

# Customer Satisfaction Measurement to Online Sales Using Kano Model and Method Service Quality

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**Abstract:** *One of the information and communication technologies that growing rapidly to increase service system is using Internet technology. Wide spread using of the Internet has impacted on the rise of on-line sales. On-line sales have the same opportunities in order to compete and succeed in business. Ease of online sales technology targeted by the company or an individual to do business with the online sales concept. The interesting phenomenon in Indonesia, the Internet users, especially housewives or student has a creative idea to do business with the online sales concept. Customer satisfaction is the deciding factor of success of online sales technology. This study aims to measure customer satisfaction with online sales, a case study in Purwakarta, West Java, Indonesia. The methodology used is adopting the Kano Model and Method Service Quality. The Results of this research are a result of calculation of the questionnaire and the analysis of measurement results.*

**Keywords:** *Customer Satisfaction, Online Sales, Kano Model, Method Service Quality*

## 1. Introduction

A company is said to have a competitive advantage if it has the advantage of having customers and competitors in order to defend themselves from competitive pressure on the market. In order to win the competition, so the company must have a competitive advantage (Jogiyanto, 2005). One of the strategies undertaken by the company to increase competition is by utilizing information technology to the service system. Strategy that can be implemented by companies is a strategy that focuses upon the needs of customers so get customer satisfaction.

Quality of service can be obtained if the management company is done with the right strategy so that the realization of customer satisfaction and loyalty. Good-quality services may motivate customers to always establish ties and loyal to the company. It becomes a tremendous advantage over a company.

Companies can improve customer satisfaction by maximizing the customer experience and negate Maneganun pleasant experience. Customer satisfaction is expected to have an impact on the creation of obstacles switch, switching costs and customer loyalty (Tjiptono, 2008).

The strategy undertaken by the company to improve the quality of service is the use of Internet technology. Online transaction targeted companies to enable customers to transact.

From the data obtained from the Ministry of Communication, and Information (Kemenkominfo) was photographing condition information and communication technology in Indonesia in 2014, smart phone users more than 75 million people. Of the 73 million population of Indonesia who used the Internet 7% are users buying and selling online (online shop), with the achievements of the number of transactions

up to 15 Trillion Rupiah and is expected to reach 300 trillion rupia in 2016 (Isaac, 2015).

The phenomenon that occurs in Indonesia is the easiness of using and selling online is not only utilized by the company but also by individuals. Various Internet facilities used to make buying and selling online from the website, blog, social media to the messenger.

Problems arise when performing on-line transaction when the customer perceives dissatisfaction of on-line trading services.

This study was conducted to look at customer satisfaction with the quality of service online shop with optimal information technology support through the provision of online transaction (online shop). To provide the service system with optimal information technology support, the company should identify users' needs well. One way that can be used in the analysis of user needs is to use the model of Kano. From various studies before the impact of customer satisfaction, online shop also leads to changes in customer behavior. From various observations, we concluded that customers make transactions without a plan and from a social community. This becomes an attraction for subsequent research.

Customer satisfaction is a critical success factor of the technology buying and selling online (online shop) Customer satisfaction will increase the income of service providers selling online (online shop) to get extraordinary profits.

## 2. State of the Art

### 2.1 Customer Satisfaction

Customer satisfaction can be defined as the customer response to the mismatch between the importance of earlier and actual performance had felt after use (Tjiptono, 2008). There are five dimensions to measure customer satisfaction.

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- Tangibility*, include physical facilities, equipment employees, and means of communication.
- Reliability*, ability to perform the promised services in accordance with immediate, accurate and satisfactory.
- Responsiveness, ability to help customers and availability to serve well.
- Assurance*, knowledge, courtesy of its officers and trustworthy so that customers are free from risk.
- Empathy*, sense of caring to give individual attention to customers, understand customer needs and easy to contact.

## 2.2 Kano Model

Kano model is a tool for categorizing and prioritizing the needs of the customer / user based on their effects on satisfaction (satisfaction) user models of Kano defines four dimensions must-be requirement, one-dimensional requirement, attractive and indifferent requirement (Walden, 1993).

There are types of product attributes by identifying its impact on user satisfaction levels, namely:

- It must-Be attributed*, meaning that an attribute is a function that must exist as the product. If available, the customer will feel normal because these functions must exist. However, if there is no implementation assessed or less, then the customer will feel very dissatisfied (extreme dissatisfaction).
- One-dimensional attributes*, meaning a function as the product will increase customer satisfaction in line with the quality of the fulfillment of these functions. The better implementation of the function, then the higher level of customer satisfaction, and vice versa.
- Attractive attributes*, meaning that a function is generally thought to be absent by the customer on a product. If no, the customer feels mediocre. But if there is, the level of customer satisfaction will increase.
- Indifferent attributes*, that is to say, whether or not a function has no effect on customer satisfaction.

