BANJARESE
PACIFIC INDONESIA
Journal Of International Multidisciplinary Research

E-ISSN:000-000,
Vol: 1, Nomor: 2, Desember 2023
Halaman :47-60

Website-Based Online Sales Information System at the Sarto Sapi Company

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Informasi Artikel
Submitted: xx-xx-2024
Revised:xx-xx-2024
Published:xx-xx-2024

Keywords:
Website
Database
PHP
MaySQL
Cow Online

Abstract
The Sarto Sapi Company is one of the providers of cattle sales services which is located in Jebol Hamlet RT 001 RW 007, Donohudan, Regency Boyolali, with sales still done manually. Objective The research is the development of a website-based online sales information system for the Sarto Sapi Company to facilitate access for customers who want to shop online without having to come directly to the Sarto Sapi Company. The website developed is a means of selling cattle as well as a means of conveying information to the public. The method used in developing a website-based online sales information system at the Sarto Sapi Company is the Waterfall method. The Waterfall method is used to determine system requirements, the next step is the analysis, design, coding, testing and maintenance stages. Development of a Website-Based Online Sales Information System at the Sarto Sapi Company, researchers used notepad++ software, sublime text, the PHP programming language, and MySQLi database. Results of research on developing a website-based online sales information system at the Sarto Sapi company, online sales website. National Journal Research Output

Abstrak

Perusahaan Sarto Sapi merupakan salah satu penyedia jasa penjualan sapi yang berlokasi di Dusun Jebol RT 001 RW 007, Donohudan, Kabupaten Boyolali, dengan penjualan masih dilakukan secara manual. Tujuan Penelitian adalah pengembangan sistem informasi penjualan online Perusahaan Sarto Sapi berbasis website untuk memudahkan akses bagi pelanggan yang ingin berbelanja online tanpa harus datang langsung ke Perusahaan Sarto Sapi. Website yang dikembangkan merupakan sarana penjualan ternak sekaligus sarana penyampaian informasi kepada masyarakat. Metode yang digunakan dalam pengembangan sistem informasi penjualan online berbasis website pada Perusahaan Sarto Sapi adalah metode Waterfall. Metode Waterfall digunakan untuk menentukan kebutuhan sistem, tahap selanjutnya adalah tahap analisis, desain, pengkodean, pengujian dan pemeliharaan. Pembangunan Sistem Informasi Penjualan Online Berbasis Website Pada Perusahaan Sarto Sapi, peneliti menggunakan software notepad++, sublime text, bahasa pemrograman PHP, dan database MySQL. Hasil penelitian pengembangan sistem informasi penjualan online berbasis website pada perusahaan Sarto Sapi, website penjualan online. Hasil Penelitian Jurnal Nasional.

Kata Kunci Website, Database, PHP, MySQL, Sapi Online

PENDAHULUAN

1. Introduction

1.1. Background

In recent years, information technology has brought major changes in various industries, including the sales industry. The use of the internet and websites has become an increasingly dominant trend in simplifying the product sales process and improving customer experience. In this context, the Website-Based Online Sales Information System at the Sarto Sapi Company is a relevant and strategic step for kiosk owners to increase the competitiveness of their business, Yoon, Y., & Park, S. (2020).

This background encourages the development of a sales system that is responsive and integrated with website technology. The main objective of developing the website is to increase operational efficiency, expand customer reach, and simplify the purchasing process for Kios Sarto Sapi products. By adopting a website-based sales system, customers can easily explore product catalogues, search for products, and make purchase transactions online. Apart from that, this system also allows kiosk owners to manage product stock, track sales, and analyze sales data for better decision making. Through the development of a Website-Based Livestock Sales System, it is hoped that kiosk owners can optimize their business potential, improve service to customers, and keep up with developments in information technology that continue to develop, Wu, H., Gao, S., & Wang, Y. (2021).

In the era of increasingly advanced digital globalization, information technology has become an integral part of almost all aspects of life, including the business world. The sales industry is also experiencing a major transformation with the adoption of website technology. In this context, the development of a Website-Based Livestock Sales System is an interesting topic for further research and study. Kios Sarto Sapi is a business that focuses on selling livestock, such as cows and sheep. However, Kios Sarto Sapi has not utilized the potential of website technology in their sales process. By adopting a website-based sales system, kiosk owners can develop a more efficient business model and improve the quality of service to customers. The development of a website-based sales system allows customers to access and purchase Kios Sarto Sapi products online, with easy accessibility and high comfort. This system can also improve operational efficiency, including product stock management, sales recording, and data analysis for better decision making, Chen, Y., & Kuo, A. (2022).

In order to utilize the potential of website technology in the Sarto Sapi Kiosk sales industry, research and system development is needed that suits the needs and characteristics of the business. Therefore, this research aims to develop a Website-Based Sarto Sapi Kiosk Sales System that is responsive, intuitive, and integrated with important features such as product search, shopping cart, and a secure online payment system. With this research, it is hoped that Kios Sarto Sapi owners can increase operational efficiency, expand customer reach and increase their business growth. Apart from that, this research can also contribute to the development of science and information technology in the context of website-based sales business, Statista. (2021).

The development of information technology, especially the internet, has changed the way business is conducted in various sectors, including the trade industry. Online sales have become an increasingly popular trend in recent years, including in the cowhide industry. Sarto Sapi Company realizes the great potential offered by online platforms to expand market reach and increase the efficiency of their sales processes. Therefore, this research aims to develop a website-based Sarto Sapi Online Sales Information System that is in accordance with the latest developments in the 2020-2023 period. Through the latest understanding and references as mentioned above, this research supports the background for the development of the website-based Sarto Sapi Online Sales Information System. And through an information system development approach supported by the latest references, it is hoped that this research can make a positive contribution in increasing the efficiency and effectiveness of online sales at the Sarto Sapi Kios, PWC. (2020).

