



APLIKASI PENGELOLAAN PERSEDIAAN BARANG PADA TOKO WANZ BIKERSPOT BERBASIS WEB

TUGAS AKHIR

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PROGRAM STUDI TEKNIK INFORMATIKA FAKULTAS ILMU KOMPUTER U UNIVERSITAS MERCU BUANA JAKARTA 2021 ANA

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APLIKASI PENGELOLAAN PERSEDIAAN BARANG PADA TOKO WANZ BIKERSPOT BERBASIS WEB

Tugas Akhir

Diajukan Untuk Melengkapi Salah Satu Syarat Memperoleh Gelar Sarjana Komputer

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PROGRAM STUDI TEKNIK INFORMATIKA U FAKULTAS ILMU KOMPUTER UNIVERSITAS MERCU BUANA JAKARTA 2021

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Wanz Bikerspot adalah usaha *online* pada kategori otomotif yang tersedia di *marketplace* Tokopedia, Bukalapak, dan Shopee. Sistem yang sudah berjalan masih manual seperti pencatatan penjualan, barang masuk, stok barang, informasi *supplier*, dan pembuatan laporan yang masih ditulis pada buku. Pengurus masih melihat jumlah stok melalui ingatan atau mengecek satu persatu. Hal ini tentu memperlambat kinerja karena tidak efektif. Pencatatan penjualan dan laporan juga sangat memakan waktu dikarenakan harus menulis dan menghitung satu persatu.

Berdasarkan permasalahan tersebut, maka dibutuhkan aplikasi berbasis website khusus untuk toko online dimana pada aplikasi tersebut dapat melihat jumlah stok barang tersedia, data barang, data barang masuk, data transaksi, informasi supplier, menginput transaksi, meng-input barang masuk, dan membuat laporan transaksi yang dapat dicetak sehingga dapat meningkatkan kinerja pengurus. Selain itu, terdapat perhitungan fee pada masing-masing marketplace dimana laporan pendapatan sudah dihitung dengan fee yang dibebankan kepada pengurus selaku penjual.

Penelitian ini berbasis *website* menggunakan PHP sebagai bahasa pemrograman, dan MySQL sebagai *database*. Aplikasi ini dibuat khusus untuk penjual pada toko online marketplace. Dengan adanya aplikasi ini, dapat membantu para pelaku usaha toko *online* secara efektif dan mencegah terjadinya kesalahan data, seperti yang pernah terjadi pada penerapan sistem yang masih manual sebelumnya.

Kata kunci: Aplikasi, inventori, *marketplace*, usaha *online*, *website*

ABSTRACT

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Title	:	Inventory Management Application at Wanz
		Bikerspot Store Web-Based

Wanz Bikerspot is an online business in the automotive category available on the Tokopedia, Bukalapak, and Shopee marketplaces. The system that is already running is still manual, such as recording sales, incoming goods, stock items, supplier information, and making reports that are still written in books. The management still looks at the amount of stock through memory or checks one by one. This of course slows down performance because it is not effective. Sales records and reports are also very time-consuming because you have to write and calculate one by one.

Based on these problems, a special website-based application is needed for online stores where the application can see the number of available stock items, goods data, incoming goods data, transaction data, supplier information, input transactions, input incoming goods, and create transaction reports that can be printed to improve the performance of the board. Also, there is a fee calculation for each marketplace where the income statement is calculated by the fee charged to the management as the seller.

This research is website-based using PHP as a programming language, and MySQL as a database. This application is made specifically for sellers in the online marketplace shop. With this application, it can help online shop businesses effectively and prevent data errors from occurring, as has happened in the previous manual application of the system.

Key words: Applications, inventory, marketplaces, online ventures, websites

KATA PENGANTAR

Puji syukur kita panjatkan pada kehadirat Allah SWT yang telah memberikan rahmat dan karunia-Nya sehingga penulis dapat menyelesaikan laporan hasil tugas akhir. Penulis menyadari bahwa tanpa bantuan dan bimbingan dari berbagai pihak penulisan ini tidak dapat diselesaikan dengan baik. Penulis juga menyadari dengan segala keterbatasan dan kemampuan penulis, laporan ini masih jauh dari kata sempurna. Penulis ucapakan terimakasih sebanyak-banyaknya kepada siapapun yang secara langsung atau tidak langsung memberikan kontribusi dan mendoakan dalam penyelesaian tugas akhir ini. Secara khusus penulis mengucapkan terima kasih kepada:

