

## After-sales service quality as an antecedent of customer satisfaction

Shahrouz Shahrouzifard<sup>a\*</sup> and Morteza Faraji<sup>b</sup>

<sup>a</sup>Masters Student, Department of Business and Management, Firozko Branch, Islamic Azad University, Firozko, Iran

<sup>b</sup>Associate Professor, Department of Business and Management, Firozko Branch, Islamic Azad University, Firozko, Iran

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### ABSTRACT

Nowadays, customer is believed to be the most precious asset for any organization and building a long term relationship between firms and customers plays essential role for the success of organizations. This paper presents an empirical investigation to study the relationship between after-sales service quality and customer satisfaction in a firm named Setareh Nik Aria Yadak whose primary responsibility is to provide after-sales services for public transportation. The study selects a sample of 252 out of 730 customers in 2015 who received their services from this firm. The survey designs a questionnaire in Likert scale, which consists of four items of quality, responsiveness, speed and cost of services. Cronbach alpha is calculated as 0.79, which validates the quality of the survey. Using Spearman correlation test, the study has detected a positive and meaningful relationships between four components of after-sales services and customer satisfaction.

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## 1. Introduction

Nowadays, customer is believed to be the most precious asset for any organization and building a long term relationship between firms and customers plays essential role for the success of organizations (Lele & Sheth, 1987; McCollough et al. 2000; Cohen et al., 2000). Rigopoulou et al. (2008) investigated the impact of after-sales services on customers' satisfaction as well as on their behavioral intentions, namely "repurchase intention" and "word-of-mouth" (WOM). They reported that after-sales service quality influence on satisfaction, which in turn impacts behavioral intentions. Therefore, after-sales services influence on the overall offering and thus, the quality of the relationship with customers. Kurata and Nam (2010) reported that after-sales service plans determined to maximize profits could not necessarily fit optimal after-sales service levels that could satisfy customers the most. Van Birgelen et al. (2002) investigated the relationship between perceived service performance and national cultural specifications in the formation of customer satisfaction for three kinds of after-sales service contact modes. They reported that, unlike the traditional face-to-face service encounter, the perceived quality–

\* Corresponding author. Tel: +989123399585  
E-mail address: [shahrouzifard@yahoo.com](mailto:shahrouzifard@yahoo.com) (S. Shahrouzifard)

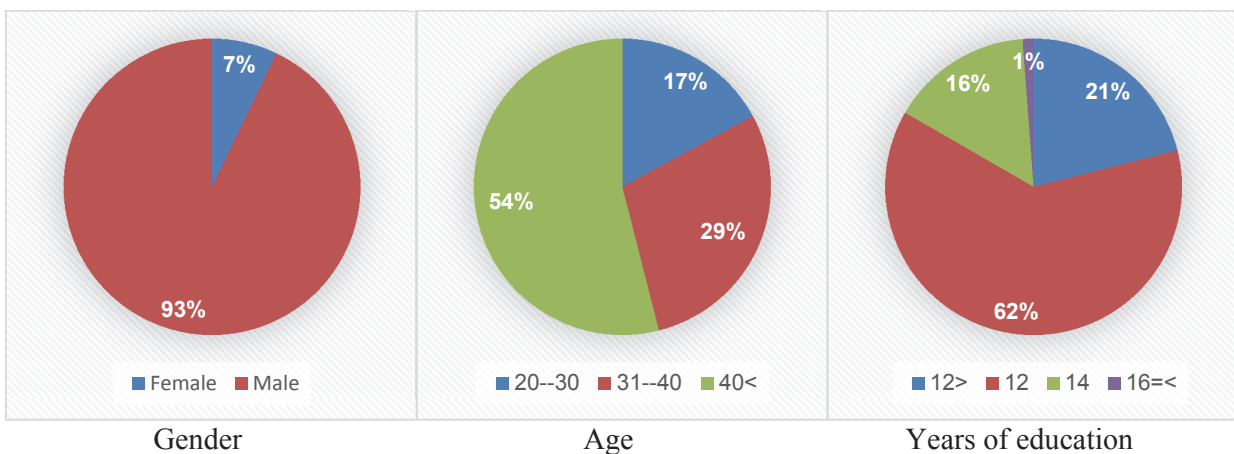
satisfaction relationship was moderated by national culture in the case of an after-sales service contact mode mediated by technology. The positive effect of customer satisfaction on brand and dealer loyalty has been considered, significantly. Bloemer and Lemmink (1992) tried to prove whether or not this relationship actually existed by investigating the case of an automobile-dealer network. They considered three different kinds of customer satisfaction: (a) satisfaction with the car; (b) satisfaction with the sales service and (c) satisfaction with the after-sales service. They expected that all three kinds of satisfaction could have an effect on brand loyalty as well as on dealer loyalty. In their study, the three types of customer satisfaction and the intention to buy the same brand of car more than once, along with the intention to purchase from the same dealer again were investigated. The customers were also requested why they could purchase the same brand or from the same dealer. They reported that: customer satisfaction with the car, as well as dealer loyalty were main determinants of brand loyalty; customer satisfaction with the sales service as well as with the after-sales service were main determinants of dealer loyalty and dealer loyalty is an intervening variable in association between satisfaction and brand loyalty.

