

## **CHAPTER FIVE**

### **CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS**

This chapter presents (1) a summary of the study, (2) a summary of the findings, (3) discussions of customers' satisfaction with services at the Metropolitan Waterworks Authority, Minburi Branch Office, (4) conclusions, and (5) recommendations for further research.

#### **5.1 SUMMARY OF THE STUDY**

Customer satisfaction is a major concern of the Metropolitan Waterworks Authority, Minburi Branch Office. Customers' satisfaction measurement is crucial for learning how well the service is perceived by the customers. The results of this study will be helpful for improving the quality of goods and services.

##### **5.1.1 Objectives of the Study**

This study is intended to identify customers' satisfaction with services at the Metropolitan Waterworks Authority, Minburi Branch Office. The investigation focused on customers' satisfaction with four elements; water quality, service staff, service procedures, and facilities provided. Additionally, it was conducted to investigate the customers' opinions and to find out the weak points of the service that should be improved. The results of customers' satisfaction, together with their comments and suggestions, will be useful for developing the organization.

##### **5.1.2 Subjects, Materials, and Procedures**

The subjects of this study were 100 customers who came to use the services at the Metropolitan Waterworks Authority, Minburi Branch Office from January 21 – 31, 2008. Both male and female customers of various ages were invited to complete the questionnaires.

The research instrument used in this study was a self-administered questionnaire conducted in both Thai and English. The questionnaire was divided into three parts, which were general information of the respondents, customer satisfaction measurement, and comments or suggestions from the respondents.

The questionnaires were distributed to the respondents directly by the researcher at the waiting area of the office. After collecting the data, the results of the survey were analyzed by using the Statistical Package for Social Sciences Program (SPSS) version 15.0. Descriptive statistics was used to analyze general information and satisfaction level. The results are shown in the form of frequency, percentage, mean, and standard deviation.

## **5.2 SUMMARY OF THE FINDINGS**

The results of the study can be summarized as follows:

### **5.2.1 General Information of the Respondents**

The total number of the respondents was 100 and the majority of them (56%) were male. Most of them were between 31 and 40 years of age (55%). The education level of most respondents was Bachelor's Degree (63%). The majority of them (54%) were office worker. And in terms of the income per month, most of the respondents (41%) had income between 20,001 – 30,000 Baht.

### **5.2.2 Customers' Satisfaction with Services at the Metropolitan Waterworks Authority, Minburi Branch Office**

The respondents' satisfaction with water quality was at satisfactory level since the mean score for overall satisfaction in this area was rated as 3.66. The results also show that the respondents were mostly satisfied with the sufficient water amount which accounted for the highest mean score (4.00) followed by water cleanliness (3.65). The respondents were less satisfied with water pressure which accounted for the lowest mean score (3.16).

Apart from the satisfaction with water quality, the respondents were also satisfied with the service staff since the mean score of overall satisfaction was rated as 3.87. The results show that they were mostly satisfied with the politeness and manners of the staff which accounted for the highest mean score (3.97), followed by staff expertise in performing their duties (3.88), the willingness to help and give prompt service (3.71), and sufficient number of staff with the lowest mean score (3.65).

Next, in terms of the respondents' satisfaction with the service procedure, most of them were also satisfied since the mean score for overall satisfaction in this area was 3.97. The highest level of satisfaction was the appropriate queuing system with the mean score of 4.31, followed by the ease of contact with the staff (3.92), the speed of service (3.91), and clear service steps and system with the lowest mean score of 3.77.

Finally, it was found that the respondents were satisfied with the facilities provided since the mean score for overall satisfaction with the facilities was 3.90. The highest level of satisfaction in this area was the cleanliness of the place, with the highest mean score (4.48), followed by sufficient waiting space (3.66), appropriateness and accessibility of the office location (3.63), and up-to-date equipment (3.61).

### **5.2.3 Respondents' Comments and Suggestions**

Although the respondents were quite satisfied with the services at the Metropolitan Waterworks Authority, Minburi Branch Office, they would still like the service provider to improve the services in some aspects.