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Himawan Lutfi

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NASKAH JURNAL



Inventory Management Application at Wanz Bikerspot Store Web-Based

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Asian Journal of Information Technology Copy Right: Medwell Publications Abstract: Wanz Bikerspot is an online business in the automotive category available on the Tokopedia, Bukalapak, and Shopee marketplaces. The system that is already running is still manual, such as recording sales, incoming goods, stock items, supplier information, and making reports that are still written in books. The management still looks at the amount of stock through memory or checks one by one. This of course slows down performance because it is not effective. Sales records and reports are also very time-consuming because you have to write and calculate one by one. Based on these problems, a special website-based application is needed for online stores where the application can see the number of available stock items, goods data, incoming goods data, transaction data, supplier information, input transactions, input incoming goods, and create transaction reports that can be printed to improve the performance of the board. Also, there is a fee calculation for each marketplace where the income statement is calculated by the fee charged to the management as the seller.

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INTRODUCTION

The ease of opening a business is very easy just by opening a shop in the Thousands and even marketplace. millions of users in each marketplace can be used as business opportunities and targets to earn income without the need to build/rent shop houses, pay salaries of many employees, pay shop operational bills, and so on. Only by registering can you open a shop and run an online trading business. Wanz Bikerspot is a homebased online business that has been running since 2017. The business is engaged in the automotive sector such as helmet accessories. motorcycle accessories, car accessories, care/shine, masks, buff/balaclava, and other biker needs. The online shop Wanz Bikerspot has spread across three marketplace platforms such as Tokopedia, Bukalapak, and Shopee. Within three years from 2017-2020 Wanz Bikerspot has managed to sell tens of thousands of products just selling online. However, the bv shortcomings in the product management of this business are that it is not good at recording manual inventory of goods so that it takes a very long time and is less efficient.

There are more than 100 types of goods for sale. The stock recording is still manual by checking goods in the warehouse or through memory. If you look at the amount of stock through the website or marketplace application itself, it is not effective because there are frequent bugs, there is no notification that the goods will run out, which causes the goods to be set inactive (not sold) by themselves without the user's knowledge. effectively and prevent data errors from occurring, as has happened in the previous manual application of the system.

This makes the shop manager not know that there are items that the prospective buyer cannot see, so there is no income for it.

In addition to manual stock recording, Wanz Bikerspot is also still manual in recording transaction data, incoming goods data, and making turnover reports by writing in a book. Often there are errors in writing and calculations that cause it to be checked or recalculated so that it takes a very long time because in one month it can sell up to 500 products.

Based on these problems, a special website-based application is needed for online marketplace stores where the application can see the number of available stock items, data on goods sold, data on incoming goods, transaction data, supplier information, input transactions, entered, input goods and make transaction reports, and incoming goods report that can be printed to support store operations to improve the performance of the management in managing stock items and making reports. In addition, there is a fee calculation for each marketplace so that the income statement is calculated with the fee charged to the management as the seller.

This research is applied specifically to online stores due to the calculation of fees in each marketplace. This research is also made according to the necessary needs. In addition, in the transaction entry, there is no invoice because in the online invoice business the buyer can easily get it directly for each paid transaction.

Because the use of this application is tailored to the needs of each company,

therefore the contents of this type of application are very diverse in form and concept. [1] The rapid development of technology in today's era is very interesting develop flexible to technology. This hope arises because of the many people who want to be practical in everything. With the development of technology, various types of new systems have emerged that can fulfill the desires of people who want to be completely practical. especially in trading companies. [2] The use of information technology is mandatory for business actors, especially the trade sector, as supporting services for business actors. Web-based applications are the choice of business actors to provide fast and good service to their employees. [3] In general, inventory functions to manage merchandise inventories that are always changing in quantity and value through buying and selling transactions.

A programming language is a communication tool between humans computer and devices. Currently. technological developments related to programming languages are very sophisticated and are widely applied to every tool that helps human work. Language is divided into three, namely low-level programming language (lowlevel programming language), middlelevel programming language (middlelevel programming language), and highlevel programming language (high-level programming language). High-level programming languages are the most developed languages. Since the emergence of the C language created by Dennis Ritchie, it has become the foundation of several other programming languages such as Java (James Gosling), C ++ (Bjarne Stroustrup), PHP (Rasmus Lerdorf), and others. This application will be built using the PHP programming language as a programming language, Mysql as a database, and built with the CI framework.

