



# Helmet Sales Information System Web based on Studio Shop Jakarta Custom Helmet

Hilman Basyiri

Faculty of Computer Science, Nusa Mandiri Jakarta, Indonesia

## ARTICLE INFO

### Article history:

Received Feb 20, 2025

Revised Mar 11, 2025

Accepted Mar 20, 2025

### Keywords:

Sales,  
Service,  
Web

## ABSTRACT

Systems information of helmet sales based on the web at Studi Helm Custom Store. The purpose of this study was to analyze and design of web-based sales system in Stores Studio Helm Custom. It is made to increase profits and make it easy for customers to order and buy helmets. This method uses data collection, analysis (surveys, interviews, and literature) and design (form inputs, processes, reports, and database). The results of this study are web-based sales system that can be used by customers 24 hours. The conclusion is a web-based sales system has facilities such as information pages, the page order, and cancel the page.

*This is an open access article under the [CC BY-NC](#) license.*



## Corresponding Author:

Hilman Basyiri,  
Faculty of Computer Science,  
Nusa Mandiri Jakarta, Indonesia  
Jl. Arief Rahman Hakim No. 51 Surabaya, Indonesia  
Email: hilman12@gmail.com

## 1. INTRODUCTION

Background of the Problem The advancement of the times has caused the human need for information to become increasingly widespread. In particular, information technology and transportation are progressing very rapidly. The importance of safety in driving provides awareness that helmets are very vital as a means of protection in driving. With the development of lifestyle and the importance of safety in driving, nowadays everyone is required to wear a helmet when driving. But at this time there are still many shops that sell helmets using the manual method, namely conducting business activities in the store, with the development of information technology we can buy anything without having to go to the store again. One way to get information we can use the internet, With the internet, we can save space and time without having to leave our place and routine activities, because the internet is an electronic medium that provides convenience and information in carrying out business activities, commerce, and other activities. The use of computers is the main choice in handling data processing, both large and small scale. With this, we need a new system that is able to process data quickly, precisely, accurately and update (up to date) quickly and in accordance with the development of information needs. One form of computerized information processing is to use the web. According to Sibero (2011b:11) "Website is a system related to documents used as a medium to display text, images, multimedia and others on the internet network. Therefore, nowadays, many companies use internet services for their business.

Studio Helm Custom is engaged in the sale of helmets or protective equipment, especially in the head area on two-wheeled vehicles. Because the shop is still manual, problems often occur, such as errors in delivering information, giving prices that are not in accordance with the actual price because there is no price tag on the item and poor sales reports. In running its business trying to improve marketing and sales. One way is by using the internet (E-Commerce) which informs about products, prices, how to order and payment transactions as well as assisting in data processing and making sales reports. According to Henny Destiana and Fandy Fajrin (2014) PT Catur Daya Persada is one of the companies engaged in trade and services for industrial needs. sells tools, equipment and spare parts for Oil and Gas mining as well as Coal mining which includes Instrumentation,

Electrical and Mechanical, Automatic Lubrication, including vibration training, balancing, alignment. PT Catur Daya Persada wants to provide satisfactory service to its customers. To solve the above problems, PT Catur Daya Persada wants to build an online sales system (e-commerce) to facilitate work and improve the smoothness of the sales service process.

According to Henny Destiana and Fandy Fajrin (2014) PT Catur Daya Persada is one of the companies engaged in trade and services for industrial needs. sells tools, equipment and spare parts for Oil and Gas mining as well as Coal mining which includes Instrumentation, Electrical and Mechanical, Automatic Lubrication, including vibration training, balancing, alignment. PT Catur Daya Persada wants to provide satisfactory service to its customers. To solve the above problems, PT Catur Daya Persada wants to build an online sales system (e-commerce) to facilitate work and improve the smooth process of sales service. According to Henny Destiana and Fandy Fajrin (2014) PT Catur Daya Persada is one of the companies engaged in trade and services for industrial needs. sells tools, equipment and spare parts for Oil and Gas mining as well as Coal mining which includes Instrumentation, Electrical and Mechanical, Automatic Lubrication, including vibration training, balancing, alignment. PT Catur Daya Persada wants to provide satisfactory service to its customers. To solve the above problems, PT Catur Daya Persada wants to build an online sales system (e-commerce) to facilitate work and improve the smoothness of the sales service process.

