# Analysis of Consumer Satisfaction Level of Ornamental Fish in Jatinegara Ornamental Fish Market

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## ABSTRACT

This study aims to analyze the characteristics possessed by consumers and the level of consumer satisfaction in the Jatinegara Ornamental Fish Market and analyze the main variables that most affect the level of consumer satisfaction. Data collection and processing will be carried out in August – September 2023 located in Jatinegara District, East Jakarta. The research method used is the case study method, with a sampling technique that is *purposive sampling*. The data analysis used is *the Customer Satisfaction Index* (CSI). The results of this study found that consumer characteristics in the Jatinegara Ornamental Fish Market were dominated by the majority of consumers with an age range of 41-64 years with the majority of the last high school education. The majority of consumers work as private employees with the majority of monthly income of Rp 3,000,000 – Rp 5,000,000. Consumers have made purchases three times per month at the Jatinegara Ornamental Fish Market. These market consumers come from various districts in the East Jakarta Region, including Makassar District, Matraman District, Cakung District, Jatinegara

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District, Duren Sawit District and Pulo Gadung District. The *Customer Satisfaction Index* (CSI) value of 61.4% in the category is classified as satisfied. The main variable that most affects consumer satisfaction is the product quality variable.

*Keywords: Market; ornamental fish; characteristics; consumers; consumer satisfaction.*

## 1. INTRODUCTION

Ornamental fish have the potential to develop the economy of Indonesia. The diversity of ornamental fish and abundant ornamental fish populations make ornamental fish one of the country's sources of foreign exchange through export activities. Indonesia's position as an exporter of ornamental fish is in 5th place, after the Czech Republic, Thailand, Japan and Singapore. Data from the Ministry of Maritime Affairs and Fisheries shows that the export value of Indonesian ornamental fish in 2021 reached USD 34.55 million, an increase of 12.33% compared to the previous year which only reached USD 30.76 million [1].

The total production of ornamental fish in DKI Jakarta recorded in the Ministry of Maritime Affairs and Fisheries (KKP) in 2017 was 20,217 thousand heads, then in 2018 it was 18,920 thousand heads, in 2019 it was 19,050 thousand heads, then in 2020 it was 15,219 thousand heads, then in 2021 it was 16,053 thousand heads. With a large amount of ornamental fish production, ornamental fish are widely traded and in demand by the public. Ornamental fish have their own charm because they have a variety of patterns, colors and shapes of each different type. One of the attractions of ornamental fish is often made in contests in cities like East Jakarta.

The ornamental fish trade in East Jakarta has high potential to be developed because it is supported by urban areas that have a large community of ornamental fish lovers and are supported by various modern and traditional ornamental fish market facilities. One of the ornamental fish markets in East Jakarta is called Jatinegara Ornamental Fish Market located in Jatinegara District. This Jatinegara Ornamental Fish Market sells various types of ornamental fish and equipment. Ornamental fish lovers often visit this market because of the many variants of quality ornamental fish and there are even some ornamental fish sellers who sell fish with rare colors and shapes. The price of this ornamental fish varies greatly depending on the species.

This will cause satisfaction or dissatisfaction from a consumer in the market.

Consumer satisfaction is a state in which consumer needs, wants, and expectations of a product are met by the appearance of the product or service. Consumers who feel their expectations are met will continue to consume the product, encourage consumers to remain loyal to their products and services, and happily promote the product [2].

Consumer satisfaction can be formed from the fulfillment of consumer expectations of a product. The standards set by the consumer are used to evaluate the product. When consumer standards are met, a sense of satisfaction will be formed. Conversely, if the standard is not met, there will be a feeling of dissatisfaction felt by consumers with the product. This dissatisfaction will cause consumers to stop using or buying the product. Losing customers leads to a decrease in potential sales, which will ultimately disrupt the buying patterns made by customers during their subscription [3]. Therefore, it is necessary to conduct an analysis of consumer satisfaction in the Jatinegara Ornamental Fish Market.

## 2. METHODS

### 2.1 Time and Place

Data collection and processing will be carried out in August – September 2023 located in Jatinegara District, East Jakarta.

### 2.2 Research Method

The research method used is the case study method. The type of data used in this study consists of primary data and secondary data. Primary data in this study were obtained through interviews with the help of questionnaires. Interviews were conducted with ornamental fish consumers spread across the Jatinegara Ornamental Fish Market. The questionnaire in this study used a Likert scale with a scale of 1-5 in each question attribute which was divided into two answers based on performance and importance. Details of the Likert scale used can be seen in Table 1 and Table 2.