MATERIALS AND METHODS

The method of data collection is done through the observation method. Direct observation by knowing how the system and workflow of the research object. Starting from how to handle outgoing transactions, incoming goods, recording store revenue, and managing goods in the warehouse.

This type of research uses quantitative methods. The research was conducted based on a case study in which the author was directly involved and understood the conditions and needs of the object of this research. The object of this research is the online shop business.

The Research Phase is a series of research processes where the researcher starts observing the problem to the research process. In this study, the stages to be carried out can be seen in Figure 1.

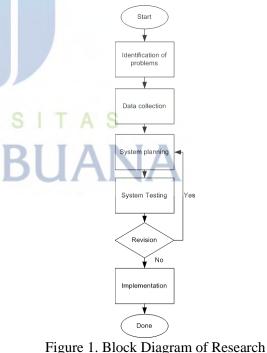


Figure 1. Block Diagram of Research Stages

CodeIgniter (CI) is an open-source web application network that is used to build dynamic PHP applications. CodeIgniter is a PHP framework with an MVC

(Model, View, Controller) model for building dynamic websites using PHP which can accelerate developers to create a web application. Besides being lightweight and fast, CodeIgniter also has super complete documentation along with examples of code implementation. This complete documentation is one of the strong reasons why many people choose CodeIgniter as the framework of choice.

The PHP programming language is a programming language that is often embedded in HTML. PHP itself comes from the word Hypertext Preprocessor. The history of PHP was originally short for Personal Home Page (Personal site). PHP was first created by Rasmus Lerdorf in 1995. At that time PHP was still called Form Interpreted (FI), which took the form of a set of scripts used to process form data from the web.

This programming language uses a server-side system. Server-side programming is a type of programming language in which the script/program will be executed/processed by the server. The advantages are that it is easy to use, simple, and easy to understand and learn.

E-Commerce in general is the activity of buying and selling goods/services or transmitting funds/data via electronic networks, especially the internet. The development of information technology software and makes conventional transactions possible to be carried out electronically. Website is used as a substitute for an offline store. Ecommerce websites include various functions such as product storefronts, online ordering, and stock inventory, to carry out their main function as ecommerce. The software used is installed on an e-commerce server and works simultaneously with an online payment system to process transactions. In general, e-commerce means doing business through interconnected networks (internet).

The Sales Fee charged to the seller is different from the previous one. Based on experience from around 2017-2018, the three e-commerce sites such as Tokopedia, Shopee, and Bukalapak do not charge sales fees, aka free. All transactions made by pure sellers will be fully accepted by the seller itself. However, it is estimated that in mid-2019 the sales fee will begin to be charged to all merchants/sellers in each e-commerce such as Tokopedia, Shopee, and Bukalapak. This fee is charged for every incoming transaction/order. The amount of fee charged varies. The amount charged is Tokopedia 1%, Bukalapak 4%, and Shopee 5.8%.

For Tokopedia, the 1% fee is charged to stores that have the title Power Merchant. For Bukalapak, a fee of 4% is charged to stores that have the title of Super Seller in the category of household, industrial, bicycle, car & motorcycle accessories/parts, and sports. And finally, for Shopee, the number of fees at stores with the title Star Seller which I have calculated can reach 5.8%. This amount includes admin fees and service fees.

Turnover is the total value of product sales within a certain period of time. Turnover can be called gross income because this income has not been deducted by costs incurred for capital, such as production costs, employee salaries, and other operational costs. The turnover value of a company is often the benchmark for assessing the group of companies, whether small, medium, or large. However, the figures that appear in the turnover are still a rough count, so they do not reflect the actual net profits the company gets.

Profit refers to the selling value of a product after deducting the cost of capital. A value is called profit if it is net or deducted by various cost components incurred by the company in producing or marketing products. Some of these cost

components include production costs, employee salaries, shipping costs,

electricity, marketing costs, and so on. Profit expresses the true value of the profits earned by the company, so it is also called net income.

MySQL is an open-source relational database management system (RDBMS) with a client-server model. Meanwhile, RDBMS is software for creating and managing databases based on a relational model.