1.2 Theory Study

The aim of this research is to develop a Website-Based Online Sales Information System for the Sarto Sapi Company. To support the development of this system, there are several relevant recent theoretical studies, namely:

1. Challenges and opportunities faced in e-commerce. Through this review, researchers can understand the aspects that need to be considered in developing a Website-Based Online Sales Information System at the Sarto Sapi Company, including transaction security, delivery speed, and risk management, Karim, F., & Md Nor, K. (2022).
2. Evaluate the impact of user experience on e-commerce websites. In the context of this research, researchers can utilize these findings to improve the appearance and functionality of the Website-Based Online Sales Information System at the Sarto Sapi Company so that it suits user preferences and increases customer involvement, Choudhury, S., & Hossain, M. (2020).
3. Explore the influence of social media marketing on online consumer purchase intentions. Referring to this research, researchers can consider the use of social media in the Website-Based Online Sales Information System at the Sarto Sapi Company as an effective marketing strategy to increase visibility and interest in purchasing products, Dissanayake, D. M., & Wickramasinghe, V. (2021).
4. Present a comprehensive literature review on the impact of online customer reviews on e-commerce sales. Researchers can use these findings to understand the role and influence of customer reviews in the context of the Website-Based Online Sales Information System at the Sarto Sapi Company, as well as develop effective review management strategies, Parveen, F., Jaafar, N. I., & Abdul Hamid, N. A. (2022).

Through the latest theoretical understanding and studies as mentioned above, this research can obtain a strong theoretical basis for developing a Website-Based Online Sales Information System for the Sarto Sapi Company.

METODE

1. Proposed Method/Algorithm

   The most appropriate method for developing a Website-Based Online Sales Information System for the Sarto Sapi Company is:

   a. Literature Study: conduct a comprehensive literature study to gather information about online sales information systems, e-commerce platforms, and best practices in website development. Which provides insight into the latest trends in the e-commerce industry and the use of information technology in business, Sharma, P., & Kim, D. (2023).
   b. User Needs Analysis: Conduct interviews and surveys with potential users, such as cattle breeders, traders and customers, to understand their needs and preferences regarding the Website-Based Online Sales Information System at the Sarto Sapi Company. This needs analysis will help in designing features that suit user needs and provide a good user experience, Nurhayati, E., & Pratama, A. (2021).
   c. System Design: Based on the results of the needs analysis, design the architecture of the Website-Based Online Sales Information System for the Sarto Sapi Company. This includes designing databases, user interfaces, integration with online payment systems, inventory management, and other relevant features. Using the latest references on intuitive and responsive user interface design, Sinaga, T., & Pratama, A. (2021).
   d. Website Development: Implement system design by building websites using appropriate web development technologies and platforms. Ensure data security, scalability and optimal website performance. Using the latest references regarding e-commerce website development to adopt best practices, Kusumawati, R. (2020).
   e. Testing and Evaluation: Carrying out comprehensive testing to ensure that the Website-Based Online Sales Information System at the Sarto Sapi Company functions well and meets user needs. Evaluate system performance, security, and reliability using appropriate testing methods. Recent references on web application testing and web security will provide guidance in conducting comprehensive testing, Mohan, R., & Srinivasan, P. (2020).
   f. Implementation and Training: Implementing a Website-Based Online Sales Information System at the Sarto Sapi Company. Provide training to users, such as cattle farmers, traders, and administrative staff, to ensure a good understanding of the system and maximum utilization of its features.
   g. Monitoring and Maintenance: Carrying out routine monitoring and maintenance of the Website-Based Online Sales Information System at the Sarto Sapi Company. Overcome problems that may arise and make updates according to technological developments and business needs. Current references on system maintenance and change management will help in maintaining system quality and sustainability, Saputra, R. D., & Ayuningtyas, S. (2020).

   By following the proposed method, it is hoped that we can produce a Website-Based Online Sales Information System for the Sarto Sapi Company that is reliable, responsive, and in accordance with user needs.

3. Method

   The most appropriate method for developing a Website-Based Online Sales Information System for the Sarto Sapi Company is the Waterfall method. The stages in the waterfall method are as follows, Rani, M. K., & Ramakrishnan, K. S. (2021) :

a. Analysis Stages

   At this stage, data analysis and company needs are carried out. As well as determining the information needs that will be displayed on the website.

b. Design Stages

   This stage only designs the output of the application system that will be created. There is a home page, company information, product model photos, contact person as website output pages.

c. Coding Stages

   This stage begins to write the output results into a programming language. Using HTML and PHP languages to write design results.

d. Testing Stages

   In this stage, testing is carried out on the software that has been created to minimize errors and ensure that the output produced is as desired. And the test was carried out jointly by Informatics Engineering students at Solo Christian University in the final semester.

e. Maintenance Stages

This stage is likely for the system to experience changes when it is running. Changes can occur due to errors that appear and are not detected during testing. So at this stage you can repeat the development process from the specification analysis stage for new software changes.

HASIL DAN PEMBAHASAN

a. System Requirements Analysis
The system requirements analysis that has been carried out is developing a Website-Based Online Sales Information System for the Sarto Sapi Company to assist the process of selling and purchasing livestock online.

b. Functional Requirements Analysis
The functional requirements in this research are that the system can be used to manage customer data, admin data, category data, animal data, animal order data, transfer confirmation, and report data.

c. Non-Functional Requirements Analysis
The non-functional need in this research is a purchasing guide where customers will see the guide first before purchasing so that the shopping process is easy and fast.

d. System planning
System design is designing or designing a good system whose contents are operational steps in the data processing process and procedures to support system operations. The entire series of research process activities, from initial design to implementation.

e. Customer System Flowchart
The Customer System Flowchart used to develop a Website-Based Online Sales Information System at the Sarto Sapi Company can be seen in Figure 1 , Suryono, W., & Mustikasari, E. (2021).

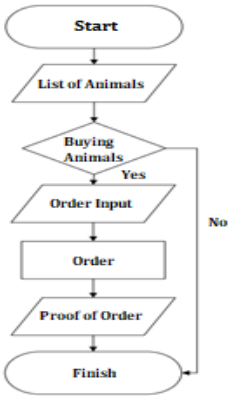


Figure 1. System Flow Chart for Customers

f. Admin System Flowchart
Flowchart of the admin system for changing passwords, adding employees and viewing animal data reports, transaction data used to develop a website-based online sales information system at the Sarto Sapi Company can be seen in Figure 2, Fatimah, N., & Yusop, F. D. (2022).