In terms of the water quality, the respondents suggested that they wanted higher water pressure. For the service staff, they commented that the staff should be more polite and smile more. Moreover, there should be an information counter at the front to assist the customers. Lastly, regarding the facilities, the respondents commented that there should be a bus passing the office. They also suggested that the photocopying machine should be downstairs; there should be convenience store; the parking space should be increased, and the sign for the office should be more outstanding. In addition, they suggested that there should be more branch offices for greater convenience.

## **5.3 DISCUSSIONS**

This section concerns the discussions of general information of the respondents, customers' satisfaction with services at the Metropolitan Waterworks Authority, Minburi Branch Office, and respondents' comments and suggestions.

### 5.3.1 General Information of the Respondents

Among 100 respondents, there were almost equal numbers of male (56%) and female (44%). This finding corresponds with the study of Suphachai Pinsurong (สุภชัย พิณสุรงค์, 2548) about consumers' satisfaction toward the service of the Metropolitan Waterworks Authority, Nonthaburi Branch in which male respondents accounted for 50.9% and female respondents for 49.1%. Also, in the study of satisfaction of water users: the case study of the Metropolitan Waterworks Authority, Bangkok Branch Office by Chaviwan Vinitkhetkhumnuan (ฉวีวรรณ วินิจเขต คำนวณ, 2548), the number of male and female respondents were nearly equal with 52.5% of female and 45.5% of male. Since water is the basic goods that is necessary for survival of everyone, the number of respondents for each gender will not be much different unlike some consumer goods that targets particular group of customer. In terms of other characteristics of the respondents like age, education, and occupation, the findings from this study also correspond with the study of Suphachai Pinsurong (สุภชัย พิณสุรงค์, 2548) and Chaviwan Vinitkhetkhumnuan (ฉวีวรรณ วินิจเขต คำนวณ, 2548). Most of the respondents were in the middle age group, had Bachelor's Degree, and many of them were office workers. However, the income per month of most respondents who came to use the service at Minburi Branch Office was slightly higher with the income between 20,001 – 30,000 Baht.

### 5.3.2 Customers' Satisfaction with Services at the Metropolitan Waterworks Authority, Minburi Branch Office

The results of the study show that most of the respondents were somewhat satisfied with the services provided by the Metropolitan Waterworks Authority, Minburi Branch Office.

In terms of the satisfaction with water quality, the majority of the respondents were somewhat satisfied. They were mostly satisfied with the sufficient water amount which corresponds with the study of Suphachai Pinsurong (สุภชัย พิณสุรงค์, 2548) followed by water cleanliness. However, they were less satisfied with the water pressure, as 50% of them stated that they were moderately satisfied. Some of

them (3%) were very satisfied with the water pressure. This finding is in line with the study of Chaviwan Vinitkhetkhumnuan (ฉวีวรรณ วินิจเขตคํานวน, 2548) that most of the respondents were least satisfied with the water pressure in terms of water quality with the mean score of 3.02. Also, the study of Suphachai Pinsurong (ศุภชัย พิณสุรงค์, 2548) found that most respondents were least satisfied with the water pressure with the mean score of 3.40 and 3.29 for the water pressure in the evening and in the morning respectively. The average water pressure supplied by the Metropolitan Waterworks Authority is 6 meters which is less than the international level. The pressure depends on the location of the usage, whether it is near the pumping station or not, and the quality of the pipe. The reason why the Metropolitan Waterworks Authority cannot increase the pressure is that the pipe system in Thailand is old and the standard is less than the international standard. By supplying high water pressure, the pipe may burst or there may be water leakage at the joint. Therefore, many people who experience low water pressure will use a pump. Nowadays, many villages supply the customers with a pump as they buy a house.

Apart from the satisfaction with the water quality, the respondents were also somewhat satisfied with the service staff. The respondents were mostly satisfied with politeness and manners of staff followed by staff expertise in performing their duties. The results show that the staff at the Minburi Branch Office was well-trained and exhibit good manners when serving the customers. This also corresponds with the result from Panwalee Primkajepong (2007) on customer satisfaction with work permit application services at the Office of Foreign Workers Administration. The result from her study showed that the respondents were mostly satisfied with the staff expertise with the highest mean score of 3.93. However, the respondents stated that they were least satisfied with sufficient number of staff.