Data Manipulation Language (DML) is a DBMS package that allows the user to access or manipulate data as it has been previously organized in an appropriate data model. Commands - SQL commands that are used to process data contained in tables such as insert, update, and delete.

Stock Calculation Algorithm is used in this application. The basic concept is that if there is a transaction, the old stock will decrease. Before deducting, check first the available stock is sufficient. If it is not enough then a transaction cannot take place. Then if there are incoming goods, the old stock will be added to the new stock that is inputted.

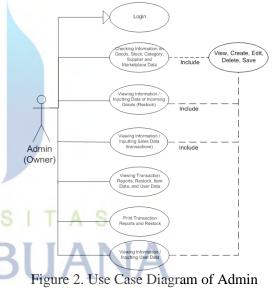


In the early stages of making a Webbased inventory management application system, the system design is carried out first by making use of case diagrams and activity diagrams.

Use Case Diagram are a description of some or all of the actors, use cases, and their interactions that introduce a system. The following is a use case diagram of a Web-based inventory management application system aimed at Figure 2 and Figure 3.

There are 7 admin actors who can log in, check information on goods / stock / supplier / marketplace data, view information / input data on incoming goods (restock), view information / input sales data (transactions), view transaction reports / restock / item data / user data, print transaction / restock reports, and view user information / input data.

Then on the actor side, there are 6 employees who can log in, check information on item data, view information/input data on incoming goods (restock), view information/input sales data (transactions), view restock reports/goods data, and print reports restock. The employee actor here is a user created by the admin. If you want to add another user, it can be arranged through the User menu on the Admin side.



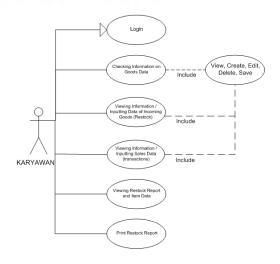


Figure 3. Use Case Diagram of Employees

Activity Diagram is a description of the activity of a system, starting from the beginning until the end of the system activity. In Figure 4 to Figure 10, the following is the activity diagram that the author has created.

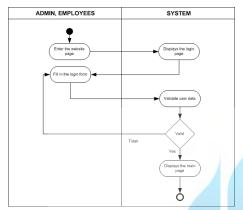


Figure 4. Activity Diagram of Admin and Employees Side Login

In Figure 4, both the admin and the employee can do the same thing, namely login.

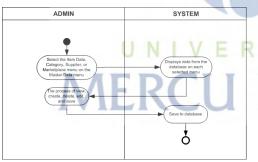
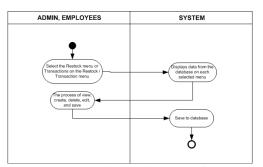
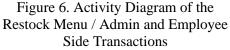


Figure 5. Activity Diagram of Admin Side Master Data Menu

In Figure 5, the admin is given full menu access which is on the Master Data menu.





In Figure 6, Admins and Employees can create a transaction data or create a data restock.

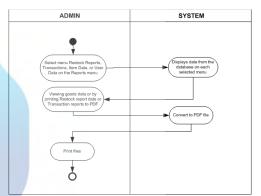


Figure 7. Activity Diagram Admin Side Report Menu

In Figure 7, the Admin is given complete report access rights on the Reports menu.

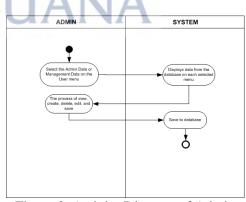


Figure 8. Activity Diagram of Admin Side User Menu

In Figure 8, there is a menu that is only given specifically for admins, namely the User menu. Useful for

managing or creating users on the website.

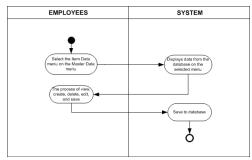
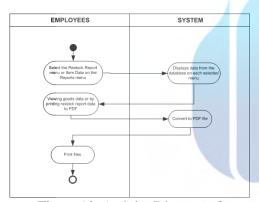


Figure 9. Activity Diagram of Employee Side Master Data Menu

In Figure 9, employees are restricted from accessing the menu on the Master Data menu. Only given access to the Item Data menu.





In Figure 10, employees are only given limited access to the Restock report and the Goods Data report.

