
APPLICATION OF THE POINT-OF-SALE MODULE IN BUSINESS

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Abstract

In this digital era, many cashiers still carry out sales recaps by hand during the daily period. When recording sales items, usually only the total is recorded, not what items were sold. If only the total sales are recorded in the sales records, then if goods are lost it will be difficult to trace what goods are lost and takes a long time. This can be overcome with an ERP system or the abbreviation for Enterprise Resource Planning. An ERP system can be obtained when creating your own ERP system or you can also use a website available on the internet such as Odoo. In this article, we will discuss an ERP system using Odoo because using Odoo can overcome the problems faced by applying the Point of Sale module and is easier because there is no need to create your system. The Point of Sale module consists of a cashier system and inventory management. When a business uses a cashier system in the Point of Sale module, the data entered into the cashier system will be captured into the Odoo database which makes it easier to record sales and will be automatically connected to other sections such as stock. Through a research and development (R&D) approach, this research aims to design and implement the Odoo ERP system, namely the Point of Sale module for a business. This research succeeded in proving that Odoo ERP can help businesses manage sales and inventory management automatically and faster than if done manually.

Keywords: Business, ERP, Inventory, Odoo, Point of Sale

INTRODUCTION

Nowadays, digitalization has entered all aspects of our lives. If in the past everything had to be done manually with a long process, now it can be done more easily and quickly. As technology advances, more and more people are setting up businesses by following trends that make business competition tighter. Tight competition makes sellers have to think about how to make a business work well and remain stable for a long time. One way to maintain a business is with buyer satisfaction because according to (Familiar & Ida, 2015) customers who feel happy are expected to use the product from time to time.

Customer satisfaction can be influenced by several factors, one of which is service. This is in line with the opinion of (Familiar & Ida, 2015) which reads that the product will run well if there is good service in it. One form of service is the cashier, the cashier must work quickly and thoroughly so that no errors occur. To make cashiers faster and more thorough, you can use a system for cashiers that will make it easier for cashiers and make buyers not wait long and reduce the occurrence of human error. This agrees with (Nugroho *et al.*, 2023) that companies need technology to maximize their wealth and create updates for their own goods. Then according to (Nugroho, Ardiana *et al.*, 2023) Technological improvements in the modern era play an important role in the continuity of a business.

To solve this problem, it can be solved with an ERP system and can apply the Point of Sale module in Odoo. Odoo is used because according to (Nugroho *et al.*, 2024) Odoo's flexibility is so sophisticated that applications can be added based on the growth and needs of the company one by one as the customer base grows and the company's needs grow.

LITERATURE REVIEW

Enterprise Resource Planning

Enterprise Resource Planning (ERP) is an integrated system used by MSMEs to unite all departments in one database (Nugroho, Lestari, *et al.*, 2023). Meanwhile, according to (Suminten *et al.*, 2019) ERP system is a system that supports business processes by providing real-time information that is integrated between functional divisions of the company. So ERP is a system that supports business processes by providing real-time information used by MSMEs to unite all departments in one database. According to (Nugroho & Rizkiyanto, 2023) ERP can replace all software in finance, HR, inventory, planning, etc. This software is divided into modules for each field. Then according to (Surung *et al.*, 2020) The database can be stored locally if the ERP implementation is carried out in a corporate environment, it can also be cloud-based if the ERP system implementation is outside the organization's boundaries.

Odoo

According to (Putri & Suhendi, 2021) Odoo is a modern and complete Enterprise Resource Planning (ERP) application distributed in open source, in which there are various modules, including Sales, Inventory, Accounting, Finance, Point of Sale (POS), and so on. Meanwhile, according to (Nugroho, Firdaus, *et al.*, 2023) Odoo is an open source cloud-based management software solution developed by Fabien Pinckaers in 2005.

Point of Sale

According to (Putri & Suhendi, 2021) Point of Sale (POS) can be interpreted as software that records sales transactions.

Stock

According to (Qadafi & Wahyudi, 2020) inventory is a very important main component in a company, because inventory will be sold continuously for the smooth running of the company's business, besides that inventory is a fairly large asset when compared to other current assets.

Inventory

According to (Nugroho *et al.*, 2024) the inventory application in Odoo is a sophisticated inventory management modernization that makes work more effective and easier.

