

# Implementation of The Odoo Point of Sale ERP Module at Gordino Store

Niko Putra Prawiratama Wijanarko<sup>1\*</sup>, Syaifudin<sup>2</sup>, Teddy Siswanto<sup>3</sup>

*Information System Study*<sup>123</sup>, Faculty of Industrial Technology, University of Trisakti

**Abstract**— Gordio Store is a UMKM that is engaged in developing clothing convection in Tanah Abang Market, Central Jakarta. Operational business processes This business is still done manually and not yet computerized, so the transfer of information about sales is done manually. The ongoing sales business process at Gordio Store has become inefficient and the owner has experienced some difficulties, especially information on sales and sales transactions last week or month. Therefore, it is necessary to apply Enterprise Resource Planning (ERP) technology to resolve these problems. The selection of software used is Odoo software, because it is considered open source and is easy to use and can also keep pace with changes and is integrated as a whole to meet the company's most complex operational needs. The implementation results show that the Odoo application can overcome the problem of sales data information using the Point of Sale module in Gordio Store. It is expected that with this ERP system business operations can be more effective and efficient so that it is expected to provide more benefits for business owners.

**Index Terms**—Enterprise Resource Planning, Odoo, open-source, Point of Sale, software.

## I. INTRODUCTION

The development of an effort to increase productivity is a challenge in the business world, not only is it an opportunity to make the business bigger but behind all that the company's challenges for accuracy, discipline, and production efficiency will be highly tested.

Niko Putra Prawiratama Wijanarko, born in Surabaya May 31, 1997. Students at Trisakti University, Department of Information Systems, Faculty of Industrial Technology (email : niko065001600008@trisakti.ac.id).

Syaifudin, completed his Bachelor's study at Gadjah Mada University in 1988, his Masters at the University of Indonesia in 1996 and his PhD at Universiti Utara Malaysia in 2011. As a lecturer at Trisakti University from 1988-present. Areas of expertise are Statistics and Information Systems. His current position is the head of the Laboratory of Software Engineering and Information Systems. He once served as chairman of the 2013-2017 Information Systems Study program. Research that has been done is about Knowledge Management and handwriting recognition (pattern recognition) (email : fusin@trisakti.ac.id).

Teddy Siswanto, completed his Bachelor of Mechanical Engineering at Brawijaya University in 1986, had worked at a number of private companies as computer programmers by self-taught, then continued his studies by completing the Master Degree of Information System at Bina Nusantara University in 1995 and now working full time at the University Trisakti Information Systems Study Program as a Regular Lecturer. The research field of interest is related to Bioinformatics and is incorporated in the MABBI membership (Indonesian Bioinformatics and Biodiversity Society) (email : teddysiswanto@trisakti.ac.id).

\* Corresponding author

E-mail address: [niko065001600008@trisakti.ac.id](mailto:niko065001600008@trisakti.ac.id)

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Indeed, the implementation of an ERP system always seems expensive, but if examined with more observance there are already many vendors offering solutions to the problems above. One solution to overcome these problems is the ERP system that is open source, one of which is OpenERP or Odoo (the new name of OpenERP). Odoo is a management system that provides more than 4000 applications to support the company's business needs.

Odoo uses a number of modules that can cover all functional areas of the company to simplify the company's manual processes so that they can provide precise or real-time information in decision making [1].

The POS (Point of Sales) module is designed to cover buying and selling transactions, as well as the accounting, goods, and stock management processes, as well as the income statement which is a requirement of the retail store business process [2].

## II. LITERATURE REVIEW

### A. System

According to Marshall B. Romney and Paul John Steinbart in his book titled Accounting Information System means that the system is a series of two or more components that are interrelated and interact in order to achieve goals. [3] According to Anastasia Diana and Lilis Setiawati, the system is a series of interdependent parts and work together to achieve a certain goal. [4] The definition according to Mulyadi, the system is a network of several procedures that are made according to a pattern arranged sequentially to carry out the main activities in a company. [5]

### B. Information

Information according to Agus Mulyanto is data that is processed in such a way as to become a more useful and meaningful form for those who receive it, while data is a source of information that describes a real event. [6] According to Krismaji, information is organized data and has many uses and benefits. [7] The same thing was said by Romney and Steinbart that information is data that has been managed and processed to give meaning and improve the decision making process. As is the role, information users make better decisions in terms of the quality of information improvement [3], [7]

