. It is important to customers that maps with information are easily available in both languages Thai and English which are clear to read and understand. Then station name plates are not visible from all places inside the train. It is recommended to add more station name plates with better visibility. During rush hours when trains are really crowded and many have to stand near the train entrance doors or next to the seats, not all passengers can hold on to a hand support. During the train's movement, it is hard to maintain balance and is not comfortable. A hand rear system installed in the Sky Train where people standing near the entrance door or next to the seats of the trains would ensure that passengers even during rush hours can feel safe and comfortable.

Moreover, Bangkok Subway must provide convenient operating hours. During the survey, the researchers noticed many respondents were not happy with the operating hours. Many commented that the subway system should operate longer at night so that people would have a chance to use the services after closure of entertainment venues. The suggestion would therefore be to extend operating hours from 6 am-12 pm to 6 am-2:30 am.

FURTHER RESEARCH

Further research could be beneficial to Bangkok Subway to improve its service quality and get a better understanding of its customers.

To examine the gap between customer's expectation and perception of service quality over several periods (once every six month or once a year) can explain how the gap between the two is changing. It further confirms or disconfirms the company's attention to improving service quality and to correct shortcomings.

Comparing Bangkok Subway's service quality against competitors (Sky train, mass rapid bus system etc.) would help the company to see where they stand within the industry.

Another potential further application of SERVQUAL would be to categorize Bangkok Subway's customer into several user segments (for example high, medium, low). On the foundation of their individual SERVQUAL scores, the segments can then be studied for their demographic characteristics and the relative importance of the five dimensions influencing service quality perception. Based on the findings, Bangkok Subway would understand better what actions have to be implemented to improve the image for the most important group.

It may be of interest to give a relative importance of the SEVQUAL dimensions as it is possible that not all dimensions are equally important to customers. In most cases it is reasonable to speculate that customers do consider all five dimensions to be quite important. In addition to the questions assessing service quality expectation and perception, the respondents would have to allocate for example 100 points among the five dimensions of service quality. This allocation can then be used for calculating the weighted SERVQUAL score.

This research included only two groups of customers, Thai and non-Thai. Non-Thai included only Europeans and North Americans used to mass rapid transit systems. It could be of interest to also add another group of customers having similar experience Thai people have with mass rapid systems in Bangkok. This could include respondents from countries having just recently introduced mass rapid systems and where the economical circumstances are similar.

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