RESEARCH METHOD

The first process carried out by the author is to make observations in the environment around the author. At the time of the research, the author found many businesses that had a manual cashier system, when the author observed this, the author found several weaknesses of the manual cashier system, namely a messy sales recap and the buyer had to wait a long time to pay because it was still calculated manually. When finding these problems, the author wishes to create a system that can be used by businesses so that cashiers are more automated, effective, and efficient. The system is Point of Sale using the Odoo application. (Nugroho *et al.*, 2024) describes the research design like this:

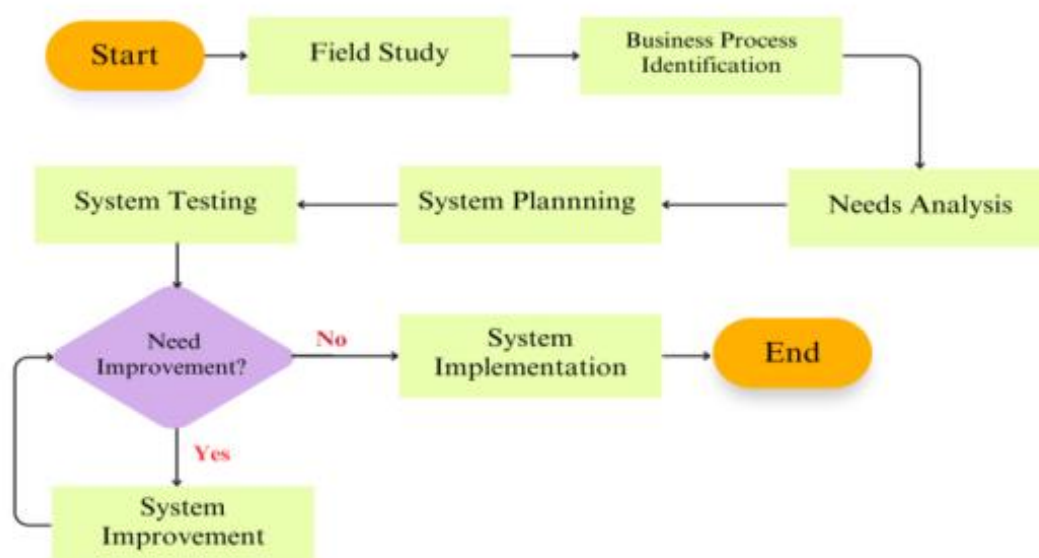


Figure 1. Research design

1. Initial stage

In the early stages of research, researchers made observations to several businesses to identify problems. This activity aims to collect data needed for system creation.

2. Business Process Identification

After identifying the problem, the next step is to map the business processes applied by the businesses around the author.

3. Needs Analysis

After getting material to research, the business that is the object of the researcher's research still uses a manual cashier system.

4. System Planning

Based on the needs analysis, this research will apply the Point of Sale system to make the existing cashier system in the business more automated, effective, and efficient.

5. System Testing

At this stage, the Odoo system that has been created will be thoroughly tested and evaluated. The goal is that when the system is used there are no errors or weaknesses. This evaluation process will continue until the system passes the test and overcomes the problems of the business that is the object of research.

6. System Improvement

After testing the system, if there are deficiencies or weaknesses in the system, they will be corrected. All things that do not pass when testing the system will be evaluated what needs to be improved so that when the system is used it will meet the needs and become more automated.

7. System Implementation

After all stages have been passed, the system can be applied to the daily activities of the business.

RESULTS AND DISCUSSION

The result of this research is a Point of Sale system that is used for the cashier system. In addition to the Point of Sale cashier system also helps in manufacturing and inventory management of a business.

