



# Measuring customer satisfaction through expectation and perception

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### ARTICLE INFO

#### Article history:

Received: 3 August 2011;

Received in revised form:

22 September 2011;

Accepted: 30 September 2011;

#### Keywords

Expected service,  
Perceived service,  
Service quality,  
Public service delivery,  
Satisfaction.

### ABSTRACT

Countries around the world have showed great efforts in promoting and improving the effectiveness of services given. Malaysia government required all public agencies in this country to strive to achieve ISO certification in order to developed high and consistent quality based on the principle of right the first time and all the time through documentation of policies and procedures. The issue on public service that does not meet the customer expectation has always been as an interesting topic and discussion. Until now, public sector is still trying to improve the facilities in order to meet customer satisfaction. To explore the differences between expected and perceived service quality towards publics Service delivery in Majlis Perbandaran Sungai Petani Kedah (MPSPK), a study was conducted on each individual that received service delivery in the public agency. The results of the study indicated that the overall service quality provided by the MPSPK was below customers' expectations. Tangible was rated as the most important dimension followed by understanding customer, empathy, reliability and communication.

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### Introduction

Public sector management face fluctuation due to the increasingly rapid pace of social, political, and technical change. The service quality particularly in the public sector has become ever more important in improving customer satisfaction. According to Mohamad Niza, Shaiful Anuar, Mohd Fazly, Mohammad Ismail and Nor Aimah (2009) public sector organizations agree that customer service is one of the key factors that contribute establishment of reputation and credibility in the eyes of the public. Here, the public complaint of long queues, poor service delivery and insufficient physical facilities may affect the image and level of service quality in the public sector. However, it is not easy to measure service quality because of its unique characteristics which are intangibility, perishability and heterogeneity.

Today, with the growing pressure on government agencies to deliver real outcomes for it is citizen, essential for public sector organizations to become more accountable and responsive to stakeholders in the development and implementation of policy. The issue also hit public agencies such as Majlis Perbandaran Sungai Petani Kedah (MPSPK) where their services such place of facilities, waste management, counter service, landscape service and car parking service had received complaints from the customers.

The problems of customer dissatisfaction occurred in MPSPK when they received many complaints from customers. Report from MPSPK (2009) stated that majority of the complaints received by MPSPK are regarding tangible facilities where the rubbish bins provided for example at Taman Jerai Harmoni have been decayed and riddled that caused the disorder rubbish. In that report, such complaints have been ignored by MPSPK and lead to a worst condition when customers post the complaint in the one local paper.

The problems regarding poor service quality offered by MPSPK had been highlighted in Sinar Harian (2009) where the issue involved low service delivery in MPSPK is on clogged

drain. One of local papers reported that the clogged drain had resulted to bad smell and affected the food stall environment when the water has overflowed on the road. The food entrepreneur had complaint that the condition of the drain has caused them to loss their customer and affected the daily business activity. Even the problem had been addressed to MPSPK; the authority just comes and makes observation rather than taking action by clean the drain. This situation has resulted in customers' dissatisfaction towards public service delivery offered by MPSPK towards Sungai Petani population because they took a few months to clean up the drain after the complaint was lodged.

According to Rodríguez, Burguete, Vaughan and Edwards (2009) in order to provide high-quality and cost-effective public services, it involves the right approaches and culture, establishing clear ways of delivering services, and putting the right people in place to respond to the needs of citizens. Thus, public service provider need to continuously build new strategies of development based on efficiency, effectiveness, and economy of management simultaneously aimed to attaining suitable performance and at satisfying customer's requirements. When the service provider understands how citizens perceived services delivered to them, it will be possible to identify ways of managing these evaluations and influencing them in the desired direction. The relationship between the service concept, the service offered to citizens, and citizen benefits has to be clarified (Grönroos 2007). He gives a two-dimensional view of service in his model which he calls the first "technical" quality or "what" is received by the customer and the other "functional" quality or "how" a service is provided. What customers receive in their interactions with a firm is clearly important to them but customers are also influenced by how they receive the service and how they experience the simultaneous production and consumption process.

Kotler and Armstrong (2008) stated that "a service firm's ability to hang onto its customers depends on how consistently it

delivers value to them". Satisfaction is a person's feeling of the pleasure or disappointment arising from comparing products perceived performance in relation to expectation. Besides, bad service product can cause service failures, bad service quality and low customer satisfaction. Therefore, the concept of service management must also include the component of employee's quality consciousness (Deng and Pei, 2009).

Service quality is concept has been debated by many scholars and considerable interest in research literature because of the difficulties in defining and measuring it. Service quality is the extent to which a service meets customers' needs or expectation (Lewis and Mitchell, 1990). It is apparent that there is little consensus of opinion and much disagreement on how to measure service quality (Robinson, 1999). The quality of the public service quality will be analyzed using the Service Quality dimension (SERVQUAL) (Parasuraman, Zeithaml and Berry 1985). The service quality will analyze through the user perception and satisfaction of the public services given (Basu, 2004). This literature review will be discuss on the service delivery quality through perceived service, expected service which contains word of mouth, personal needs and past experience and also through service quality dimensions which are tangible, reliability, empathy, communication and understanding the customer. These five dimensions were proposed in SERVQUAL model will be used to measure expectations and perception of customer that experienced public service delivery (Parasuraman, Zeithaml and Berry, 1988).

