

System Information Management Sales of TB Prima Keloran Equipment and Goods with the Waterfall Method

Yusril Dwi Baskara*¹, Wibawa¹, Puji Handayani Putri¹, Eko Harry Pratisto²

¹ Informatics, Universitas PGRI Yogyakarta, Indonesia

² Curtin University, Australia

E-mail: *yusrilddbaskara@gmail.com , ndorobowo@yahoo.co.id , pujihp@upy.ac.id,
eko.harry@gmail.com

Abstract

In the digital era, many company switch to system information to improve efficiency and retrieval decision . However , Prima Keloran Building Store Still use method manual bookkeeping in management sales . This method face various weaknesses , such as risk error recording by employees , difficulties data access , and limitations in reporting as well as analysis sales . With growth business and increasing transaction volumes , the need will more system efficient become the more important . Implementation system information management sale with Waterfall method can become effective solution . This method follow step sequentially , starting from analysis need until implementation , so that allow developers to meet need specific shop in a way systematically . With system this , it is expected sales data management become more accurate and real-time, as well as analysis processes for planning strategic can made easier . Research This aims to design and implement capable system overcome constraint moment this and support development Prima Keloran Building Store business . With Thus , the implementation system This expected No only overcome existing problems , but also constructive ones a strong foundation for growth business in the future.

Keywords : Building Store , management sales , waterfall, system information

1. INTRODUCTION

The rapid advancement of information technology has encouraged almost all companies to start implementing computer-based technology to support their business operations. However, this also presents a new challenge for companies, namely how to create a system that can integrate various information needs optimally. Thus, companies can more easily increase productivity and maintain the company's survival effectively and efficiently [1] .

An information system is a collection of interconnected elements that work together comprehensively to collect, store, manage and distribute information within an organization , so that the information system becomes an important factor in disseminating information about rapidly developing market conditions so that it is able to advance the sales process in building supply stores [2] .

Data management, information processing, software development, data protection, and technology management. The synergy of various elements in the information system is able to improve operational efficiency, speed up the decision-making process, and at the same time enable quick adjustments to changing situations in the building store. [3]

With the existence of a computerized goods sales information system, it can reduce errors in conventional systems, and facilitate the sales process at the Prima Keloran building store because each process is integrated with each other which is stored in the database and computerized. so that the sales management information system can facilitate the process of purchasing goods transactions and

consumers can directly see the available goods by accessing the information system that has been prepared [4] .

2. RESEARCH METHODS

2.1. Literature review

Research by Setia Wardani, regarding design system information unit management has purpose of supervising procurement , handling , and storage of items in system information , with existence system capable manage information capable product maintain production levels while avoid the disappearance time operational and limiting room storage required for materials standard as minimal as possible maybe . As well as inventory data strong that can increase accuracy operation management inventory to be able to increase production of painting and packaging units at CV Karya Hidup Sentosa [5] .

Then in study Hendriyanto [6] own the purpose of managing product data , sales and promotions at the Nara Collection store , with the holding of use system information sale web based capable develop sales and promotions more products effective and efficient , can also make the transaction process become more easy and fast , and sales data information and reports can printed with fast and easy by online cashier .

Kusumo's research [7] own purpose for aspect managing product data in the store , with allocate available data arranged in system information , effectiveness management after existence system , and know goods data management What only what is needed categorized to be neat and easy in Operation . Researchers this also does study system information management sales in store building , type research conducted there, and how matter the help employees and owners in operation system .

2.2. XAMPP

XAMPP is gathering device software that includes Apache, MySQL, PHP, and Perl. With small size and convenience in usage , XAMPP is ideal tool for developing and testing applications in PHP and MySQL [8] .

2.3. MySQL

MySQL or phpMyAdmin is a multi-threaded, multi-user, and open-source SQL (Database Management System) database management system or DBMS. This system is used to manage databases on websites and can be used by multiple users at the same time without experiencing problems [9] .

2.4. PHP

PHP is an open source server-side scripting programming language that is widely used in web development. PHP can make websites dynamic and can be run on a web server and combined with HTML, CSS, and JavaScript [10] .

2.5. Data collection

Data collection was carried out by conducting literature studies, observations at the Prima Keloran building store involving employees, admins, and owners, then interviews involving consumers.

2.6. Business Process

Business processes are a series of business activities related to business products, as can be seen in Figure 1.

