

E-Commerce Web Design Analysis For Computer Sales

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Abstract—CV. Anyar Komputer is a company for repair services, sales and purchases of laptops and PC computers. Customer from CV. Anyar ordinary computer from individuals and offices / companies. Current business processes at CV Anyar Komputer in recording computer or other hardware repair activities are still recorded in the ledger and there is no written evidence for customers who repair their devices, so customers have to come again to the store to ask about the status of the development of the repaired devices. From the data obtained, there were more than 10 customers who came to repair the device at CV. Anyar Computer. Meanwhile, in the process of purchasing computers, it is still recorded in the ledger, the difficulty is when doing financial reports takes a long time because the process is done manually and does not use the help of machines in making financial reports. With technological developments that force people to work quickly, CV. Anyar Komputer must develop in the transaction process and documentation in its business processes. Analysis of e-commerce needs for web student computer sales was chosen because there are already many companies and computer shops that sell website-based goods. This website-based e-commerce is designed with 4 user access rights, namely administrators, technicians, leaders, and customers. The system development method used is a prototype where the stages used are only up to the design stage. This study does not discuss the return of goods to suppliers and consumers. Business process analysis using PIECES and Data Flow Diagrams. used for data flow modeling. The results of this study are 1 databases with 6 tables designed, interface design for 4 user access rights

Keywords— *e-commerce, analysis, computer sales*

I. INTRODUCTION

Recently, technological developments have made significant progress. Technology is getting more sophisticated and complex, along with these developments humans as technology users tirelessly continue to improve and update it to match what is expected, namely to facilitate human activities themselves. In this case technology is very helpful in almost all aspects of activities using information system technology as a support for activities, be it in the fields of economy, socio-culture, health education and so on. Therefore, information technology has become a primary requirement for the survival of a company to increase the effectiveness and efficiency of company performance. The current development of technology encourages all aspects of life to make the work process better, faster and more accurate. CV. Anyar Komputer still do not enjoy the technology that has developed at this time for its industrial activities, which in the shop still uses the old or manual information system to serve consumers so that it is inefficient, for example in the computer sales process that is happening at this time it is not enough to provide services which is satisfactory because of the absence of a fast and accurate

information system for consumers regarding the stock or available computer supplies. There are problems in service services such as service systems that still use manual recording and there are no records or proof of transactions for consumers. With so many services, there are at least 10 more customers servicing a day, this shop wants to try to provide the best and efficient time to use in customer service.

Apart from that problem, which is faced by CV. Anyar Komputer by using a system that is still manual, this shop often has difficulty controlling the stock of computers. With some of the problems above, CV. Anyar Komputer tries to do or improve the quality of service by building an information system which will help and facilitate faster, permanent and accurate service for the performance of CV. Anyar Computer.

So that this research does not deviate from the planned objectives so that it makes it easier to get the necessary data and information, the authors define the problem boundaries as follows:

1. Information system designed for service and sales at CV. Anyar Computer.
2. The system development method used is a prototype in which this practical work research is only at the stage of gathering needs and design.
3. This system has 4 access rights, namely:
 - a. Admin access rights are processing login data, services, goods, sales.
 - b. Customer access rights are processing customer data.
 - c. Technician access rights are processing technician data.
 - d. Director access rights are to view service and sales reports.
4. The information system built does not make reports on the return of goods to suppliers and consumers

II. METHOD

A. Data Collection Method

The method used is the case study method by means of a descriptive analysis approach, namely a method that searches, collects and processes the necessary data and which is then interpreted and compared with the theoretical basis obtained from several literature that supports this writing, so that a conclusion can be drawn.

The methods used in collecting this data consist of:

1. Observation, by way of direct observation of the object of research.
2. Data collection, this data collection is carried out in direct consultation with the supervisor.
3. Interview, Conducting interviews or direct question and answer with the director, Mr. Abdullah as the Director of CV. Anyar Computer.

