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MICROSOFT ACCESS-BASED ACCOUNTING SYSTEM DESIGNATED FOR SMALL AND MEDIUM ENTERPRISE DEPOT AIR GALON YOYO

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Abstract

The accounting conventional method is still applied by Depot Air Galon Yoyo. The Microsoft Access-based Accounting System designated for Small and Medium Enterprise (SME) is a form of community service to help overcome the problems experienced by SMEs in recording or keeping accounting records from the conventional system to software-based accounting. The conventional bookkeeping system can cause inefficiency in time for preparing the financial statements, and do not meet the faithful representation's criteria. Data for the purpose of designing Microsoft Access-based accounting system were obtained through interview with SME's owner, and field observation. The outputs generated from the accounting application are bookkeeping administration, and reports. The output of bookkeeping administration includes a list of accounts, a list of suppliers, a list of customers, a list of supplies, a general journal form, a purchase form, a sales form, an inventory adjustment form, and a payable payment form. Output reports include income statements, balance sheets, sales reports, purchase reports, remaining inventory reports, remaining accounts payable reports, statements of changes in capital, and financial position. Relational database can be formed with the output of bookkeeping administration and report output that are interconnected. Thus, the implementation of accounting system helps SME in mitigating errors in recording the amount of inventory, reducing the occurrence of errors in payment of debts by SME to suppliers, and save more time in completing SME's financial reports so that SME owners can quickly make the right decisions for their business to grow.

Keywords: *accounting software, Microsoft access, bookkeeping administration, financial reports, Depot Air Galon Yoyo*

Introduction

Indonesia has the largest economic activity in Southeast Asia, and it continues to develop (Rifa'i et al., 2021). However, despite those achievements which Indonesia has achieved, based on data from Badan Pusat Statistik in March 2021 the percentage of poor people in Indonesia rose to 10.14% or equivalent to 27.54 million people, an increase of 0.36% or equivalent to 1.12 million people

compared to March 2020, despite a decrease of 0.05% or equivalent to 0.01 million people when compared to September 2020¹. Efforts have been made to overcome the problem of poverty in Indonesia in the form of community empowerment, namely by increasing Micro, Small, and Medium Enterprises (MSMEs) (Permana, 2017). MSMEs have a significant role in supporting Indonesia's economy. Based on Law Number 20 of 2008 concerning MSMEs, it is emphasized that MSMEs are business activities that can expand employment opportunities, and can play a role in leveling and increasing people's income and the state economy so that national stability is realized. Based on data collected from sirclo.com, as of November 2021, the number of Micro, Small, and Medium Enterprises (MSMEs) reached 62.9 million or equivalent to 99.9% of all businesses operating in Indonesia². Based on Law Number 20 of 2008 concerning MSMEs, it is emphasized that MSMEs are business activities that can expand employment opportunities, and can play a role in leveling and increasing people's and country's income so that national stability is realized. But in reality, some entrepreneurs experience the same problems in running their businesses at the MSME level. The problems faced by MSMEs include capital, bookkeeping, marketing, products, and other things that have the potential to hinder business activities (Ardiansyah, 2019; Muljanto, 2020). The impact of bookkeeping that is carried out by ignoring the applicable accounting methods may not be obvious as a result, but not applying accounting methods to a business, can result in business owners not being able to fully understand the condition of their business. On the other hand, with records that follow the accounting method, business owners can obtain information that can give them ideas in making the right decisions, and be able to identify or predict problems that are or will be experienced by their business so that the business can be managed effectively. This shows that accounting has a role as a key indicator of the performance of a business (Sari & Indriani, 2017). In 2 years, Depot Air Galon Yoyo recorded daily transactions using manual records which were not based on correct accounting methods. The manual recording of transaction data, besides taking a lot of time in recording, also has the possibility of errors. This makes recording ineffective and can lead to business owners not getting real information about the business they are running in. Based on the background of the problem, the scope of this community service project is to design a Microsoft Access-based accounting system that is easy to understand and easy to use by MSMEs in presenting financial reports by applicable accounting standards.

Methods

Data collection is the process carried out by researchers in collecting the data needed in their research so that research can be achieved (Hasanah, 2016). The data collected in this study used the types of field research and case studies. Field research is a type of research in which researchers prepare their research

¹ Badan Pusat Statistik, Persentase Penduduk Miskin Maret 2021 Turun Menjadi 10,14 Persen, bps.go.id, 10 November 2021, pukul 21.32 WIB.

² Sirclo, Melihat Peran UMKM di Indonesia, Bagaimana Perkembangannya?, sirclo.com, 10 November 2021, pukul 21.50 WIB.

designs and test tools, determine research locations, respondents, and informants, researchers conduct observations, documentation, and interviews (Darmalaksana, 2020). In addition to field research, this research also uses the type of case study research where researchers are required to explore and explore in detail the problems faced by research subjects (Ananda & Kristiana, 2017). The data in this study are data obtained directly from the subjects studied by conducting observations and interviews with informants, so quoted from research conducted by Darna dan Erlina (2018), the data in this study are primary. Data collection techniques used by the author are as follows:

1. Observation

The technique of collecting data by systematically recording events without any communication with informants is an observation technique (Kristinugraini et al., 2014; Rahmawan et al., 2019). Observations made by the author are to observe the process of recording the daily financial transactions of SMEs.

