Developing Micro Small and Medium Enterprises (MSMEs) In The Field Of Ornamental Fish Cultivation In The Village Of Pinang Freely E-Commerce

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Abstract

Micro, Small and Medium Enterprises (MSME) in Pinang Village currently play a major role in driving the economy of the community. This is due to the rapid growth of MSME in ornamental fish cultivation so that it has a positive impact on society. Currently, the marketing is limited. Even though it has used social media, the development of MSME in Pinang Village is very slow. To facilitate management, a forum in the form of online media in the e-commerce system has been created as a forum for the Pinang community to develop their MSME. So that they can maintain their existence and Continuous development. The research method in system analysis used for this research is PIECES which consists of Performance, Information, Economy, Control, Efficiency and Service. The system design uses object-oriented analysis methods with Unified Modeling Language (UML), the programming language used is PHP. In this research, a system will be developed whose implementation has features such as user, purchase transaction, fish categories, fish species, transaction reports. With the existence of this ecommerce system to help the development of MSME in the field of ornamental fish cultivation in Pinang Village.

Keywords — *MSME, E-commerce, PIECES*

1. INTRODUCTION

In micro enterprises based on law number 20 of 2008 concerning MSMEs (Small and Micro Medium Enterprises) is a productive business owned by individuals and / or individual business entities that meet the criteria of micro enterprises as stipulated in the law. MSMEs have several types, one of which is ornamental fish cultivation, the existence of MSMEs should not be doubted because it is able to survive and become the driving wheel to improve the economy, especially the krisi economy, but on the other hand MSMEs also face several problems, namely limited working capital, low human resources and lack of mastery of science about current technological developments.

Along with the beginning of the era of revolution 4.0, which in this era offers all the ease and speed in accessing all aspects of life. As is popular today, people are very spoiled with various ease of existing payment technology such as e-commerce.

This also applies to the state instasi namely the village, where they are required to provide a place to develop in the economic sector for the community. Because the container provided has not been able to develop its business and improve the economy of MSMEs in the field of ornamental fish in pinang village. Ecommerce containers are needed in the

development of MSMEs in the field of ornamental fish cultivation, because currently the community needs information technology-based containers such as e-coomerce that should be initiated by village agencies so that people engaged in ornamental fish cultivation are accommodated and can help increase sales.

Pinang Village is one of the villages in Tangerang City. Pinang Village area is currently starting many communities engaged in Micro Small and Medium Enterprises, one of which is in the field of ornamental fish cultivation, but unfortunately the development of technology can not be felt by some people who are cultivating because of the attention of the local government who have not been able to accommodate or accommodate people engaged in ornamental fish cultivation, MSME actors in the field of ornamental fish cultivation only use social media as a tool to develop their business where there are still many scams through social media if used as a transaction media, and social media used only in the form of sample images there is no exact price banderol, and by waiting for customers to come to the cultivation location so that sales like this are stuck for reasons of time and weather and distance

Problems

Based on the ongoing problems can be explained based on the description in the background, can be described as follows:

1) How is the implementation of the e-commerce system made in order to develop MSMEs in the field of ornamental fish cultivation in Pinang Village is running?
2) Can the e-commerce system develop MSMEs in the field of ornamental fish cultivation in Pinang Village?
3) Can the e-commerce system be a forum for MSMEs in the field of ornamental fish cultivation in Pinang Village?

2.   RESEARCH METHOD

After the data is collected, then the data is analyzed. The activity of analyzing data is one of the important steps in order to obtain facts and information on research results. Data and information must be analyzed, written using the method of Data Analysis a process or efforts to process data into a new information so that the characteristics of the data become easier to understand and useful for the solution of a problem, especially related to research. Data analysis can also be defined as an activity carried out to turn the resulting data from research into a new information that can be used in making conclusions.

In this information system analysis method, the author uses pieces method (Performance, Information, Economy, Control, Efficiency, and Service) that is to know performance, information, economy, control, efficiency, and service become a strategy in optimizing the improvement of MSME development and services in the system.

In the method of analysis of information system design to analyze the procedure that runs the author using tools (tools) in the form of UML (Unified Modeling Language) made using visual paradigm software that is a language based on graphics or images, visualizing, specifying, building, and documenting of a software development system based on object orientied programming through stages: use case diagram, activity diagram, sequence diagram , and class diagrams. To develop a system design that wants to be built.