### C. Information System

Noviandi, Destiani and Partono said that information systems are organizations that meet the needs of daily transaction processing, support operations, are managerial and strategic activities of an organization and provide certain outsiders with the necessary reports. Information system definitions can also be defined frameworks that coordinate things such as resources (human, computer) to convert inputs into outputs, to achieve company goals. Information systems can also be defined as a set of components consisting of people or people, work procedures, data, information that is useful for decision making in organizations. [8]

### D. Enterprise Resource Planning (ERP)

According to O'Brien, J. A., & Marakas, G. M., Enterprise Resource Planning is a company system that includes all functions within the company which are driven by several integrated software modules to support the internal business processes of a company. [9] According to James A. Hall, Enterprise Resource Planning is a model of information systems that enables an organization to automate and integrate its main business processes. [10]

### E. Odoo (OpenERP)

Odoo (OpenERP) is a modern ERP application in the form of open-source in which there are various business modules such as Sales, CRM (Customer Relationship Management), Project Management, Warehouse Management, Manufacturing, Finance, and Accounting, Human Resources, and so on. [11] Odoo can be adapted to a company or organization that is already running. Odoo can be adjusted to the procedures that have been applicable as long as according to ERP standards. [11]

### F. Point of Sale (POS)

Point of Sales or commonly called POS, can be interpreted as software that records sales transactions. POS is also a sales-oriented activity as well as a system that helps the transaction process. POS software is a major component of the system which ultimately determines the course of the process, such as what to do and how to do it. [12]

## III. RESEARCH METHODOLOGY

The method used to develop this system is the Waterfall methodology. The waterfall method is a method that takes a systematic and sequential approach through several stages in SDLC to build software [13]

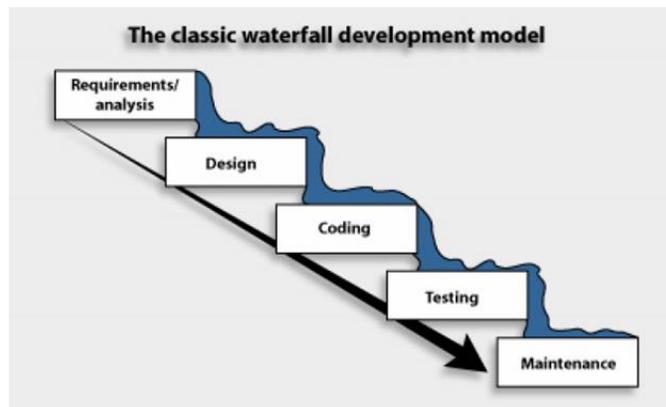


Fig 1.

The Waterfall method has the following steps: [14]

#### A. Requirement Analysis

Is an analysis step of system requirements. Data collection in this stage can carry out research, interview, or literature study. A system analyst must dig up as much information as possible from the user so that it will create a computerized system that can perform several tasks desired by the user. This stage will produce user requirements documents. This document is the system analyst's reference for translation into the programming language.

#### B. System Design

The design process will translate the requirements analysis into a software design that can be estimated before it is made in the form of lines of code. This process focuses on data structures, software architecture, interface representation, and procedural algorithm details. This stage will produce something called software requirements. This document will be used by programmers to carry out system-making activities.

#### C. Coding & Testing (Implementation)

Coding is the translation of design in a language understood by computers. Done by the programmer who will translate things requested by the user. This stage is the actual stage of working on a system. In the sense that the use of computers will be maximized in this stage. After coding is complete it will be tested on the system that has been built. Aims to find the system error then repaired.

#### D. Testing

This stage can be said to be the last stage in making a system. After analyzing, designing, and coding, the finished system is ready for use by the user.

#### E. Maintenance

Software that has been delivered to the user will change over time. These changes could be due to an error because the software must adapt to the new environment (peripherals or new operating systems), or because customers need functional and other developments.

IV. RESULTS AND DISCUSSION

A. Pre-system

Pre-system analysis illustrates the state of the system before the use of Odoo ERP conducted at Gordio Store. The information system that runs on the Gordio Store can provide accurate results, but from observations it turns out there are still some shortcomings that make data management difficult to do, it can be described as follows:

- a. Processing data purchases and sales still use thick books in processing and storing various data.
- b. Gordio Store business processes are conventional.
- c. Lack of information generated from data processing based on the current system.