**Table 1. Likert Scale (Performance)**

| Respondent's answer | Score |
|---|---|
| Very Dissatisfied | 1 |
| Not Satisfied | 2 |
| Quite Satisfied | 3 |
| Satisfied | 4 |
| Very Satisfied | 5 |

**Table 2. Likert Scale (Importance).**

| Respondent's answer | Score |
|---|---|
| Very Unimportant | 1 |
| Not Important | 2 |
| Quite Important | 3 |
| Important | 4 |
| Very Important | 5 |

Secondary data was obtained by conducting literature studies related to research topics as well as various kinds of references from the East Jakarta Madya City Library, Central Statistics Agency, Literature of the Ministry of Marine Affairs and Fisheries*, Google Scholar*, and the Jatinegara District Government.

## 2.3 Sampling Technique

The sampling technique used in this study is *purposive sampling. Purposive sampling* is a sampling method by looking at certain criteria that have been set [4]. These criteria can provide reasons for determining a number of samples in a study. The sampling criteria in this study are:

1. Respondents who bought ornamental fish or products at the Jatinegara Ornamental Fish Market
2. Respondents aged 15-64 years.

Respondents who are willing to be interviewed. The data analysis used is the *Customer Satisfaction Index* (CSI)

Data will be retrieved directly (*offline*) and indirectly (*online*). Data taken directly (*offline) will be carried out* by observation, interviews and documentation at the location of the Jatinegara Ornamental Fish Market, while for data taken indirectly (online) will be carried out by distributing questionnaires to the public through *google form*.

## 2.4 Data Analysis

The data analysis used in calculating consumer satisfaction scores is CSI or *Customer Satisfaction Index*. The purpose of using CSI is to determine the level of overall consumer satisfaction by weighing the level of satisfaction of the attributes used in the questionnaire. The steps to calculate the CSI value are:

a. Determine *Mean Important Score* (MIS) and *Mean Satisfaction Score* (MSS)

$$MIS = \frac{[\sum_{i=1}^{n} Yi]}{n}$$

Information:
MIS = Average value of interest
Yi = Value importance
n = Number of respondents

$$MSS = \frac{[\sum_{i=1}^{n} Yi]}{n}$$

Information:

MSS = Average Performance Value
Yi = Performance value
n= Number of respondents

b. Count *Weight Factor* (WF)

$$WF = \frac{MIS}{\sum_{i=1}^{p} MIS} x \ 100\%$$

Information :
WF = Percentage of MIS value per attribute against total MIS value
MIS = Average value of interest
Sigma MIS = Total average importance score

c. Count *Weight Score* (WS)

$$WS = WF \ x \ MSS$$

Information :
WS = Results of WF multiplication with MSS
WF = Percentage of MIS value per attribute against total MIS value
MSS = Average performance value

d. Determine Value *Customer Satisfaction Indeks* (CSI)

$$CSI = \frac{WT}{HS} x \ 100\%$$

Information :
WT = Total weight *score*
HS = Scale maximum
The range of consumer satisfaction scales can be seen in Table 3.

**3. Range of Consumer Satisfaction Scales**

| Index Value | Indicator | Explanation |
|---|---|---|
| 81% - 100% | Very satisfied | Performance Exceeds Expectations |
| 61% - 80,99% | Satisfied | Performance in Line with Expectations |
| 41% - 60,99% | Quite Satisfied | Performance Almost Meets Expectations |
| 21% - 40,99% | Not Satisfied | Performance Has Not Met Expectations |
| 0% - 20,99% | Very dissatisfied | Performance has not met expectations at all |

## 3. RESULTS AND DISCUSSION

### 3.1 Consumer Characteristics

The characteristics of ornamental fish consumers in the Jatinegara Ornamental Fish Market include age, gender, education level, occupation, monthly income range, purchase frequency, and consumer domicile based on the sub-district of residence. Consumer characteristics in the Jatinegara Ornamental Fish Market can be seen in Table 4.

