7. Dana Rio Efendi Manalu.docx

by - -

Web-Based Clothes Sales Information System

Dana Rio Efendi Manalu*ᵃ, Nency Extise Putriᵃ, Yessy Prima Putriᵇ

ᵃFaculty of Information Technology and Creative Industries, Universitas Metamedia, Indonesia
ᵇInformation System Study Program, STMIK Indonesia Padang, Indonesia

Abstract

Aliyelsha Damar Bordir is a business in the field fashion which is located on Jln. Rasuna Said No.38 Kurai Taji, South Pariaman, Pasir, Kec. Central Panaman, Pariaman City. Aliyelsha Damar Bordir sells robes, koko clothes, kebaya clothes and mukenas. Clothing sales at the Aliyelsha Damar Bordir shop do not yet use information technology media so there are limitations in selling and marketing clothes at the Aliyelsha Damar Bordir shop not using information technology so it is difficult to do marketing. Based on the existing problems, the author designed a web-based information system for selling clothes at the Aliyelsha Damar Bordir shop. This research method uses the System Development Life Cycle (SDLC) with the Waterfall model. The programming languages used in building the system are PHP and MySQL. The aim of this research is to build a sales information system for the Aliyelsha Damar Bordir shop in selling clothing, implementing a clothing sales information system in improving clothing marketing and strengthening business value in the field of fashion and the results of this research are that the system built can make it easier for Aliyelsha Damar Bordir in the sales that will be built, as well as making it easier to provide information regarding goods and customer data.

Keywords: Web Based Information System, PHP, Clothing, Aliyelsha Damar Bordir

1.0 INTRODUCTION

Information technology makes everything more practical and easier. Business people use technology as a means to develop their business. The development of Information Technology (IT) is currently so rapid. Where almost all sectors in the business world take advantage of technological advances to make their work easier. This requires the public to always follow these developments. The need and demand for clothing materials and embroidered clothing, suppliers of clothing materials continues to increase accompanied by increasing interest from the public and entrepreneurs to participate in building businesses in the fashion industry, including by opening clothing stores and also opening embroidery and clothing sewing businesses.

Modern progress has led to consumers who want to follow fashion trends from time to time, both in terms of clothing and goods used in the fashion sector. Today's fashion is developing very rapidly, one of which is clothing, such as gamis, koko, kebaya, and mukena. Other products sold at the Aliyelsha Damar Embroidery Shop are school clothes and dowry cloth. Apart from that, if the conventional buying and selling process requires buyers and sellers to meet in person, then with e-commerce this is no longer necessary, so buyers can make transactions in different cities without having to meet and communicate can be done using the internet.

One of the shops that has not yet utilized e-commerce is the Aliyelsha Damar Embroidery Shop. The Aliyelsha Damar Embroidery Shop is one of the distributors of school uniform attributes in the West Sumatra Region, located on Jln. Rasuna Said No.38 Kurai Taji, South Pariaman, Pasir, Kec. Central Pariaman, Pariaman City. Currently, the sales system used by the Aliyelsha Damar Embroidery Shop still uses a conventional system, namely consumers have to go to the Aliyelsha Damar Embroidery Shop to select and buy the products provided and promotions are still not optimal, only using platforms, such as Facebook, WhatsApp, Instagram. So the only people who know about the Aliyelsha Damar Embroidery Shop are regular customers or buyers who are around the shop and it is not effective and efficient for customers outside the area.

Aliyelsha Damar Embroidery Shop markets several products, namely:

Product name	Inventory	Unit price (@)
Mukena Bordir	15	Rp. 300.000.00
Baju gamis/koko	18	Rp. 165.000.00
Baju kebaya	20	Rp. 200.000.00
Jilbab Bordir	30	Rp. 35.000.00
Merek bordir	15	Rp. 15.000.00

Based on this explanation, an online sales website was designed as a means of promoting product sales for the Aliyelsha Damar Embroidery Shop. By implementing this system, it will be easier for the Aliyelsha Damar Embroidery Shop to manage the sales transaction process. By having its own online sales website, the Aliyelsha Damar Embroidery Shop will look more professional and trustworthy. Apart from that, security in managing a business will also be more guaranteed than opening and building a product showcase on a free marketplace which will not necessarily last long whether the marketplace is active or not. By having our own online sales website, we can also be more effective and efficient in managing products without interference from second parties.