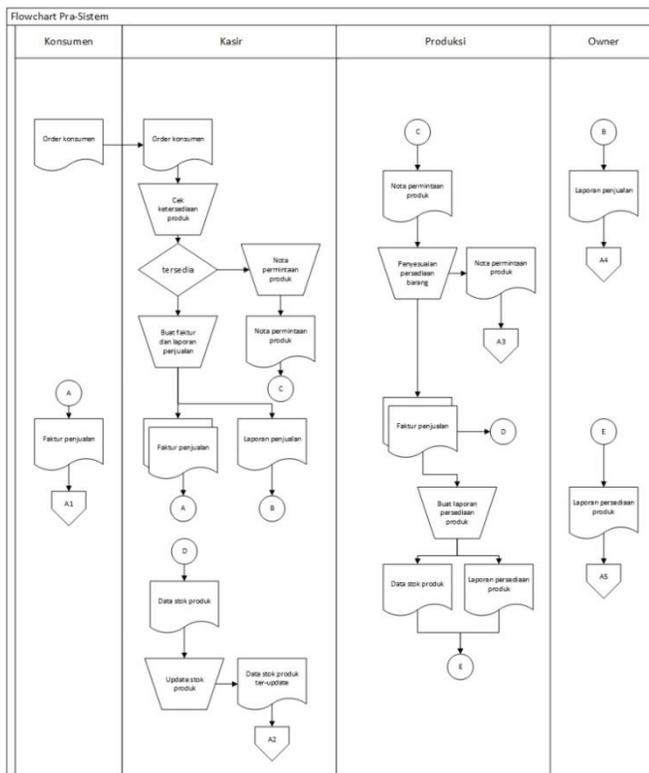


Fig 2.

B. Proposed System Analysis

Post-system analysis illustrates how the system will change after the Odoo ERP implementation in Gordio Store. Gordio Store is a business engaged in wholesale clothing sales. Gordio Store can record many transactions at any time. The number of these transactions has not been matched by an application that can manage data in great detail and can calculate transaction results quickly and accurately.

Gordio Store is looking for a solution that is by using a sales system based on ERP (Enterprise Resource Planning) POS (Point of Sale) module, which includes product management and the use of prototyping to build and maintain systems. POS implementation can also help record transactions that occur at Gordio Store, making it easier for the cashier to recap transaction data in preparing reports.

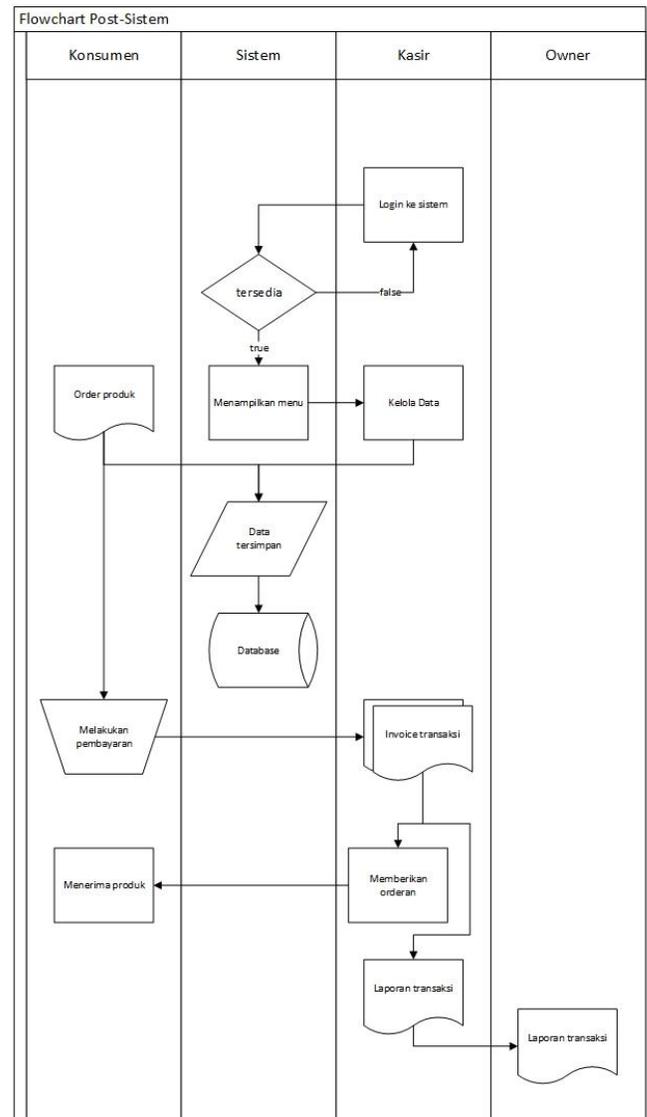


Fig 3.