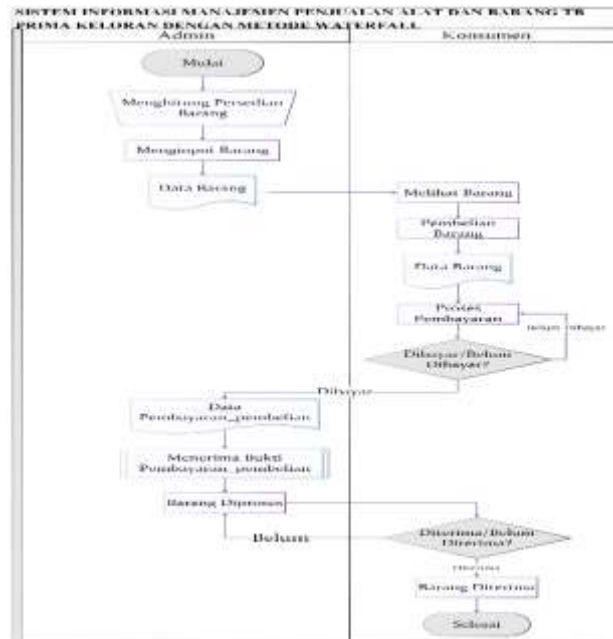


Figure 1. Business Process

2.7. Use Case Diagram

Use case diagram is a diagram used to describe the functional needs of a system and the interaction between actors and the system, as can be seen in Figure 2.

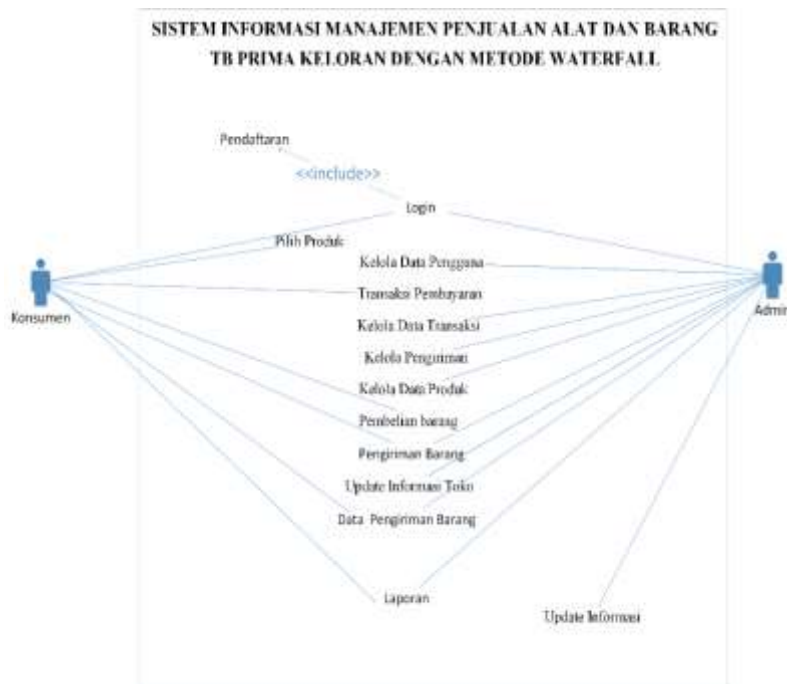


Figure 2. Use Case Diagram

2.8. Context Diagram

Context Diagram is a simple diagram that describes the relationship between external *entities*, output, and input of the system. The context diagram image can be seen in Figure 3.

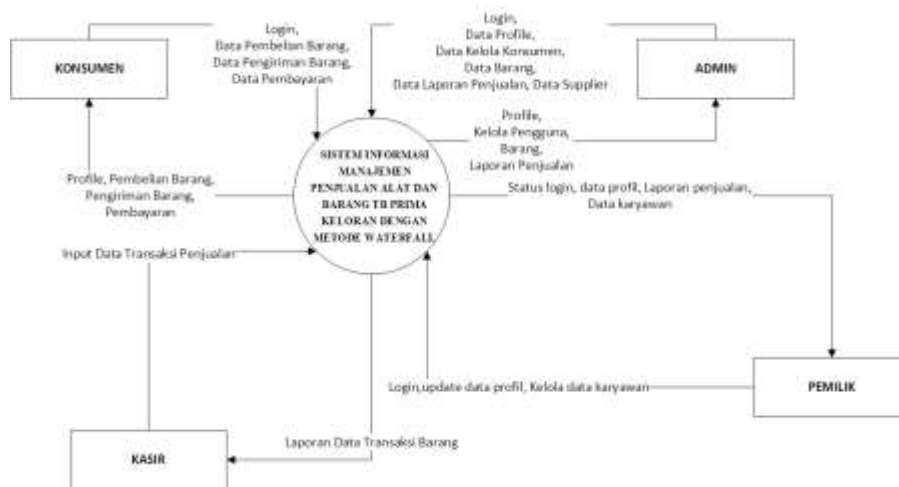


Figure 3. Context Diagram Page

2.9. Data Flow Diagram Level 1

Data Flow Diagram Level 1 is a problem solving of the context diagram in the DFD level 1 image, there are several product login processes, report delivery orders. The form of DFD level 1 can be seen in figure 4.

