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The Impact Of Service Quality Management Based On Communication Technology Of Customer Loyalty

(Case Study Moshi2 Spesialis Sampah, Gowa, Sulawesi Selatan)

Mariesa Giswandhani, S.Sos., M.I.Kom Communication Science, Faculty of Economy and Social Science, Fajar University

Makassar, Indonesia Email : mariesagiswandhani@gmail.com Dr. Mujahid, SE, MM.
Management Science, Faculty of
Economy and Social Science, Fajar
University
Makassar, Indonesia

Email: mujahid.unifa@gmail.com

Amalia Zul Hilmi, S.Sos., M.I.K. Communication Science, Faculty of Economy and Social Science, Fajar University

Makassar, Indonesia Email : amaliazulhilmi@ymail.com

Abstract—Moshi2 **Spesialis** Sampah garbage transportation service in Gowa regency, South Sulawesi that utilizes communication technology as a form of service to its customers. Increasing the amount of household waste, and the speed of access of modern society and the dependence on technology opens opportunities for Moshi2 Spesialis Sampah to provide services in the form of customer care which can be accessed by telephone and also internet. This research was conducted to see how the influence of service quality based on communication technology to customer loyalty. The number of variables used in this study consists of 5 namely reliability (X1), assurance (X2), tangibles (X3), empathy (X4) and responsiveness (X5). The data analysis used is simple regression regression analysis. The results showed that reliability (X1), assurance (X2), tangibles (X3), empathy (X4) and responsiveness (X5) had significant effect on customer loyalty. While the variable that has the most dominant influence on customer loyalty is responsiveness (X5). The better the responsiveness or responsiveness given to the customer, the greater the likelihood of customer loyalty.

Keywords-- Moshi2 Spesialis Sampah, Quality of Service Management, Communication Technology, Customer Loyalty

I. INTRODUCTION

Success in competition is determined by the anticipation and rapid response to any changes in customer needs and behavior. Companies are required to be more creative and innovative in serving customers through offering products or services by providing services and facilities are getting better.

Competition in price is not the only thing that is effective in increasing the number of customers or retaining customers. Quality service becomes one thing that can be assessed and perceived directly by the customer.

The rapid advancement of communication technology has made modern customers a prime need, hoping to get more services with the convenience offered by technology. Society has undergone a transformation of science and technology, society is now able to adjust to the situation and conditions of his day or live with the constellation of the times

Looking at the phenomenon, one of the start-up companies of waste transport service named Moshi2 Spesialis Sampah located in Gowa-South Sulawesi Regency, sees the opportunity in the application of business model to modern society which of course need more services to its primary needs, one of which is the problem cleanliness. Moshi2 Spesialis Sampah is a company engaged in the field of waste transportation services that utilize communication technology in providing services to consumers and customers. In contrast to conventional municipal waste management and transport services that are commonly used by municipalities or those we normally encounter. At the conventional trash service model that does not have customer care, Moshi2 Specialist Trash provides services to meet the needs of today's modern society that requires speed of service, ease of payment of contributions, and can be accessed at any time. Based on pre-research conducted by the researcher and looking at the data from Moshi2 Special Sampah party against several households that are its customers, it was found that most Moshi2 Customers of Garbage Customers complain about the problem of delay in transporting garbage that is not in accordance with the schedule promised.

According to Kotler-Keller [1], reported that: "Satisfaction is the feeling of pleasure or disappointment of someone who emerges after comparing the performance of the product to the expected performance (or outcome)." The purpose of this research:

To know and analyze the effect of service quality [2]
management dimension based on communication
technology refers to reliability, assurance, tangibles,
empathy and responsiveness to customer loyalty of
Moshi2 Spesialis Sampah.



2. To know and analyze the dimensions that have the most dominant influence on customer loyalty.

II. RESEARCH METHOD

This research took place during February to July 2017 at Moshi2 Spesialis Sampah of Gowa Regency, South Sulawesi. The respondents of this research are Moshi2 Spesialis Sampah's cutomers.

Method of sampling using slovin formula. [3] To use this formula, first determine what the fault tolerance limit is. The tolerance limit for this error is expressed as a percentage. The researchers chose to use a 5% error limit. Namely from a total of 321 population, obtained 178 samples. The number of variables in this study are 5 independent variables, namely reliability, assurance, tangibles, empathy, and responsiveness and 1 dependent variable that is customer loyalty.

Here are the stages of data analysis conducted in this research:

1. Test Data Validity

Test validity is a measure that shows the levels of validity or distress of an instrument. The high degree of instrument validity indicates the extent to which the data collected does not deviate from the description of the validity in question. (Arikunto, 2002: 144).