## 2. The proposed study

This paper presents an empirical investigation to study the relationship between after-sales service quality and customer satisfaction in a firm named Setareh Nik Aria Yadak whose primary responsibility is to provide after-sales services in public transportation. The population of the survey includes all customers who received their services from this firm during the year of 2015. Therefore, the sample size is calculated as follows,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N - 1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where  $N$  is the population size,  $p = 1 - q$  represents the yes/no categories,  $z_{\alpha/2}$  is CDF of normal distribution and finally  $\varepsilon$  is the error term. Since we have  $p = 0.5$ ,  $z_{\alpha/2} = 1.96$  and  $N = 730$ , the number of sample size is calculated as  $n = 252$ . Fig. 1 shows personal characteristics of the participants who took part in this survey.



**Fig. 1.** Personal characteristics of the participants

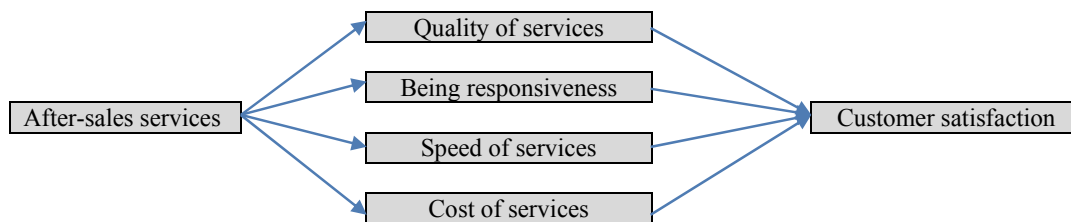
As we can observe from the results of Fig. 1, 93 percent of the respondents were male, 54% were at least 40 years of age and they mostly had minimum or no university education. The survey designs a questionnaire in Likert scale, which consists of four items of quality, responsiveness, speed and cost of services. Cronbach alpha is calculated as 0.79, which validates the quality of the survey. In addition, Kolmogorov–Smirnov has indicated that the data were not normally distributed and therefore, the proposed study of this paper uses Spearman test to examine hypotheses of the survey. The main hypothesis of the survey is as follows,

Main hypothesis: There is a positive relationship between after-sales services and customer satisfaction.

The main hypothesis of this survey consists of the following four sub-hypotheses,

1. There is a positive relationship between quality of services and customer satisfaction.
2. There is a positive relationship between being responsiveness and customer satisfaction.
3. There is a positive relationship between speed of services and customer satisfaction.
4. There is a positive relationship between cost of services and customer satisfaction

Fig. 2 shows the structure of the proposed study,



**Fig. 2.** The structure of the proposed study

### 3. The results

In this section, we present details of the presentation of the study.

The main hypothesis of the survey investigates the relationship between after-sales services and customer satisfaction. The implementation of Spearman correlation yields  $r = 0.68$  (Sig. = 0.002), which means there was a positive and meaningful relationship between after-sales services and customer satisfaction.

#### 3.1. *The relationship between quality of services and customer satisfaction*

The first sub-hypothesis of the survey investigates the relationship between quality of services and customer satisfaction. The implementation of Spearman correlation yields  $r = 0.42$  (Sig. = 0.000), which means there was a positive and meaningful relationship between quality of services and customer satisfaction.

#### 3.2. *The relationship between being responsiveness and customer satisfaction*

The second sub-hypothesis of the survey investigates the relationship between being responsiveness and customer satisfaction. The implementation of Spearman correlation yields  $r = 0.54$  (Sig. = 0.003), which means there was a positive and meaningful relationship between being responsiveness and customer satisfaction.

### 3.3. *The relationship between speed of services and customer satisfaction*

The third sub-hypothesis of the survey investigates the relationship between speed of services and customer satisfaction. The implementation of Spearman correlation yields  $r = 0.49$  (Sig. = 0.001), which means there was a positive and meaningful relationship between speed of services and customer satisfaction.

### 3.4. *The relationship between cost of services and customer satisfaction*

The last sub-hypothesis of the survey investigates the relationship between cost of services and customer satisfaction. The implementation of Spearman correlation yields  $r = 0.65$  (Sig. = 0.005), which means there was a positive and meaningful relationship between cost of services and customer satisfaction.

## 4. Conclusion

In this paper, we have presented an empirical investigation to study the relationship between after-sales services and customer satisfaction for one of the part suppliers of public transportation in Iran. The results of the survey has indicated that cost of services played essential role for customer satisfaction. In addition, customers appreaed to highly expect firm to be responsible about the job they accimplish. A fast and reliable service also played crucial role on attracting customer to become regular user of services.

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