

Implementation of CV Metha Developing Palembang Goods Ordering System

Fatmariani¹, Meidyan Permata Putri², Marhama Apriliani³,

^{1,2}Information Systems Study Program, Institute of Technology and Business PalComTech meidyan_permata@palcomtech.ac.id²,marhamaapril@gmail.com³

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Abstract: CV Metha Berkembang is one of the companies engaged in the production and sale of aluminum sills. The sales process on CV Metha Berkembang has not been computerized where orders are made with consumers coming directly to the company's location or being able to call the company's phone number. An uncomputerized ordering process is needed in a company, where the ordering system does not require consumers to come to the place. For this reason, an ordering information system is needed that can make it easier for CV Metha Berkembang to carry out ordering activities. The system development method used is the prototype method, while for modeling the system used, namely flowcharts, data flow diagrams and entity relationship diagrams and conducting functional testing with blackbox testing. The result of this research is Web-based ordering system CV Metha Berkembang. this Web-based ordering system that aims to help the item ordering process. This system can also be used by the admin in confirming orders and inputting stock data for goods sold. With this system, it can help consumers, leaders, managers, and admins in processing order data, sales stock, and total stock of goods. In the next stage, this ordering information system can be developed again to become an Android-based information system.

Keywords:Information System, Ordering, Prototype Method

INTRODUCTION

Along with the increasingly fierce competition in the business world, companies are required to implement accurate strategies, especially in marketing and selling their products. Many companies are hampered in marketing their products only in a certain area and usually only in the area around the company. Companies must have the courage to invest in information technology in order to increase work effectiveness which in essence can maximize income in terms of business or business owned and provide convenience in carrying out work activities. According to (Husen, A and Dora, B 2021). Along with the advancement of technology, a website-based sales system is very helpful to improve company performance, using a company's website-based sales system can save time and make it easier for the process of sending data, data processing and data search. According to (Doni, A.P, 2020) Internet technology can help companies to utilize quickly and accurately in providing information to consumers by using a web-based sales system (online), in the form of serving sales transactions and expanding marketing reach more effectively and efficiently. According to (Santoso, S and Radna, N, 2017)

CV Metha Berkembang is a company that sells handicraft furniture such as furniture products and aluminum furniture aimed at the people of Palembang and its surroundings. The ordering process on CV Metha Berkembang is carried out in two ways, namely consumers calling or coming directly to the company to place an order. After receiving the order, the cashier of CV Metha Berkembang validates the payment first to then make a sales receipt in two copies, one of which is held by the company while the other is given to consumers. The receipt

* Corresponding author





held by the company will later be given to the admin to be managed as a daily sales report, which will then be forwarded to be managed in the form of a monthly report and at the end will be continued to be recapitulated and given directly to the leadership.

The offline seller system and payments made in cash have not used a computerized system for the order process so that the range of promotions is still limited. In addition, it was found that the problem of reporting sales results still takes a long time because reporting is still manual, notes are lost and double notes often occur.

Based on these problems, the researcher aims to create a web-based ordering application on CV Metha Berkembang which is a program in a computer that can be used by users to carry out processes directly. An application is also a collection of certain files and contains program code that connects computer hardware with the user. According to (Roni, H dan Riki, K). To assist companies in managing sales data, sales and service transactions, and sales and service reports that can be directly connected to each other. The application will be built using the Prototype method. The Prototype method is an itterative process in system development where the needs are transformed into a system that works continuously through cooperation between users and analysts. With open prototyping, the model of a system (or part thereof) is developed quickly and polished in repeated discussions with users. According to (Fendi, H, 2020). So it is hoped that the existence of this website can reduce the occurrence of errors and can simplify and speed up the process of recording.

LITERATURE REVIEW

To support the research, several studies related to this research have been analyzed, namely:

- 1. Research by Husen Azis Mubarok, Dora Bernadisman in the Journal of Information Technology and Multimedia entitled "Web-based Goods Ordering Information System at AMANAH Grocery Stores" This research has similarities in terms of ordering goods, but there are differences in the method used, namely using Extreme Programming. The results obtained in the output of this study is the existence of a product ordering information system that contains a catalog of goods. According to (Husnaini, U and Purnomo, S, A, 2018)
- 2. Research from Irawan, Rahmalisa and Wahyuni in the Journal of Information Technology and Multimedia entitled "Furniture Sales Information System on CV. Satria Hendra Jaya Pekanbaru Web-Based". This research has similarities in terms of sales but there are differences in the method used, namely using SDLC (Software Development Life Cycle). The results obtained in the output of this study are the existence of a furniture goods sales system in the form of a website that aims to compile a fast and accurate recording of sales data. According to (Rosa, A, S and Shalahuddin, 2018)
- 3. Research from Faizatul and Herlawati entitled "Web-Based Goods Sales Information System at Rahayu Bekasi Printing House". The research has similarities in the system development tools used in the form of flowfhart, Data Flow Diagram, and Entity Relationship Diagram. The method used is to use the waterfall method, but it has differences in the system created, namely the marketing system. The results obtained in this study are website outputs to process the Rahayu Printing marketing system which makes it easier to store data by utilizing information technology systems. According to (Andra, T, 2018)
- 4. Research from Sintawati entitled "Application of the Prototype method for a web-based procurement information system". This research has similarities in the website-based system and the method used is to use the prototype method, but it has differences in the system made, namely the procurement system. The results of the research obtained are website outputs that make it easier for employees in the process of monitoring the stock of incoming and outgoing goods without having to come to the store. According to (Burhan, B, 2017)



METHODS

A. Data Collection Methods

The data collection method in this study was carried out aimed at collecting primary data and secondary data that are useful in building a system, the data collection methods used are:

- Observation is the process of thoroughly observing and observing behavior under a particular condition. According to (Sugiono, 2018). Pengamatan adalah kegiatan keseharian manusia dengan menggunakan pancaindra sebagai alat bantu utamanya. According to (Sudaryono, 2017). Researchers make direct observations of ongoing systems, daily sales data, and monthly sales.
- An interview is a conversation with a specific intention conducted by two parties, namely the interviewer who asks the question and the interviewee (interviewed) to provide answers to the questions given. According to (Wanda, W, 2017). The researcher conducted an interview with Mrs. Metha Monica as the Leader. The information obtained from this interview activity is in the form of information about the system running on the Metha Berkembang CV, and what data is in the Metha Berkembang CV.
- Documentationis intended to obtain data directly from the research site, including books, regulations, activity reports, photos, and data relevant to the research. According to (Maniah and Dini H, 2017). Researchers took several pictures to be used as documentation as supporting data in the study.

B. System Development Methods

The method used in this study is the Prototype method. The Prototype Prototyping method begins with collecting needs, involving system developers and users to determine the objectives, functions and operational requirements of the system. According to (Uus, R, 2017). Illustration of the Prototype method can be seen in figure 1. According to (Rosa, M, S and Shalahuddin, 2018) :



Figure 1. Prototype Method Illustration

RESULTS AND DISCUSSION

A Product Ordering Information System has been produced on the Web-Based Metha Developing CV. This application can process various kinds of data such as product data, consumer data, ordering transactions, and user data itself, in this study 4 stages were carried out, namely:

Needs Analysis

The stages of collecting needs carried out by researchers include:

- 1. **Survey :** The survey was conducted at CV Metha Berkembang where researchers asked for information on sales procedures and recording reports, the survey also included research on the condition of the way transactions carried out by shop owners in serving their customers at CV Metha Berkembang.
- 2. **Problems encountered :** In selling CV Metha Berkembang is still offline and in terms of recording reports CV Metha Berkembang still uses the old way, namely the recording system through books where the book can be lost or other unwanted things happen.
- 3. **Problem Solving :** With existing problems can be solved or overcome by creating a booking information system. So every time an order comes in, and the sales report after





making a transaction can be recorded automatically in the database. The parts of the pipeline that run on the Metha Developing CV are as follows:



Figure 2. Sales Flowchart running on CV Metha Developing part one



Figure 3. Sales Flowchart running on CV Metha Developing part two

2. Designing Prototyping

At this stage, the author and CV will design the web-based application that will be made and will be classified with several classifications including: A flowchart is a chart with certain symbols that describe the sequence of processes in detail and the relationship between a process (instruction) and other processes in a program. According to (Desi, E, H, At al, 2018) Data Flow Diagram (DFD) is a system modeling that describes an operational system where system functions are very important and complex compared to data manipulated by the system According to (Marwan, M, L, 2021).

a. Entity Relationship Diagram (ERD) is a graphical model that includes a detailed explanation of all entities, relationships, and constraints to assist system analysts in completing the creation of a system. According to (Ahyar, Hk, Et al, 2020). The proposed Flowchart of the Metha Developing CV ordering application can be seen in figure 4.