Criteria acceptance validity test that is by comparing the results of calculation test instrument validity rhitung with rtabel. Instrument is valid if r count > r table.

2. Test Reliability Instruments Research

Reliability has a trustworthiness. In other words, a measuring instrument has reliability when the measurement results are relatively consistent if the measuring instrument is used repeatedly by the same researcher or by other researchers. Therefore, questions in the questionnaire should be made as good as possible, so that if filled the respondents the results are relatively consistent. (Arikunto, 2006: 142).

One method of reliability testing is to use the Alpha-Cronbach method. (Triton, 2006: 248).

3. Simple Regression Analysis

The method of data analysis used in this study is a simple regression analysis method. Where simple regression analysis is used to test the effect of service quality on customer loyalty of Moshi2 Spesialis Sampah:

Y = b0 + b1X1 + u

Information:

Y = Customer Loyalty

X1 = Quality of Service

b0 =The regression intercept

b1 = Regression coefficient X1 u =

Disturbance error

After performing simple regression analysis, F-test (simultaneous) and t-test (partial) are used :

a. F-Test

The F-test is used to see if all independent variables have a significant influence on the dependent variable.

b. t-Test

T-test is used to see which independent variables are the most dominant influence significantly to the dependent variable.

III. RESULT AND DISCUSSION

1. Test of Validity and Reliability of Research Instruments

Criteria acceptance validity test that is by comparing the results of calculation test instrument validity rount with rtable. Instrument declared valid if rcount>rtable.

From the results of the data above shows that the whole item question in the questionnaire has a value research rount>rtable, it can be concluded that all items of question in this research stated Valid.

The following table Alpha value level reliability:

Table 1
Level of Reliability Based on Alpha Value

Alpha	Relative Level
0,00 - 0,20	Less Reliable
	Somewhat
>0,20 - 0,40	Reliable
>0,40 - 0,60	Quite Reliable
>0,60 - 0,80	Reliable
>0,80 - 1,00	Very Reliable

Source :(Triton, 2006)

Meanwhile, based on the results of calculations using researchers using SPSS application, of all items questionnaire in this study showed that:

Table 2 Reliability Table Case Processing Summary

			N	%
Cases	Valid		178	100.0
	Excluded ^a Total		0 178	.0 100.0
Reliability Statistics			stics	
Cronb	oach's Alpha	l	N of Items	
	.652		26	

Source: Primary data is processed from the questionnaire, 2017

Cronbach Alpha value or reliability of 0.652, which if associated in the table level of relibility is in the range 0.60 - 0.80 which means the variable X is reliable.

2. Simultan Test (F-Test)

Testing simultaneously to know service quality dimension consisting of reliability, assurance, tangibles, empathy, and responssiveness to customer loyalty of



Moshi2 Spesialis Sampah can be seen in the following table:

Table 3
Summary table of F-Test

Variables	Variable	F	C:-	T., C.
		Г	Sig.	Info.
Bound	Free			
	 Reliability 			
	 Assurance 			
Customer				
	 Tangibles 			
Loyalty		15.535	0.000	Sig.
	 Emphaty 			
(Y)				
	 Responsive 			
	ness			
		Adjusted		
R	R2			
		R2		
0.815	0.664	0.622		

Source: SPSS; Model Summary and table Anova, 2017

In the table above shows that the dimensions of service quality affect the customer loyalty services Moshi2 Spesialis Sampah, simultaneously:

- 1) Multiple Correlation Coefficient
 - That the R number of 0815 describes the correlation or dependent variable relationship with independent variables is strong mean sektar 81.5% influenced by independent variables.
- 2) Coefficient of Determination Coefficient of Determination (R Square) obtained value of 0.664, this illustrates that 66.4% variation rise and fall of the dependent variable is determined by the independent variable.
- 3) F Count (F Change)

Anova test results obtained F value Calculate 15,535 with a significance level of 0.000 <alpha 0,05 it can be concluded that statistically there is significant influence of service quality to customer loyalty.