#### Materials and Methods

The respondents of this research comprise of MPSPK customer as it is individual analysis as the research is addressed to investigate the quality of service delivery in public agency in customers' expectation and perceived value individually.

**Data collections:** The data for this study will be collected through personally administered questionnaires. The advantage of this method is the completed data can be collect from the respondents in one time or period (Sekaran, 2006). For the descriptive research, primary sources have been used. By using primary data, it has direct control over the data collection and often yielded more accurate, current, sufficient, available and relevant information. The primary data can be obtained through distributing the questionnaires to the respondents. By using this structured design, it can capture the actual customer's perception on differences between expected and perceived service by MPSPK delivered to them.

**Data analysis:** Morgan, Leech and Barret (2005) defined data analysis as a process of classification, summarizing, organized and manipulated data that has been received from respondents. Hence, data analysis involves in this studies only emphasized on the Cronbach's Coefficient Alpha, Descriptive Analysis and Multi-Regressions Analysis.

#### Result and Discussion

Cronbach coefficient alphas (pre-test of questionnaire): According to Zikmund (2003), a Cronbach's Alpha value above 0.9 is excellent. Sekaran (2006) stated that, the closer the reliability coefficient gets to 1.0, the better the goodness of a measure. In general, reliabilities less than 0.6 are considered to be poor, those in the 0.7 range, acceptable and those over 0.8 good. So for this research, Cronbach Alpha has been used to test the reliability and the result is 0.903 that shows the data consistency from respondents is acceptable.

**Descriptive analysis:** As shown in Table 1, the female respondents represent the majority with the number 154 (51.3%) and males 146 (48.7%).

Table 2 showed the age of respondents. The respondents were divided into six age categories. The majority of age category comes from the range 26-30 years old which equal to 91 respondents (30.3%). It was followed by respondents aged 21-25 years old which equal to 81 respondents (27%), aged 31-35 years old, less than 20 years old, 36-40 years old and 40 years above which equal to 81 respondents (27%), 38 respondents (12.7%), 32 respondents (10.7), 30 respondents (10%) and 28 respondents (9.3%) respectively.

Table 3 showed the race of respondents. The highest respondents' percent are from Malay with 179 respondents (59.7%), meanwhile for Chinese represent 74 respondents (24.7%) and 47 respondents (15.7%) for Indian.

Table 4 showed the income of respondents. The majority of respondents belong to income range RM2001-RM2500 which equal to 133 respondents (44.3%) followed by income range less than RM1000, RM1501-RM2000, RM1001-RM1500, more than RM3000 and RM2501-RM3000 which equal to 62 respondents (20.7%), 49 respondents (16.3), 33 respondents (11.0%), 17 respondents (5.7%) and 6 respondent (2.0%) respectively.

Table 5 showed the level of customer's education. Majority of customers' education level is SPM/Certificate which equal to 110 respondents (36.7%), meanwhile for diploma level, the total respondents are 86 (28.7%) and for degree level, the total respondents are 104 (34.7%).

Table 6 showed the occupation of respondents. majority of the respondents is government employee which amounted to 94 respondents (31.3%), followed by self-employed, student, private employee and not working which equal to 70 respondents (23.3%), 62 respondents (20.7%), 51 respondents (17.0%) and not working (7.7%) respectively.

Table 7 showed the overall perceive service is less than overall expected service. From t-test analysis, the differences in overall service is -0.82 indicate that the customers' perceived service is lesser than what they have been expected that actually resulted in customer dissatisfaction. Hence, there is a difference between overall services delivered by MPSPK towards customers.

#### Multi-Regressions analysis:

There are five dimensions have been used to examine customer's satisfaction towards difference between customer expectation and perception towards public service delivery. In Table 8 showed the hypothesis of expected services was examined by computing Regression Analysis between expected service quality dimensions (tangibles, reliability, empathy, communication and understanding customer needs) and customer satisfaction. The results (table 4.3.1) indicated that tangible dimension had a significant relationship with customer satisfaction as indicated by significant t-value ( $p < .05$ ) where ( $r = 0.274$ ,  $p < 0.05$ ), reliability dimension ( $r = 0.206$ ,  $p < 0.05$ ), empathy dimension ( $r = 0.291$ ,  $p < 0.05$ ), communication dimension ( $r = 0.167$ ,  $p < 0.05$ ) and understanding customer need dimension ( $r = 0.204$ ,  $p < 0.05$ ) respectively. The positive coefficients for the all dimensions were found to be statistically significant, suggesting increasing level of satisfaction. Accordingly, the null hypothesis of Ho1 (a), Ho2 (a), Ho3 (a), Ho4 (a) and Ho5 (a) are rejected. Hence, it can be concluded that expected service dimensions affects customer satisfaction.