## 2. RESEARCH METHOD

The research method is a way how a writer can understand a discussion, problem and problem solving in a system.

### 2.1 Data Collection Techniques

- a. Observation is by making direct observations at a custom helmet studio shop to get the data needed for research.
- b. The interview is by communicating directly with the owner and employees of the custom helmet studio shop according to the topic under study.
- c. Literature Study Using a reading list that became a source of inspiration in doing scientific writing. This method is carried out with the aim of deepening the theory that has to do with the main points of discussion and problems in this research, namely by reading books, examples of research of similar studies, theses, journals and so on.

### 2.2 System Development Model

- a. Analysis of Software Needs Online sales website requires data such as product data, transaction data and other information that is recorded into one database. And the payment is by media transfer.
- b. Design The application design uses the Unified Modeling Language (UML), the diagrams used are Use Case Diagrams. Database design using Entity Relational Diagram (ERD) and Logical Relational Diagram (LRS).
- c. Code generation Stage of data translation or problem solving that has been designed into a particular programming language. To solve problems in designing the system into an application that is easily understood by the user, the author uses the programming language PHP, HTML and CSS which is used to compile the layout of the designs made. With a database using MySQL.
- d. Testing This is the testing phase of software built using the blackbox testing method. The author conducts testing in accordance with the desired system work, for example testing the addition of product data, discount products, product searches, promotional products and others, blackbox trials are carried out to ensure whether all the performance of the system is running well.
- e. Support is the final stage where a software is finished. Here the author ensures that all systems run properly according to user needs and can also provide changes or additions according to user requests.

## 3. RESULTS AND DISCUSSIONS

In simple terms, the system can be interpreted as a collection of elements or components that are organized, interact and depend on each other. According to McLeod (2004) cited by Jacob in the book Introduction to Information Systems (2012:1) defines the system is "A group of elements that

are integrated with the same goal to achieve the goal. The system is also a network of interrelated procedures, collected together to carry out an activity or for a specific purpose. achieve a goal.

### 3.1 System Design and Proposed Program

#### a. Analysis Stage

Web-based online sales system where sellers and buyers can make transactions without having to meet face to face. Consumers make purchases through a media browser with an internet network. The following are the system requirements of the e-commerce system: User page

A1. The buyer selects the item to purchase and is added to the shopping cart.

A2. Buyers can filter items according to category.

A3. The system calculates the number of items and total purchases.

A4. The system confirms via e-mail, sms or telephone.

A5. Buyers can confirm payment.

#### b. Administration Page

B1. Admin can manage item data.

B2. Admin can manage sales transaction data.

B3. Admin can manage sales reports.

B4. Admin can manage account data.

B5. Admin can manage postage

### 3.2 Testing

#### a. Admin Login Form

No.	Testing Scenario	Test Case	Expected results	Test result	Conclusion
1.	Empty all customer data fields on the transaction form, then click the 'Process' button	All textboxes are empty	The system will deny access and display the message "name is required"	According to expectations	Valid
2	Just fill in the username field data, empty the password data, then immediately click the "Login" button	Username: Supadmin Password: (blank)	The system will deny login access and will display the message "Username and password are not known"	According to expectations	Valid
3	Just fill in the password data and empty the username data, then immediately click the "Login" button	Username: (blank) Password: (admin)	The system will deny login access and will display the message "Username and password are not known"	According to expectations	Valid
4	Entering with the condition that one of the contents is true and the other is false, then immediately clicks the "Login" button	Username: Supadmin Password: Troubled(wrong)	The system will deny login access and will display the message "Username and password are not known"	According to expectations	Valid
5	Enter the correct conditions, then immediately click the "Login" button	Username: Supadmin Password: admin 1 (correct)	The system receives login access and then immediately displays the Admin form	According to expectations	Valid