Here are some literature studies related to this research:

1) Research conducted by Fifit Alfiah, Rasyid Tarmizi Aad and Adyani Junidar in ICIT JOURNAL Vol 6 No 1 (2020) Raharja University Tangerang entitled "Designing E-Commerce System for Clothing Sales in A&S Stores". This research aims to make it easier for many people can be helped by the existence of this application masnyarakat no longer need to take time or difficult - difficult to come to the place directly to buy something.

2) Research conducted by Sandy Kosasi in the National Seminar on Information and Multimedia Technology (SNASTIA) 2017 ISSN 1979-3960 entitled "Designing E-Commerce Information Systems to expand the Pontianak Special Souvenir Products Market". This research aims to produce a system that can provide ease of introducing and selling all souvenir products typical of Pontianak City globally. Expanding the market share area and efforts to increase sales volume by building interactive communication relationships with consumers (customers). E-Commerce system design method uses Waterfall approach with object-oriented approach. The results of the E-Commerce system design can display all information about the products by the typical Pontianak City.

3) Research conducted by Endra Yuafanedi Arifianto, Purnomo Budi Santosa, Soraya Kurniawati in IENACO 6 National Seminar (2018) entitled "Designing E-Commerce to develop Marketing and Ordering Products of Creative Wood Craft Industry". This research aims to provide information about the variants of products sold, how to order products so as to help the marketing process of the creative industry of wooden handicrafts. This prototype e-commerce website system helps buyers in choosing products according to their needs and also ordering products made through the website. This research uses WordPress tools, System Development Life Cycle (SDLC) and PIECES analysis (performance, information, economy, control, efficiency, and service). The result of this research is the design of this prototype used by two users, namely admin and buyer. From the test done that is verification testing, the system designed is in accordance with the design that has been made before.

4) Research conducted by Renny Sari Dewi, Oki Anita Candra Dewi and Rizky Noviasri in Journal of Community Service Vol.3, No.1 June 2019. entitled "Design and Implementation of E-Commerce System for Batik MSMEs in Jombang Regency". This research aims to design and implement an e-supply chain in the form of ecommerce that is useful to facilitate MSMEs to sell batik products in all circles in Indonesia. There are 5 stages in the implementation of this program, including surveying the business process of making batik jombang, determining the superior motives of MSMEs, designing system needs, system development, and implementation of web-based e-commerce systems. The conclusion is that the system was designed with the help of Enterprise Architect software, a web-based ecommerce built with WooCommerce plugins.

3.   RESEARCH RESULTS AND DISCUSSION

Proposed System Design

After conducting research and analyzing the system that runs in the related section in pinang village, then the next process that will be discussed is about the system to be built. There are several proposed procedures that aim to be built, namely an ecommerce system to increase MSMEs in the field of ornamental fish in pinang village.

The design of the proposed system was created by using UML (Unified Modelling Language) diagrams by using Enterprise Architect software application. As for the creation of software is created using PHP language with database application system using PHP MyAdmin. UML to be created using, among others:
a.   Use Case Diagram
b.   Activity Diagram
c.   Class Diagram

