

---

# Internet Marketing By Implementing Enterprise Resource Planning (Erp) At The Mukomuko Milk Center Using Php Programming Language And Mysql Database

**Radius Prawiro**

Universitas Putra Indonesia "YPTK" Padang

[Rcradius2210@gmail.com](mailto:Rcradius2210@gmail.com)

## Abstract

This study describes about design of internet marketing by implementing ERP which is supported by a MySQL database and the PHP programming language. From the research conducted at Sentra Susus Sapi Mukomuko, it can be concluded that the old system used was ineffective because the process take a long time and space, thus making the performance of employees less efficient. After conducting research at Senstra Susu Sapi Mukomuko the researcher using interview methods and other methods, it can be concluded that the information system used is still not optimal. Therefore, the output design, input design, file design and program flow of the new system are carried out. The results of the analysis are applied to an ERP program. The new information system designed is expected to improve the quality of information and performance in the future.

## Keywords:

PHP, MySQL, ERP.

## Introduction

Today's dynamic business is increasingly complex with functional units requiring more inter-departmental data flows for decision making, timely and efficient spare parts procurement, inventory management, accounting, human resources and distribution of goods. In this regard, efficient information systems will increase competitiveness through reduced costs and better logistics. There is also an emphasis on greater interaction between customers and suppliers, to achieve the production of goods and services according to customer specifications. Enterprise Resource Planning (ERP) is a strategic tool that synchronizes, integrates and streamlines organizational data and processes into a single system to gain competitive advantage in an uncertain business environment.

In developing countries, there is a tendency for departments to work independently so that different sections compete rather than work

together. This has compromised the operational efficiency of a large number of manufacturing entities. Thus the resulting product cannot compete both within and outside the country of origin in terms of cost, quality and on time delivery. With ERP, companies can manipulate large amounts of data or information to be processed and displayed as desired.

Therefore, ERP has a vital role for competitive advantage in a company. Given the facts above, it is undeniable that the Enterprise Resource Planning (ERP) system is not new and has even become one of the crucial things that must be owned by companies. However, in practice in Indonesia, especially in Mukomuko, not all companies use an ERP system because of the high cost and complex complexity. The existence of these factors finally makes the middle to lower companies decide that they have not been able to use the ERP system.

From the background that has been described, to get better results due to the limitations of the research, the problem is limited to how to present a system so that the problems faced are not too broad. The goal is that problem solving does not deviate from the objectives to be achieved and in accordance with the title that the author presents. Therefore, the author limits the problem in general, namely the author only limits internet marketing problems by implementing Enterprise Resource Planning at the Mukomuko Cow Milk Center using the PHP programming language and MySql database to produce an output that can help factory owners see raw material information and sales transaction information. clearly at the Mukomuko Cow Milk Center.

## **Literatur Review**

### **Enterprise Resource Planning (ERP)**

ERP stand for 3word element, namely enterprise (company/organization), Resource (resources), and Planning (planning). The most important requirement of an ERP system is integration. The integration is meant to combine various requirements on one software in one logical database, making it easier for all departments to share information and communicate. The implementation of an ERP system depends on the size of the company/organization, the scope of the change, the role, and the customers/members of the company/organization. In implementing this ERP the organization/company requires consulting, customization and support services (Syahdindo et al., 2019)

### **MySql**

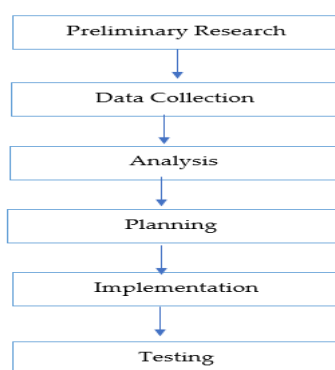
MySQL is one type of database server that is very well known. Its popularity is due to MySQL using SQL as the basic language to access its database. Mysql is a type of RDBMS (Relational Database Management System). In MySQL, a database contains one or more tables. A table consists of a number of rows and each row contains one or more columns. There are several ways to manage the Mysql database, namely through the DOS prompt (command line tool) (Maulana, 2016).