C. Product Data Mock-ups

This page functions to manage product data such as adding, changing, and deleting product data. Next is the product data page system design in Figure 4 and Figure 5.

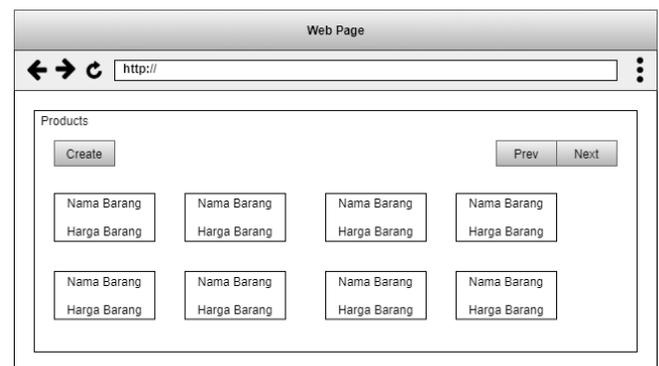


Fig 4.



Fig 5.

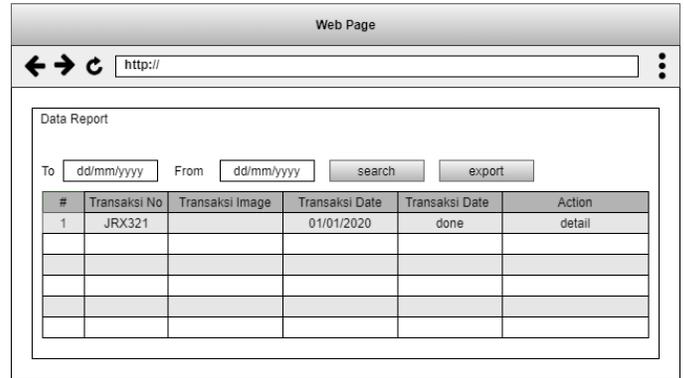


Fig 8.

**D. Order Data Mock-ups**

This page functions to add and manage order data. Next is the system design of order data pages in Figure 6 and Figure 7.

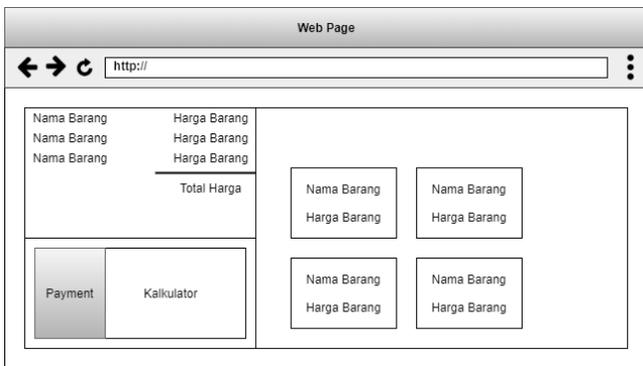


Fig 6.

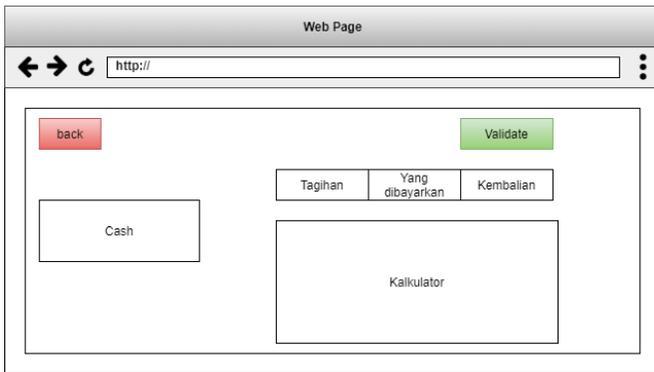


Fig 7.

**E. Mock-up Laporan**

This page functions to view report data from sales results. The following is the report page system design in Figure 8.

**F. Create Database**

Open a web browser then type "localhost: 8069" then it will be directed to the address "http://localhost:8069/web/database/manager" to configure the database first.