2.0 LITERATURE REVIEW

The previous studies discussed research that is relevant to this research, namely the first research with the title "Web-Based Batik Sales Information System at the 10S Wholesale Market Shop in Setono" (case study of the 10S Soetono Wholesale Market Shop) The results of this research help the sales data collection process that occurs in this shop to be computerized so that data collection will be more efficient and neat by building a Web-Based Batik Sales Information System at the 10S Shop Setono Wholesale Market [1]. The second research is entitled "Web-Based Clothing Sales Information System on the Depok Distro Project" (Case Study on Depok Distro). The results of this research will make it easier for employees to process data and create reports automatically. Buyers also get convenience in purchasing transactions and access to information [2]. The third research is entitled "Web-Based Clothing Sales Information System at the More Shop Jakarta Store" (case study of the More Shop Jakarta Store). The results of this research are to develop a web-based sales input information system to help the efficiency of the company's operational activities at the More Shop Jakarta business. [3].

3.0 METHODOLOGY

System Development Methods

The method used in developing the sales information system design software for the Aliyelsha Damar Embroidery Store uses the waterfall method. The waterfall SDLC (System development cycle) model is often also called the linear sequential model or classic life cycle. The waterfall model provides a sequential or ordered software life flow approach starting from analysis, design, coding, testing and support stages [4]. The following are the stages of the Waterfall method in Figure 1.
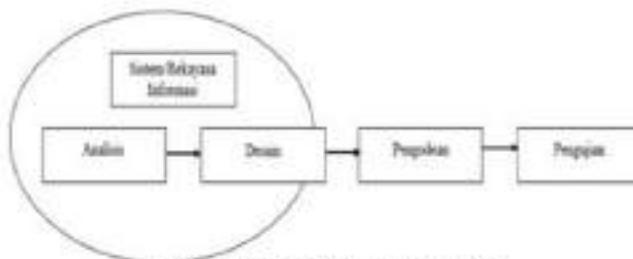

Figure 1. Stages of the Waterfall Method

Figure 1. the stages of the Waterfall Method are explained as follows:

a. Software Requirements Analysis

   The process of gathering requirements analysis is carried out intensively to specify software requirements so that they are easily understood by users. At this stage, analyze the sales information system currently running at the Aliyelsha Damar Embroidery Store to find problems and provide solutions to these problems. The purpose of analyzing needs is to get a design in the form of documents or other sources that can help in making the right solution to the problem [5].

b. Design

   Design or system design is an activity in creating an integrated work concept between humans and machines that are brought together into one for certain or shared purposes and objectives to produce accurate

information for the decision-making process in supporting management operations functions in an organization. designing a new system that can solve the problems faced in the sales of the Aliyelsha Damar Embroidery Store by creating data structures, software architecture, creating interface representations, and using database modeling with Use Cases, Activity Diagrams, Sequence Diagrams, and Class Diagrams [6].

c. Program Code Creation
    The design must be translated into a computer program according to the design that was created at the design stage. The result of this stage is the coding of the sales information system program for the Aliyelsha Damar Embroidery Store. The program code was written using the Visual Studio Code application as the PHP programming language and MySQL to create the database and XAMPP as the database server connector [7].

d. Testing
    At this stage, the sales information system program was tested at the Aliyelsha Damar Embroidery Shop. This is done to minimize errors and ensure that the output produced is in accordance with what is desired in terms of logic and functionality and can run according to the specified wishes including input, process and output [8].

4.0 RESULTS AND DISCUSSION

New System Analysis

The analysis of the proposed new system in general aims to design an application to improve customer service and clear transaction processes, and besides that store promotions will also be improved from the previous one, so that the process of buying and selling clothes developed with the system can be well organized.

It is hoped that the analysis and design of this system will be useful for supporting data processing activities, data storage, as well as making reports addressed to owners and other interested parties and being able to create their own archival data.