### **PHP (Hypertext Preprocessor)**

PHP is the most widely used script programming language today. PHP is widely used to program dynamic websites, although it is possible to use it for other uses (Syahdindo et al., 2019)

## **Methodology**

In conducting research so that the results are as expected, a research framework is needed, where the research framework carried out is described as Figure 1 describes the stages carried out in the research.



**Figure 1 Research Framework**

The research method carried out is as follows:

a. Preliminary Research

This preliminary research was conducted with the aim of understanding and analyzing a problem and the constraints that occur in the object under study so that researchers can find some temporary solutions for solving problems that occur in the object under study.

In this preliminary research, the researcher can also determine whether or not this research is suitable for the object under study.

b. Data collection

In conducting the data collection process, the authors conducted direct interviews with Mr. Rudi as the owner of the Mukomuko Cow Milk Center. The author gets some important information related to the research being carried out.

1. Research Time

The research was carried out on January 12, 2021 for data collection and ended on May 30, 2021 at the Mukomuko Cow Milk Center.

2. Research Place

The research location for data collection and collection was carried out at the Mukomuko Cow Milk Center.

### 3. Research methods

In writing this final report, the author uses several methods to collect data, namely:

#### a) Field Research

Field research was carried out directly on the object of research at the Mukomuko Cow Milk Center to collect primary data using data collection techniques

#### b) Library Research

Research conducted to collect secondary data by reading books, journals, literature related to research to support an information.

#### c) *Laboratorium Research*

This research is processing the data - the data that has been collected is related to produce valid information. In this case the research is carried out by designing programs or software that are in accordance with the topics and problems encountered and also in terms of preparing the overall report.

### c. Analysis

#### 1. Data Analysis

This data analysis is carried out after collecting data and information that has been taken through direct interviews, this data analysis stage is a process of processing data to obtain the steps that will be used during the design to match the expectations of the research objectives.

#### 2. Process Analysis

In this study using the Enterprise Resource Planning method in the process, and process analysis is useful in designing system processes in data processing which can later provide suggestions and descriptions of system performance, so that they can understand the system processes that will later be used.

### 3. System Analysis

Analyze what system design is appropriate to be designed at the Mukomuko Cow Milk Center, by carrying out this stage it is intended that the system designed is suitable for the needs of the Mukomuko Cow Milk Center.

#### d. System planning

In this design stage, the researcher uses the Unified Modeling Language (UML) as a tool in explaining the flow of program analysis where UML is used, namely:

##### 1. Use Case Diagram

Use case diagrams are used to explain the benefits of the application when viewed from the point of view of people who are outside the system (actors). In designing this application, the use case diagram consists of admin and customers. These two users are users of the application who can carry out activities within the application according to their rights.