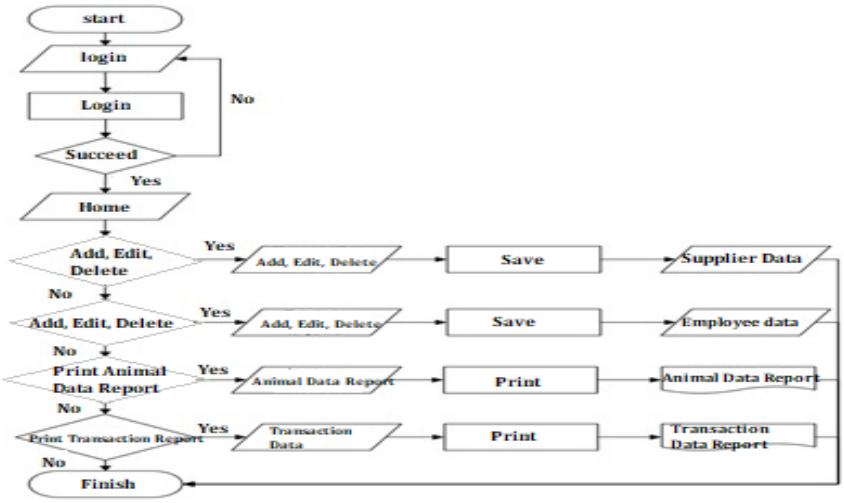


Figure 2. System Admin Flowchart

g. Veterinary Officer Flowchart

The Animal Officer System Flowchart for adding, editing and deleting Animal data used for developing a Website-Based Online Sales Information System at the Sarto Sapi Company can be seen in Figure 3, Widyasari, R., & Hendrawati, H. (2022).

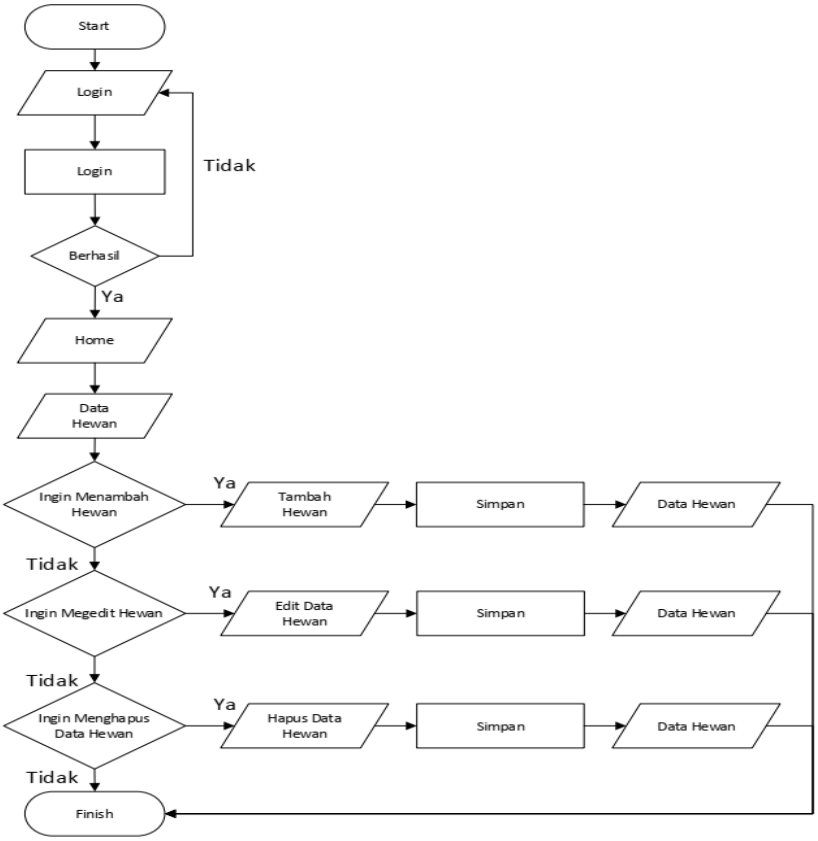


Figure 3 Flowchart of the Veterinary Officer System

h. Cashier Officer Flowchart

The cashier system flowchart for editing purchase verification used to develop a website-based online sales information system at the Sarto Sapi company can be seen in Figure 4, Widyasari, R., & Hendrawati, H. (2022).

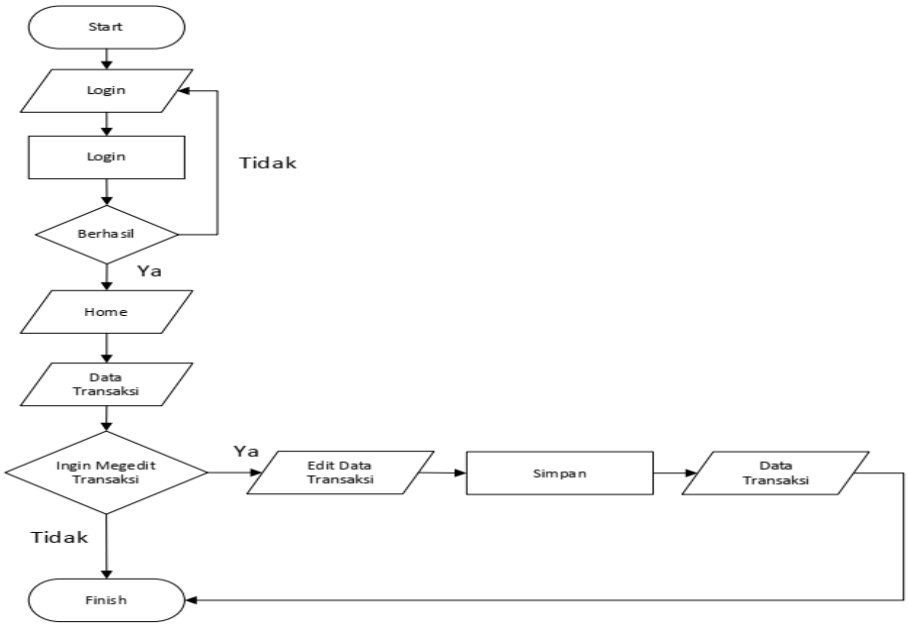


Figure 4 Cashier System Flowchart

i. Data Design / ERD and Data Dictionary

The data design / ERD and data dictionary used for developing a website-based online sales information system at the Sarto Sapi company can be seen in Figure 5, Riadi, I. (2022).