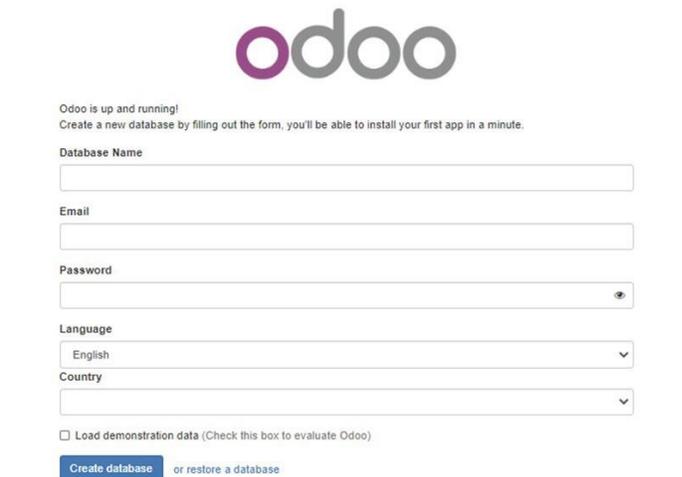


Fig 9.

**F. Point of Sale Module Installation**

After successful login directly will be directed to the Apps page, in the right corner there is a search tab type point of sale to look for the point of sale module. After the point of sale module appears, then click Install and wait a few moments until the point of sale module is successfully installed.

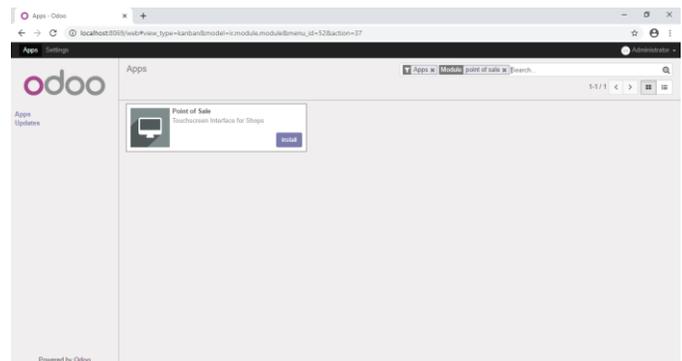


Fig 10.

**F. Product Data Page**

On the Point of Sale menu: Orders - Products to add and manage product data. To add product data, click Create.

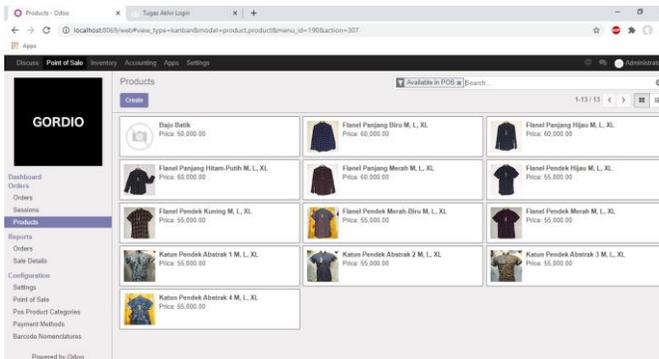


Fig 11.

Fill in the product data starting from the image, name, product type, sale price of the product in question, then click Save.

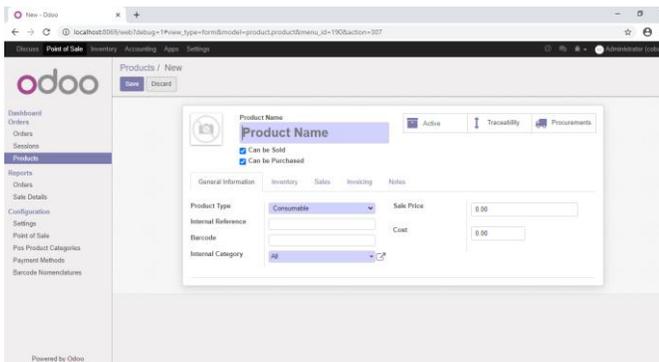


Fig. 12

**F. Order Data Page**

After that the order page appears as follows. All products previously added to Products will appear on this page complete with pictures and selling prices. To place an order, one of the product images can be clicked. The product will automatically be listed in the shopping list on the left hand corner. The provisions on the calculator below are:

- Qty : determine the number of products ordered.
- Disc : determine discounts on products ordered.
- Price : determine the price of the product manually.

After placing an order, click Payment.