New System Flow

The initial step in the new system planning process is to continue the complete identification of the goals, objectives and obstacles in the Aliyelsha Damar Embroidery Shop. The design of this system aims to provide convenience between the available information and its users. With the formation of this system, it is hoped that it can support the process of management activities and data processing so as to provide accurate and high-quality information for users. The following is a picture of the new system flow:

1. Use Case Diagram
    Use case diagrams describe functional requirements and describe the behavior of the system to be created and describe an interaction between one or more actors and the system to be created. The use case diagram of the web-based clothing sales information system at the Aliyelsha Damar Embroidery Store can be seen in Figure 2.
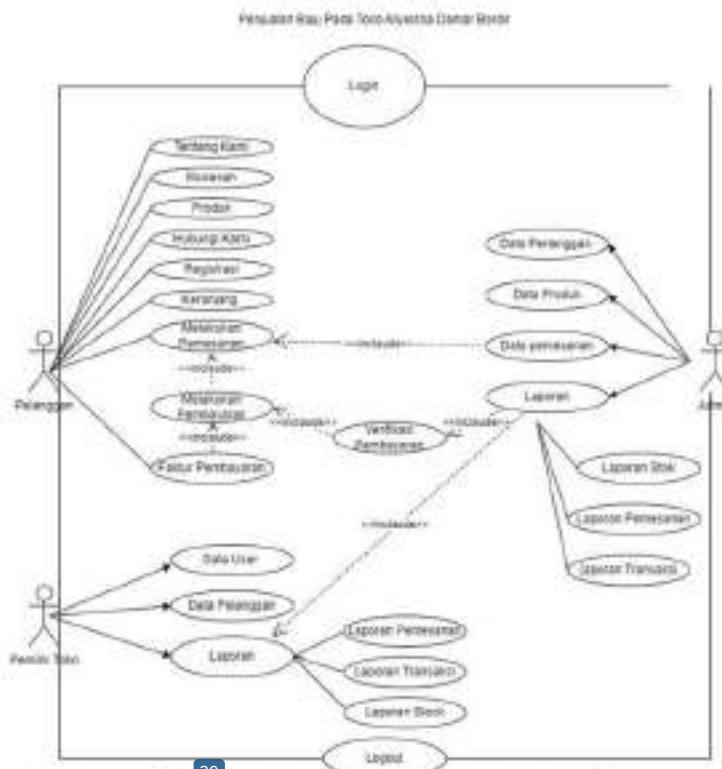
Figure 2. Use Case Diagram of the Clothing Sales Information System at the Aliyelsha Damar Embroidery Store

Figure 2 explains the information system for selling clothes at the Aliyelsha Damar Embroidery Shop. Before entering the system, customers must register first through the system by visiting the registration page and entering the requested biodata including email and password which will be used later when they want to log in to the system.

If the customer is already registered, the customer can access the system by logging in by entering the registered email and password. After logging in, customers can manage their baskets, place orders and make payments based on orders. Customers can also print payment invoices if needed.

Next, the admin can manage clothing data, manage product data, manage incoming stock, manage orders and verify payments from customers. Then the shop owner can manage user data, view order reports, transaction reports, incoming stock reports and inventory reports. All features can be accessed by shop owners and admins with the condition that they must first log in to the system by entering the correct username and password.

Activity Diagrams

Activity Diagrams describe various activity flows in the system being designed, how each flow begins, the decisions that may occur and how they end [9]

2. Activity Diagram Login

Activity Diagram Login is a user activity to enter each menu available in the clothing sales information system at the web-based Aliyelsha Damar Embroidery shop based on the user access they have, for more details, see Figure 3.
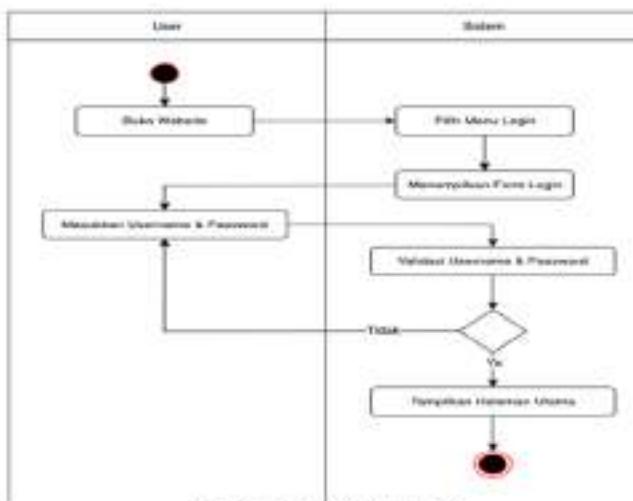
Figure 3. Activity Diagram Login

Figure 3 explains how users log in by entering the username and password that have been registered in the system. If the username and password entered are correct, the user will be directed to the main page and can access the menus provided according to their respective access rights.