Based on Table 1, consumer characteristics in the Jatinegara Ornamental Fish Market based on age range from 19-64 years. A total of 58 people with a percentage of 32% were at the age of 19-25 years. A total of 59 people with a percentage of 33% were in the age range of 26-40 years, while 65 people with a percentage of 35% were in the age range of 41-64 years. The age range with the highest number is in the age range of 41-64 years consisting of parents. The age range of the second most respondents is the age of 26-40 years. Based on these results, it can be

**Tabel 4. Consumer characteristics in jatinegara ornamental fish market**

| Consumer Characteristics | Category | Number of Respondents (People) | Percentage (%) |
|---|---|---|---|
| Age | 19 – 25 Year | 58 | 32 |
| | 26 – 40 Year | 59 | 33 |
| | 41 – 64 Year | 65 | 35 |
| Gender | Male | 118 | 65 |
| | Woman | 64 | 35 |
| Education Level | Senior High School | 118 | 65 |
| | Bachelor | 49 | 27 |
| | Master | 15 | 8 |
| Livelihoods | Not working yet | 7 | 4 |
| | Student | 35 | 19 |
| | Private Officers | 75 | 41 |
| | Civil Servant | 17 | 9 |
| | Indonesian State Army/Police | 5 | 3 |
| | Entrepreneur | 43 | 24 |
| Purchase Frequency each month | Once | 65 | 35 |
| | Twice | 35 | 19 |
| | Three times | 82 | 46 |
| Range of Income each month | Not earning yet | 28 | 15 |
| | Rp 500.000 – Rp 3.000.000 | 23 | 13 |
| | Rp 3.000.000 – Rp 5.000.000 | 97 | 53 |
| | Rp 5.000.000 – Rp 10.000.000 | 24 | 13 |
| | > Rp 10.000.000 | 10 | 6 |
| Domicile (Subsdistrict) | Cakung | 17 | 9 |
| | Duren Sawit | 14 | 8 |
| | Jatinegara | 10 | 6 |
| | Makasar | 95 | 52 |
| | Matraman | 11 | 6 |
| | Pulogadung | 35 | 19 |

concluded that at the age of ≥ 26 years can be said to be financially feasible and have great intentions and interests in raising ornamental fish for decoration, entertainment and hobby distribution [5].

Male consumers are 65% or as many as 118 people. Respondents with female sex percentage 35% or as many as 64 people. This is because men prefer to keep ornamental fish compared to women because in addition to keeping fish, aquarium maintenance must be done regularly and requires a lot of energy. Therefore, sex differences will affect a consumer's purchase decision and satisfaction [6].

The level of consumer education in the Jatinegara Ornamental Fish Market mostly consists of consumers who have graduated from high school with a percentage of 65% or as many as 118 people. The level of consumer education is classified as a high category, namely education taken more than six years. Someone who has a history of high enough education will be more responsive and critical in channeling needs and wants. A high level of education can cause a person to behave critically in purchasing products [7].

Livelihoods in this study are divided into six categories, namely unemployed, students, private employees, civil servants, army / police, and entrepreneurs. The number of jobs most chosen by respondents was private employees by 41% or as many as 75 respondents. The second most jobs are entrepreneurs by 24% or as many as 43 respondents. So, it can be concluded that ornamental fish consumers who work as private employees and self-employed may have the financial ability to buy ornamental fish needed for entertainment in the form of raising ornamental fish or as a business in the field of ornamental fish. This is motivated by the activities carried out and the level of income or ability of consumers to meet physical and spiritual needs [8].

The frequency of this purchase is divided into 3 categories, namely once, twice and three times making purchases at the Jatinegara Ornamental Fish Market with units of time per month. The frequency of this purchase can be used as a consideration for a seller in seeing the trust and satisfaction of a consumer [9]. Respondents who chose answers made purchases with three repetitions as many as 82 people. Respondents who chose one-time purchases amounted to 65 people and two-time purchases as many as 35 people. Consumers at Jatinegara Ornamental Fish Market show trust and satisfaction with the product to make a repurchase with experience in buying products three times and twice per month.

Monthly income is divided into five categories, namely unearned, IDR 500,000 - IDR 3,000,000, IDR 3,000,000 - IDR 5,000,000, IDR 5,000,000 - IDR 10,000,000, and > IDR 10,000,000. Respondents who have not earned as much as 28 respondents are generally retirees, undergraduate students and students. Respondents who have a monthly income of IDR 3,000,000 - IDR 5,000,000 with a total of 97 respondents, while the least selected income answer is an income of more than IDR 10,000,000 with a total of 10 respondents. Respondents with incomes in the range of Rp 3,000,000 - Rp 5,000,000 are generally dominated by undergraduate students who have just completed their studies or high school / vocational graduates who have just started working. Consumer income of more than IDR 10,000,000 is generally a master graduate or someone who has more than 3 years of work experience. Income or pocket money is related to decision making by consumers in buying ornamental fish. Income is a very important material resource for consumers, because it is with income that consumers can finance their consumption activities [10].