A.   Use Case Diagram Of Proposed System

The proposed usecase diagram on the application:
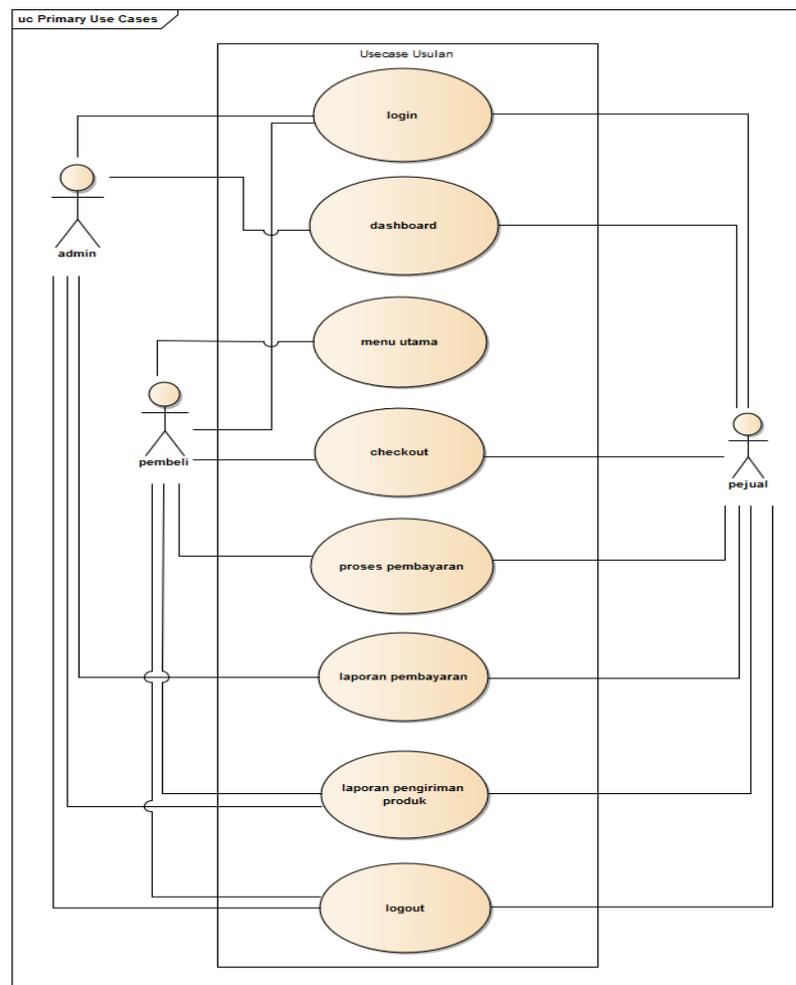
Figure 1. Use Case Diagram Proposal

In this use case diagram, Admin can monitor every payer traction, seller can, Marketing can not add and edit master data, Manager can only view dashboard, transaction report, operations and activity log.
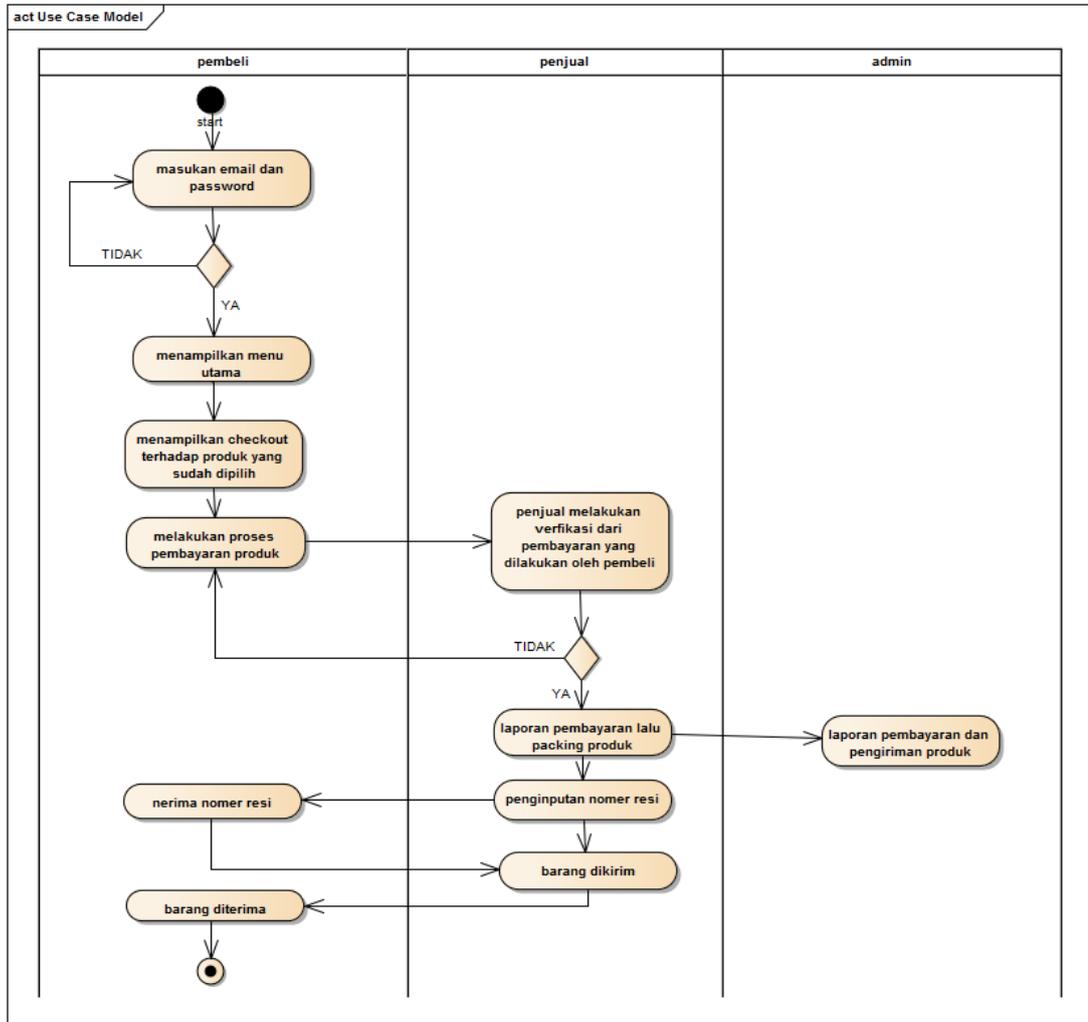
B. Proposed Activity Diagram:

Figure 2. Proposed Activity Diagram

Based on Figure 2 describes the activities that occur in ecommerce design. Starting from the buyer to fill in the email and password to login, if the login fails then repeat again, and if the login is successful then the buyer enters the main menu view, after the buyer selects one of the products it will be directed to the checkput display, after checkout the buyer must complete the payment of the product, the seller verify the payment made by the buyer, if it is true that the payment transaction will be the seller will do packing the product , after packing the product the seller inputs the receipt number and sends the product, and the buyer receives the receipt number until the buyer receives the goods. And admins monitor the reports of payment transactions made between buyers and sellers.

C. Class Diagram

The Diagram class can help to visualize the class of a system, since the diagram class has a group of objects with the same attributes (properties) and relationships.:

Figure 3. Class Diagram

Database specifications are database designs that are considered normal. The database design describes the storage media used, the content stored, the primary key and the length of the record.

Program Design

The design of the display system of the proposed system is as follows:

A. Login view
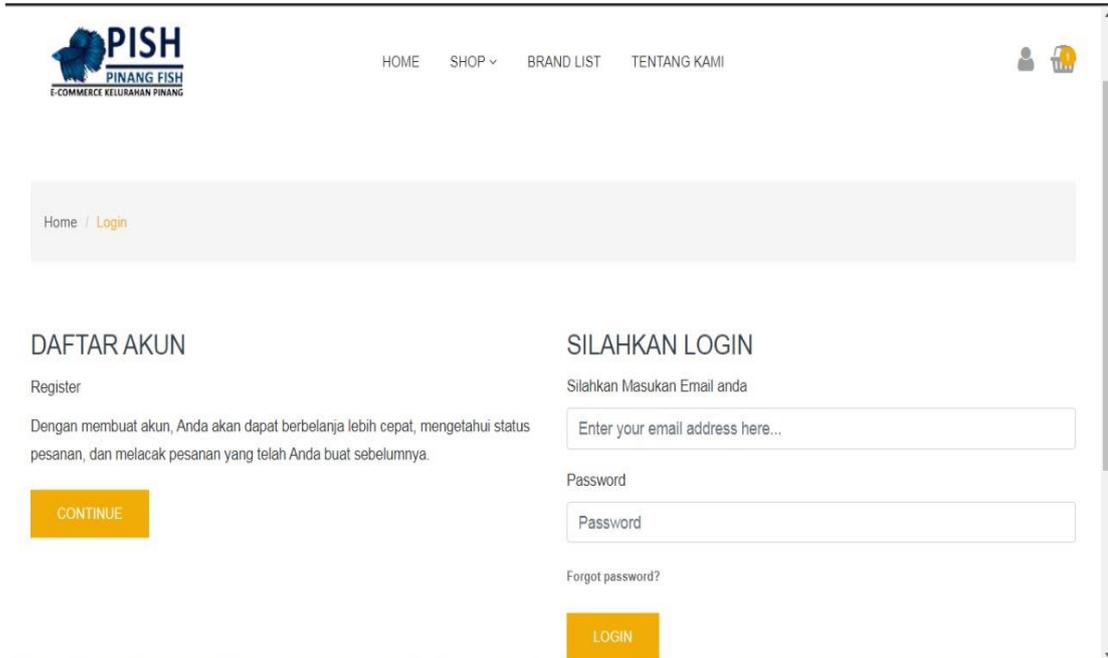
Figure 4. Login view

When first accessing this application must first login using the email and password that has been registered.
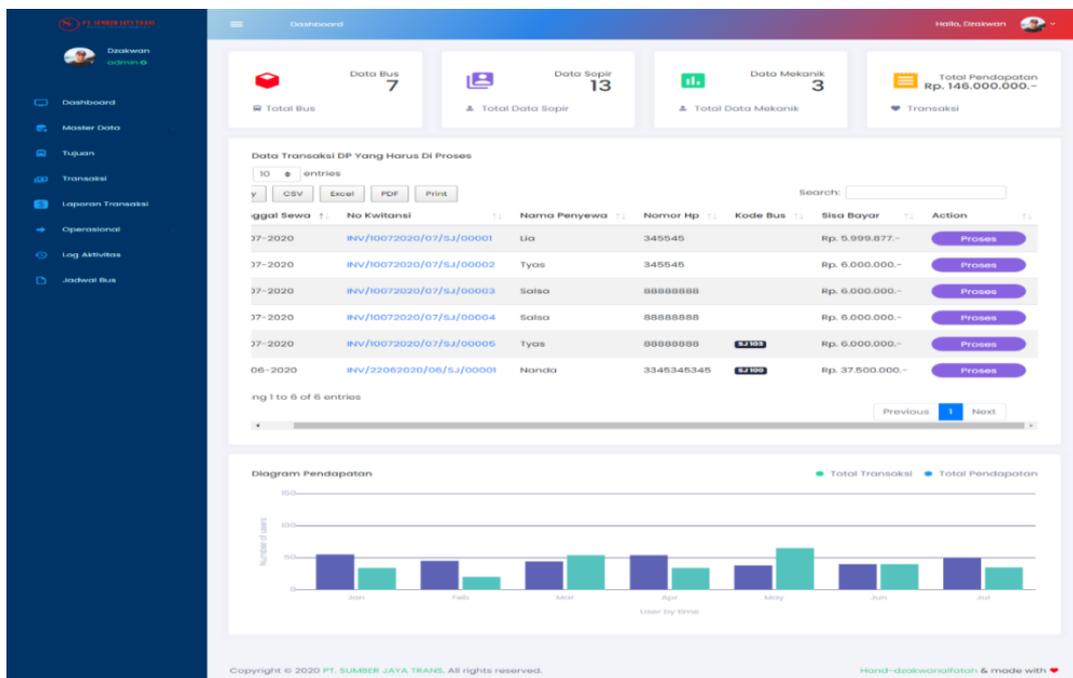
B. Dasboard View

Figure 5. Dasboard view

Here's a look at the admin dashboard, which displays a summary of Tansaksi.
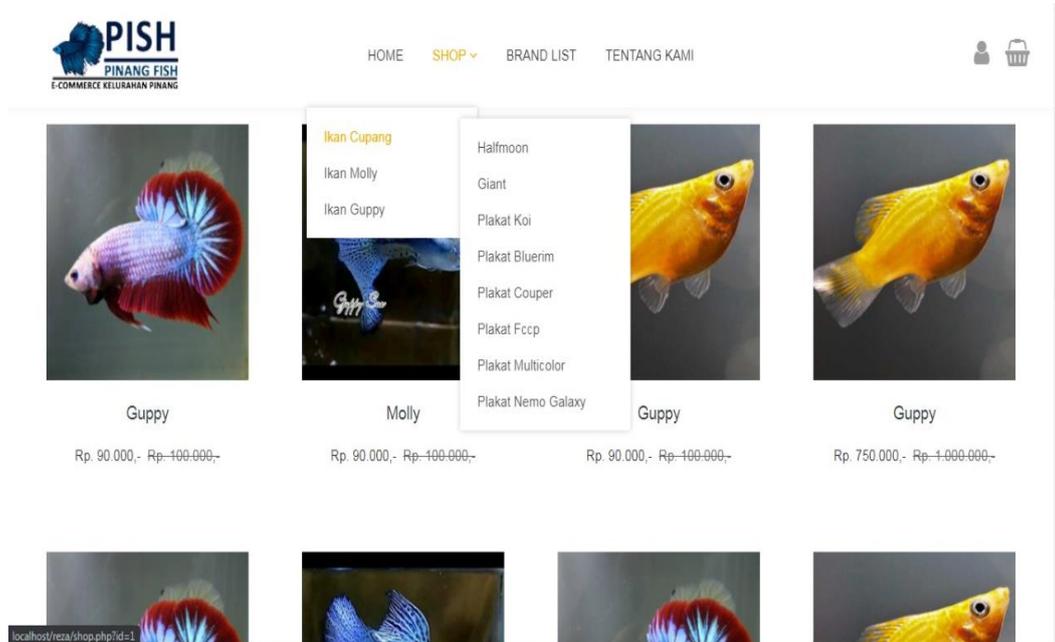
C.   Main Menu Display