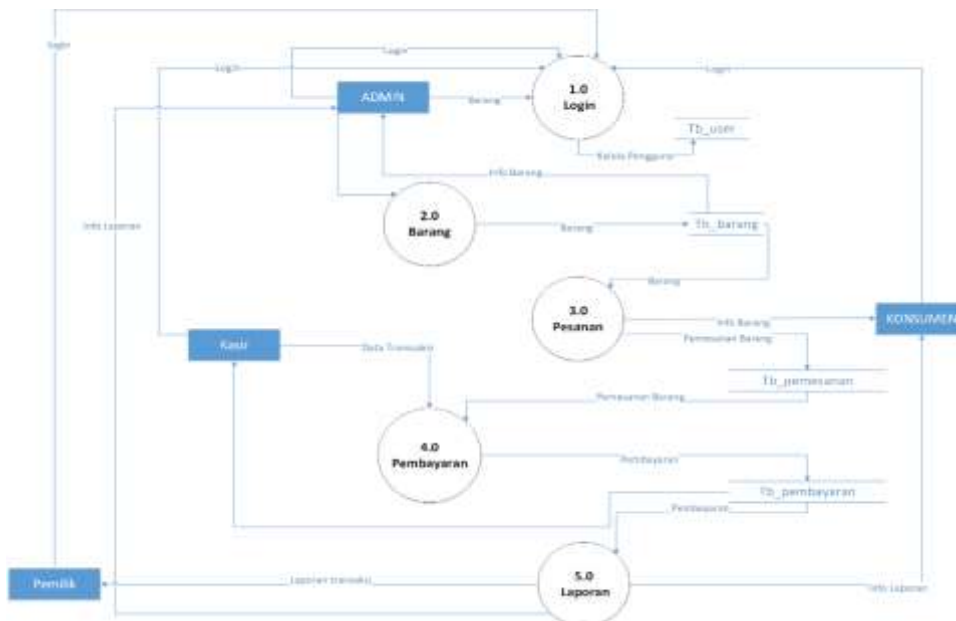


Figure 4. Data Flow Diagram Level 1

2.10. Data Flow Diagram Level 2

DFD level 2 is a table taken from DFD level 1 which is described to find out the complexity that needs to be described in order to find out the flow of a process. In this study, ordering is used as an object of DFD level 2. Level 2 can be seen in Figure 5.



Figure 5. Data Flow Diagram Level 2

2.11. Database Structure Design

Database structure design is a database that is used by the system to store all data and data flows that are related to each other. The form of the database structure can be seen in Figure 6.