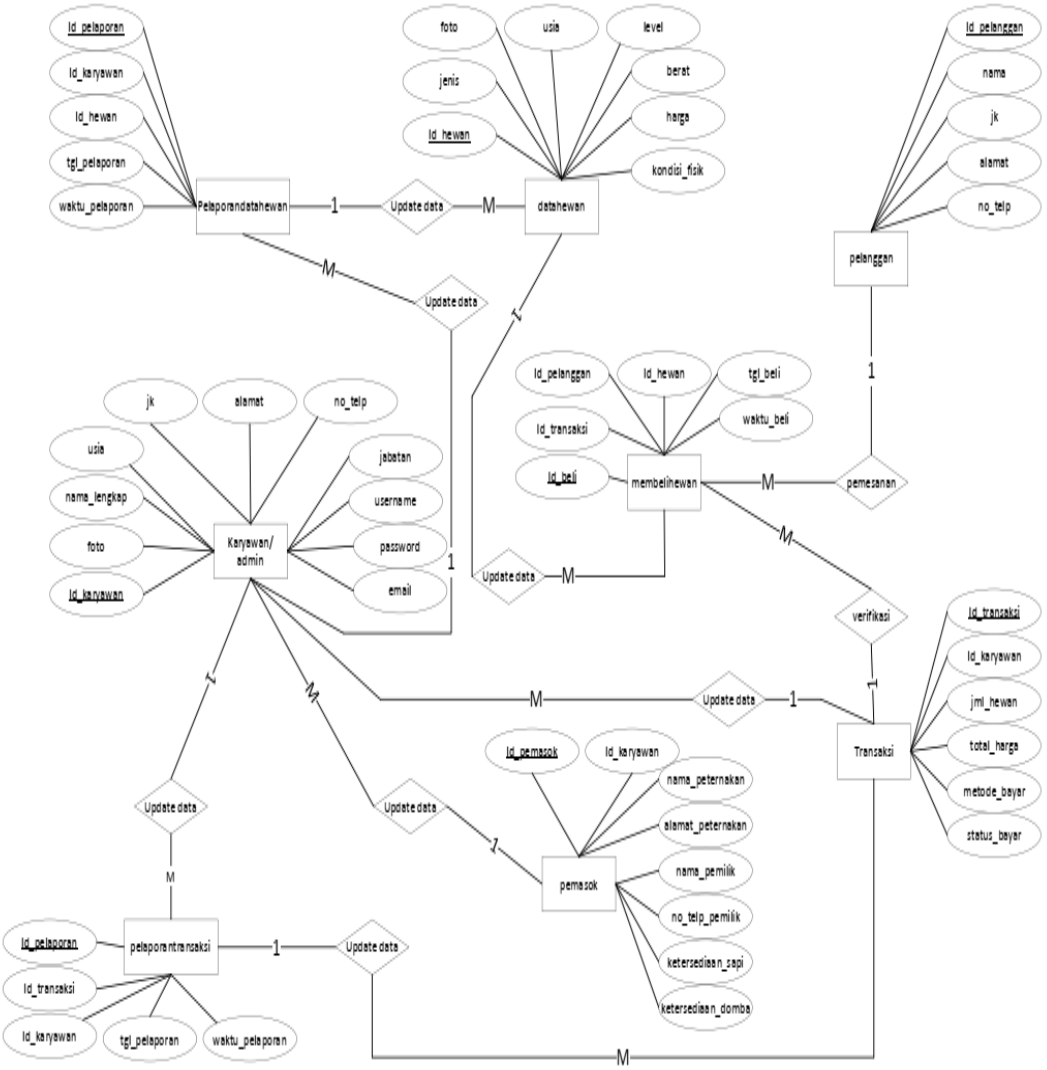


Figure 5. ERD Development of a Website-Based Online Sales Information System

a. Data Flow Diagram (DFD) / Use Case Diagram

The design of DFD level 0 and level 1 in the development of a Website-Based Online Sales Information System at the Sarto Sapi Company can be seen in figure 6 and figure 7, Pangestika, M., & Kartika, I. W. (2022).

Hartini, N., & Simangunsong, F. (2023).

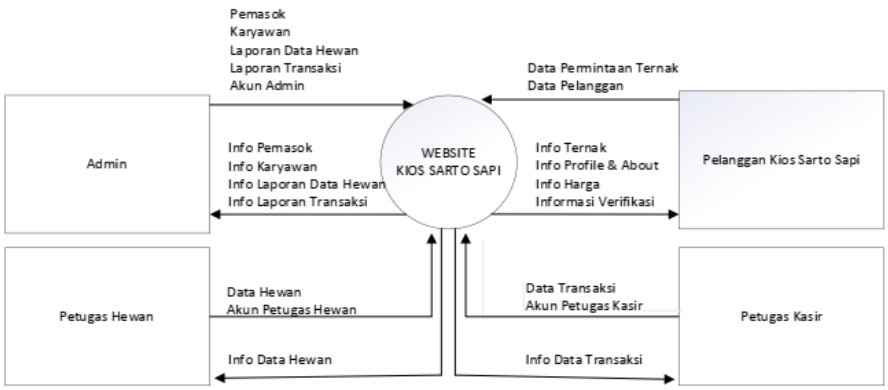


Figure 6. DFD Level 0 Development of a Website-Based Online Sales Information System