4. Literature study, theoretical data collection with the help of various books relating to and supporting the issues discussed.

B. Systems Development Method

According to Yurindra (2017: 47) the prototype model is a process that allows developers to create a software model, this method is good to use if the client cannot provide maximum information about the desired needs.

This research design is modeled using a prototype process model. The prototype process model is a method in system development that uses an approach to program something quickly and gradually so that it can be immediately evaluated by the user.

The following is the process that occurs in the prototype method:

1. Collection of needs.

At this stage, communication and meetings or group discussions are carried out to determine general objectives, the desired needs and a description of the next required part. Meanwhile, the details of the needs are not discussed at this stage but at a later stage.

2. Design.

The design stage is carried out quickly and the design represents known aspects of the software. And this design becomes the basis for prototyping.

In this practical work research the author only uses 2 stages, because the author raises the title Service Information Systems and Computer Sales at CV. Anyar Computer

C. Equations

There are six variables from the PIECES framework used in analyzing the feasibility of an information system (Supriyatna and Maria, 2017), namely:

1. Reliability (Performance)

In performance analysis, it is carried out to determine the performance of a system that has been running well or vice versa. The performance of the system can be measured by the amount of data generated and how fast it is to be recovered.

2. Data and Information

An information that will be displayed is a finding of the data generated and this analysis is used to find out how much and also how clear the information is generated in one search.

3. Economic Value (Economics)

In this section, an analysis is carried out to determine whether the system is appropriate for an information institution when viewed from a financial perspective and costs incurred. This is very important because the performance of a system is also influenced by the amount of costs incurred.

4. Control and Security (Control and Security)

To ensure the performance of a system, a good control and supervision is needed. This analysis is used to find out how much control and security is carried out so that the system used is still running properly.

5. Efficiency

The main thing that needs to be questioned from a system that is used is the effectiveness and efficiency of its performance. In addition, it must also be considered the reasons for the system being created and used. A system must be able to help problems, especially in terms of system automation. This analysis was conducted to determine the efficiency of using the system.

6. Service (Service)

Another part that needs to be considered in assessing the performance of a system is its implementation in service

delivery. A system can be declared to be running well if it is balanced with good service as well. This analysis is carried out to determine the problems that exist in the implementation of the service and how the service runs.

III. RESULT

A. Analyzing of the Running System

The running system is analyzing the system being used. The following is an analysis of the existing system in the company CV. Anyar Computer.

1. Computer Service Procedure.

In computer service by coming directly to the CV shop. Anyar Komputer will then be served by the admin staff and the admin will ask what the customer wants, such as wanting to buy a laptop or PC or wanting service. When a customer comes to the store and asks the admin staff to use the service, it will call the technician staff to serve the customer and ask which part will be repaired.

2. Procedure for selling a laptop or pc.

Just like the service procedure, if a consumer wants to buy a laptop or pc, the consumer must come directly to the store. Then the admin staff will explain the product information that the customer wants. If the consumer is confused about the brand to buy, the admin staff will explain the superior products from the store.

B. Analysis Of System Weaknesses

The author analyzes the system running on the CV. Anyar Komputer by collecting information from the existing running system, then finding the problems that cause the problems and the consequences of these problems. To analyze it, the writer uses the PIECES framework as a problem analysis tool.

TABLE II. TABLE ANALYSIS OF SYSTEM WEAKNESS

Analysis	Old System	New System
<i>Performance</i>	The system used is still manual, so it takes time to record reports.	In the new system it is computerized so that recording reports is more efficient.
<i>Information</i>	Information from service and sales is stored in documents that are prone to loss.	In the new system can provide information about service and sales in detail and accurately.
<i>Economy</i>	The director needs to pay additional costs for making reports per day.	In the new system can reduce the cost of creating reports.
<i>Control</i>	Sales and service data archive storage is prone to being manipulated by unauthorized people.	In the new system, sales and service data are stored on the system so that they are not prone to being manipulated.
<i>Efficiency</i>	Making service and sales records takes a lot of time, especially during busy times.	The new system makes it easier for customers and employees to process transactions.
<i>Service</i>	The delay in confirming the damage suffered by customers to service is because it is only known to the technician.	In new systems customer service knows where the damage is to the computer.