3. Partial Test (t-Test)

Next do a prtial test (t-Test) to find out whether all variable free service quality (X) have a significant effect on customer loyalty (Y). Here's a partial test table:

Table 4
Anova Table t-Test

Variables Free	Rank	t	Sig.
(Constant)		-2.521	.013
Reliability	5	010	.992

Assurance	2	4.279	.000
Tangibles	4	055	.956
Emphaty Responsivenes	3	788	.432
s	1	19.527	.000

Based on the results of data processing according to the above table then obtained the following results:

- 1) Reliability does not significantly affect customer loyalty, this is because the result of research based on questionnaire and test (Test-t) using SPSS application found probability has value 0.992> 0.05.
- 2) Assurance have a significant impact on customer loyalty. Safety is significant to binding customers, it is based on T-Test results conducted using the SPSS application. That guarantee has a value of 0.000 <0.05 which means significant.
- 3) Tangibles in the form of facilities to customers have no effect in binding the customer of garbage transport, especially facilities in terms of communication technology. This can be seen from the result of Test t using SPSS application which has value 0.956> 0.05.
- 4) Empathy does not affect customer loyalty. Can be seen from Test-t results using SPPS application. Empathy has a value of 0.432> 0.05.
- 5) Responsiveness is a service quality dimension that has the most significant influence in customer loyalty of waste transport. This is based on the result of Test t using SPSS application, proved that responsiveness got first order in the most significant influence with value 0.000> 0.05 and highest questionnaire score.

After a partial test, the highest quality of service impact is the responsiveness.

The discussion in this research will explain the interrelationship between independent variables consisting of reliability, assurance, tangibles, empathy, and responssiveness to the dependent variable that is customer loyalty.

1. Effect of Reliability on Customer Loyalty

From the results of this study found that the dimension of reliability or reliability ie reliability that includes the ability to provide the best services that focus on the ability and reliability of parties Moshi2 Spesialis Sampah in overcoming the problem of household waste has no significant effect on customer loyalty. This is based on the results of questionnaires filled by respondents who are customers Moshi2 Spesialis Sampah which shows that Moshi2 Spesialis Sampah not always complete in transporting household waste. In addition, other statements contained in the questionnaire indicate that Moshi2



Spesialis Sampah sometimes not timely in transporting garbage, but parties Moshi2 Spesialis Sampah quite accurate against each billing. It's just the parties of Moshi2 Spesialis Sampah has not used the website and social media facilities to provide updated information to its customers.

According to Wyckof [4] the quality of service is a level of excellence expected, and related to it is the act of control over the level of excellence to meet consumer expectations. wick of sees the quality of service not viewed from the producer's point of view but from the perception of the person receiving the service. This is because consumers who feel and consume services provided, so that consumers are able to assess and determine the quality of service. Thus, the quality of service is good or bad depending on the consistency of the producer's ability to meet the expectations of its customers.

According to Ratminto and Atik [4], the benchmarks of service success are determined by the level of service receiver satisfaction. While the level of satisfaction of the recipient of this service will be obtained if a recipient of the service get the type of service in accordance with what they expect and need. Thus, the needs of service recipients should be as much as possible fulfilled in order to obtain satisfaction. The presence of a call center that is presented by Moshi2 Spesialis Sampah is expected to be useful for establishing good communication, as well as meeting the needs with maximum reliability. In addition, information about waste education or service is always a good update to provide benefits and also new knowledge for customers.

Trusted from customers of Moshi2 Spesialis Sampah absolutely necessary so that customers also give positive feedback on Moshi2 Spesialis Sampah. Trust is at the forefront of running a business. Reliability has a significant influence on customer loyalty, because customers can directly assess the speed and also the ability of Moshi2 Spesialis Sampah in handling domestic waste issues.

2. Effect of Assurance on Customer Loyalty

From the results of this study found that the assurance is the knowledge, politeness and the ability of the parties to the company to grow the trust of customers to the company. This includes several components such as communication, credibility, security, competence and courtesy. If the reality is more than expected then the service can be said to be qualified, and vice versa. In short, the quality of service can be defined as how far the difference between the reality and the expectation of customer service they receive [5].

Based on the results of this study, the guarantee dimension significantly affects customer loyalty. This is evidenced by the results of this research questionnaire that Parties of Moshi2 Spesialis Sampah always maintain cleanliness and neatness in the transportation of waste, customers feel safe in communicating with parties of Moshi2 Spesialis Sampah through each site because the customer's identity is awake, party of Moshi2 Spesialis Sampah ensure the solution of customer complaints either directly or by social media, and the Moshi2 Spesialis Sampah as much as possible to meet customer needs by ensuring that no more waste is left behind during transport.

Besides hospitality is one aspect of service quality in assurance (guarantee) the most easily measured. One concrete form is to be polite and cheap smile. Aspects of competence means that every employee of the company must have good knowledge of a product or service so it does not look stupid when asked customers. Credibility is the extent to which the company has a good reputation so that customers have confidence to use the company's products. While security in this case is the customer must have a sense of security in doing the transaction. Safe because the company is honest in the deal.