The results achieved from this study are the Web-Based Supply Management Application at Wanz Bikerspot Store as a work support application in the online shop business. The elements in this application are login, data input, data view, report view, and report print. The amount of fee charged to the store when inputting transaction data according to the provisions of each marketplace can be seen in Table 1.

Marketplace	Amount of Fee				
Tokopedia	1%				
Bukalapak	4%				
Shopee	5,8%				
Table 1. Amount of Fee					

The following is a page view of the inventory management application that has been created.

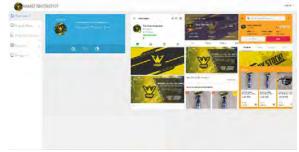


Figure 11. Front page view

Figure 11 shows the front page of the website shortly after logging in. There is a side-menu on the left and there is a shop image on each marketplace that you can click on so you can go to the destination store in each marketplace.

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Figure 12. Display of Goods Master Data

Figure 12 is a display of Master Data - Item Data in which there is information about data on goods sold. There is important information about the category, selling price, capital price, profit on goods, amount of stock, and the name of the supplier.

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Figure 13. Display Supplier Master Data

Figure 13 is a display of Master Data - Supplier Data which contains store supplier information. There is a shop link or contact number along with the supplier's address.

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Figure 14. Display of Category Master Data

Figure 14 is Master Data - Category Data that contains the types of categories sold.



Figure 15. Display of Marketplace Master Data

Figure 15 is Master Data -Marketplace Data which contains the name of the marketplace.

ta number of	1.00	-747						
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E services	4.	Distant	2 Mersberg	Distanton	Unaver .	Courses-	S Treast Have	9.0.00
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Figure 16. Display Restock Data

Figure 16 is information about the data for incoming goods (restock). There is information regarding the date it was made, the number of goods, the name of the supplier, and information. This description field is optional. Data restock is created if the store restocks goods.

			(A)	NON		
			LAPORAN DATAR	ESTOCK BARANG		
Internet States * Pate * Internet Second * Internet	e) R Reservices					
TIAE No.	Note because	-	None Derroe	Junità	Korragau	Trazed
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t	(SEC)	Cher Viven		1.91	rk .	184-125-2626-5-107-80
4	950004	Engline Cleaner		8	J.L.	06-12-2020 5-02.00
2	reade-	Lecond Waterleto		4	1.	06 17 2026 9:02:21
6	25.0065	Block Apple		[12	J.L.	#6-10-3838 \$L02.30
10	PSIDET	Tate Tries		1	ot	98-12-2626-940511
ξ	254003	Reporting		6	14	05-12-3828 9:00:50
-	and the second s			2	1000	

Figure 17. Display View Restock Data Report

Figure 17 is a display of the restock data report where it can filter items by date, month, and year.

4			1.14			\$
	N	WANZ	BIKERSPOT			L Com
		Reports	of Restock Items			
No	Item Code	Inens Namu	Quantity	Notes	Data	
1	750601	Monsta Shine	20	ink	2020-12-08 09:00-45	
2	P50002	Mane Protection	30	kk.	2020-12-08 09:01-05	
3	P\$0003	Cerr Vision	10	c6.	2030-02-08 09:02:02	
4	150204	Frights Cleaner	8	lok	2105-12-08 09402-14	
5	250005	Lenson Waterless	8	ok	2020-12-08 09:02:21	
6	P\$0006	Black Again	12	ok	2120-12-08 09:02:30	
7.	PS0007	Tire Tree	8	ek.	2101-12-08 09:02-41	
R	1993066	HyperBas	6	ink	2020-12-08 09:02:50	
4	750009	Paket Mensta Shine	6	ck.	2020-12-08 09:03:17	
10	PS0010	Paket Matte Protection	6	lek -	2459-12-08 09 03-42	
31	PS0011	Ware Helmet Perfune	12	ok	2120-12-08 09:04:14	
12	PS0012	Donait Hidm	24	ok	2101-12-08 09:04-45	
13	PS0015	Microfiber David Palmer	50	jok.	2105-12-08 09/04:57	
14	PS0014	Micrifiber Husaga	12	ok.	[2100-12-08/09-05:22	
15	PS0015	Kanebo	12	ok	2109-12-08 09:05:33	
16	P\$90016	Waxing Pad	15	ck.	2020-12-08 09:05:52	
37	PS0017	Fix It Pro	12	c6.	2020-12-08 09:06:09	
18	PS0018	Sarang Tangan Lates	20	ek	2020-12-08 09:06:27	
19	P90019	Sline Panbandi	12	ok	2826-12-08 09:07:24	
					21006.01.006.00.00.004	

Figure 18. Display Print Restock Data Report

Figure 18 is a report that is ready to print.