To measure the quality of service in this study also used the method of service quality Kano sehingga grade obtained is 5-dimensional mapping of service quality.

## 2.3 Method Service Quality

According to Parasuraman (1990), there are five dimensions of SERVQUAL as follows:

- Tangibles*, or physical evidence of the ability of a company to demonstrate its existence on external parties. Appearance and abilities of physical infrastructure companies and the state of the surrounding environment are tangible proof of the services provided by the service provider. This includes physical facilities (building, warehouse, and others), technology (equipment and supplies used), as well as the appearance of employees. In short, it can be defined as the appearance of physical facilities, equipment, personnel, and communication materials.
- Reliability*, or the reliability of the ability of companies to provide services, as promised, are accurate and reliable. Should customers expect timely means of performance,

service without fault, sympathetic attitude and with high accuracy? In short, it can be defined as the ability to provide the promised service accurately, timely, and trustworthy.

- Responsiveness*, or responsiveness is a willingness to help and provide fast service (responsiveness) and right to the customer, with the delivery of clear information. Allowing consumers to wait for no apparent reason causing a negative perception in the quality of service. In short it can be interpreted as a willingness to help customers by providing good service and fast.
- Assurance*, or guarantees and assurances that knowledge, gallantry, and the ability of the company's employees to gain confidence of customers to the company. It consists of components: communication (Communication), credibility (Credibility), security (Security), competence (Competence) and manners (Courtesy). In short, it can be defined as the knowledge and hospitality personnel and the ability of personnel to be trusted and believed.
- Empathy*, which gives genuine concern and a private individual or gives to customers by striving to understand the desire of consumers to which a company is expected to have an understanding and knowledge about the customer, understanding customers' specific needs, and has the operating time that is convenient for the customer. In short, it can be interpreted as an effort to know and understand the needs of customers on an individual basis.

## 3. Methodology

Stages of the research conducted during this study as follows: a literature review, environmental assessment, observation and interviews using questionnaires, measurement questionnaire and analysis of results of customer satisfaction questionnaires on the quality of service by using Kano models and methods of service quality.

### 3.1 Kano Model and Method of Service Quality for customer satisfaction surveys

Model Kano is began as a survey of the customer. The survey aims to inquire about the attributes of the product, and what is felt by the customers about the products that have the attributes. Sufficiently or insufficiently (Zultner and Mazur, 2006). Further answers to questions on the attributes Sufficiently (functional) or insufficiently (dysfunctional) will be combined and categorized into four categories Kano.

**Table 1:** Kano Evaluasian (Walden, 1993)

### 3.2 Questionnaire

In this study, the questionnaire was designed to adopt the model of Kano and methods Servqual, Kano models used to measure service quality by looking at the dimensions of functional and dysfunctional. Servqual dimensional model used in the method servqual namely tangibles, reliability, responsiveness, assurance and empathy. The number of questions in section C consists of 17 questions for the dimension of functional and dysfunctional 17 questions for the dimension.

### 4. Results

Sub chapter discusses the research results in the measurement of customers towards the on-line sales model of Kano and Method Service quality and customer satisfaction questionnaire analysis results against on-line sales.

#### 4.1 Customer Satisfaction Measurement to Online Sales with Kano Model and Method Service Quality

Results of a study of customer satisfaction in the quality of service online shop is using a model Kano with five dimensions of service quality method of obtaining grade value One dimensional (O) and Must Be (M).

For the category of service quality dimensions that get a grade one dimensional namely tangibles, reliability, responsiveness, empathy, assurance, for categories of service quality that gets grade Kano must be is a category responsiveness with attributes always update the status of the delivery of goods and services within the Assurance with attributes of goods can be returned if not appropriate and attribute inventory always available.

**Table 2:** Result of Calculation Kano Model

Categorizing Method Service Quality		Grade Kano
<b>Attribut</b>	<b>Tangible</b>	
	The performance of the site or service you use online sales very nice, nice views.	<b>O</b>
	Reputable sites or services you use online sales very well.	<b>O</b>
	<b>Reliability</b>	
	Can be accessed by either using a mobile device or computer	<b>O</b>
	Showing catalogs by category	<b>O</b>
	There is a search feature item.	<b>O</b>
	It may mark the first product in the list of products you want, and it will be bought (wish list)	<b>O</b>
	Can filter and sort the product according to the cheapest products, most expensive, most sold, etc.	<b>O</b>
	<b>Responsiveness</b>	
	24 hour Call Center	<b>O</b>
	Always update the status of their consignments	<b>M</b>
	The latest product information is displayed on the main page	<b>O</b>
	<b>Assurance</b>	
	Security purchases	<b>O</b>
	Goods can be returned if not suitable	<b>M</b>
	Stock items are always available	<b>M</b>
Quality guaranteed	<b>O</b>	