The area where a consumer lives or domicile has an influence on purchasing decisions because the longer the distance of a consumer's residence, the more difficult and more expensive a consumer's travel costs [11]. Respondents in this study as a whole answered the domicile in the DKI Jakarta Area. Domicile is categorized in the scope of sub-districts, including Cakung District, Duren Sawit District, Jatinegara District, Makassar District, Matraman District and Pulo Gadung District. The majority of respondents are domiciled in Makassar District as many as 95 people. Makassar District is located 7 km from Jatinegara Ornamental Fish Market. The distance of the residence is still in one scope with the location of the Jatinegara Ornamental Fish Market, namely in the East Jakarta Region.

## 3.2 Customer Satisfaction Index (CSI)

The level of consumer satisfaction in the study consisted of 13 variables. Consumer satisfaction analysis uses an assessment of the performance and importance of ornamental fish sellers in the Jatinegara Ornamental Fish Market. The results

**Table 5. Customer satisfaction index calculation**

| No. | Attribute | CSI | | | |
|---|---|---|---|---|---|
| | | MIS | MSS | WF | WS |
| **Reliability (X₁)** | | | | | |
| 1. | Timeliness of store opening and closing | 3,10 | 3,13 | 2,93 | 9,16 |
| 2. | Ornamental fish traders can provide services according to consumer needs | 3,26 | 3,18 | 3,07 | 9,76 |
| **Responesivenes (X₂)** | | | | | |
| 1. | Service when calculating purchases is considered fast | 3,19 | 3,07 | 3,01 | 9,24 |
| 2. | Ornamental fish traders are responsive in answering consumer questions | 3,24 | 3,05 | 3,05 | 9,31 |
| 3. | Merchants provide information that is easy for consumers to understand | 3,30 | 3,09 | 3,12 | 9,62 |
| **Assurance (X₃)** | | | | | |
| 1. | Feel safe and comfortable in transactions | 3,13 | 2,92 | 2,95 | 8,62 |
| 2. | All the needs that consumers are looking for are always available | 3,13 | 2,96 | 2,96 | 8,74 |
| 3. | Proof of transaction | 3,07 | 2,80 | 2,89 | 8,09 |
| **Emphaty (X₄)** | | | | | |
| 1. | Ornamental fish vendors serve with a friendly / smile | 3,15 | 3,01 | 2,97 | 8,95 |
| 2. | Ornamental fish merchants give greetings to consumers | 3,15 | 3,04 | 2,97 | 9,04 |
| 3. | Ornamental fish merchants pay attention to consumer complaints | 3,13 | 2,94 | 2,95 | 8,67 |
| **Tangibility (X₅)** | | | | | |
| 1. | The condition of the selling store is neatly arranged / clean | 3,18 | 2,95 | 3,00 | 8,83 |
| 2. | Neatness, cleanliness and appearance of sellers | 3,10 | 2,86 | 2,92 | 8,37 |
| 3. | Product placement according to consumer needs | 3,16 | 2,99 | 2,98 | 8,93 |
| **Performance (X₆)** | | | | | |
| 1. | Ornamental fish support products work well | 3,29 | 3,22 | 3,11 | 10,00 |
| 2. | Ornamental fish are sold in healthy conditions | 3,28 | 3,12 | 3,10 | 9,66 |
| **Feature (X₇)** | | | | | |
| 1. | There are many variations of ornamental fish species | 3,30 | 3,24 | 3,12 | 10,09 |
| 2. | There is supporting equipment for the maintenance of ornamental fish | 3,32 | 3,23 | 3,13 | 10,12 |
| 3. | The store provides ornamental fish equipment repair services | 3,12 | 2,92 | 2,95 | 8,59 |
| **Durability (X₈)** | | | | | |
| 1. | Ornamental fish equipment can last for at least 1 month | 3,24 | 3,12 | 3,05 | 9,53 |

