

Research:

ANALYSIS OF NETWORK SERVICE ACTIVITIES IMPROVEMENT AT PT. ABC

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Abstract. *This research aims to identify a chain of network services that should have to be improved considering to the level of needs and customer service satisfaction. Understanding about the services conditions based on the level of its needs and customer satisfaction requirements, then the company is able to perform the priority of its improvement. This research has identified the sampling taken from ABC's customers and have implemented the Important Performance Analysis Method. Several factors have been evaluated are as follows: Stable network (non intermitten); Network which has never had problems.; Network which has never had repeated problems; Speed of accessible network is in compliance with the contract.; Data application runs well; Sound/voice application is good; Internet application runs well; Service Level Ability is in compliance with the contract and Guarantee coverage is in compliance with the agreement. Having had research of the aforementioned factors, there are three factors need to be improved as the priority; stable network, network which has never had problem, and network which has never had repeated problem.*

Keywords : network services, customer satisfaction, performance importance analysis.

INTRODUCTION

Data communication between headquarter and branch offices or among branch offices itself has been required to speed up the company business process. Having had the quickest information directors are able to make proper decisions.

PT. ABC has been running communication business since end of 1980 that has dealt with data communication operating services for more than 2000 customers in 2012. Its market segments are covering banks, finance non bank, manufactures etc. Since there are so many huge companies have managed those kind of data communication operating, so that, price competitiveness and best quality services are the most important things to be implemented.

After having met with some customers, they has requested to obtain the best network condition.

Purposes and benefit.

This research has some purposes to obtain, such as:

- To identify the importance level of sub dimension of network supply services.
- To identify the customer satisfaction level against the network usage.
- To focus the research attribution to cartesius diagram as the priority.

LITERATURE REVIEW

- Customers satisfaction.

Customer sactisfaction is when a customer gets a value from a supplier, producer or services agent. This value is from the product, services, system or something related to emotional reflected. When a customer has said that value is the quality of the product then the customer has satisfied with the product itself. When value is a great comfort, then customer has satisfied with its great comfort of a service itself. When value is a cheap price, then a customer has satisfied with a cheap price given by vendors (Handi Irawan, 2002).

Satisfaction is from Latin, *satis* means enough and *facere* means to do. So, the product or services what could satisfy customers is the product could meet the customer's requirement.

Consumer behavior theory, satisfaction has been defined based on the consumer's perspective which has consumed the product or service. One of the definitions states that satisfaction is when a product has met customers expectation.

Whenever the producer does not have the same perception with the customer's perception of the product offered then a gap of communication is happened.

Customer satisfaction relies on the customer's expectation. Therefore, the customer satisfaction strategy should have to go through the accuracy and knowledge in details about the expectation of the customer. Sometimes, the expectation of the customer is able to be managed by the company, but mostly the company could not manage it. That is why the expectation of the customer is dynamic. It is noted that the customer satisfaction is the accumulation of the customers who are using such a product or service, hence, each new transaction or experience using its product or service will reflect to the customer satisfaction in a long next period. The effort to make the customer satisfied has never come to an end.

b. Service. Characteristic of Service.

Some definitions about service are as follows:

- A service is a kind of activity or transaction that is offered by one party to another party which is unable to see and unable to own something. Service industry could be related to physic product or non-physic one. (Philip Kotler, 1994).
- A service is an integrated package (service package) consists of explicit and implicit service which has been offered within or using supporting facilities which is using secondary materials (John A. Filtzsimmon, 1982).

Therefore, service is an activity or performance package which has been offered by one party to another party which is unable to see and unable to belong it that contains of 4 main elements such as, supporting facilities, secondary materials, explicit service and implicit service.

Berry, Parasuraman and Zethami (1990) stated that service product has three different characteristic which differentiates with goods. The three characteristics are:

- Intangible, means that service does not have a form, but customers are able to consume or enjoy such a service produced by the producer.
- Heterogeneous, means that the process of the service will vary from one producer to another producer, from consumer to another consumer and from time to time. It is inseparable between producer and consumer and the quality of the service has often come up during the transaction.

Philip Kotler (1994) added another dimension, perishability, a service cannot be stored as other manufacturing product, a service has produced is a product to be consumed at that moment.

c. Quality of the service.

The quality of a service is defined based on the effort how to fulfill the customer requirement accurately in compliance with the expectation of the customer. Wyckof (in Lovelock, 1988), quality of a service is an expected strength to manage to be able to meet the customer requirement. There are two factors have been influencing the quality of a service, expected service and perceived service (Parasuraman, et al, 1985. Whenever a service is accepted or perceived by customer meeting its expectation then it is good quality and satisfactory.