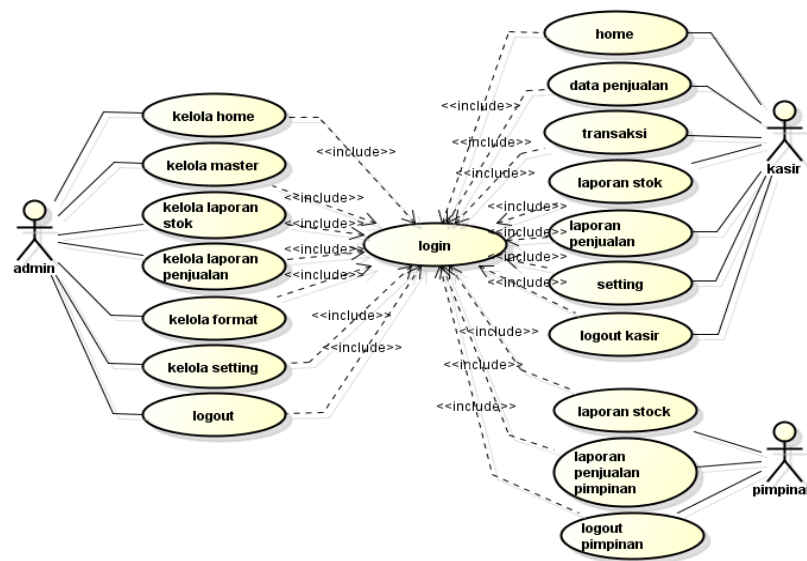


Figure 2: Use Case Diagram

## 2. Class Diagram

Class diagrams describe the relationship between database tables, can be seen in Figure 3:

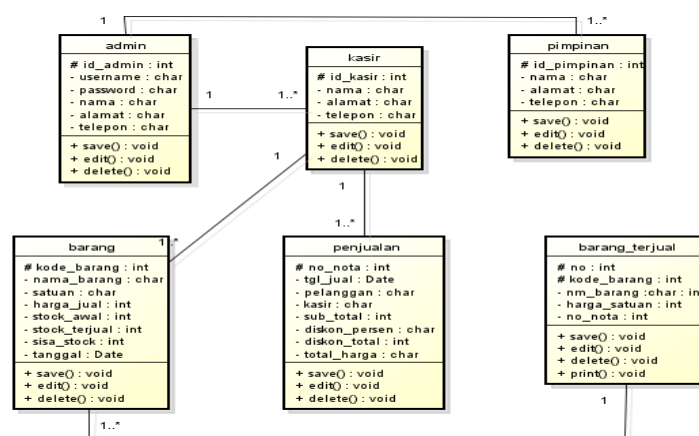


Figure 3: Class Diagram

## 3. Sequence Diagram

Sequence diagrams are used to describe scenarios or a series of steps taken in response to an event to produce a certain output. Starting from what triggers the activity, what processes and changes occur internally and what outputs are produced. Sequence diagrams in the design of this system are as follows:

## a. Sequence diagram Admin

Sequence diagrams appear Admin. The work structure and interactions that are carried out are as follows:

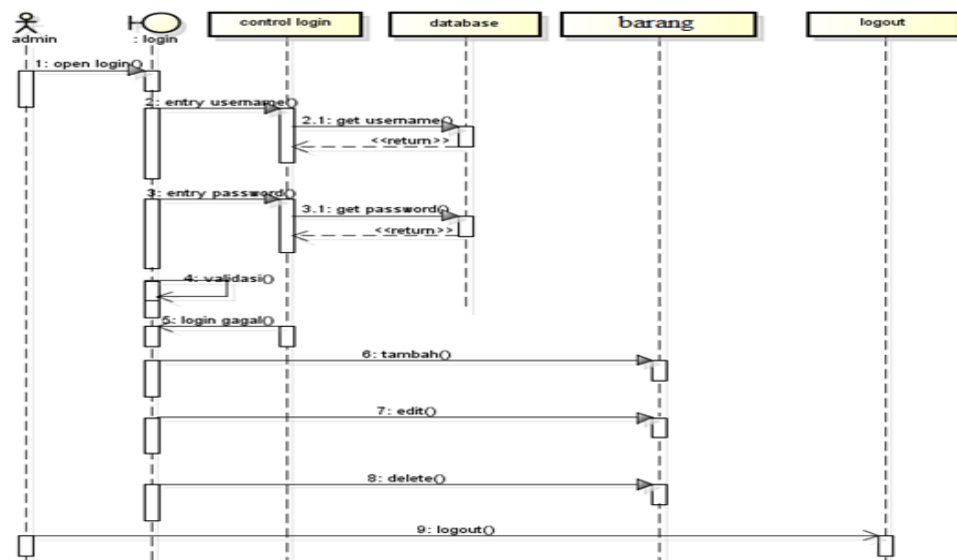


Figure 4: Sequence Diagram Admin

## b. Sequence diagram order

Sequence diagram display goods displaying data items that have been inputted, the work structure and interaction when executed looks as follows:

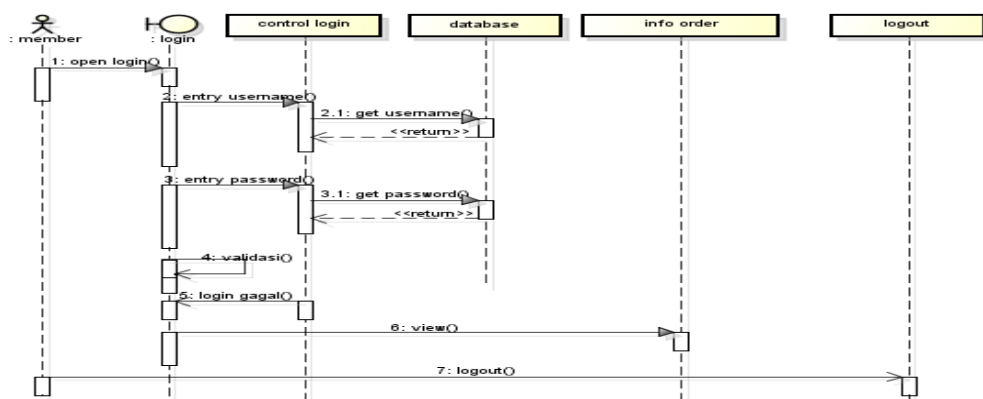


Figure 5: Sequence Diagram Info Order

## c. Sequence diagram Sale

The sales sequence diagram shows how the user sees sales transactions in the system. The work structure and interactions when executed look as follows:



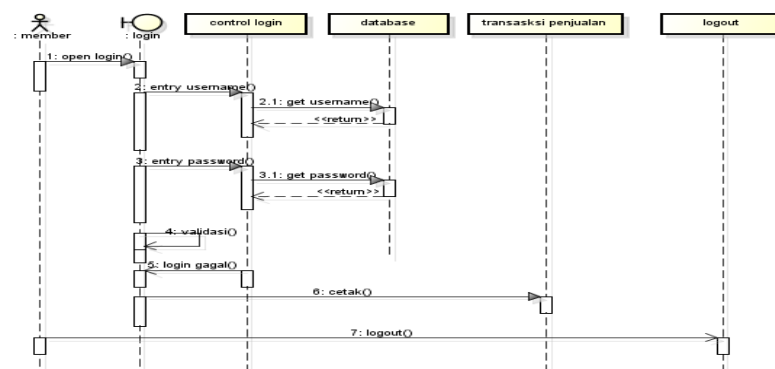


Figure 6: Sales Transaction Sequence Diagram

#### 4. System Implementation

The system implementation stage (System Implementation) is the stage of placing the system so that it is ready for operation. In carrying out implementation activities, several things need to be done, namely implementing an implementation plan. Is the initial activity of the system implementation stage, the implementation plan is intended primarily to manage the costs and time needed, implementation activities are carried out on the basis of the activities that have been planned in the implementation plan. Follow-up implementation is done by testing the system acceptance (system acceptable test) against the actual data within a certain period of time which is carried out together with the user. Implementation activities are carried out on the basis of activities that have been planned in implementation activities, including personnel selection and training, site selection, and hardware and software installation, program testing, system testing and system conversion.

### Results and Discussion

In the testing section of this program will be explained about the use of the program created. The explanation of the program made includes the appearance of the program, the control functions in the program, and how

to use it. This sub-chapter will explain the use of the program per menu system, starting from the main menu display, functions and how to use it until it's finished.