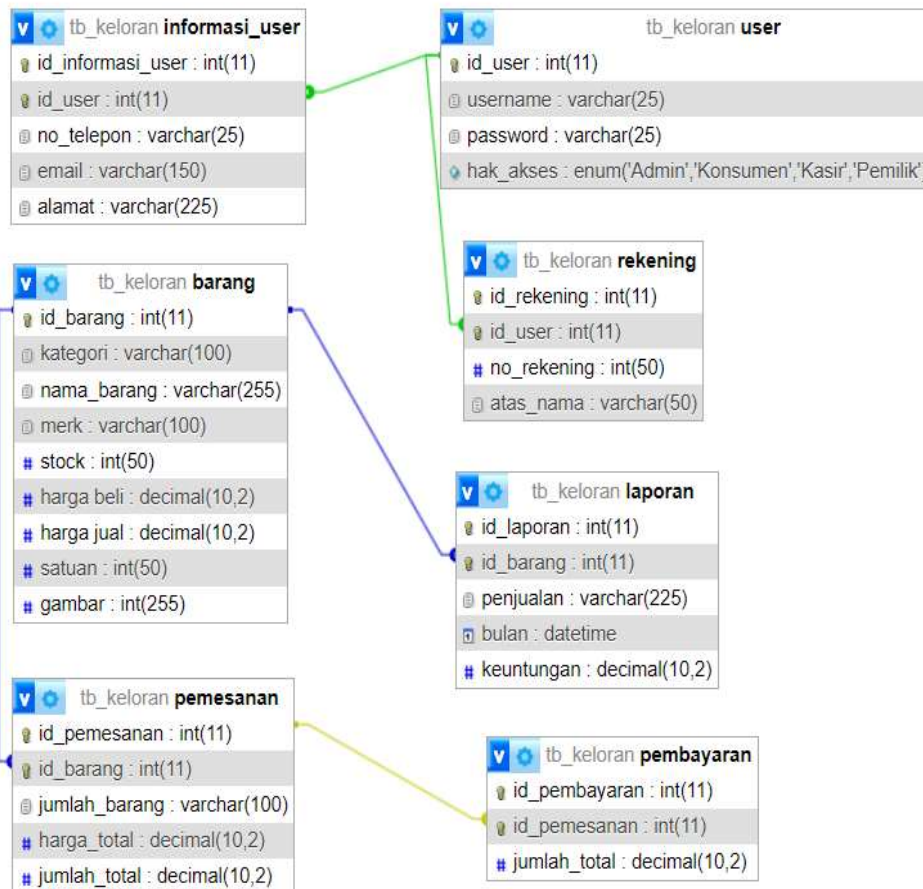


Figure 6. Database Structure

3. RESULTS AND DISCUSSION

3.1. Implementation

Making System Information Management Sales of Tools and Goods Prima Keloran Building Store use *Laravel framework* with Language programming PHP, HTML , CSS and Java Script. The following are appearance from system Information Management Sales of Tools and Goods at Prima Keloran Building Store .

3.1.1. Manage Users Page

Here on the page This is the Manage Users Page allows admin to edit , add and delete account user . This feature support arrangement access , management participation ensure security and efficiency in use system information management sale .



Figure 7. Manage Users Page

3.1.2. Item Setting Page

Here on the page This is the Item Setting Page allow users to edit , add , and delete category product . This feature help in organize goods with more good , makes it easier search , and improve experience user in explore products available in the system management sale .

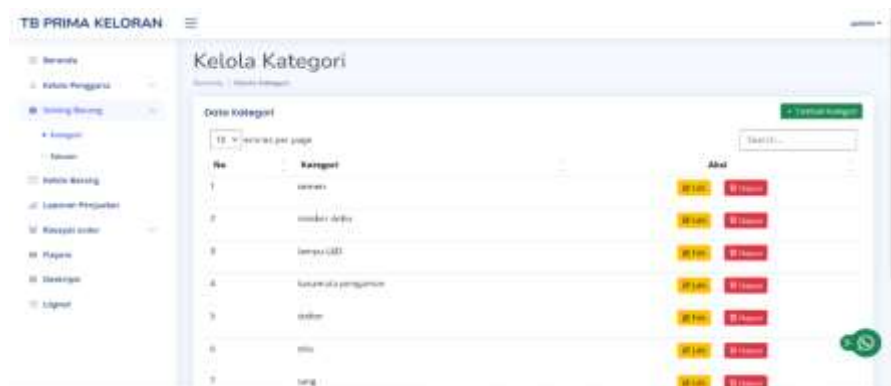


Figure 8. Item Setting Page

3.1.3. Manage Items Page

This page used for management goods or procurement goods in the shop with display goods where admin can edit information goods related to item id , name , appropriate image with goods , stock availability , price buy , and price sell from goods the .

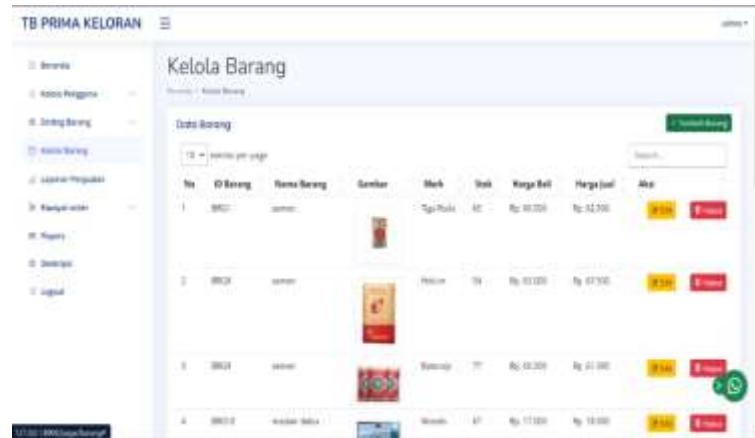


Figure 9. Manage Items Page

3.1.4. Transaction Page

This page display pages used consumers for transaction process after finished enter a list of items you want purchased , and give information about cost fare send what must paid in accordance with the provisions stated , and filling in transaction data so that it can be processed and approved by the store.