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Rader Para	TRANSAKE PENDAN AN									
		a No	Pickede barang	10 Nama barang	dame. D	C Kategori	C Marketolace	CRe	C Keterangan	C Tanggal Kelwar
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Figure 19. Display of Transaction Data

Figure 19 is information about the transaction data that has been made. When creating transaction data, you must enter the amount, category, marketplace name, marketplace fee amount, and description. After the data is created, the date when created will appear. The description field is optional.

		AF	Manz		
		LiPORAN BAT	TRANSARSE BAR ONG		
ALC: NO. OF CO.					
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Figure 20. Display Transaction Data View

Figure 20 is a display of the transaction data report where it can filter data by date, month, and year. In addition, there is also a nominal total turnover, net turnover, and the total number of items from the transactions made. The net turnover results obtained have been calculated by the fees charged.



Figure 21. Display Print Transaction Data

Figure 21 is the result of the report that is ready to print.

	WANZ BIKERSPOT									
Data Iteas										
No	Jim Code	Calegory	bom Name	Sell Price	Capital Price	Stock.	Supplar	Not		
	PS000	Kilep-Promines - Detailing and Case	Mosta Shine	13000	52006		Kilep-Premium Official	-		
	Proceed	Kilep Progades - Detailing and Care	Mate Projection	83000	\$7000	10	Kilep Prominen Official			
	PS000)	Killy Pression Detailing and Care	Clear Visian	45000	33000	9	Killy Pressen Official	_		
4	P50004	Kikip Programs - Detailing and Care	Eugias Classe	65000	45000	10	Kahp Postana Official	-		
	PS0065	Kilop Pressnet - Detriking and Care	Lesses Waterless	65000	45000	8	Kilep Pressant Official			
5	110004	Scarp Programs - Detailing and Case	Black Again	90000	\$5000		Kilep Prension Official			
	PS0007	Walter Programs - Detroiting and Case	They Trian	82000	-40000	8	Kibr Pressen Official			
	PS0006	Scilep Promines - Detailing and Case	RyperWat	69000	48000	6	Kilop Prominen Official			
,	110000	Kilep Pression - Detailing and Case	Paint Means there	150000	35000	50	Kilep Premium Official			
10	P50010	Kille Presiden Detailing auf Care	Pailet Matte Protection	150000	198000	36	Kille Preman Official			
	P90011	Solar Pressent - Detailage and Cam	Wast Heimer Perferse	13 9000	25000		Pistana Neine			
	PS0012	Kilop President Detailing and Care	Denst Helm	155000	1,20000		Heinst 2an			
	P50013	SCale Pression - Detailing and Care	Microfiber Denid Polaser	1,5000	6200	50	Detail Poiner			
	PS0014	Killer Preasury - Detriking and Care	MicroGer Bennys	19000	18500	112	Price Prients			
	P50015	Siley Pression - Denillag and Cats	Kaabe	10000	5000		Supplier Kniche			
	P50016	Kilop Pressing - Detailing and Case	Phining Pad	9000	1200		Maxs7_st	-		
	P\$0017	(Kilop Processor - Detailing and Care	Fix It Pro	9900	solo		Posat larger	_		
	PS0011	Kike Portano - Detailing and Care	Server Dorgen Lates	(\$900)	9000	20	Lovely Paintee	_		
9	P50019	Kilop Program: Detailing and Capy	Siano Prenhersik	9500	3000		Awagan Kada			
50	PS0033	Baladaya - Manart - Beff - Malkar	Balaciova Magnate	35000	22500		MB5 Tactical Store	-		
	P50034	Belolava - Maget - Baff - Meder	Bulaciavia Rall	339000	21000	112	Helmer Zaur			
	P50033	Baladaya - Manet - Beff - Makie	Bulacitys Apiantar	22000	15000		Engineer			
	150034	Balastava - Masset - Bell - Malazy	[Maget Magazo	45000	34000		MBS Tartand More	-		
24	P50017	Raholaya - Manart - Raff - Mailae	Manot Rall	45000	31000	12	Biekust Zono			
	PS0031	Balaclava - Manet - Bell - Madar	Mauset Algonestar-	49900	28000		(impress)	-		
36	Pages	Baladava - Manet - Baff - Medar	Buff Magane	2,000	19000		MIKS Toward Store			
	PSON	Relation - Manuel - Batt - Marker	Marker Sain American Titul	11900	153200	Ten	Toraty Diskan	-1-		

Figure 22. Display Item Data Report View

Figure 22 is an item data report that can be used by administrators for stock taking activities.