Figure 6. Main Menu View

In this menu contains the appearance of products sold such as fish, with different types and prices.

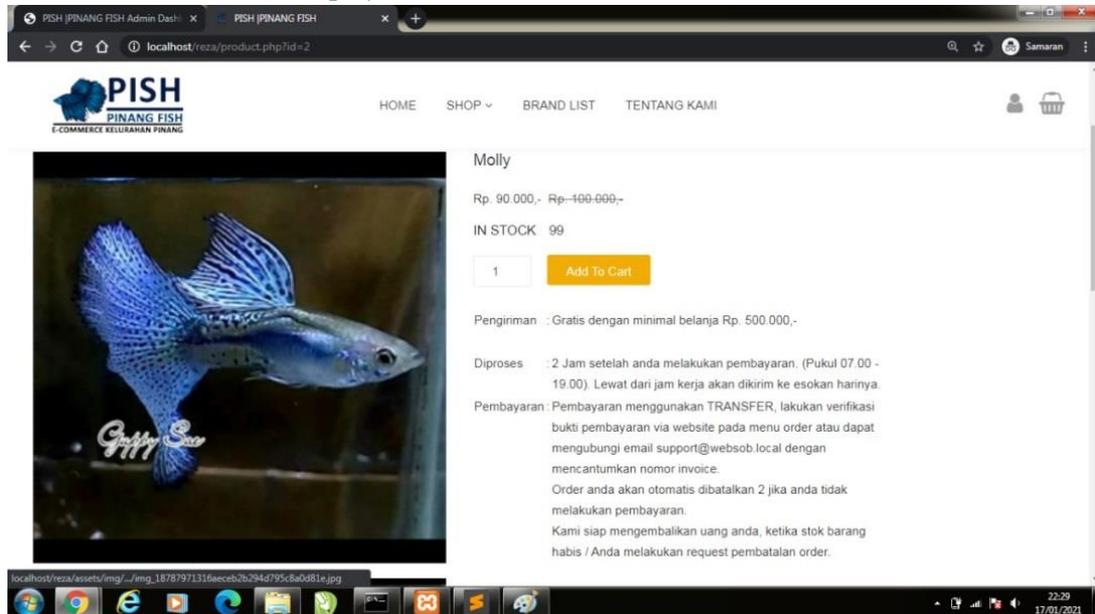D.   Product List Menu Display

Figure 7. Product Details Menu View

The view above is a detailed view of the product sold from the Description and its price.
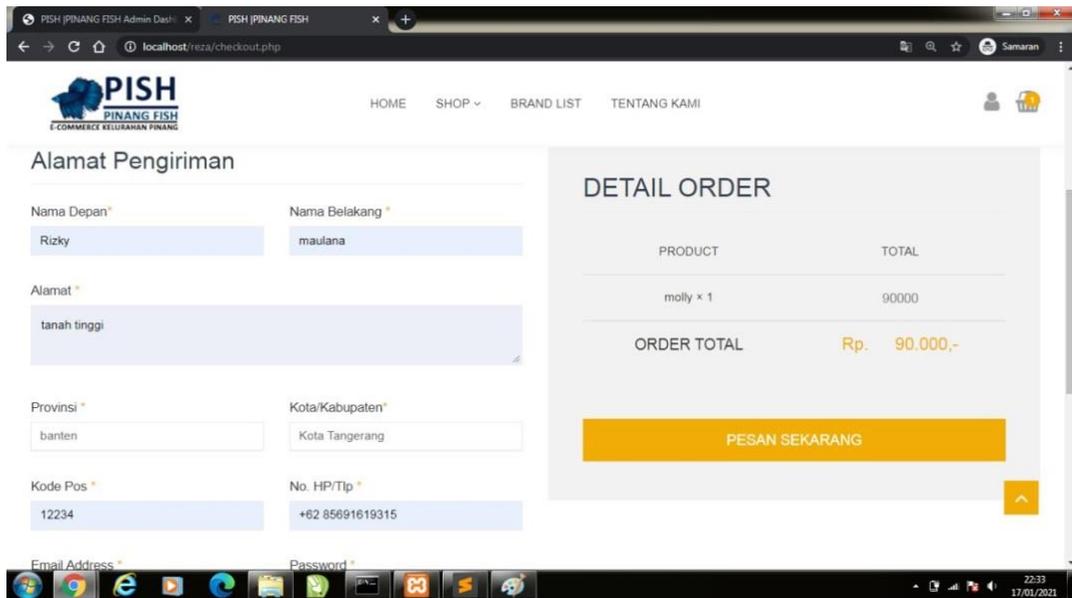
E. Product Checkout Menu View