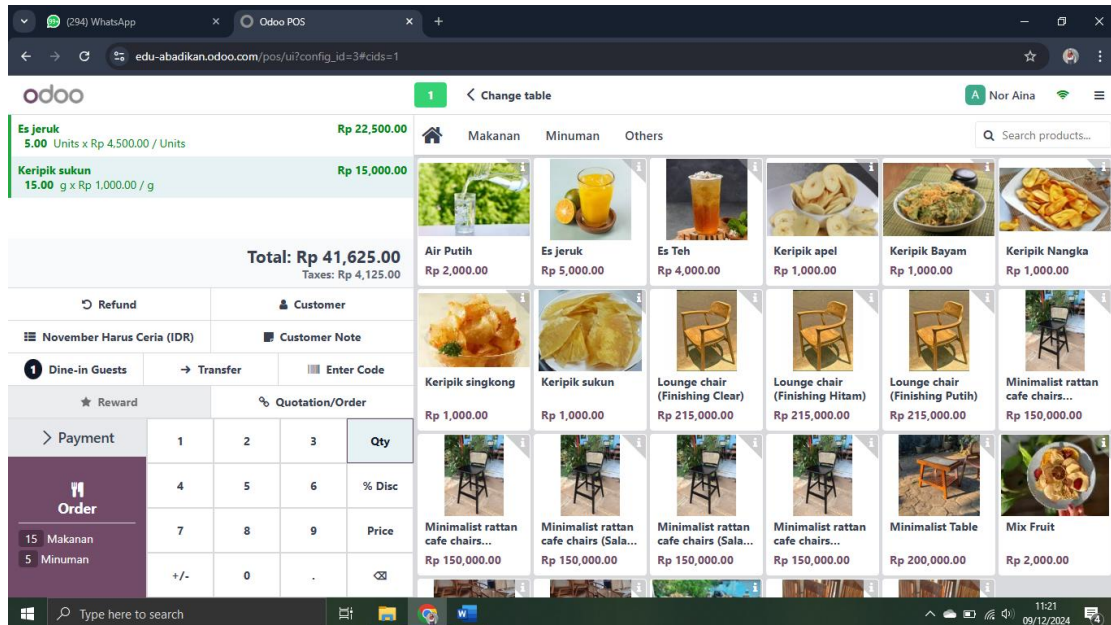


Figure 2. Point of sale

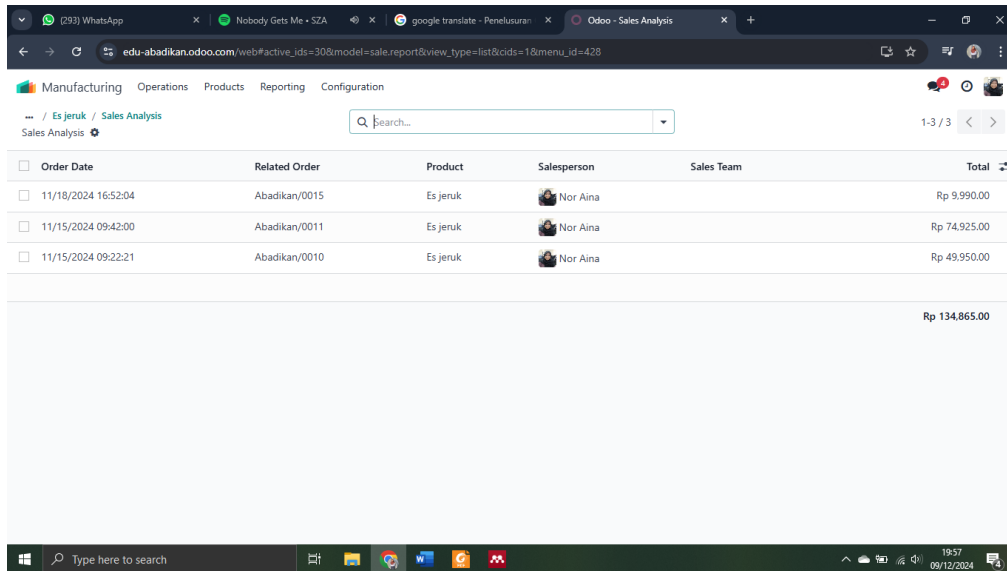
In Figure 2 is a display of the Point of Sale system. In this system the cashier can enter the menu and the amount ordered by the buyer. In addition, the cashier can also enter discounts to buyers. In addition, it can also add buyer points as a form of customer loyalty. In this system, the cashier only needs to choose what payment method the buyer wants and whether the buyer wants to tip or not.

The screenshot shows the Odoo Point of Sale Analysis interface. It displays a table of orders with columns for Order Date, Product, Product Category, Employee, Total Price, and Status. The table lists 15 orders, all of which are 'Posted' and were made by the employee 'Nor Aina'. The products are categorized under 'Makanan' (Food). The total price for each order is listed in the 'Total Price' column.