2. Interview

Interviews are data collection techniques by asking questions to informants according to research needs (Linawati et al., 2017). Interviews were conducted either by meeting directly with informants at the research site or by making phone calls and sending messages via social media. Interviews were conducted to find out the background of MSMEs, MSME activities, and problems faced by MSMEs.

Community service activities are carried out at Depot Air Galon Yoyo which is located at Sumber Agung Housing Block F No. 15, Jodoh, Batu Ampar, Batam City. The activity was carried out from September 6 to December 31, 2021. At the beginning of the implementation period, namely in September, researchers conducted a surveyed the location and asked for approval from the business owner. During this period, the proposal was also prepared before starting the system design. From November to December, the system was compiled and designed for Depot Air Galon Yoyo. Before designing the system, the researcher conducted interviews with business owners to find out the flow of the accounting recording system and the problems encountered in the system running at Depot Air Galon Yoyo. In this process, researchers collect and analyze data that is used as a guide in designing the system. After that, the researcher will design and create a Microsoft Access-based accounting record system based on the data collected. Implementation of the system is carried out after the system has been designed properly.

Result and Discussion

From the system design process to the completion of the community service report, this community service activity has gone through three stages, namely the preparation stage, the implementation stage, and the assessment and reporting stage. The preparation stage is the stage where the researcher makes observations and analyses the problems faced by MSMEs to submit proposals for the implementation of community service activities. The second stage is the implementation stage where researchers collect as much information as possible

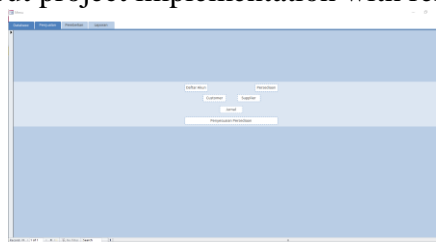
about MSMEs. The last stage is the assessment and reporting stage. At this last stage, the researcher obtained an assessment from MSMEs regarding the results of the system implementation, and the researcher completed an accountability report for all community service activities.

The output of the system consists of:

1. Main Menu

The main menu is the first screen that appears when the user opens the system. The main menu functions to make it easier for users to access the features contained in the system, such as bookkeeping administration and financial reports. The main menu consists of the Database menu, Sales menu, Purchase menu, and Report menu.

Reporting the result about project implementation with relevant data.



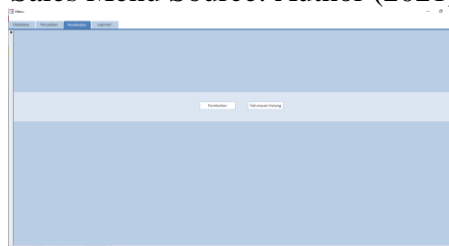
Picture 1.

Database Menu Source: Author (2021)



Picture 2.

Sales Menu Source: Author (2021)



Picture 3.

Purchase Menu Source: Author (2021)



Picture 4.

Report Menu Source: Author (2021)

2. Chart of Account (COA)

Chart of Accounts can be accessed on the database menu. The list of accounts contains accounts used in general journals and financial statements. In the Chart of Accounts, can be seen the account group number, account group name, account number, and account name. Changes to the Chart of Accounts can be made on the Chart of Accounts form by accessing the "Edit Chart of Accounts" option which can be used to add new accounts, delete existing accounts, and change existing accounts.

No. Kelompok Akun	Nama Kelompok Akun	Nomor Akun	Nama Akun
100	Aset	100	Aset
100	Aset	101	Aset Lancar
100	Aset	102	Aset Tidak Lancar
100	Aset	103	Aset Tetap
100	Aset	104	Aset Tidak Tetap
100	Aset	105	Aset Lainnya
200	Liabilitas	200	Liabilitas
200	Liabilitas	201	Liabilitas Lancar
200	Liabilitas	202	Liabilitas Tidak Lancar
200	Liabilitas	203	Liabilitas Tetap
200	Liabilitas	204	Liabilitas Tidak Tetap
200	Liabilitas	205	Liabilitas Lainnya
300	Ekuitas	300	Ekuitas
300	Ekuitas	301	Ekuitas Lancar
300	Ekuitas	302	Ekuitas Tidak Lancar
300	Ekuitas	303	Ekuitas Tetap
300	Ekuitas	304	Ekuitas Tidak Tetap
300	Ekuitas	305	Ekuitas Lainnya

Picture 5.

Chart of Accounts Source: Author (2021)

DAFTAR AKUN

No. Kelompok Akun:

Nama Kelompok Akun:

Nomor Akun:

Nama Akun:

Buttons: Save and New, Save and Close, Delete Record

Picture 6.