3. Activity Diagram registration

The registration activity diagram is an activity carried out by customers to register on the web-based clothing sales information system at the Aliyelsha Damar Embroidery shop. For more details, see Figure 4.
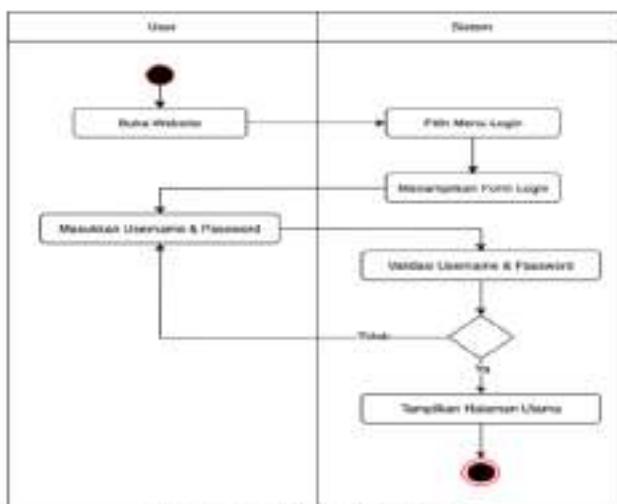
Figure 4. Registration Activity Diagram

Figure 4 explains how customers register an account through the system, namely by opening the website, then selecting the registration menu, then filling in the requested biodata, then the customer clicks register account now and the system saves the registration data into the database.

4. Activity diagram for ordering clothes

Activity Diagram for ordering clothes in the web-based clothing sales information system at the Aliyelsha Damar Embroidery shop can be seen in Figure 5.
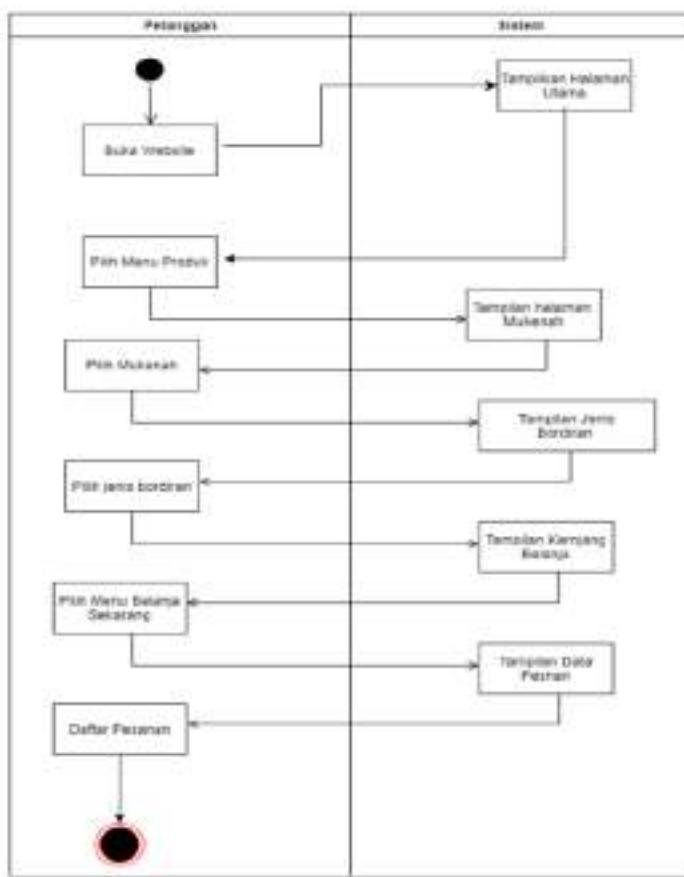
Figure 5. Activity Diagram for Ordering Clothes

Figure 5 explains the process of ordering clothes by customers at the Aliyelsha Damar Embroidery shop through the system. Customers who have registered and successfully logged into the system can choose the clothes they want to buy. Once the clothes you are looking for have been found, customers can place an order