Figure 8. Product Checkout Menu View

This display explains that the buyer has placed an order for the goods sold, which displays the amount of price and type of fish.
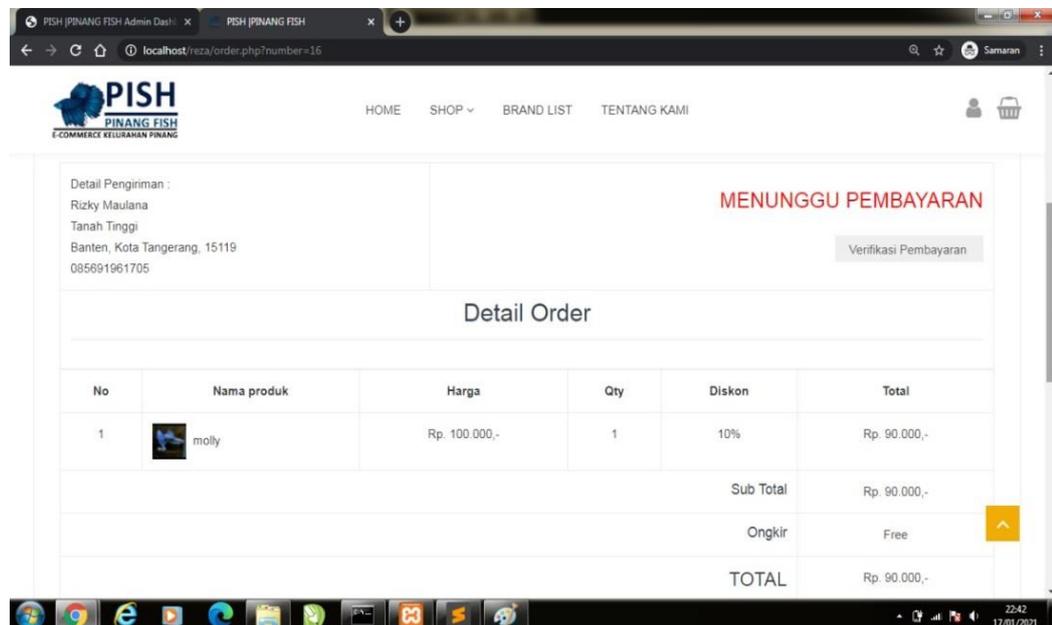
F. Order details menu view