CONCLUSION

Based on the results of the implementation and testing of the research that has been carried out, the conclusions are drawn:

- 01. This application has been successfully built by the planning and design that has been done. In this application, the admin user and employee user access rights can be distinguished.
- 02. Data reports of incoming and outgoing goods can be made easily, quickly, and accurately so that they can be presented on time.
- 03. With this application, it can reduce errors in making data and reports that are often complained of while still recording through books.

REFERENCES

- Pratiwi, S., D. Setiyadi, and F.N. Khasanah, 2017. Inventory Information System Using the FIFO Method at PT Albahar Cipta Sentosa Bekasi. Student Journal of Bina Insani, 4 (1), 49-62.
- 02. F. Naufal and Asri S.D., 2019. Webbased application for data collection of entry and exit of merchandise at Umkm. Case Study: Cv. Tiara Cell (Counter Gadgets and Accessories).

Journal of Engineering and Computer Science. 3 (2).

- 03. Hengki and S. Susan, 2017. Analysis and Design of Web-Based Ship Parts Inventory Information System: A Case Study of Asia Group Pangkalpinang. SISFOKOM Journal, 6 (2).
- 04. Rebecca, 2016. Definition of E-Commerce (Electronic Commerce). Business Tips. Downloaded on 29 May 2020 from https://www.akseleran.co.id/blog/om zet-adalah/.
- 06. Tan, Dawud, 2017. Knowing what is the CodeIgniter Framework. Knowledge Base. Downloaded on 30 May 2020 from https://idcloudhost.com/punjuk/meng enal-apa-itu-framework-codeigniter/.
- 07. K, Yasin, 2019. Understanding PHP and its Functions. Commerce Hoster Blog. Downloaded on 30 May 2020 from

https://www.niagahoster.co.id/blog/p engentuk-php/.

08. D.A. Anjarwati and Asri S.D., 2019. Damage Reporting Information System for Public Facilities in WebProgress Tech. Downloaded on 13 Dec 2020 from https://www.progresstech.co.id/blog/ pengentuk-e-commerce/.

05. Ramadhani, Niko, 2020. What is Turnover? The difference between turnover and profit in business.

Based Terminals. CESS (Journal of Computer Engineering Systems and Science). 4 (2).

- 09. S.B. Nauli, 2019. Analysis of the Design of Raw Material Inventory Systems in Pharmaceutical Companies. Fifo Scientific Journal. 11 (2).
- A. Reni and S. Arahman, 2019. The Design of Web-Based Stock Information System Application at The Don's House Store. Journal of Cendikia. 17.
- Raden, B.Y., M. Kholil, and B. Hanum. 2018. Implementation of Inventory Management System (IMS) Case Study on XYZ Online Store Business Unit. ICEAMM. 343.

MERCU BUANA

KERTAS KERJA

Ringkasan

Usaha *online* semakin berkembang dan maju dengan pesat. Berbagai macam jenis usaha berbasis toko *online* juga sangat banyak mulai dari menjual barang ataupun jasa. Saat ini usaha online didominasi oleh usaha perorangan dibanding perusahaan. *Marketplace* adalah wadah atau tempat dimana seluruh pelaku usaha *online* dan pembeli saling bertemu untuk melakukan transaksi secara *online*. Maka dari itu aplikasi pengelolaan persediaan barang ini hadir untuk membantu pelaku usaha *online* dari segi pengelolaan persediaan barang dan pencatatan serta laporan yang diharapkan dapat meringankan beban kerja serta efisiensi waktu agar kinerja dapat meningkat. Aplikasi ini dibangun menggunakan Bahasa pemrograman PHP dan menggunakan *framework* CI, serta menggunakan MySQL untuk penyimpanan *database* nya.