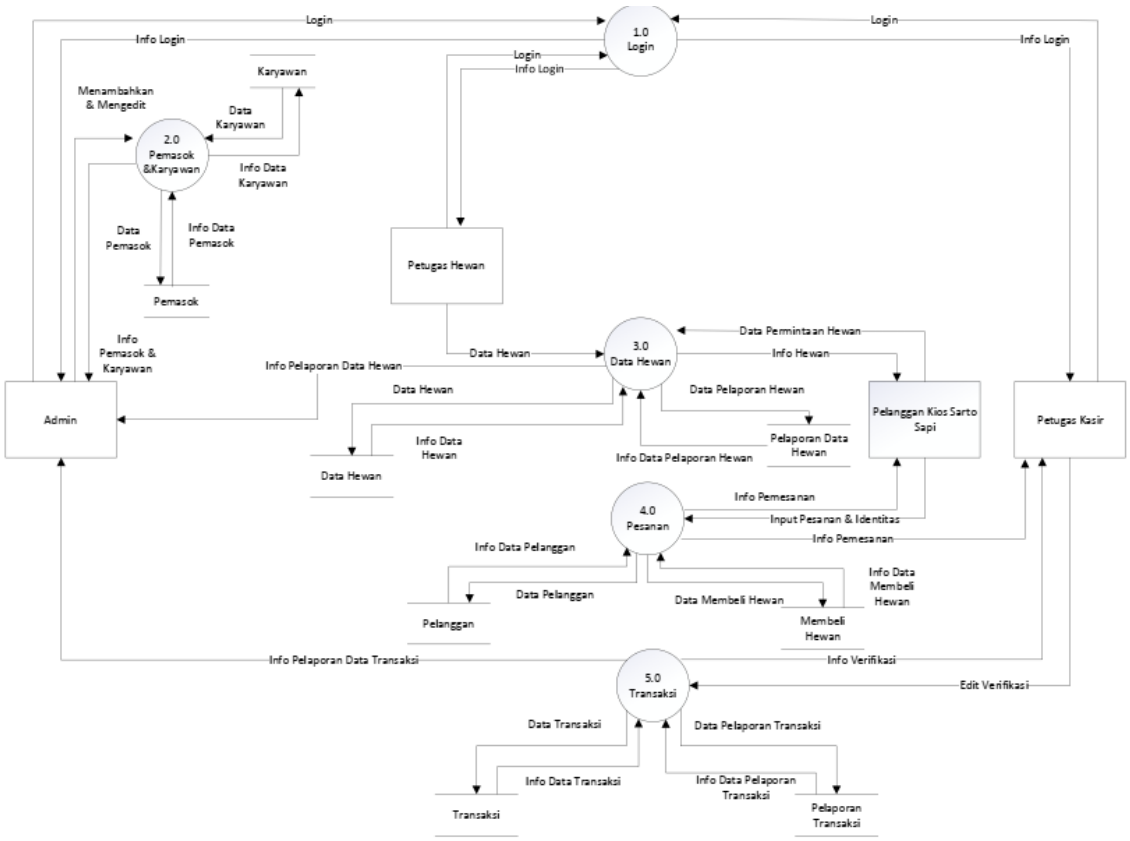


Figure 7. DFD Level 1 Development of a Website-Based Online Sales Information System

a. Customer Input Design

Input design for searching cattle data at the Sarto Cattle company can be seen in Figure 8, Hartini, N., & Simangunsong, F. (2023).

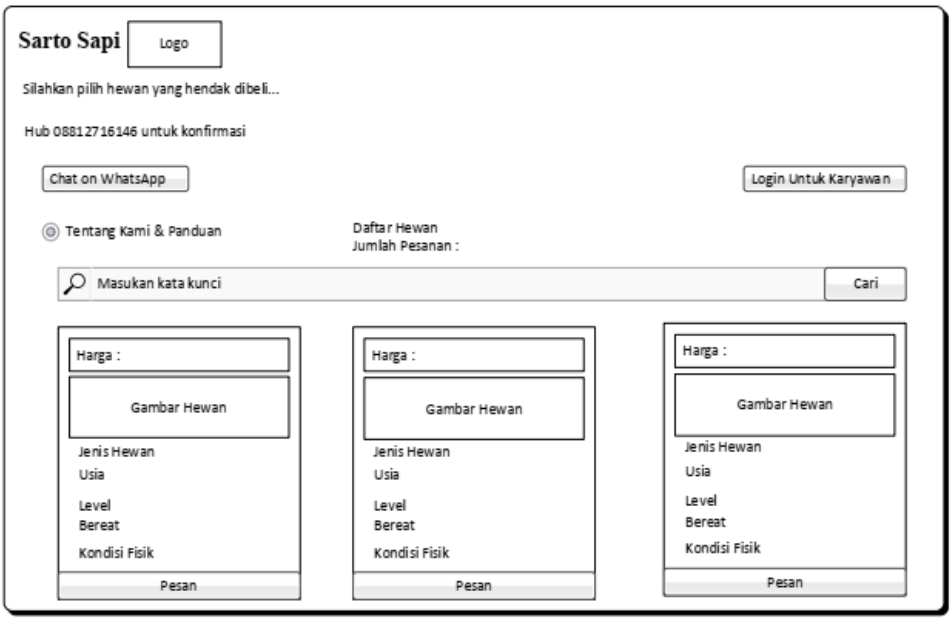


Figure 8. Design of Cattle Data Search Input in System Development

l. Designing Order Input and Bank Transfers

Input design for searching cattle data at the Sarto Cattle company can be seen in Figure 9, Sari, P., & Pranoto, H. (2023).