Order Date	Product	Product Category	Employee	Total Price	Status
11/18/2024 16:52:04	Keripik apel	Makanan	Nor Aina	277,500.00	Posted
11/15/2024 22:16:58	Keripik singkong	Makanan	Nor Aina	66,600.00	Posted
11/15/2024 21:40:39	Keripik sukun	Makanan	Nor Aina	6,660.00	Posted
11/15/2024 12:51:01	Keripik Nangka	Makanan	Nor Aina	55,500.00	Posted
11/15/2024 09:42:00	Keripik sukun	Makanan	Nor Aina	66,600.00	Posted
11/15/2024 09:22:21	Keripik sukun	Makanan	Nor Aina	66,600.00	Posted
11/15/2024 07:13:11	Keripik sukun	Makanan	Nor Aina	44,400.00	Posted
11/14/2024 00:41:43	Keripik sukun	Makanan	Nor Aina	49,950.00	Posted
11/14/2024 00:41:43	Keripik singkong	Makanan	Nor Aina	16,650.00	Posted
11/14/2024 00:12:12	Keripik singkong	Makanan	Nor Aina	88,800.00	Posted
11/14/2024 00:03:38	Keripik Nangka	Makanan	Nor Aina	55,500.00	Posted
11/13/2024 23:59:06	Keripik singkong	Makanan	Nor Aina	88,800.00	Posted

Figure 3. Order Analysis

Figure 3 illustrates that when using the Point of Sale system it also makes it easier for cashiers to make reports because all transactions are automatically recorded by the system.

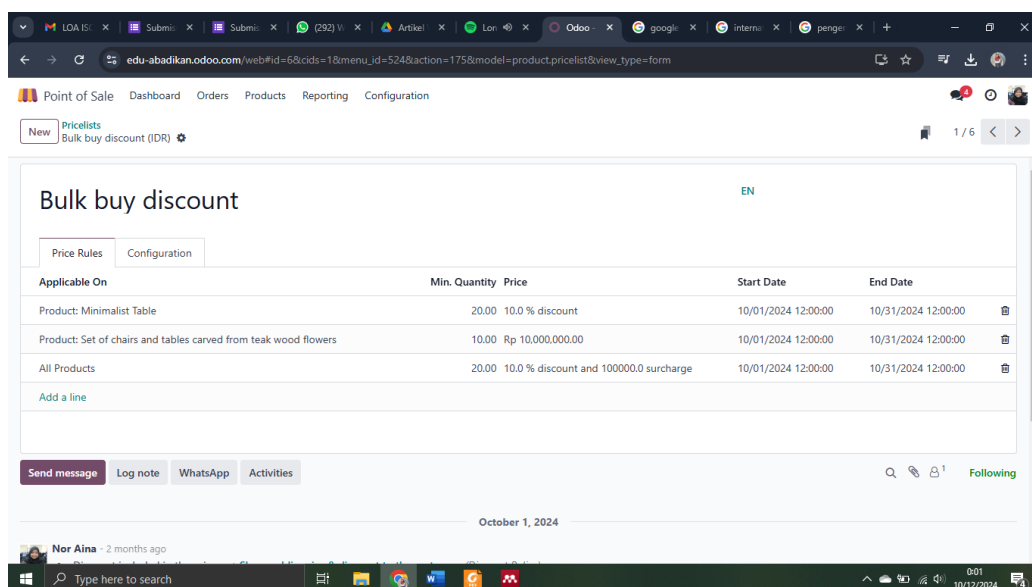


The screenshot shows the Odoo Sales Analysis report for 'Es Jeruk'. The report lists three transactions with their respective dates, related orders, products, salespersons, sales teams, and total amounts. The total amount for all transactions is Rp 134,865.00.

Order Date	Related Order	Product	Salesperson	Sales Team	Total
11/18/2024 16:52:04	Abadikan/0015	Es jeruk	Nor Aina		Rp 9.990.00
11/15/2024 09:42:00	Abadikan/0011	Es jeruk	Nor Aina		Rp 74.925.00
11/15/2024 09:22:21	Abadikan/0010	Es jeruk	Nor Aina		Rp 49.950.00
					Rp 134,865.00

Figure 4. Sales List

Figure 4 explains that when using a Point of Sale system it also makes it easier for a business to determine stock and when an item must be produced again. Using the Point of Sale system if a product is sold it will also automatically reduce the stock in the warehouse.