In this dimension, it can be seen that Moshi2 Spesialis Sampah customers feel secure in transacting and accessing every existing site. The results of statistical tests show that the main thing that has a high score is the decency of Moshi2 Spesialis Sampah in serving and maintaining cleanliness when transporting garbage.

3. Effect of Tangibles on Customer Loyalty

The results of this study prove that this dimension has no significant effect on customer loyalty. The physical evidence described in this research is the physical facility of Moshi2 Spesialis Sampah in fulfilling the needs of its customers. As described in the previous chapters, that physical evidence becomes a reference or facility that will facilitate and accelerate in service. With the existence of adequate physical facilities of course will support the process of better service. The physical facilities that have been discovered during the research process are:

1) Garbage transportation

The Moshi2 Spesialis Sampah vehicle is a pick-up motor. Moshi2 Spesialis Sampah have four pick-up motors to support customer service in garbage hauling. It's just based on research that has been done, there are still customers who complain about the issue of this garbage vehicle, because the results of filling questionnaires found there are some customers who complain because the garbage is not transported thoroughly. This is because the capacity is still inadequate in overcoming the problem of household waste.

2) Customer Care Services

Customer service is a key success factor of the company. If a business grows and grows and remains commonplace in competition then profit and income should also increase. To do so, we need to increase the number of customers we have, so we maintain and retain our customers just as well as acquire new customers. So in terms of winning a new business, we also need to maintain the loyalty of existing consumers. Customer service means maintaining and retaining our customers and adding new customers. Many aspects that can provide customer satisfaction and not just give the best. In the era of free market today, many are offered only quality goods, but continuous and sustainable relationships between sellers and customers have not been properly considered. Excellent service (customer care) is good required all members of the company, without exception.



4. Effect of Empathy on Customer Loyalty

From the results of this study indicates that the dimension of empathy has no significant effect on customer loyalty. This is evidenced by the results of filling out the questionnaire that the Moshi2 Spesialis Sampah does not always pay attention individually or according to customer needs, the Moshi2 Spesialis Sampah is not always earnest in response to customer complaints, the Moshi2 Spesialis Sampah sometimes provide different service quality, and Moshi2 Spesialis Sampah never give discounts to customers. Based on customer reviews from high-end groups always have high expectations, so that service providers know them personally. Companies need to know their names, their specific needs and when it comes to knowing what hobbies and other personal characters are. Otherwise, companies will lose the opportunity to be able to satisfy them from this aspect.

This corresponds to the theory of the development of human needs of "Maslow". At a higher level, human needs are no longer with the primary. Once the physical, security and social needs are met, then two more needs will be pursued by human ego needs and actualization. The last two needs of Maslow's theory are those which relate much to the dimension of empathy. Customers want their egos like prestige guarded and they want their status in the eyes of many people maintained and if necessary improved continuously by service provider companies.

The dimension of empathy is supposed to be a dimension that provides a great opportunity to provide a "surprise" service. Something that customers do not expect, is provided by the service provider. Many ways can be done to please customers.

According to Djajendra [6] a Public Speaker, Business Practitioner, Lecturer, Writer, Training Designer and Motivator; who founded PT Djajendra Motivasi Unggul argued that Empathy is a strength that increases the bond of trust between all stakeholders. Therefore, empathy in the heart is able to identify and understand the reality of others. When entrepreneurs are able to understand the reality of the market or potential buyers with their hearts, they will automatically have the intuition to

create products, services, services, or communications tailored to the needs of the market or customers.

In terms of sales, successful salespeople always have strong empathy, so they can quickly react to provide services according to customer needs. And also, their empathy sharpens the beliefs of the heart and informs reality in the right way, so they can make quick decisions, to ease the sales process as per the customer's wishes.

Empathy is the science of conscience, which has the ability to connect one heart to another with honesty and intelligence. So, within a company, if everyone is trained with the energy of empathy, then the working relationship is sure to be harmonious in a very collaborative work of solidity. Likewise, people who deal directly with customers, they will be more intelligent to connect with various customers, so as to increase the company's sales exceeded the target. Essentially, empathy must be flowed perfectly in all aspects and dimensions of the company's work, so that

the company can continue to succeed and achieve the best performance.

Strengthen the marketing team with empathetic energy; strengthen sales team with empathy energy; strengthen service team with empathy energy; strengthen the back office team with empathy energy; and reinforce all other parts of the company with empathetic energy to make your business successful and enduring in all situations and conditions.

Empathic energy will result in greater abundance, strength, success, and relationships.