### 1. Main Page Display

This main page displays the initial appearance of the website. For more details, see Figure 7 below:

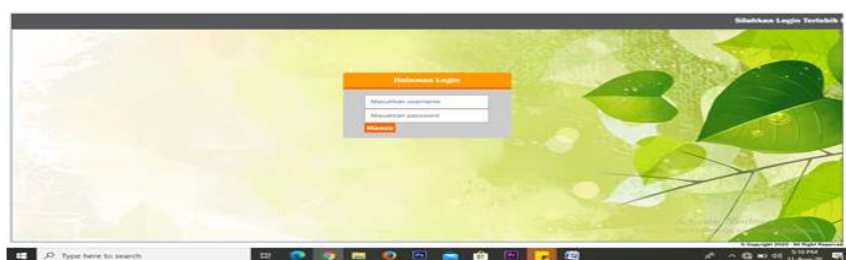


Figure 7. Main page

### 2. Admin Home Page Display

The following is a display that shows the admin home view, for more details, it can be seen in Figure 8 below:

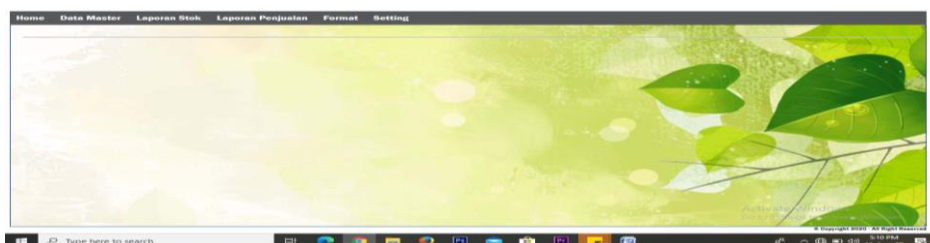


Figure 8. Admin Home Page

### 3. Input Item Data

The item data input form displays a list of item data on the admin display, for more details, it can be seen in Figure 9 below:

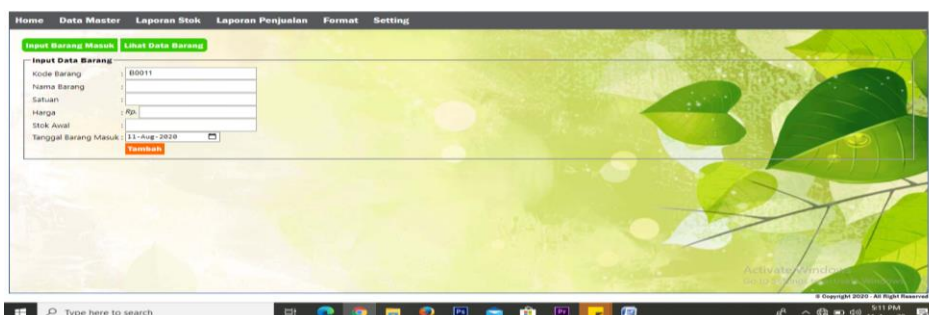


Figure 9. Item Data Input Page

#### 4. Item Data Display

The results form displays the results of all input data items that have been inputted, for more details, it can be seen in Figure 4 below:

Kode Barang	Nama Barang	Satuan	Harga	Stok Awal	Stok Terjual	Stok Sisa	Tgl Barang Masuk	Aksi
B0006	Antangin	BOX	Rp. 40,000.00	50	23	27	2022-08-06	Edit Hapus
B0007	Promag	Pci	Rp. 12,000.00	50	10	40	2022-08-06	Edit Hapus
B0008	Milanta	Botol	Rp. 25,000.00	50	22	28	2022-08-06	Edit Hapus
B0009	Glimetir	Pci	Rp. 25,000.00	50	3	47	2022-08-06	Edit Hapus
B0110	Brodrex	Pci	Rp. 5,000.00	50	5	45	2022-08-06	Edit Hapus

Figure 4. Item Data Display Page

#### 5. Input Data Petugas

The officer data input report form for more details can be seen in Figure 11 below:

Figure 11. Officer Data Input Display Page

## 6. Input Pimpinan

The leadership input form for more details can be seen in Figure 12 below:

Figure 12. Leader Input Display Page

## 7. Input Transaksi Penjualan

The sales transaction input form for more details can be seen in Figure 13 below:

Kode Barang	Nama Barang	Harga Satuan	Jumlah Jual	Harga Akhir	Opsi
B0006	Cas Iphone 6	Rp. 40000	1	Rp. 40000	Hapus

Figure 13. Sales Transaction Display Page

## 8. Sales Invoice Report

Sales invoice report form for more details can be seen in Figure 14 below:

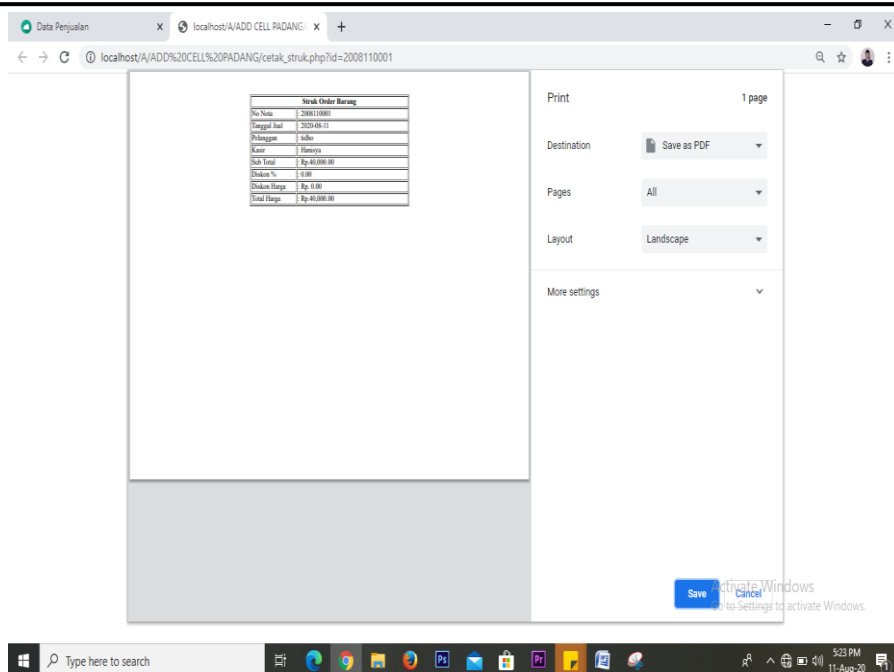


Figure 14. Sales Invoice Display Page

## 9. Daily Sales Report

The daily sales report form for more details can be seen in Figure 15 below:

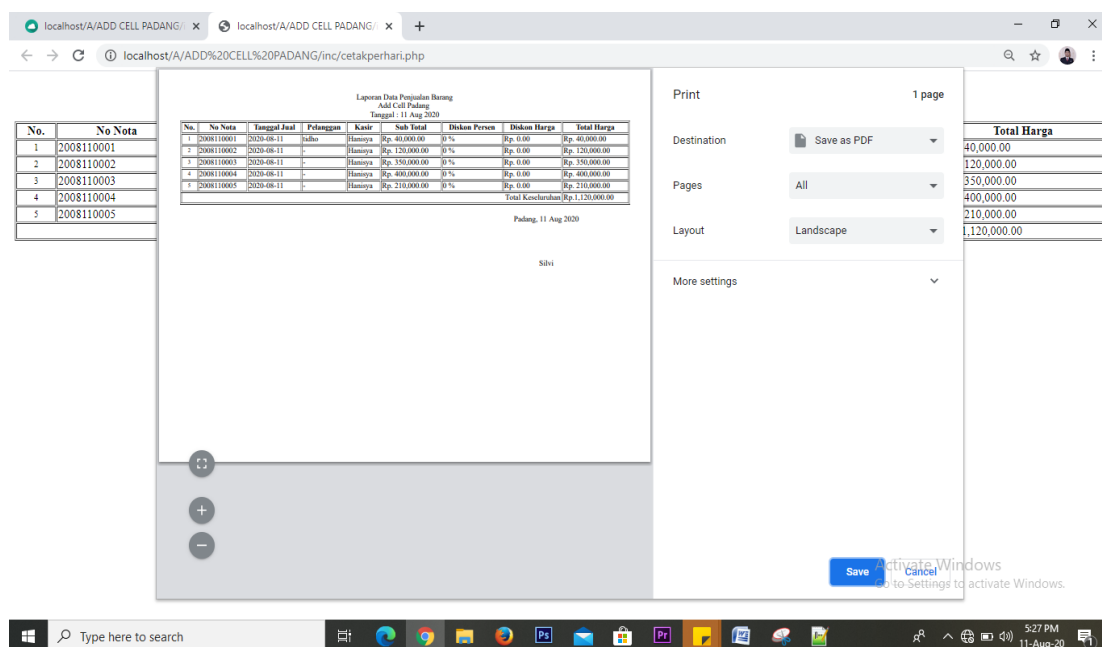


Figure 15. Daily Sales Report Display Page

## 10. Monthly Sales Report

Monthly sales report form for more details can be seen in Figure 16 below:

No.	No Nota	Tanggal Jual	Pelanggan	Kuantitas	Sub Total	Diskon Persen	Diskon Harga	Total Harga
1	2008110001	2020-08-11	Indah	1	Rp. 40,000.00	0%	Rp. 0.00	Rp. 40,000.00
2	2008110002	2020-08-11	-	1	Rp. 120,000.00	0%	Rp. 0.00	Rp. 120,000.00
3	2008110003	2020-08-11	-	1	Rp. 350,000.00	0%	Rp. 0.00	Rp. 350,000.00
4	2008110004	2020-08-11	-	1	Rp. 400,000.00	0%	Rp. 0.00	Rp. 400,000.00
5	2008110005	2020-08-11	-	1	Rp. 120,000.00	0%	Rp. 0.00	Rp. 120,000.00
					<b>Total Keseluruhan</b>			<b>Rp. 1,120,000.00</b>

Padang, 11 Aug 2020

Siti

Print 1 page

Destination: Save as PDF

Pages: All

Layout: Landscape

More settings

Save Cancel

Activate Windows  
Go to Settings to activate Windows.

Total Harga	
40,000.00	
120,000.00	
350,000.00	
400,000.00	
210,000.00	
1,120,000.00	

Figure 16 Monthly Sales Report Display Pages

## 11. Annual Sales Report

The annual sales report form for more details can be seen in Figure 17 below:

No.	No Nota	Tanggal Jual	Pelanggan	Kuantitas	Sub Total	Diskon Persen	Diskon Harga	Total Harga
1	2008110001	2020-08-11	Indah	1	Rp. 40,000.00	0%	Rp. 0.00	Rp. 40,000.00
2	2008110002	2020-08-11	-	1	Rp. 120,000.00	0%	Rp. 0.00	Rp. 120,000.00
3	2008110003	2020-08-11	-	1	Rp. 350,000.00	0%	Rp. 0.00	Rp. 350,000.00
4	2008110004	2020-08-11	-	1	Rp. 400,000.00	0%	Rp. 0.00	Rp. 400,000.00
5	2008110005	2020-08-11	-	1	Rp. 120,000.00	0%	Rp. 0.00	Rp. 120,000.00
					<b>Total Keseluruhan</b>			<b>Rp. 1,120,000.00</b>

Padang, 11 Aug 2020

Siti

Print 1 page

Destination: Save as PDF

Pages: All

Layout: Landscape

More settings

Save Cancel

Activate Windows  
Go to Settings to activate Windows.