The screenshot shows the Odoo Pricelist configuration page for 'Bulk buy discount (IDR)'. It displays a table with columns for 'Applicable On', 'Min. Quantity', 'Price', 'Start Date', and 'End Date'. There are three entries in the table, each representing a different product or category with specific discount rules and dates.

Applicable On	Min. Quantity	Price	Start Date	End Date
Product: Minimalist Table	20.00	10.0 % discount	10/01/2024 12:00:00	10/31/2024 12:00:00
Product: Set of chairs and tables carved from teak wood flowers	10.00	Rp 10,000,000.00	10/01/2024 12:00:00	10/31/2024 12:00:00
All Products	20.00	10.0 % discount and 100000.0 surcharge	10/01/2024 12:00:00	10/31/2024 12:00:00

Figure 5. Pricelist

In the Point of Sale module there is also a pricelist which functions to provide discounts or special prices for buyers as shown in the picture.

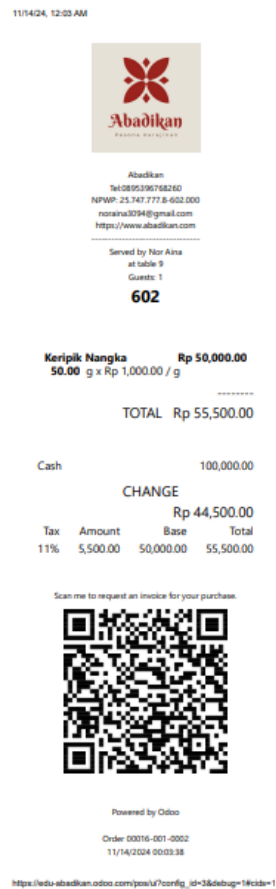


Figure 6. Invoice

The output of the Point of Sale system is an invoice that lists what was purchased by the buyer, taxes, discounts, and qr codes that can be customized to be directed where.

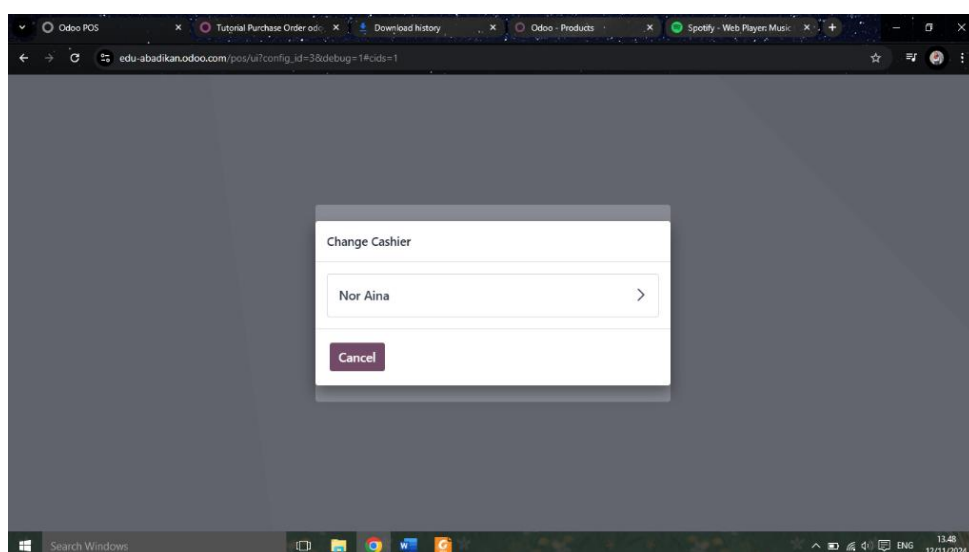


Figure 7. Change cashier

The Point of Sale system is also very suitable for businesses that have several work shifts. In this section, the system will ask to enter the name of the cashier and after that the system will ask the cashier to enter the amount of cash at the opening time to facilitate the calculation at the end of the shift session.