The stronger the energy of empathy within a company, the stronger the creativity and innovation that is in harmony with the dreams and expectations of society. Thus, excellent entrepreneurs are always able to have empathy for the beliefs, beliefs, perceptions, ways of thinking, and the culture of people's lives. And, the result of their empathy will give birth to a product or service that is in accordance with the beliefs, beliefs, perceptions, culture, or way of thinking of the prospect.

Empathy is the muscle of effort. If you want to enlarge the muscle effort, then every day train and familiarize the energy of empathy into a work culture. The more accustomed everyone in the company uses the energy of empathy, the stronger the working relationship, and the more professional the positive work attitude. Thus, the energy of empathy will not make the employee a spectator of the various realities. But, make them dare to appear with more confidence, to answer all reactions in the company with positive knowledge.

5. Effect of Responsiveness on Customer Loyalty

Responsiveness had the greatest and most significant influence in this study. The responsiveness of Moshi2 Spesialis Sampah will affect the loyalty of its customers. Of all the statements submitted in this dimension, the customer responds very positively to Moshi2 Spesialis Sampah's rapid response to the waste specialist to deal with the accumulated garbage to be transported even beyond the proper schedule. The expectations of a customer of a particular service are determined by factors such as recommendations, personal needs and prior experience. The expected services and perceived service are sometimes not the same, leaving a discontent or a gap. The service quality model or 'GAP model' developed in 1985, highlights the key conditions for delivering high quality service. It identifies five 'gaps' that cause the delivery to fail. Customers generally have a tendency to compare the services they've experienced from 'experience' with the services they expect. If experience does not match expectations, there will be gaps. This relates to the ability to provide responsive services.

Hedvall and Peltschik (1989) divide the service quality dimension into 2, namely: wilingness and ability to serve and physical and psychological access [7].

Babakus and Boller [9] in a study conducted on South American metropolitan gas and utility service companies failed to replicate the research of Parasuraman [5] using 5 dimensions of service quality. Based on the result of factor analysis, only 2 dimensions of service quality were found. This is in line with



Good service enables a company to strengthen customer loyalty and increase market share, therefore good service becomes important in company operations.

Kotler, Philip [8] suggests that service or service is any activity or benefit offered by a party to another party and is essentially intangible and does not result in ownership of something and its production may or may not be associated with a physical product. Meanwhile, according to Hasibuan [10] service is the activity of providing services from one party to another party. Good service is a friendly service, fair, prompt, and good ethics to meet the needs and satisfaction of those who receive it.

The most influential dimension of this is Responsiveness or responsiveness is a company's ability made by direct employees to provide services quickly and responsive. Responsiveness can foster a positive perception of the quality of services provided. Included in the event of failure or delay in the delivery of services, the service providers seek to improve or minimize consumer losses immediately. This dimension emphasizes the attention and speed of the employees involved in responding to consumer requests, inquiries, and complaints. So the components or elements of this dimension consist of the readiness of employees in serving customers, the speed of employees in serving customers, and handling customer complaints. This dimension is the highest indicator in influencing customer loyalty because customers do not have to wait too long for their garbage not to be transported, customer's complaint is always responded by Moshi2 Spesialis Sampah in social media, Moshi2 Spesialis Sampah quickly in providing information directly to customers, and Moshi2 Spesialis Sampah serving the transportation of garbage beyond the proper schedule.

IV. CONCLUSION

Based on the objectives and research results, it can be concluded as follows:

- The results showed that simultaneously the management quality dimension of communication technology-based services refers to reliability, assurance assurance, tangibles, empathy, and responsiveness affect significantly to customer loyalty Moshi2 Spesialis Sampah.
- The results showed that partially, it was found that responsiveness is the most influential and significant dimension of services based communications technology quality to customer loyalty Moshi2 Spesialis Sampah.

After performing the hypothesis test it was found that:

1. Simultaneously the first hypothesis is accepted that there is a positive and significant influence between service quality based on communication technology consisting of reliability, assurance, tangibles, empathy, and responsiveness to customer loyalty Moshi2 Spesialis Sampah.

2. Partially the second hypothesis is not accepted, because based on the initial hypothesis the researcher suspects that the physical evidence will have the most dominant significant influence, but based on the results of partial testing found that the responsiveness has the greatest and significant influence on customer loyalty Moshi2 Spesialis Sampah.

Based on the results of this study, can be described some suggestions, namely:

- It is recommended that in the future Moshi2
 Spesialis Sampah will utilize better physical
 evidence, either digitally or communications
 technology and also provide physical facilities that
 can support the quality of services such as the
 capacity of garbage transportation vehicles, the
 identity or branding of workers, responsiveness to
 meet the needs of its customers.
- It is practically recommended that Moshi2
 Spesialis Sampah regularly update the information and services available in wesbite and social media.

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