When a service is accepted over the customer expectation, it is an ideal quality of the service. But, when a service is under the customer expectation it is bad quality. The quality of a service is depending on the effort of the producer to fulfill the customer expectation consistently.

d. Dimension of the quality of a service.

Berry, Parasuraman and Zeithami (1990) stated that quality of a service has 10 basic dimensions see table 1, expected service and perceived service are equal.

Table 1. Dimension and Ten Dimensions of the Quality of Services

Dimension	Definition
Tangibles	Physical proof of the service, physical facilities, usable tools, physical and service representation.
Realibility	It is covering two main subjects which are work consistency and reliable competency. It means that the company has provided its services properly since the beginning.
Responsiveness	Is the willingness or readiness of the employees to provide a service which is requested by customer.
Competence	Means that everyone in the company has a proper skills and knowledge to provide a certain service.
Courtesy	Is covering politeness, attitude, respectful, fully attention and hospitality which are belongs to the contact person.
Credibility	Honest and trustworthy
Security	Protected from danger, risks and uncertainty. This aspect is covering physically safe, financially safe and confidentially secure.
Access	Is easy to reach and meet.
Communication	Is able to give some information to the customer using understandable language, good listener.
Understanding Customers	Is an effort to understand a customer.

After having been through several examination, *Berry et al* , has crystallized the aforementioned ten dimensions into five main dimensions which is named servqual dimension. This servqual dimension is a guidance to evaluate the quality of a service given by a service provider. (table 2)

Table 2. Dimension of Serqual Quality Service and its Structure

Original 10 dimensions for evaluating service quality	SERQUAL DIMENSIONS				
	Tangible	Reliability	Responsiveness	Assurance	Empathy
Tangibles					
Reliability					
Responsiveness					
Competence courtesy					
Access communication understanding the customers					

Some factors have been identified regarding the quality of network usage which is influencing customers when they utilize PT. ABC network, as described in table 3.

Table 3. Sub-Dimension Which is Influencing Network Using Factors.

Dimension	Network using factors
Reliability	Stable network (not intermittent)
	The network has never had trouble
	Network has never had repeating trouble
	Data application is running well / normal.
	Sound/voice application is normal
	Internet application is normal
Assurance	Speed of network access is compliance with normal
	Service Level Availability is compliance with the contract
	Guarantee coverage is in compliance with promise

METHOD

This research has applied descriptive-quantitative method. The Importance-Performance Analysis is to explain the solving formulation of how far is the satisfaction level of the customer received from the company performance.

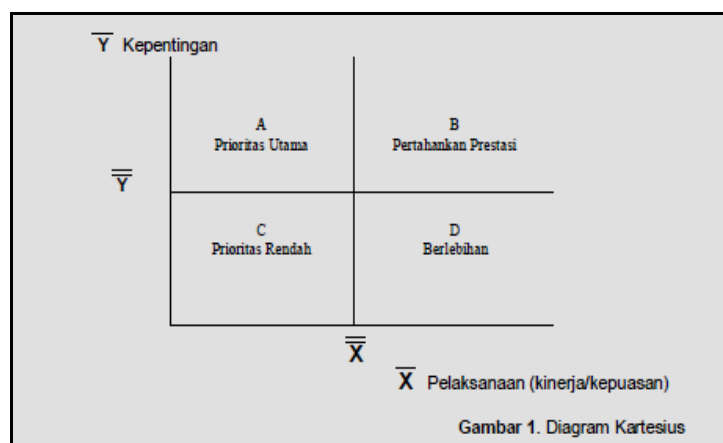
The researcher is using 5 level of Likert scale:

Performance criteria	Expectation criteria	Score
Excellent	Most important	5
Very Good	More important	4
Good	Important	3
Not good	Quite important	2
Bad	Not important	1

Scoring for each answer against the company performance and consumer expectation is to ease the data processing. Based on the result of the evaluation about the level of expectation and performance it will come to a calculation of the average value and the average of its average value itself.

This research has shown x and y variable where x is the company performance level and y is the customer expectation level.

Cartesius diagram is a form divided into four parts converged by two vertical lines which is created X and Y, X is the average of the scoring average rate at the execution level or customer satisfaction, and Y is the average of the scoring average rate at the needs factors which has influenced the level of satisfaction. Then each level has been evolved and divided into four parts within the Cartesius diagram as figure 1.