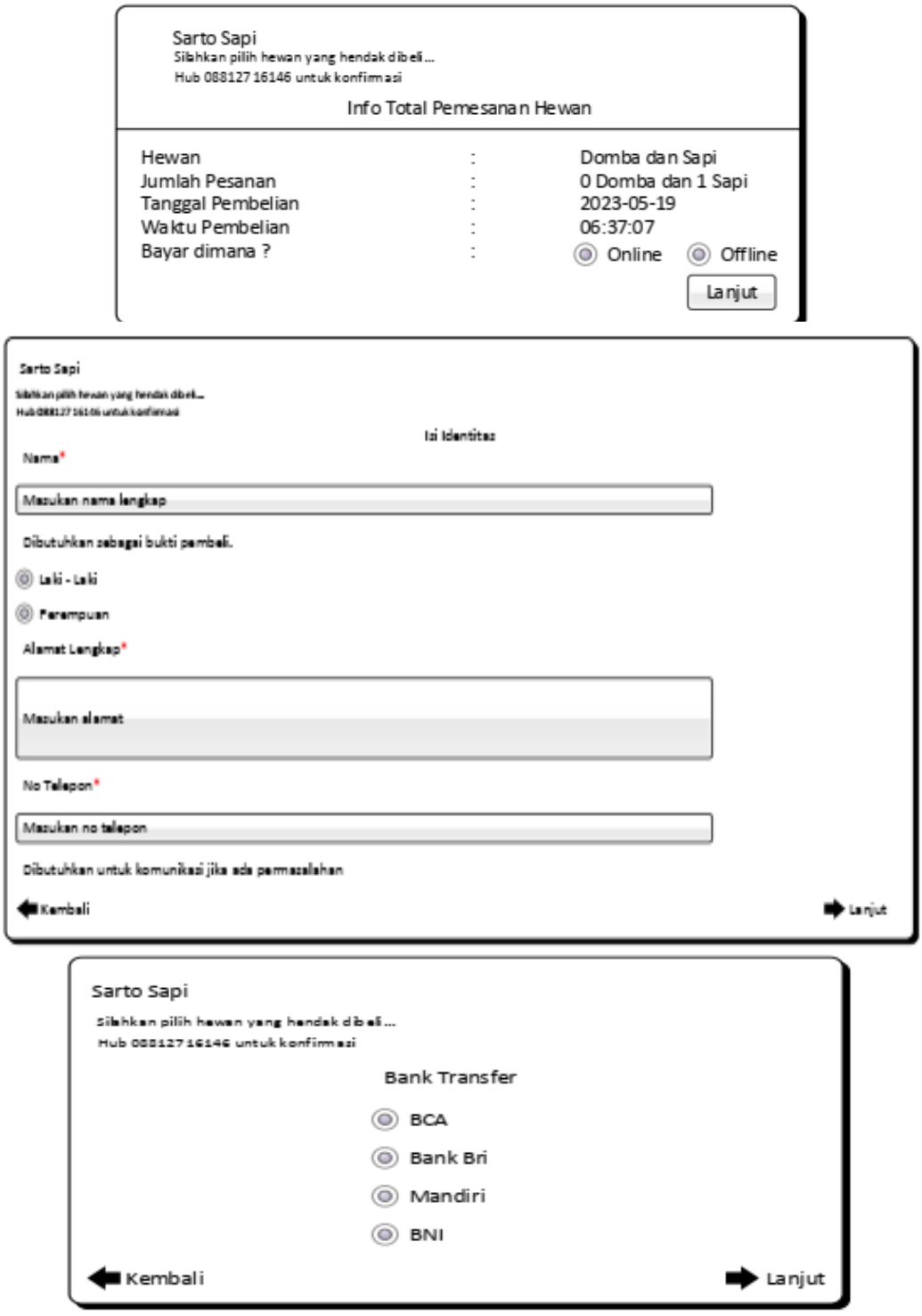


Figure 9. Design of Order Input and Bank Transfers

m. Algorithm Design

Figure 10 explains the algorithm for developing a Website-Based Online Sales Information System at the Sarto Sapi Company from the process of customers searching for animals, selecting animals, filling in customer identity, making payments, and the admin and employee login process for inputting data and saving data.

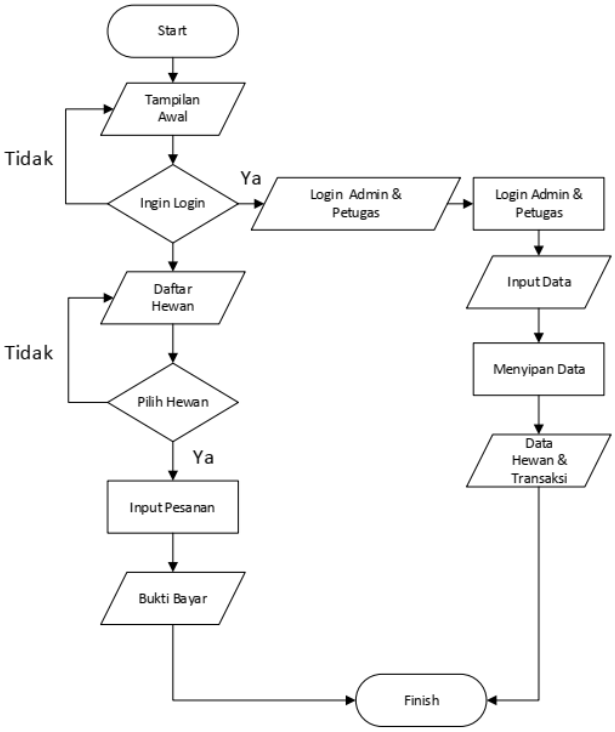


Figure 10. System Development Algorithm Design

n. System Implementation

Implementation model for developing a Website-Based Online Sales Information System at the Sarto Sapi Company, Sari, P., & Pranoto, H. (2023).

1. Main User Display

Figure 11 shows the initial page of the implementation model for developing a Website-Based Online Sales Information System at the Sarto Sapi Company. On this page there are buttons to view or enter the Chat on WhatsApp, About Us & Guide, Animal List page.

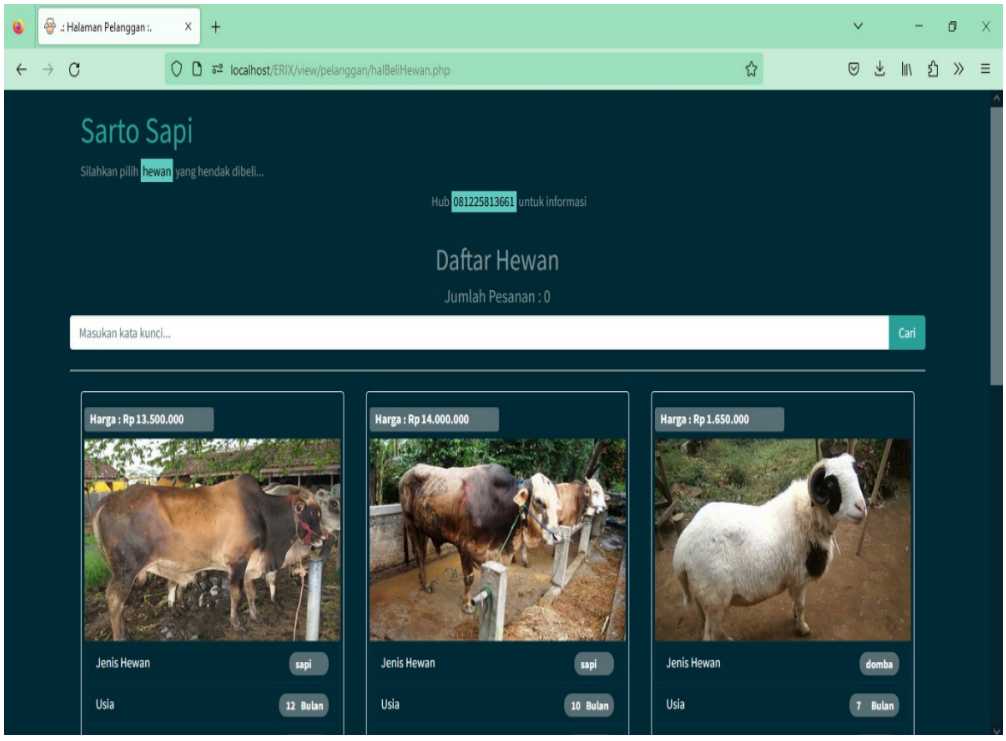


Figure 11. Main Menu Display

2. List of Animals

The animal list menu is a page that displays the entire list of animals sold by the Sarto Sapi Company. Figure 12. Shows a picture of the animal list showing all the animals sold in the development of a Website-Based Online Sales Information System at the Sarto Sapi Company.