### b. Transaction Form

No.	Testing Scenario	Test Case	Expected results	Test result	Conclusion
1	Empty all customer data fields on the transaction form, then click the 'Process' button	All textboxes are empty	The system will deny access and display the message "name is required"	According to expectations	Valid
2	Just fill in the name and clear all data and then immediately click the "Process" button	All blank Except name (Adi)	The system will deny access and will display the message "Phone/HP number must be filled and correct"	According to expectations	Valid
3	Just fill in the name and phone number in letter format then immediately click the "Process" button	Name: (Adi) Phone: (supriyanto) All blank	The system will deny access and will display the message "Invalid phone data"	According to expectations	Valid
4	Entering an email with the wrong format does not use the . and @ then click "Process"	Email: I'm happy	The system will deny access and will display the message "Invalid e-mail format"	According to expectations	Valid
5	All data is filled properly except Address is left blank then click "Process"	All correctly filled, Address (blank)	The system will deny access and will display the message "Address must be filled"	According to expectations	Valid
6	All data is filled except select the province then immediately click the "Process" button All data is filled in then	All are filled correctly Except select province	The system will deny access and display the message "select province first"	According to expectations	Valid
7	incorrectly entered the verification code directly click "Process"	All filled correctly, Code(False)	The system will deny access and will display the message "Verification code must be filled"	According to expectations	Valid

## 4. CONCLUSION

In building a sales website at the Custom Helmet Studio Store and the results of the author's observations, the authors conclude that, Through a sales website (e-commerce), buyers can more easily place orders and find out information about products on the TokoStudio Helm Custom Jakarta website. This helmet sales information system is a computerized system application that is made web-based and contains a centralized database of goods and sales data processing so that it can facilitate the management of goods data and reports. Provide convenience to buyers in ordering products that can be accessed through the sales website (e-commerce) with the address [www.studiohelmcustom.com](http://www.studiohelmcustom.com). Promotion by using the website is a means of promotion that is relatively cheap, when compared to other promotional means, and can be accessed by everyone without time and place restrictions as long as it is connected to the internet network so that it can make it easier for consumers to make transactions and can also solve problems of effectiveness in doing business. transaction. The web-based sales information system at the Custom Helmet Studio Store can expand market reach so that it can increase sales and provide maximum service to consumers.

## REFERENCES

- Anhar.2010.Panduan Menguasai PHP dan MySQL Secara Otodidak. Jakarta: MediaKita  
 Hastanti,Rulia Puji.2011. "Analisis Dan Perancangan Sistem Penjualan Berbasis Web (E-Commerce) Pada Tata Distro Kabupaten Pacitan". ISSN: 2302- 5700. IJNS – Indonesian Journal on Networking and Security

- Indrajani, Wily.2007.Analisis danPerancanganSistemPenjualanBerbasis Web Pada PT. Saranglmitasi.ISSN: 1978-9777.Jurnal Seminar Nasional Teknologi.No.24November2007.<http://andrewdion.staff.ugm.ac.id/seminarnasional-teknologi-2007.html> . 20 desember 2016
- Karmawan, Sundjadja, Luhukay.2010.Analisis danPerancangan E-commerce PD.GarudaJaya.ISSN: 1907-5022.Jurnal Nasional AplikasiTeknologiInformasi.No. 19 Juni 2010. <http://iptek.its.ac.id/index.php/sisfo/article/view/1447> . 20 desember 2016
- Laudon, K.C., & Laudon, J.P., 1998. "Management Information Systems : Organization and Technology", 4th Edition, Prentice-Hall International, Inc., New Jersey
- Masitoh Siti ,2011 "Sistem Informasi E-Commerce Bahan Bangunan Berbasis Web Pada Tb. Maju Jaya" Jurnal Sistem Informasi 2011
- Wahyono,Teguh.2009.Practice Guide PHP on Windows. Yogyakarta: Elex Media Komputindo
- Shalahuddin,Rossa A.S.2011.Rekayasa Perangkat Lunak. Yogyakarta: Andi offset
- Simarmata. Janner.2010. Rekayasa Perangkat Lunak, Yogyakarta: Andi Offset