Figure 4. Proposed system flowchart





Based on the flowchart proposed in figure 4 is an overview of the overall activity that occurs in the product ordering application at CV Metha Developing. The Data Flow Diagram of the product ordering system in CV Metha Berkembang can be seen in figure 5.



Figure 5. Data Flow Diagram(DFD)

Based on the Data Flow Diagram that has been depicted in figure 5 is an overview of the overall activity that occurs in the product ordering system at CV Metha Berkembang. The following is an Entity Relationship Diagram (ERD) containing components of the set of entities and the set of relationships, each of which has the attributes that can be seen in figure 6.



Figure 6. Entity Relationship Diagram (ERD)

Coding System

At this coding stage after the author has done the design and design. The ordering system on CV Metha Develop is built using the PHP programming language and using the MySQL database. The application interface design is made web-based using HTML, CSS and the utilization of the bootstrap framework with examples such as the following:

a. Login Page

This form is the appearance of the login page. This form has fields to input username and password. The login form display can be seen in figure 7.







Figure 7. Login Form Display

b. Main Page

This view is a detailed view of the customer homepage that contains the initial view. The customer homepage display can be seen in figure 8.



Figure 8. Customer homepage view

c. Consumer Products Page

As for the display of additional violation data containing the violation id, name, class, day, date, category of violation, form of violation, and teacher, it can be seen in figure 9.



Figure 9. Customer homepage view

d. PageDashboard

This view is a detailed view of the admin dashboard which contains a list menu view located on the left content. The admin dashboard view can be seen in figure 10.

	Selama Anda L	Datang, Administrator ogin Sebagai admin
n Selfort		
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the second se		
W Angers	70,00,000	6 Kanad Pergagan
A Amora 1		
O layerer laway falser		
5 ibertected	51,00,30	
0 min	41.00.30	
	31.00.30	
	1.00.00	

Figure 10. Admin Dashboard View

e. Goods Data Page

In the item data display, it displays the item data from the add goods form that has been processed. The display of admin item data can be seen in figure 11.

* Corresponding author







Figure 11. DisplayData of Goods

f. Sales / Item Out Report

In the item data view, we display a printable outgoing or sales data report and we specify the date range. As for the display of outgoing goods data, it can be seen in figure 12.

		La	Periode: 13 Jul 2022 sampa	g Kelua	r	
No.	Pelanggan	Rode	Nama Barang	Barang	Barang	Total
۶.	Fileri	BRG001	Buffet aluminium acp cutting	3,000,000	4	3,000,000
2.	Pileri	886002	Buffet TV	4,800,000		4,800,000
					etal Keseluruhan	Rp. 7,800,000

Figure 12. Sales report view (Outgoing Items)

4. Testing the System

At this stage, researchers use the Black Box Testing method, carried out by Testing the software in terms of its functionality without testing the design and code of the program. According to (Amanda, A, Salva, W and Titus K, 2021). The tests performed are input and output tests that are on the system. As for the testing stage of the system, it can be seen in table 1.

Table	1	System	Testing
1 uore		b y btem	resung

No	Scenarios	Test Results	Information
1	Enter the	Displays the main menu page of	Succeed
	correct	the application.	
	username and		
	password, then		
	press the login	Metha Bersama Audus gum	
	button.		
		Halaman Beranda	
2	Enter the wrong	Displays the messagebox "The	Succeed
	username and	data you entered is wrong!".	
	password, then		
	press the login	Metha Bersama Alumunium	
	button.		
3	Enter the	Display the "Incorrect	Succeed
	correct	Password" messagebox.	
	username and		
	wrong		





password, then press the login button.	Methy Bersama Audmus am
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It appears in table 1 that the system built has run as expected. The test results using Black BoxTesting were successfully used.

CONCLUSION

Based on the creation of an information system for ordering goods at CV Metha Develops that has been done, the research findings are very helpful in the process of ordering goods at CV Metha Develops. This system can process orders, consumer data, transaction processing and order validation processes. This application is useful for consumers as a place to order goods to be purchased with an interactive and user-friendly display, for admins this application can manage all processes that occur in the system such as managing data consumers, user data, goods data, validation of orders from consumers and outgoing goods, for the application manager this can show data on the stock of goods and goods sold in a certain period while for the leader it shows a report on the entire transaction and sales process. This system functions to provide control over a web-based system for processing sales and ordering data at the company.In the next stage, this ordering information system can be developed again to become an Android-based information system.

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* Corresponding author



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