Total Harga	
40,000.00	
120,000.00	
350,000.00	
400,000.00	
210,000.00	
1,120,000.00	

Figure 17. Annual Sales Report Display Page



---

## Conclusion

Based on the results of observations and analysis of system design that has been carried out at the Cow Milk Center, several conclusions can be drawn, namely:

1. With the sales application at the Cow Milk Center, it can make it easier for the company to see the stock of goods available in the store.
2. Applications designed to assist the company in making daily, monthly and annual reports.
3. The designed application will display data on which items will be sold based on stock availability and marketing.

## Referensi

- Maulana, H. (2016). Analisis Dan Perancangan Sistem Replikasi Database Mysql Dengan Menggunakan Vmware Pada Sistem Operasi Open Source. *InfoTekJar (Jurnal Nasional Informatika Dan Teknologi Jaringan)*, 1(1), 32–37. <https://doi.org/10.30743/infotekjar.v1i1.37>
- Syahdindo, R., Amin, M. N., Floribunda, S. C., & Mas Diyasa, I. G. S. (2019). Sistem Informasi Enterprise Resource Planning (Erp) Untuk Menunjang Pembayaran Spp. *Teknika: Engineering and Sains Journal*, 3(1), 25. <https://doi.org/10.51804/tesj.v3i1.395.25-30>
- Dermawan Mulyodiputro, M. (2018). Perancangan Database Sistem Informasi Apotik Menggunakan MySQL pada Apotik Cemara The Pharmacy Information System Database Design Using MySQL in the Pharmacy Cemara Farma. In *SIJ* (Vol. 1, Issue 1).
- Marlina. (2016). Sistem Pendukung Keputusan Seleksi Beasiswa Dengan Metode Ahp Dan Topsis. Seminar Nasional Sains Dan Teknologi 2016, 1–9. Retrieved from [jurnal.umj.ac.id/index.php/semnastek](http://jurnal.umj.ac.id/index.php/semnastek).
- Marlina,WinaYusnaeni, Novita Indriyani. 2017. Sistem Pendukung Keputusan Pemilihan Siswa Yang Berhak Mendapatkan Beasiswa Dengan Metode Topsis. *Jurnal Techno Nusa Mandiri* Vol. 14. Issn 1978-2136. Tangerang.
- Nugroho, Bunnafit. 2013. *Membuat Aplikasi Web Penjualan & Pembelian dengan PHP, MySql dan Dreamweaver*. Yogyakarta : Alif media
- Pratama, I Putu Agus Eka 2014, Sistem Informasi Implementasi. Bandung: INFORMATIKA

- Purbayu, Agus. 2014. *Toko Online dengan PHP dan MySQL*. Jakarta: PT. Elex Media Komputindo
- Raharjo, Budi, dkk. 2012. *Modul Pemrograman WEB (HTML, PHP, & MySQL)*. Bandung:Modula
- Sadeli, Muhammad. 2013. *Toko Baju Online dengan PHP dan MySQL*. Palembang: Maxikom.
- Saputra, Agus. 2012. *Pemograman Berbasis web dengan PHP*. Yogyakarta: Andi Offset.
- Tohari, Hamim. 2012. *Analisis serta Perancangan Informasi Melalui Pendekatan UML*. Yogyakarta: Andi Offset.
- Satriawaty Mallu. 2015. Sistem Pendukung Keputusan penentuan karyawan kontrak menjadi karyawan tetap menggunakan metode TOPSIS, *Jurnal Ilmiah Teknologi Informasi Terapan*, 38(3), No.1 Vol 2,ISSN :2407 - 3911,Makassar.
- Sianipar, R.H. 2015. *Membangun web dengan PHP dan MySQL*. Bandung: Informatika.
- Sutabri, Tata. 2018. *Analisis dan Desain Sistem Informasi*. Yogyakarta: Andi Offset.
- Yulawati, D., & Saleh, S. (2018). Prototype Pengadaan Dan Distribusi Barang Pada Waralaba Fried Chicken dan Burger lampung.In *Jurnal Sistem Informasi & Manajemen Basis Data (SIMADA)* (Vol. 1, Issue 1).