| No. | Attribute | CSI | | | |
|---|---|---|---|---|---|
| | | MIS | MSS | WF | WS |
| 2. | Ornamental fish packaging is not easy to leak if taken home | 3,20 | 3,03 | 3,02 | 9,14 |
| **Product Reliability (X$_9$)** | | | | | |
| 1. | There are no fungi or wounds on ornamental fish sold | 3,28 | 3,12 | 3,10 | 9,66 |
| 2. | Ornamental fish rearing equipment products sold in complete condition | 3,31 | 3,19 | 3,13 | 9,96 |
| 3. | Medicinal or vitamin products for fish in sealed condition | 3,31 | 3,21 | 3,12 | 10,02 |
| **Aesthetics (X$_{10}$)** | | | | | |
| 1. | The color patterns of ornamental fish sold are very beautiful | 3,34 | 3,24 | 3,15 | 10,20 |
| 2. | The decoration of aquariums on sale is very interesting | 3,31 | 3,14 | 3,12 | 9,81 |
| 3. | Ornamental fish for sale are unique or rare | 3,21 | 3,13 | 3,03 | 9,47 |
| **Perceived quality (X$_{11}$)** | | | | | |
| 1. | The products sold at Jatinegara Ornamental Fish Market are better than other locations | 3,17 | 3,05 | 2,99 | 9,14 |
| 2. | Want to make a repeat purchase because of a good quality product | 3,16 | 3,05 | 2,99 | 9,11 |
| **Price (X$_{12}$)** | | | | | |
| 1. | The price of ornamental fish is affordable with consumer purchasing power | 3,24 | 3,13 | 3,05 | 9,56 |
| 2. | Prices according to the quality offered | 3,25 | 3,13 | 3,07 | 9,61 |
| **Location (X$_{13}$)** | | | | | |
| 1. | Easy access to sales locations | 3,22 | 3,10 | 3,04 | 9,42 |
| 2. | Parking available | 3,15 | 2,84 | 2,97 | 8,44 |
| | **TOTAL** | **306,86** | | | |
| | **CSI VALUE** | **WT/Maximum Scale x 100%** $\frac{306,86}{5}$ $x\ 100\% = 61,4\%$ | | | |

of this study use Customer Satisfaction Index (CSI) analysis, the first step in this analysis is to determine MIS (Mean Importance Sccore) and MSS (Mean Satisfaction Score). MIS is the average of the important scores of an attribute. MSS is the average score for the level of satisfaction derived from the performance perceived by customers. Followed by the calculation of WF (Weight Factor) or weighing factor results from the MIS value per attribute divided by the total MIS of all indicators. Calculation of WS (Weight Score) or weighing factor, which is the result of multiplication between WF and the average level of satisfaction. Finally, the calculation is carried out for CSI (Customer Satisfaction Index). The results of CSI calculations are shown in Table 5.

Based on the calculation of consumer satisfaction with ornamental fish sellers in the Jatinegara Ornamental Fish Market, it can be seen that the value of CSI or Customer Satisfaction Index is 61,4%. The consumer satisfaction score is in the range of 61% - 80.99% which is included in the satisfied category [12]. This category indicates that the performance provided is in accordance with consumer expectations. Based on the results of the CSI value shows that as a whole, as seen from the performance of the Jatinegara Ornamental Fish Market and the importance of the attributes of each variable are in the satisfied category because consumers feel a match between performance and expectations.

The value of the consumer satisfaction index is influenced by each attribute in the research variable. Variables are generally divided into service quality, product quality, price and location. The attribute that needs to be improved in the Jatinegara Ornamental Fish Market is the parking space availability attribute on the location variable with a performance value of 2,97. This value is due to the unavailability of parking space at the location of the Jatinegara Ornamental Fish Market.

Based on the data in the Customer Satisfaction Index (CSI) calculation table , it can be seen that the highest level of satisfaction is found in the attributes of the many variations of ornamental fish and in the color attributes and patterns of beautiful ornamental fish with an MSS (Mean Satisfaction Score) value of 3,24. This is inversely proportional to the level of consumer satisfaction in the attribute of providing proof of transaction with  an MSS  value of 2,80. In addition, the parking space availability attribute is

the second lowest attribute with an MSS value of 2,84. Based on the MSS data, it is known that consumers in the Jatinegara Ornamental Fish Market are satisfied with the choice of many types of ornamental fish and have beautiful colors and patterns, but sellers at the Jatinegara Ornamental Fish Market generally do not provide proof of transaction to consumers so that consumers feel less satisfied with the service. Jatinegara Ornamental Fish Market does not have enough parking space to accommodate visitors, so consumers feel dissatisfied with it.

As a comparison with other research conducted by Hapsari at ART Samurai Koi Yogyakarta, CSI (*Customer Satisfaction Index*) results were obtained of 71.2%. This value is included in the interval of 61% < CSI < 80.99%, it can be said that in general the consumer satisfaction index is included in the "satisfied" category. In this research in Yogyakarta, the level of customer satisfaction is classified as satisfied because it is influenced by location variables, price variables and service quality variables [13].