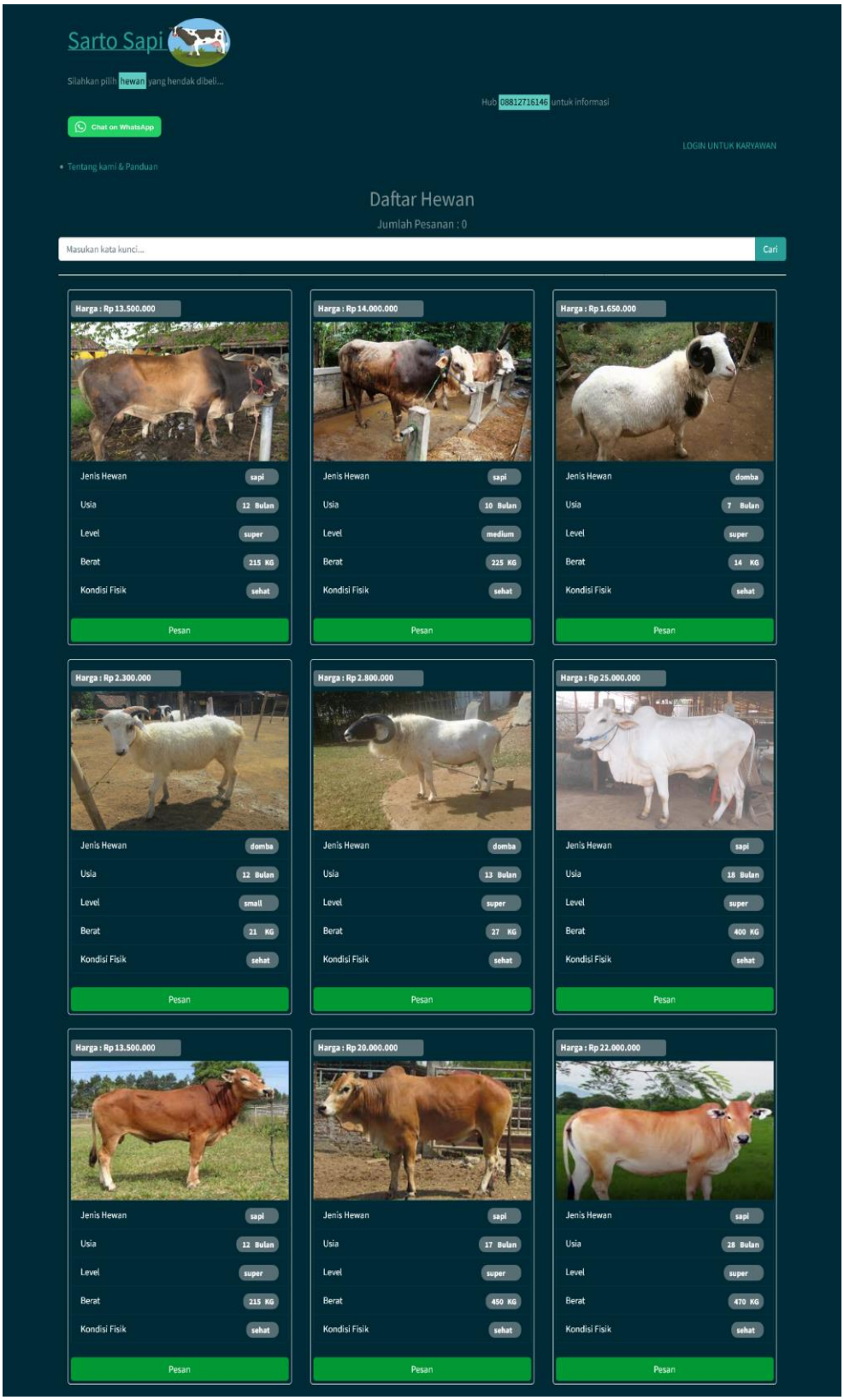


Figure 12. Animal List Menu Display

3. Order Menu, Order Identity and Payment to Bank
The orders menu is a page that displays the entire list of orders for animals sold by the Sarto Sapi Company. Figure 13. Shows a list of animal orders showing all the animals ordered, Figure 14. Order Identity Menu and Figure 15. Payment menu via bank transfer in the development of a Website-Based Online Sales Information System at the Sarto Sapi Company.