5. Activity Diagram for payment confirmation

Activity Payment confirmation diagram in the web-based clothing sales information system at the Aliyelsha Damar Embroidery Store can be seen in Figure 6.
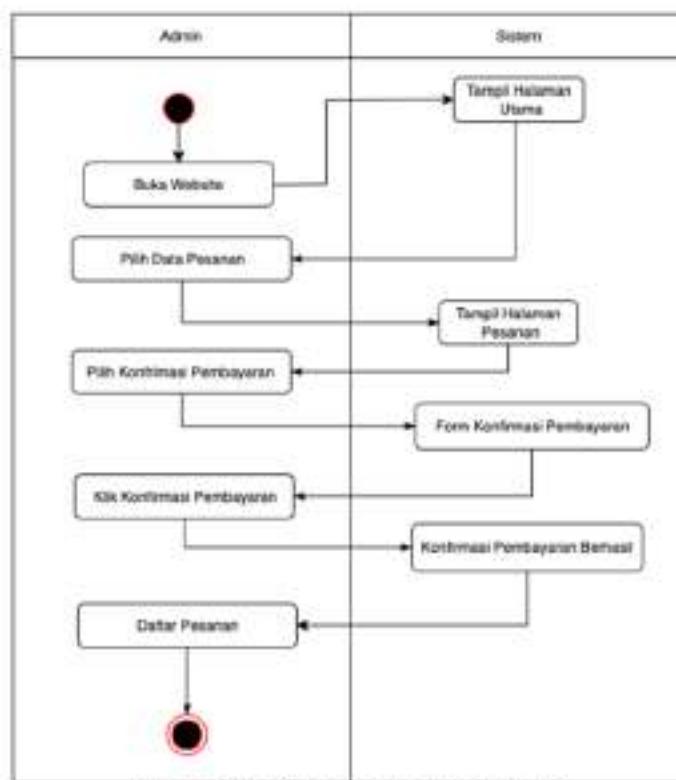
Figure 6. Activity Diagram for Payment Confirmation

Figure 6 explains the payment confirmation process carried out by the admin at the Aliyelsha Damar Embroidery shop through the system. Admin can confirm payments based on customer orders through the system.

Implementation Results Page

1. Login Page

When the system is accessed by a user, he will be directed directly to the login page. After, the user or owner will be asked to enter their email and password before logging into the system. The Login page can be seen in Figure 7

Figure 7. Login Page

2. Product Page

This product page is used to view all products available at the Aliyelsha Damar Bordir shop, on this page you can also directly purchase products or add orders to your basket, which can be seen in Figure 8.
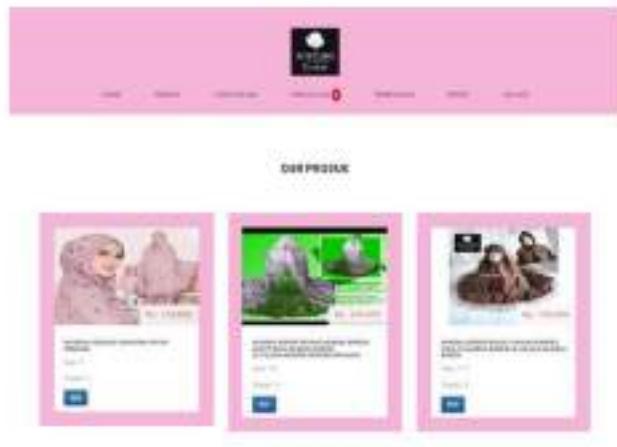
Figure 8. Product Page

3. Order Page

The order page is used by users to enter product order data at the Aliyelsha Damar Embroidery shop. The ordering page can be seen in Figure 9.

Figure 9. Order Page

4. Stock Page

This stock page is used by the admin to add stock items which will later be displayed when the user views the product. The stock page can be seen in Figure 10.

Figure 10. Stock Page

5. Order Details Page

This order details page is used by users to view order data and order status. The order details page can be seen in Figure 11.

Figure 11. Order Details Page

5.0 CONCLUSION

Conclusion

Based on the explanation of the problem description discussed in the previous chapter, then the following conclusions can be drawn:

1. With the web-based clothing sales information system at the Aliyelsha Damar Embroidery shop, customers can purchase clothes without space and time limitations. And data on incoming and outgoing goods is stored in one database so that searches and reporting can be done easily through the system.
2. Having a web-based information system for selling clothes at the Aliyelsha Damar Embroidery shop can have a positive impact on the shop, such as increasing product marketing to a greater extent and increasing competitiveness.

References

[1] M. Qomaruddin, A. Sudradjat, and R. Sopandi, "Web-Based Basurek Batik Sales Information System at the 10S Shop at the Setono Wholesale Market," Publ. J. Researcher. Tech. Inform., vol. 2, no. 09, p. 52–59, 2018.