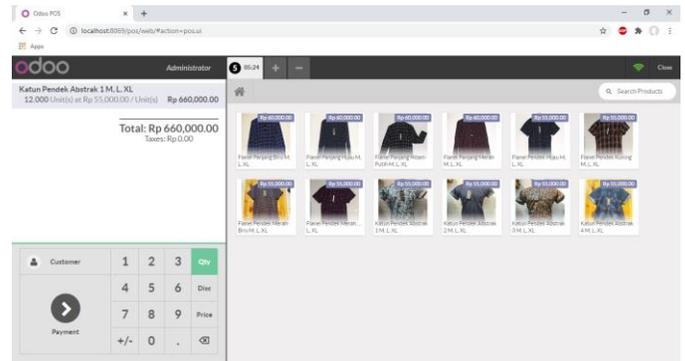


Fig 13.

After that the payment page appears with the following information:

- Cash (IDR) : the method payment is cash.
- Due : the number of customer bills.
- Tendered : paid by the customer.
- Change : returns received by the customer.

After completing payment, click Validate.

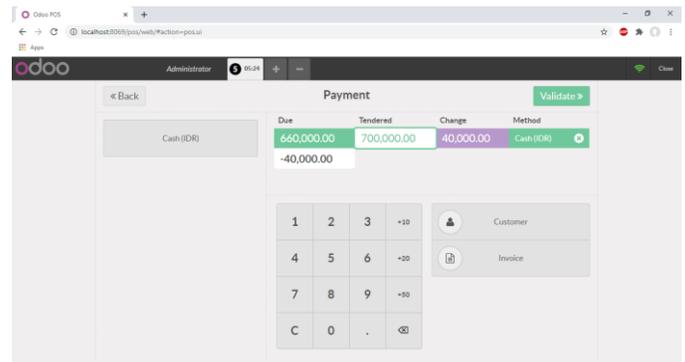


Fig 14.

**F. Reports page**

To find out sales reports of all transactions, click the Point of Sale menu: Reports - Sale Details. The details of the sale details are as follows:

- Start date : deadline for the transaction start you want to know about.
- End date : deadline for the transaction end you want to know about.

After completing payment, click Print.

The printout has the format. Pdf, click Print then Odoo will automatically download "Sale Details.pdf". The details of the sale details are as follows:

- Product : product sold.
- Quantity: quantity of each transaction.
- Price Unit : the price paid by the customer.
- Total : total income.

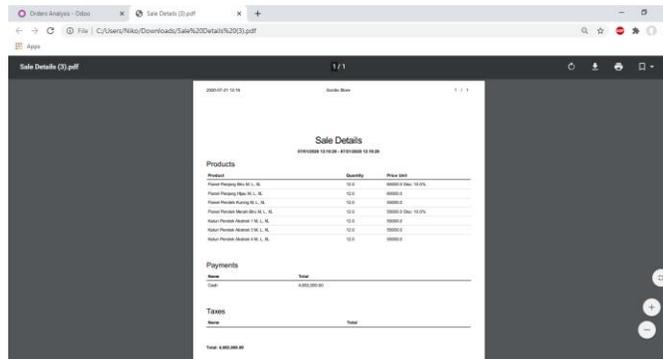


Fig 15.

## V. CONCLUSION

### A. Conclusion

From the implementation and testing of Odoo ERP software conducted at Gordio Store, the following conclusions can be drawn: After the business process can be described in detail and clearly, the appropriate Odoo ERP software can be chosen and also meets the needs of the Gordio Store to solve all existing problems. Odoo can be implemented in accordance with business processes that have been designed and also tested the results of the implementation.

### B. Suggestion

From the conclusions above, some suggestions that can be expressed to Gordio Store include: It needs to be hosted after it feels like it needs a bigger server. Odoo future use can include various fields in the Gordio Store. There needs to be a module integration in addition to the point of sale with other modules in order to help develop business that is running at Gordio Store.

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**Niko Putra Prawiratama Wijanarko**, born in Surabaya Agustus 31, 1997. Students at Trisakti University, Department of Information Systems, Faculty of Industrial Technology.

**Syaifudin**, completed his Bachelor's study at Gadjah Mada University in 1988, his Masters at the University of Indonesia in 1996 and his PhD at Universiti Utara Malaysia in 2011. As a lecturer at Trisakti University from 1988-present. Areas of expertise are Statistics and Information Systems. His current position is the head of the Laboratory of Software Engineering and Information Systems. He once served as chairman of the 2013-2017 Information Systems Study program. Research that has been done is about Knowledge Management and handwriting recognition (pattern recognition)

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