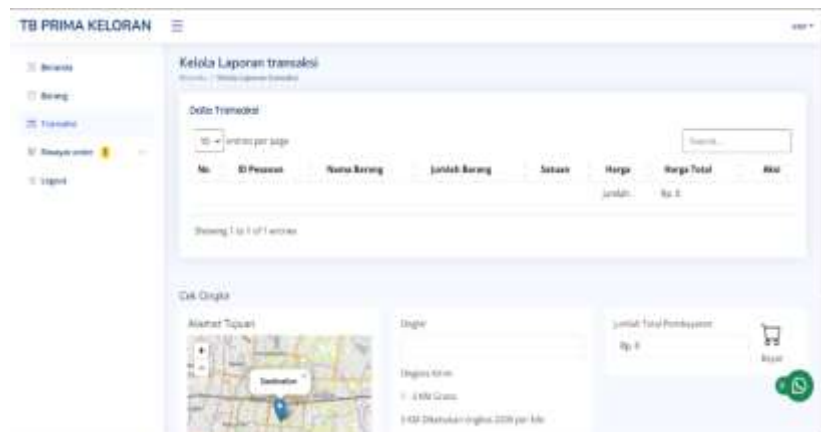


Figure 10. Transaction Page

3.1.5. Report Page Sale

This page display report results sale in form of diagram that provides information results sale based on results sales and profits earned . On the page This also provides option display results sale in period per month and per year

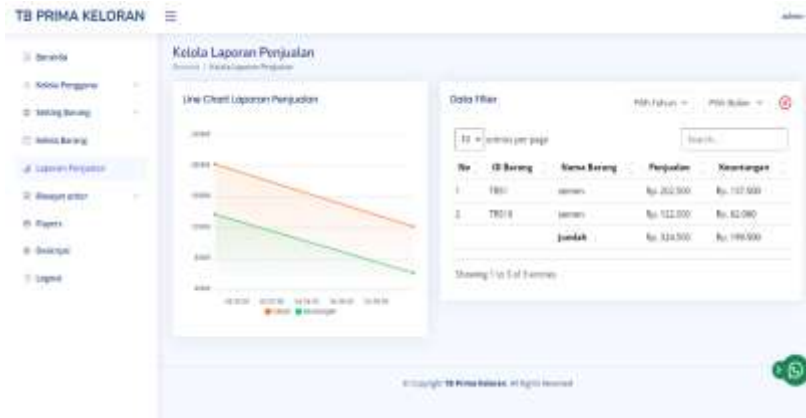


Figure 11. Report Page Sale

3.1.6. Order History Page

Following view on the Order History Page which displays a list of all transactions made , complete with code details product , quantity , date , and status. This feature make it easier users to track and manage all orders are efficient..

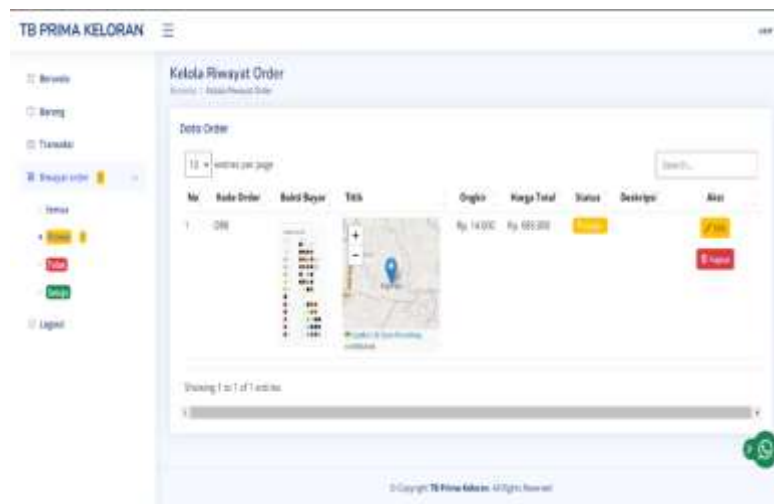


Figure 12. Order History Page

4. CONCLUSION

Based on results implementation System Information Management Sales of TB Prima Keloran Equipment and Goods With the Waterfall Method, in the system This can give sales data management to support more decisions good , have management organized items in a way systematic so that give neat and efficient results , as well as capable give report results sale in monthly and annual periods .

5. SUGGESTION

System This expected can more complex Again in reporting so that can reach calculation profit dirty and clean and needed refinement function search location tall so that the process more easy again and reach out delivery to address buyer with fast and accurate .

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