Figure 9. Order Details Menu View

In this view display displays the incoming proof of Orderan and displayed the status of payments made by the buyer whether it has been after making a payment or has not made a payment.
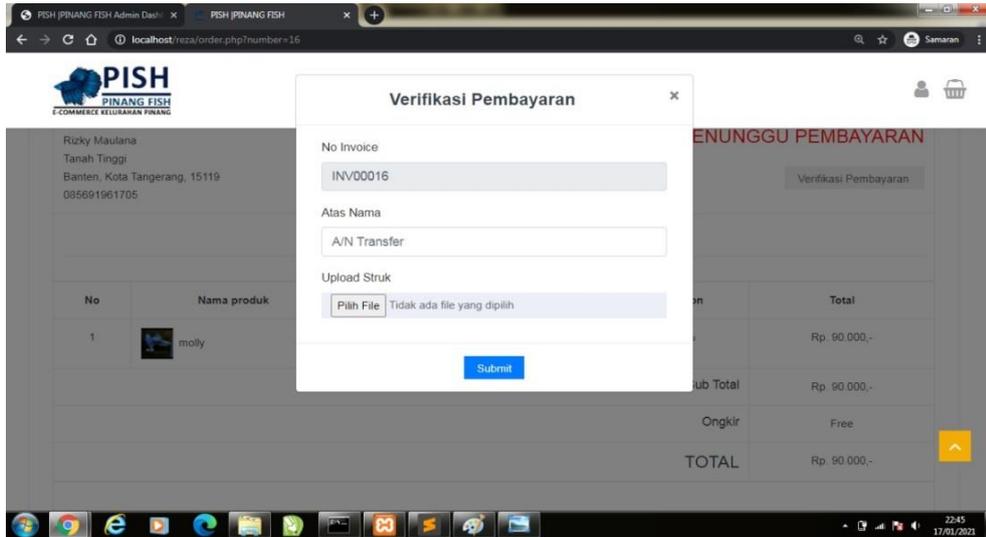
G.   Payment Verification Menu View

Figure 10. Payment Verification Menu View

The view above is a view of payment verification that has been done by the buyer.

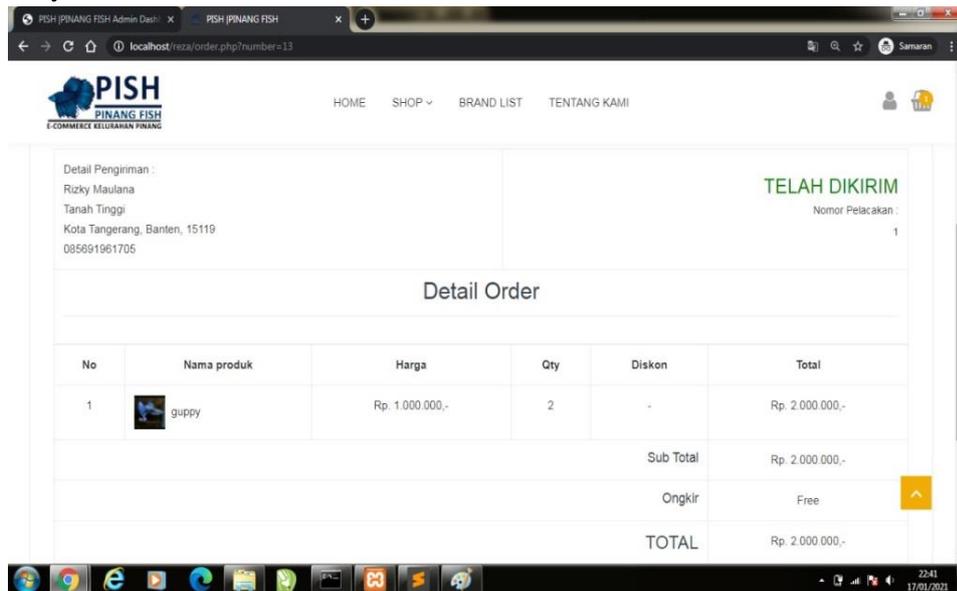H.   Delivery Process Menu View

Figure 11.Delivery Process Menu View

In the menu above shows evidence that orders that have been paid directly in the send by displaying the status of delivery.

4.   CONCLUSION

Based on the results of research and discussion in chapter one and the results of analysis and design carried out, on E-Commerce Design To Develop Micro Small and Medium Enterprises (MSMEs) In the Field of Ornamental Fish Cultivation In Pinang Village

it was stated that the current sales system is still manual, because it is still waiting for buyers to come to the location of ornamental fish cultivation in pinang village. The transaction process in MSMEs in pinang village is still relatively ineffective and efficient because it relies only on social media and offline sales. There is no draft application of E-Commerce system for MSMEs in ornamental fish cultivation in pinang village. After doing this implementation in the application that has been made can help MSMEs can market their products in a broader direction marketing.

5. SUGGESTED

The advice that can be conveyed by the author is that the next research can develop this system even better, so that the existing shortcomings can be corrected, so that there needs to be a party responsible for this system that is admin as the operator of the system. It is necessary to verify strictly so that there is no use in the e-commerce container provided by Pinang Village. And the responsible parties must be honest and transparency to the Head of The Village.

6. REFERENCES

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