Table 9 showed the hypothesis of perceived services was examined by computing Regression Analysis between expected service quality dimensions (tangibles, reliability, empathy, communication and understanding customer needs) and customer satisfaction. The results indicated that tangible dimension had a significant relationship with customer satisfaction as indicated by significant t- value ( $p < 0.05$ ) where ( $r = 0.694$ ,  $p < 0.05$ ), reliability dimension ( $r = 0.586$ ,  $p < 0.05$ ), empathy dimension ( $r = 0.603$ ,  $p < 0.05$ ), communication dimension ( $r = 0.463$ ,  $p < 0.05$ ) and understanding customer need dimension ( $r = 0.664$ ,  $p < 0.05$ ) respectively. The positive coefficient for the all dimensions were found to be statistically significant, suggesting increasing level of satisfaction. Accordingly, the null hypothesis of Ho1 (b), Ho2 (b), Ho3 (b), Ho4 (b) and Ho5 (b) are rejected. Hence, it can be concluded that perceived service dimensions affects customer satisfaction.

The result of the above in table 8 and 9 has been supported by Juwaheer (2004) as the factors with various degrees of significance resulting from the regression analysis were then shown in order of importance based on their coefficient. A factor with a high coefficient is more likely to suggest that the factor itself carries a heavier weight in explaining the customer satisfaction towards public service delivery. The results may be interpreted to mean for public sector service, customers' satisfaction of public service delivery in MPSPK is significantly driven by both expected and perceive tangibility dimension. According to Ishak Ismail, Hasnah Haron, Daing Nasir Ibrahim, Salmi Mohd Isa (2006) the the coefficient value for tangibles, reliability, empathy, communication and understanding customer needs of expected and perceived were found to be statistically significant with the value of p less than 0.05 ( $r = -0.247$ ,  $r = 0.694$ ), ( $r = -0.206$ ,  $r = 0.586$ ), ( $r = -0.291$ ,  $r = 0.664$ ), ( $r = -0.167$ ,  $r = 0.463$ ), ( $r = -0.204$ ,  $r = 0.664$ ) respectively, suggesting increasing level of satisfaction.

#### Conclusion And Recommendation

This study showed, MPSPK should be more proactive in delivering the quality service to customers who are expecting and demanding higher quality services. Customers' expectation and perceptions must ideally be met and exceeded if public sector organization is to survive regionally.

The large difference occurred when customer of MPSPK perceived value on tangible dimension is lower than what they have expected. These suggest that that includes facilities and equipment provided to people such as recreational part, hall, parking lots and decoration tree. MPSPK should do frequent checking on the availability of tangible dimension provided to customer in order to ensure their level of satisfaction. MPSPK should revise the landscape charge by conducting survey on what is the reasonable charges should be imposed for landscaping. Therefore, volume of customer who used MPSPK's landscaping services will increase and give good perception toward MPSPK service. Besides that, MPSPK also should conduct a monthly observation on the services provided by their organization because the observation can helps MPSPK to identify their own strength and weaknesses and make prompt changes.

The use of service quality dimensions to measure customer satisfaction and service delivery quality in public sector has produced relevant and meaningful results which are hoped will lead continuous improvements in the delivery of public sector services.

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**Table 1: Gender of respondents**

Gender	Frequency	Percent
Male	146	48.7
Female	154	51.3
Total	300	100.0

**Table 2: Age of respondents**

Age	Frequency	Percent
< 20 years	32	10.7
21-25 years	81	27.0
26-30 years	91	30.3
31-35 years	38	12.7
36-40 years	30	10.0
More than 40 years	28	9.3
Total	300	100.0

**Table 3: Race of respondents**

Race	Frequency	Percent
Malay	179	59.7
Chinese	74	24.7
Indian	47	15.7
Total	300	100.0

**Table 4: Income of respondents**

Income	Frequency	Percent
< RM1000	62	20.7
RM1001-1500	33	11.0
RM1501-2000	49	16.3
RM2001-2500	133	44.3
RM2501-3000	6	2.0
More than RM3000	17	5.7

**Table 5: Level of customers' education**

Education level	Frequency	Percent
SPM/Certificate	110	36.7
Diploma	86	28.7
Degree	104	34.7
Total	300	100.0

**Table 6: Occupation of respondents**

Occupation	Frequency	Percent
Government Employee	94	31.3
Private Employee	51	17.0
Self Employed	70	23.3
Student	62	20.7
Not Working	23	7.7
Total	300	100.0

**Table 7: Mean Score on Overall Expected Services and Perceived Services**

Overall Services	Mean	N
Overall Expected Services	4.0762	300
Overall Perceived Service	3.2598	300

**Table 8: Regression Results of Expected Services**

Independent variables	Coefficient	Significant	r
Tangible	0.260	0.000	0.274
Reliability	0.171	0.000	0.206
Empathy	0.261	0.000	0.291
Communication	0.153	0.004	0.167
Understanding customer	0.187	0.000	0.204

**Table 9: Regression Results of Perceived Services**

Independent variables	Coefficient	Significant	r
Tangible	0.595	0.000	0.694
Reliability	0.544	0.000	0.586
Empathy	0.573	0.000	0.603
Communication	0.459	0.000	0.463
Understanding customer	0.648	0.000	0.664