The respondents also felt somewhat satisfied with the service procedures. They were mostly satisfied with the appropriate queuing system with the highest mean score of 4.34. An automatic queuing machine at the Minburi Branch Office helps to manage the queue properly with “first come first served.” This point implies that even though the customers have to wait for the services, they are satisfied as they are assured that there would be no queue jumping. The satisfaction with the

queuing system was in line with the finding of Panwalee Primkajeepong (2007). Her respondents were mostly satisfied with the queuing system with the highest mean score of 4.17.

Lastly, in terms of the satisfaction with facilities provided at the Metropolitan Waterworks Authority, Minburi Branch Office, most of the respondents were also somewhat satisfied. They were mostly satisfied with the cleanliness of the place with the highest mean score of 4.48. Most of the respondents (51%) stated that they were very satisfied. None of them were dissatisfied with the cleanliness. This shows that the environment at the office is very good. The maids always take good care of the place. Moreover, since the Minburi Branch Office is the newest branch, established in 2005, the office also looks nice as all the equipment and decorations are new. However, some customers (4%) felt somewhat dissatisfied with the appropriateness of and accessibility of the office location. There is no bus passing the office. Therefore, it is not convenient if the customers do not have their own transportation. Moreover, the sign locating the office does not clearly stand out. Many customers drive pass the office before noticing it.

### **5.3.3 Respondents' Comments and Suggestions**

From the study, many useful comments and suggestions were obtained. Since some respondents suggested that the staff should be more polite and smile more, the office should train the staff more often so that they will have greater service mind. An information counter should be provided at the first point of contact to provide useful information for the customers. In terms of the facilities, the customers are not given enough convenience as the photocopying machine is on the third floor. They have to walk up and down for the service. Moreover, sometimes the customers have to wait for the service since there is only one photocopying machine at the office for both staff and the customers. Problems could occur when the machine broke down. There should also be a convenient store near the office area since some of the customers might need to use the service for a long time. Moreover, the office sign should be clearly displayed so that it will be easier for the customers to notice. At present, the sign is horizontal to the road which is not easily seen. Many customers drive past the office. Therefore, the office should improve the sign, or have another

sign vertically so that it would be more outstanding. Customers' concern with the facilities was in line with the study of Panwalee Primkajeepong (2007). Her respondents suggested that the office should provide a greater variety of printed materials, a free Internet Zone, a coffee machine or coffee corner, photo copying, and express photo taking services.

## **5.4 CONCLUSIONS**

The following conclusions can be drawn from the discussion above.

5.4.1 According to the study, the majority of the respondents were satisfied with the services at the Metropolitan Waterworks Authority, Minburi Branch Office.

5.4.2 The results of the findings showed that the majority of the respondents were mostly satisfied with the service procedures, followed by facilities provided, service staff, and water quality respectively.

5.4.3 Although the results revealed that most of people were somewhat satisfied with all aspects of the services, some aspects still need to be improved, such as water pressure, the manners of the staff, the location of the photocopying machine, and the visibility of the office sign.

5.4.4 In order to better serve the customers, the office should also give more consideration to the facilities provided. Since many customers have to use the photocopying machine, it should be provided specifically for the customers at the first floor. A convenience store should also be provided as in some other branch offices. Moreover, the office sign should be improved for greater visibility.

## **5.5 RECOMMENDATIONS FOR FURTHER RESEARCH**

Based on the findings and conclusions of this study, the following recommendations are made for further research.

5.5.1 Since this study was conducted at only one branch office, the results may not be generalized to all branches of the Metropolitan Waterworks Authority. Further research should also be done at other branch offices.

5.5.2 Further research should be conducted to compare the customers' satisfaction between different branch offices. It is a way to stimulate the

competitiveness and development. The useful information obtained from one branch office could also be applied to another.

5.5.3 Further research should study other groups of subjects such as companies and government offices.

5.5.4 Since the time for this study was limited, further research should extend the period of the study in order to have a larger sample size.

5.5.5 In order to gain more details of the customers, further research should also interview the respondents.

5.5.6 This study only covers customers' satisfaction in 4 main areas of interest. Further research should cover a larger area of satisfaction, such as satisfaction with the call center, public relations, and service outside the office.