[2] R. Widyastuti, Handini., Siregar, Juarni., and Ishak, "Design and Development of a Web-Based Clothing Sales Information System," Gaung Inform., vol. 13 Number 2, no. 2, p. 107–118, 2020.

[3] N. R. Audi and N. Iriadi, "Web-Based Clothing Sales Information System at More Shop Jakarta," J. Speed – Research Center. Eng. and Education, vol. 14, no. 2, p. 1–5, 2022.

[4] M. S. Jamil, R. S. Fanhas, V. S. Alpiah, P. Haerul, and M. M. I. M, "Application of the Waterfall Method in the Cipasung Islamic Boarding School," Cipasung Techno Pesantren Sci. J., vol. 16, no. 1, 2022.

[5] A. RizalSteven, "Design of a Point of Sale Information System Using the CodeIgniter Framework for the Jass Collection Umkm," J. Comasie, vol. 1, p. 48–58, 2021.

[6] R. Setiyanto, N. Nurmaesah, and N. S. A. Rahayu, "Designing a Case Study Goods Inventory Information System at Vahncollections," J. Sisfotek Glob., vol. 9, no. 1, p. 137–142, 2019, doi: 10.38101/sisfotek.v9i1.267.

[7] H. Kurniawan, W. Apriliah, I. Kurnia, and D. Firmansyah, "Application of the Waterfall Method in Designing a Payroll Information System at Bina Karya Karawang Vocational School," J. Interkom J. Publ. Ilm. Bid. Technol. Inf. and Commun., vol. 14, no. 4, p. 13–23, 2021, doi: 10.35969/interkom.v14i4.78.

[8] J. Asmara, "Design and Development of a Website-Based Village Information System (Netpala Village Case Study)," J. Educator. Technol. Inf., vol. 2, no. 1, p. 1–7, 2019.

7. Dana Rio Efendi Manalu.docx

22% SIMILARITY INDEX

20% INTERNET SOURCES

13% PUBLICATIONS

5% STUDENT PAPERS

1	e-jabt.org Internet Source	6%
2	repository.upiyptk.ac.id Internet Source	2%
3	Submitted to Universitas Putera Indonesia YPTK Padang Student Paper	2%
4	ieomsociety.org Internet Source	2%
5	stmik-budidarma.ac.id Internet Source	2%
6	garuda.kemdikbud.go.id Internet Source	1%
7	Tito Sugiharto, Mohammad Irwansyah, Sepphirotul Ajiziyah, Widi Heryanto, Syarif Hidayat. "Innovation development information system for sales of traditional food processed product web based in the Cibinuang Village", IOP Conference Series: Earth and Environmental Science, 2021	1%

Publication

8   journal.pnm.ac.id
     Internet Source   1 %

9   ejournal.kresnamediapublisher.com
     Internet Source   1 %

10   jurnal.itscience.org
     Internet Source   1 %

11   ejournals.umn.ac.id
     Internet Source   1 %

12   Fita Choiyanti, Noor Latifah, Wiwit Agus
     Triyanto. "Web Utilization and Telegram
     Gateway Features for Management of   1 %
     Booking Make Up Services at Ulfisinta Make
     Up", Journal of Physics: Conference Series,
     2020
     Publication

13   www.e-jabt.org
     Internet Source   1 %

14   media.neliti.com
     Internet Source   1 %

15   Submitted to Binus University International
     Student Paper   1 %

16   journal2.unusa.ac.id
     Internet Source   <1 %

17   su-plus.strathmore.edu

Internet Source

<1 %

18 Fatima Felawati, Sepriano Sepriano, Jodi Hendrawan, Afdalul Zikri. "Design Of Web-Based Marketing And Ordering Applications At Talang Permai Store", Sustainability (STPP) Theory, Practice and Policy, 2023
Publication

<1 %

19 ejournal.amikompurwokerto.ac.id
Internet Source

<1 %

20 Muhammad Irfan Rasnan Syah, Lukman Lukman. "Information Systems at Irfan Jaya Stores Using the Rational Unified Process Method", Sinkron, 2022
Publication

<1 %

Exclude quotes   On
Exclude bibliography   On

Exclude matches   Off

7. Dana Rio Efendi Manalu.docx