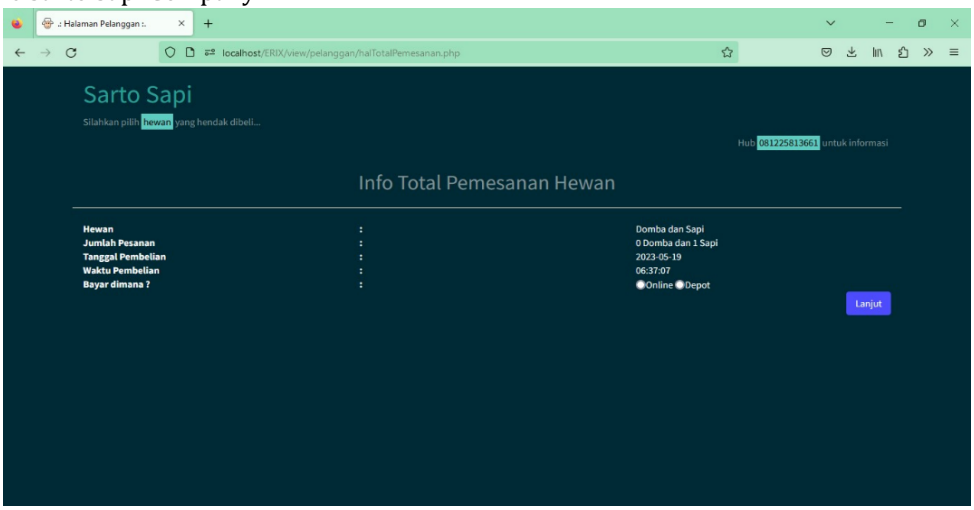


Figure 13. Cow Order Menu

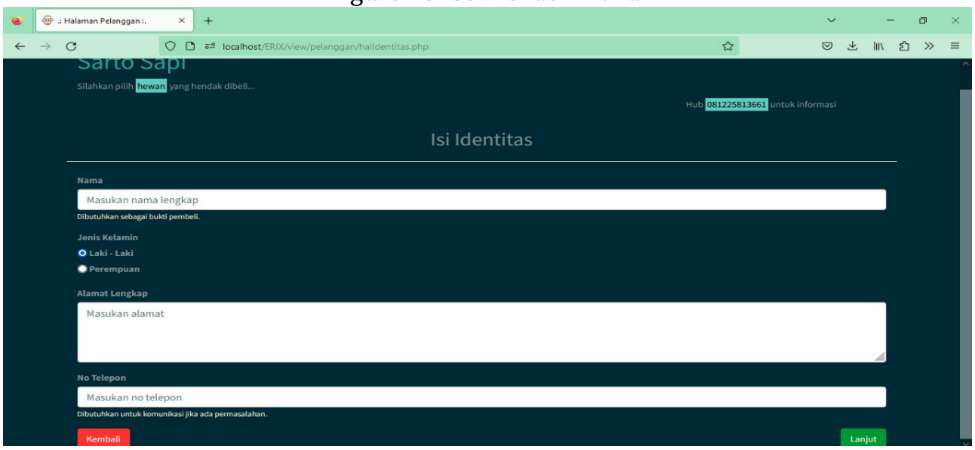


Figure 14. Cattle Orderer Identity Menu

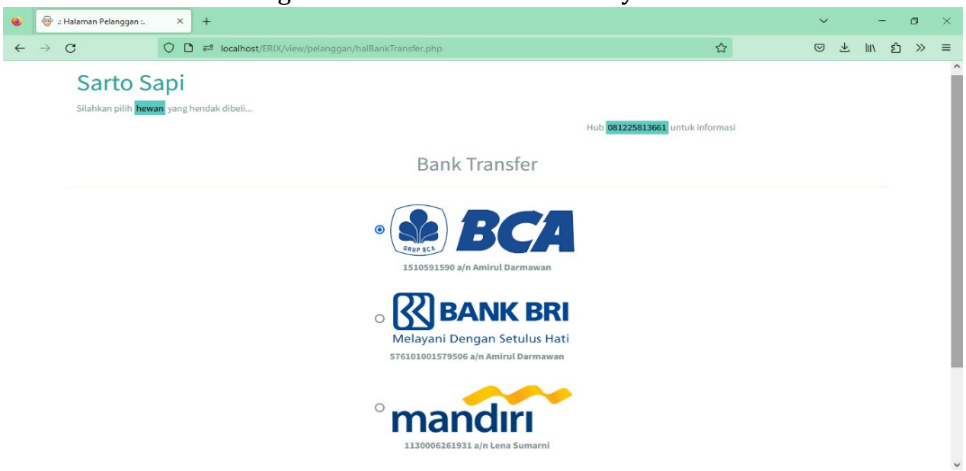
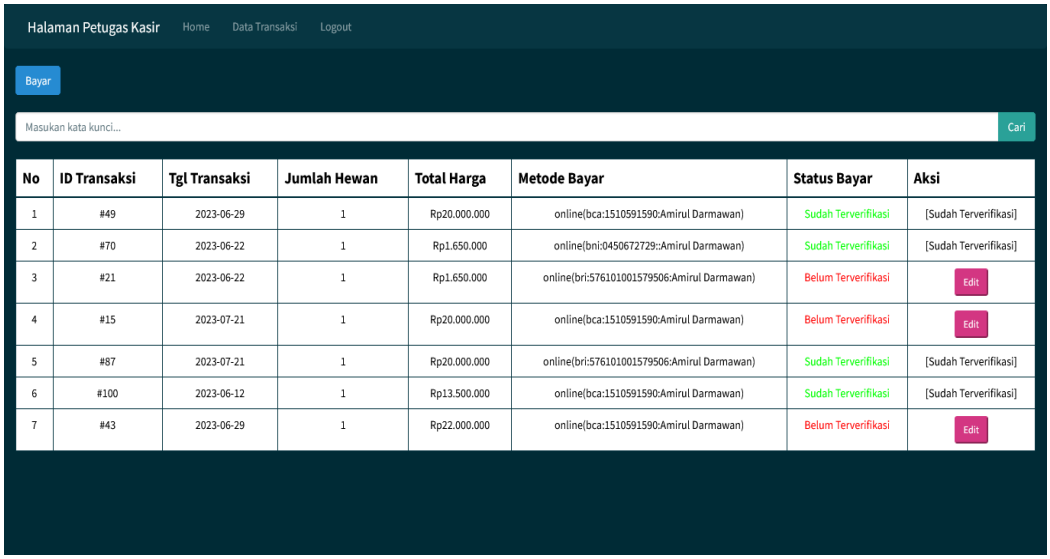


Figure 15. Payment menu for purchasing cattle via bank transfer

o. Output Transaction Results on System Development
The output of the transaction results is a page that displays the entire list of animal order transactions sold by the Sarto Sapi Company in the development of a Website-Based Online Sales Information System for the Sarto Sapi Company, which can be seen in Figure 16.



No	ID Transaksi	Tgl Transaksi	Jumlah Hewan	Total Harga	Metode Bayar	Status Bayar	Aksi
1	#49	2023-06-29	1	Rp20.000.000	online(bca:1510591590:Amirul Darmawan)	Sudah Terverifikasi	[Sudah Terverifikasi]
2	#70	2023-06-22	1	Rp1.650.000	online(bni:0450672729::Amirul Darmawan)	Sudah Terverifikasi	[Sudah Terverifikasi]
3	#21	2023-06-22	1	Rp1.650.000	online(bri:576101001579506:Amirul Darmawan)	Belum Terverifikasi	Edit
4	#15	2023-07-21	1	Rp20.000.000	online(bca:1510591590:Amirul Darmawan)	Belum Terverifikasi	Edit
5	#87	2023-07-21	1	Rp20.000.000	online(bri:576101001579506:Amirul Darmawan)	Sudah Terverifikasi	[Sudah Terverifikasi]
6	#100	2023-06-12	1	Rp13.500.000	online(bca:1510591590:Amirul Darmawan)	Sudah Terverifikasi	[Sudah Terverifikasi]
7	#43	2023-06-29	1	Rp22.000.000	online(bca:1510591590:Amirul Darmawan)	Belum Terverifikasi	Edit

Figure 16. Sales Transaction Output

CONCLUSIONS AND RECOMMENDATIONS

Conclusion:

Based on the results of research on the development of a Website-Based Online Sales Information System at the Sarto Sapi Company, conclusions can be drawn:

1. Make it easier for managers and breeders to manage product data and promote livestock,
2. Make it easier for consumers to find information about livestock,

Based on the results of the respondent's assessment from the questionnaire created, the results of the respondent's assessment were (93%). This shows that the value is greater than the agree opinion and for the essay answers from the respondents, it can be concluded that the input given was, adding types of livestock.

Suggestion:

Based on the results of the questionnaire given to respondents, in developing a Website-Based Online Sales Information System at the Sarto Sapi Company, things that need to be improved for the development of the Sales System are, optimizing their business potential, adding types of animals sold, and improving service to customers, By always following developments in information technology that continues to develop, the information produced by the system is more useful.

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