<b>Empathy</b>	
Always leave a promo discount	<b>O</b>
Various methods of payment, including bank transfer, mobile banking, Internet banking, credit cards, etc.	<b>O</b>
The products are displayed according to the original	<b>O</b>
Ket: M=Must Be, O=One Dimentional, I=Indifferent, A=Attractive, R=Reverse, Q=Questionable	

Table 2 shows the results of model calculations Kano with five dimensions of service quality to measure customer satisfaction with the quality of service online shop.

#### 4.2 Analysis of Customer Satisfaction Measurement

##### 4.2.1 Analysis of categories of service quality with Grade One dimensional

The explanation for grade one dimensional are higher tangible services, reliability, responsiveness, assurance, and empathy given to attribute to grade the value of one dimensional user satisfaction will increase but if the services are not met, it will cause dissatisfaction. Dimensions of service quality with the grade one dimensional focuses on the dimension's tangible services, reliability, responsiveness, assurance, and empathy, which will result in higher levels of customer satisfaction are:

Tangible dimensions (physical evidence) for the attributes:

- The performance of online sales sites or services that used to be a nice, nice views online shop means that service providers must give satisfaction to the customers by making the system easy to use, easy on the eyes.
- Reputable online sales sites or services that are used both means customers have already begun to be careful in the use of online transaction service shop. Customers choose to transact with sites and media that is in good standing, so the account manager must fulfill the promise in the delivery of goods, deliver the goods with the best quality for each transaction. Just a little mistake when the transaction is done can adversely impact the development of the overall service because when there is a customer who was not satisfied then the entire universe of Internet media can determine the credibility of the service provider.

Dimension Reliability for the attributes:

- Can be accessed by either using a mobile device or computer. This means that customers require access sistus so sites used for online service shop should be dynamic so it is easily accessible by the internet media in the computer or smartphone.
- Showing catalog items by category. This means that the catalog is an invaluable tool for customers facilitate the search items so that the catalog must exist within a site / online media services.
- There is a search feature items This means that there should be a search feature items because if there are no customers become dissatisfied.

- d) It may mark the first product to the list of products you want, and it will be bought (Willis), Artiya marker features for the product to be purchased must be present at the site / online media spending.
- e) Can filter and sort the product according to the cheapest products, most expensive, most sold, etc., means that the reliability of the features available in the online shop service website for a list of products with the lowest, the priciest and most sold make it easier for customers to decide shopping online.

Dimensions Responsiveness to atribut:

- a) Call Center 24 hours, meaning the responsiveness of service providers online shop up to 24 hours was able to make the customer feel satisfied.
- b) The latest product information is displayed on the main page, it means one online service reliability shop that can make customers feel satisfied that there is the latest product information on the main page.

Dimensions Emphaty (a genuine concern) for the attributes:

- a) Always on sale discount, meaning the attention of service providers in the form of sale discounts make customers feel satisfied.
- b) Various methods of payment, including bank transfer, mobile banking, Internet banking, credit cards, etc. mean customers facilitated the payment process.

#### 4.2.2 Analysis of categories of service quality with Grade Must Be

Analysis for the grade must be that if the responsiveness of service and Assurance given to attribute to grade the value must be not met, then it will lead to user dissatisfaction, but if the higher service is given, then the satisfaction of users will not rise much above normal because these services are supposed to be.

- a) Responsiveness dimension's to attribute always updated the status of shipments. Always update the delivery status of goods, services that provide shipment status updates make customers feel satisfied by the quality of service online shop.
- b) Assurance dimension to attribute the goods can be returned if it does not comply with orders and stocks were always available. Goods can be returned if it does not match, meaning that the customer is satisfied with the guarantee goods can be returned if the goods received are not in accordance with the order. Stock items are always available. This means that the customer is satisfied if the service provider has always had a stock of goods.

## 5. Conclusion

The result of analysis of this research is understanding one dimensional attributes in the questionnaire results obtained by the customer satisfaction will increase if the dimensions of service quality in the function attributed Tangibles, Reliability, Responsiveness and Assurance are not met but if the quality of service in the function attributes Tangibles, Reliability, Responsiveness and Assurance not met,so it will result in dissatisfaction for customers. Definition of attributes must be in the results from the questionnaire that if the

dimensions of responsiveness of service and service guarantees are not met, then it will lead to user dissatisfaction, but if the service are met customer satisfaction,so it will not rise much because customers feel the service is already supposed to be there.

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## Author Profile



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