Figur 1 : Cartesius Diagram

Explains:

- Showing factors or attributes which are considered to have been influencing a customer satisfaction, including important service substances, but the management have not been executing yet in compliance with the customer expectation, then the unsatisfied customers have come up.
- Showing main service elements which have been performed by the company that should be maintained properly as they are being considered to be very important and satisfaction.
- Showing several factors which is not very important related to its influencing to the customer, but the company has performed it as it is, because it has been considered unimportant and unsatisfaction.
- Showing factors which is not very important in influencing the customer, but the management has over-rated it . It is unimportant but satisfaction.

1. *Tools of Data and Respondents Collection*

This research has been using questionnaires consisting of various variables of services quality as the aforementioned which has been sent to some respondents.

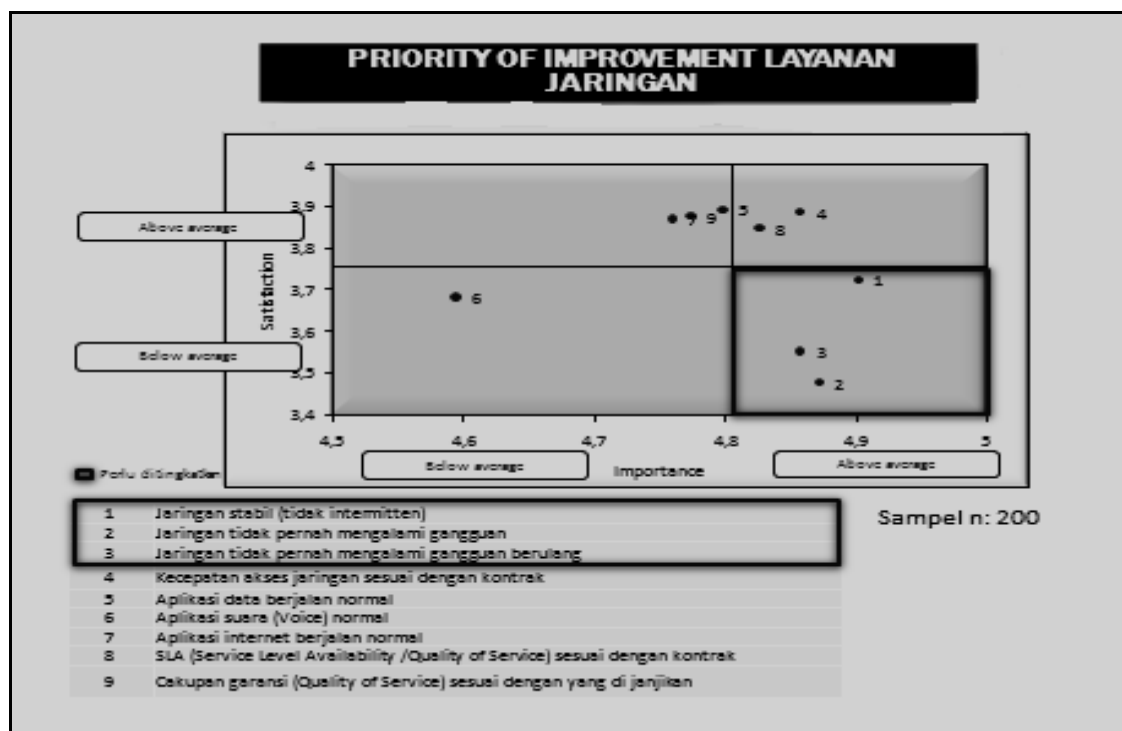
The respondents for this research are some customers who are using data communication network. There are 200 questionnaires being distributed. Based on Bernoulli formulation the data evaluation has been more than enough comparing with the minimum samples required. So that the total of the data is sufficient.

2. *Validity and Realibility Evaluation.*

This research is using construct validity which is implementing (r) moment product correlation. The data of the respondents have passed its validity and realibility evaluation.

RESULT OF THE RESEARCH

1. Based on the result of this research, a figure has come up showing the importance and satisfaction level related to network usage.



2. According to the aforementioned figure the conclusions have been identified as follows:
- The attributes which is showing the best level of satisfaction as well as the importance level (quadrant IV):
 - Speed of its access is in compliance with the contract.
 - Service Level Ability is in compliance with the contract itself.
 - Priority attributes to be improved as follows:
 - Stable network (no intermitten)
 - Network which has never been having a problem.
 - Network which has never been having a repeated problem.
 - The attributes need improvement are as follows:
 - Normal sound/voice application
 - The attributes needs to be maintained are as follows:
 - Normal data application
 - Normal internet application
 - Guarantee coverage which is in compliance with the agreement

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