## 3.3 The Main Variable That Most Affects

Analysis of the value of the consumer satisfaction index will be calculated to obtain the main variable. The main variables that most affect consumer satisfaction is obtained by listing the five highest values of the Mean Importance Score (MIS) and the five lowest values of the Mean Importance Score on an attribute. The MIS value data is shown in Table 6.

The variable with the highest importance attribute is the attribute of beauty, complexion and color of ornamental fish. The Mean Important Score on the variable is 3,34. The beauty of ornamental fish gets the highest importance value, because the majority of consumers in the Jatinegara Ornamental Fish Market see the value of a beauty of ornamental fish will make a sense of comfort when looked at. Therefore, if the colors and patterns of ornamental fish sold do not look beautiful then it will not feel comfortable when viewed.

The variable with the second highest importance value is the availability of ornamental fish maintenance support equipment with a Mean Important Score of 3,32. This happens because consumers in addition to buying ornamental fish, also buy aquariums, decorative stones, ornamental plants, water filters, feed, and others. This equipment will serve for the maintenance of ornamental fish. The variable with the attribute

**Table 6. Highest and lowest attributes in importance**

| 5 Highest rated attributes | MIS value |
|---|---|
| 1. The beauty of shades and colors of ornamental fish | 3,34 |
| 2. Availability of supporting equipment for the maintenance of ornamental fish | 3,32 |
| 3. Ornamental fish rearing equipment products sold in complete condition and ornamental fish medicinal or vitamin products in sealed condition | 3,31 |
| 4. There are many variations of ornamental fish species | 3,30 |
| 5. Ornamental fish support products work well (Example: Water filter) | 3,29 |

| 5 Attributes with the lowest value | MIS value |
|---|---|
| 1. Ornamental fish vendors serve with a friendly / smile | 3,15 |
| 2. Ornamental fish traders pay attention to consumer complaints | 3,13 |
| 3. The store provides ornamental fish equipment repair services | 3,12 |
| 4. Neatness, cleanliness and appearance of sellers | 3,10 |
| 5. Ornamental fish traders provide proof of transactions to consumers | 3,07 |

that has the lowest MIS value is the proof of transaction attribute to consumers with an MIS value of 3,07. This indicates the shortcomings of the services of ornamental fish traders at the Jatinegara Ornamental Fish Market is that they do not provide proof of payment to consumers in writing, but the seller directly mentions the price of ornamental fish to consumers, besides that the shortcomings of traders at the Jatinegara Ornamental Fish Market are the neatness, cleanliness and appearance of ornamental fish sellers with an MIS value of 3,10. The value shows the assessment of the level of consumer importance to the neatness, cleanliness and appearance of ornamental fish sellers at the Jatinegara Ornamental Fish Market. Another weakness that exists in ornamental fish sellers at the Jatinegara Ornamental Fish Market is the unavailability of ornamental fish equipment repair services, where consumers feel that these services are considered quite important. This is based on looking at the MIS value of 3,12.

## 4. CONCLUSION

Based on the analysis of consumer satisfaction with the Jatinegara Ornamental Fish Market that has been carried out, it can be concluded that:

1. Consumer characteristics in the Jatinegara Ornamental Fish Market were obtained from the results of interviews and questionnaire distribution to 182 respondents. These respondents consisted of 118 male consumers and 64 female consumers. Consumers in the Jatinegara Ornamental Fish Market are dominated by the majority of consumers with an age range of 41-64 years with the majority of the last high school education / equivalent. The majority of consumers work as private employees with the majority of monthly income of Rp 3,000,000 – Rp 5,000,000. The majority of consumers interviewed have made purchases three times per month at the Jatinegara Ornamental Fish Market. These market consumers come from various sub-districts in the East Jakarta Region, including Makassar District, Matraman District, Cakung District, Jatinegara District, Duren Sawit District and Pulo Gadung District.

2. Based on the calculation of the Customer Satisfaction Index (CSI), a CSI value of 61,4% was obtained. The CSI value of 61,4% is classified into the satisfaction value range of 61% - 80.99%, which means that the performance of the Jatinegara Ornamental Fish Market is in accordance with consumer expectations so that consumers feel satisfied.

3. The main variables that most affect consumer satisfaction by looking at the level of importance are aesthetic variables and features. The attributes in the variables with the highest level of importance are the pattern and color of ornamental fish with an MIS score of 3,34 and the availability of supporting equipment for ornamental fish rearing with an MIS score of 3,32.

## COMPETING INTERESTS

Authors have declared that no competing interests exist

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