C. System Planning

a. Developed Flowchart System

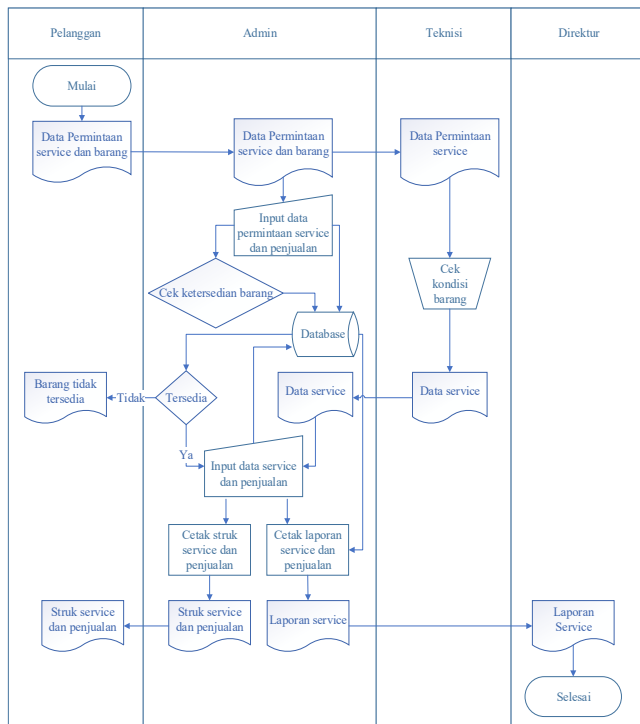


Fig. 6. Developed Flowchart System

b. Diagram Context

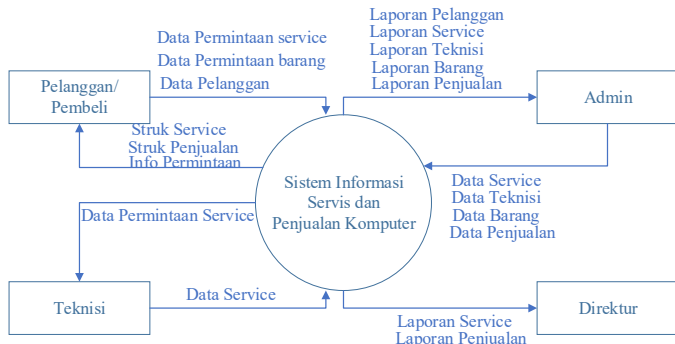


Fig. 7. Diagram Context

c. Tiered Diagram

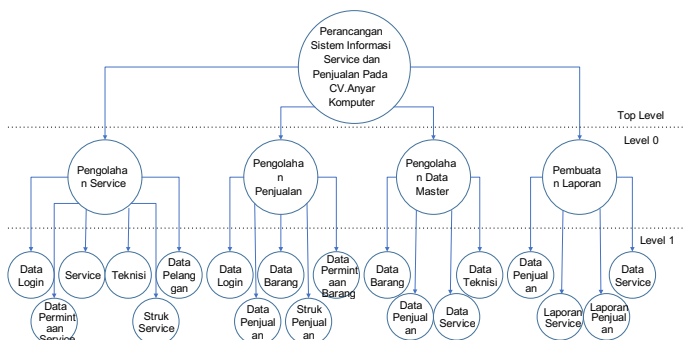


Fig. 8. Tiered Diagram

d. Level 0 Diagram

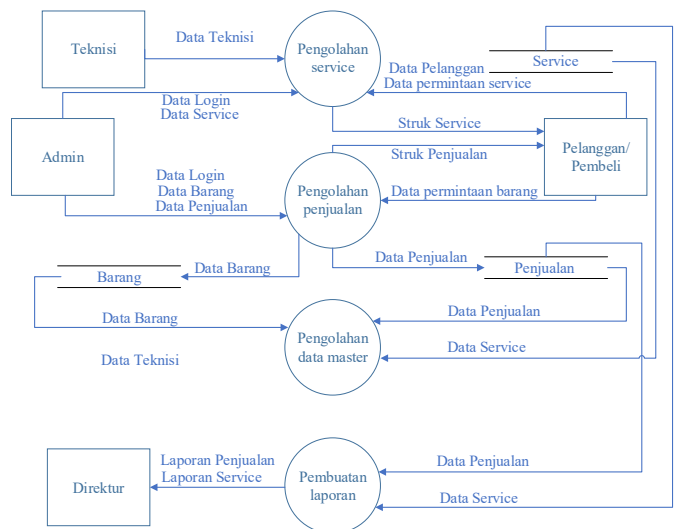


Fig. 9. Level 0 diagram

e. Table Design

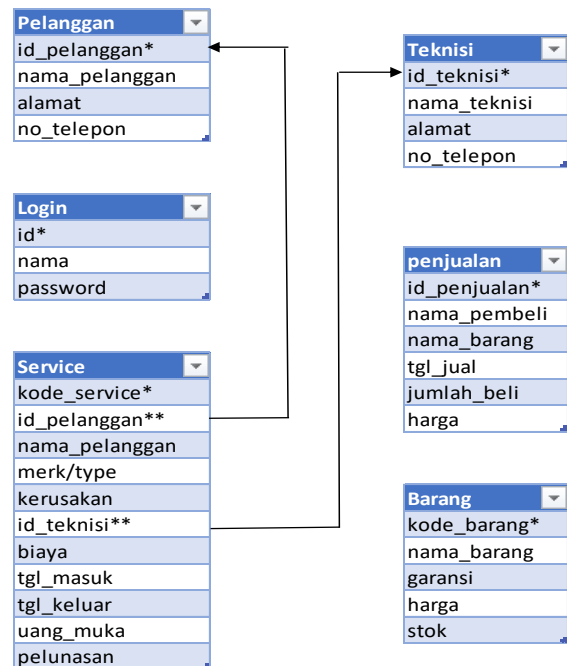


Fig. 10. Table Design

f. Interface Design

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CV. ANYAR KOMPUTER

ID :

NAMA :

PASSWORD :

Fig. 11. Interface design of Login



Fig. 12. Interface Design of Input Product

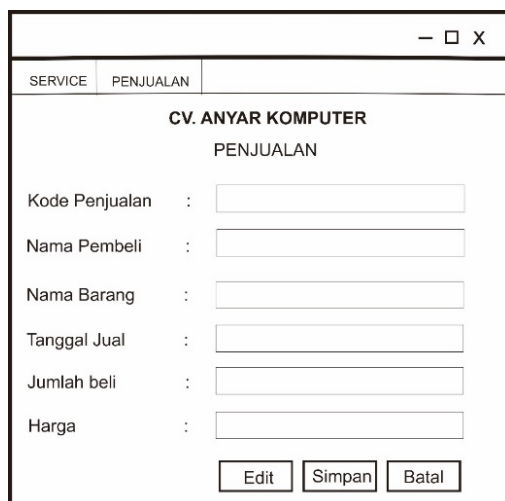


Fig. 13. Interface Design of Sell

IV. CONCLUSION

Some conclusions that can be drawn from the discussion and application of the system to the problems that exist in the design of service and sales information systems at CV. Anyar Computers as follows: In this planning, there are 6 tables, namely login table, customer table, technician table, service table, goods table, sales table which will be implemented with a database named anyar komputer. Based on the PIECES weakness analysis, CV. Anyar Computers requires Information Systems Service and Computer Sales. There are 9 interface designs including: login page interface, main page, customer page, technician page, service page, goods page, sales page, service reports, sales reports..

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