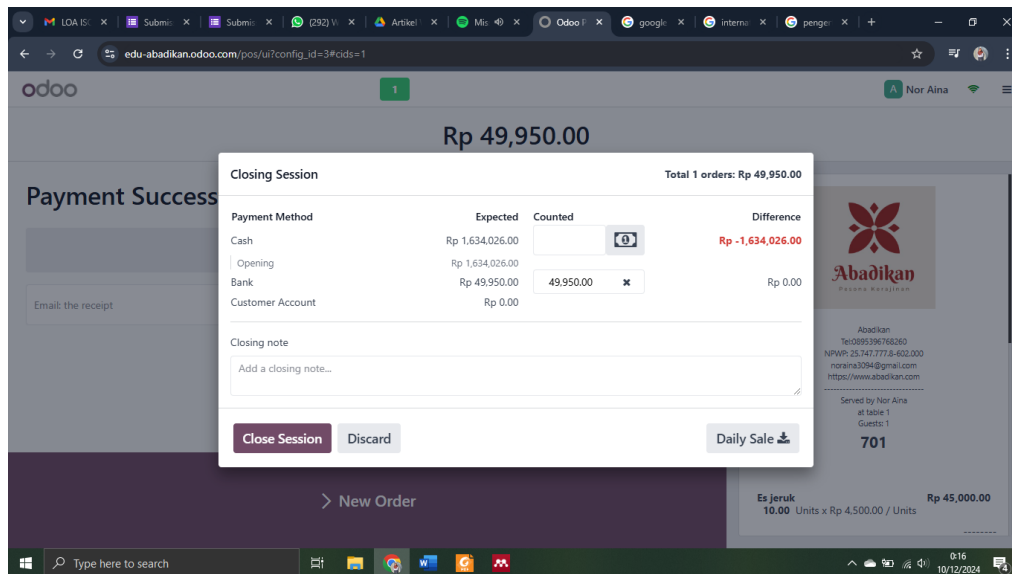


Figure 8. Close session

If Figure 7 displays the opening session then Figure 8 displays the closing session where the cashier is asked to enter the amount of cash in the cash register and for other payment methods it is automatically filled in. The purpose of the system asking the cashier to fill in the amount of cash at closing time is to ensure that there is no error either excess or lack of money in the cash register.

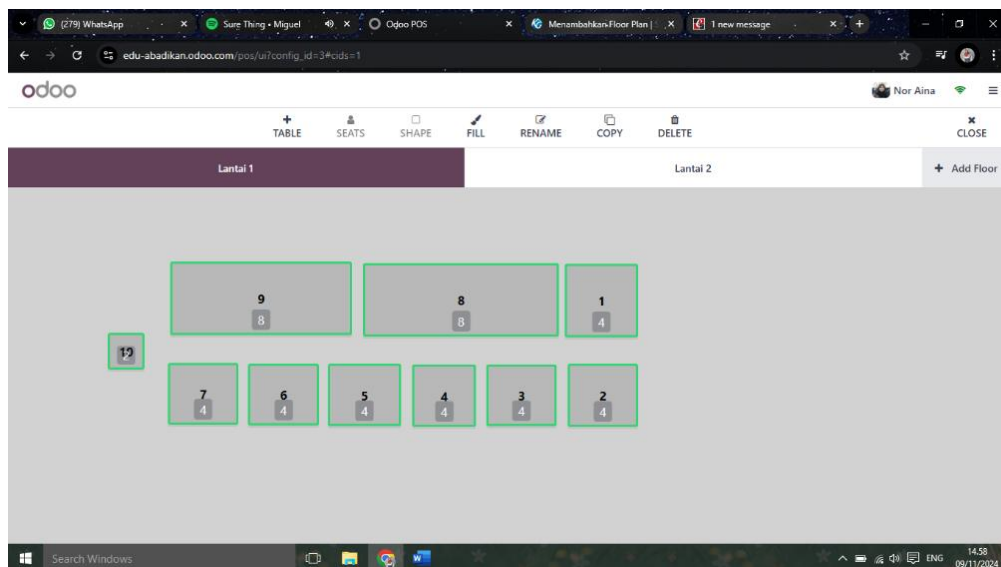


Figure 9. Main floor

In this module it is also possible to create a business place layout, so when the cashier clicks on the table used by the buyer, a display will appear as shown in Figure 2.

CONCLUSION

Using Point of Sale really helps a business so that the business runs more automatically, effectively, and efficiently. The use of the Point of Sale system also reduces the occurrence of human error and improves services in the cashier field which makes the cashier work faster. In addition to helping cashiers work faster, the Point of Sale system can also help a business for stock and inventory management.

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