Edit Chart of Accounts Source: Author (2021)

3. Customer List

The list of customers can be accessed on the database menu. The customer list contains customer information for Depot Air Gallon Yoyo, starting from the customer code, customer name, and customer address. This customer list is linked to the sales form. Changes to the customer list can be made through the customer list form by accessing the "Edit Customer List" button. In the customer list form, users can add new customer info, delete existing customer info, and make changes to existing customer info.

Kode	Nama	Alamat
0001	Yoyo	Yoyo

Picture 7.

Customer List Source: Author (2021)

Picture 8.

Customer List Form Source: Author (2021)

4. Supplier List

The list of suppliers can be accessed on the database menu. The customer list contains information on the supplier of Depot Air Gallon Yoyo, starting from the supplier code, supplier name, and supplier address. This customer list is linked to the purchase form. Changes to the supplier list can be made via the supplier list form by accessing the “Edit Supplier List” button. On the supplier list form, users can add new supplier info, delete existing supplier info, and make changes to existing supplier info.

Picture 9.

Supplier List Source: Author (2021)

Picture 10.

Supplier List Form Source: Author (2021)

5. Inventory List

The inventory list can be accessed on the database menu. The inventory list contains inventory info at Depot Air Gallon Yoyo that will be sold to customers, starting from the inventory number, inventory name, purchase price of inventory, and unit amount of inventory. This inventory list is linked to the inventory list form. Changes to the inventory list can be made through the inventory list form by accessing the "Edit Inventory List" button. In the inventory list form, users can add new inventory info, delete inventory info that is no longer sold by the user, and make changes to existing inventory info.



Picture 11.
Inventory List Source: Author (2021)



Picture 12.
Inventory List Form Source: Author (2021)

6. General Journal Form

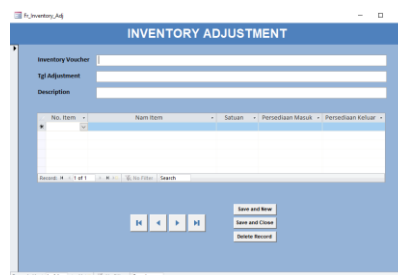
The general journal form can be accessed on the database menu. The general journal form serves to record cash receipts and disbursements transactions on the sales form, and the purchase form.



Picture 13.
General Journal Form Source: Author (2021)

7. Inventory Adjustment Form

The inventory adjustment form can be accessed on the database menu. This form serves to record the damaged, lost, and record the loss of the damaged and lost inventory.



Picture 14.
Inventory Adjustment Form Source: Author (2021)

8. Sales Form

The sales form can be accessed on the sales menu. The sales form serves to record user sales transactions.



Picture 15.
Sales Form Source: Author (2021)

9. Purchase Form

The purchase form can be accessed on the purchase menu. The purchase form serves to record user purchase transactions.



Picture 16.
Purchase Form Source: Author (2021)

10. Debt Payment Form

The debt payment form can be accessed on the purchase menu. The debt payment form serves to record the transaction of paying off the user's debt to the supplier.



Picture 17.
Debt Payment Form Source: Author (2021)

11. Purchase Report

Purchase reports can be accessed on the report menu. The purchase report contains information on the total purchases made by the user in a certain period, either in cash or on credit.



Picture 18.
Purchase Report Source: Author (2021)

12. Sales Report

Sales reports can be accessed on the report menu. The sales report contains information on the total sales made by the user in a certain period.



Picture 19.

Sales Report Source: Author (2021)

13. Outstanding Debt Report

The outstanding debt report can be accessed on the report menu. The outstanding accounts payable report contains information about the total purchases on credit or the user's outstanding debt.



Picture 20.

Outstanding Debt Report Source: Author (2021)

14. Inventory Report

Inventory report can be accessed on the report menu. The remaining inventory report contains information about the amount of inventory purchased, inventory sold, inventory lost or damaged, resulting in the remaining inventory at the end of the period.



Picture 21.

Inventory Report Source: Author (2021)

15. Trial Balance

The trial balance report can be accessed on the report menu. The trial balance report lists the balances of each account. The trial balance report functions in seeing the similarity of the final balance between debits and credits of each account obtained from the general ledger. The nominal stated on the trial balance will be used in compiling the user's financial statements.

Rekening	Saldo Awal	Saldo Akhir	Debit	Kredit
1000 Kas				
1100 Piutang Usaha				
1200 Persediaan Barang Dagang				
1300 Persediaan Barang Dagang				
1400 Persediaan Barang Dagang				
1500 Persediaan Barang Dagang				
1600 Persediaan Barang Dagang				
1700 Persediaan Barang Dagang				
1800 Persediaan Barang Dagang				
1900 Persediaan Barang Dagang				
2000 Persediaan Barang Dagang				
2100 Persediaan Barang Dagang				
2200 Persediaan Barang Dagang				
2300 Persediaan Barang Dagang				
2400 Persediaan Barang Dagang				
2500 Persediaan Barang Dagang				
2600 Persediaan Barang Dagang				
2700 Persediaan Barang Dagang				
2800 Persediaan Barang Dagang				
2900 Persediaan Barang Dagang				
3000 Persediaan Barang Dagang				
3100 Persediaan Barang Dagang				
3200 Persediaan Barang Dagang				
3300 Persediaan Barang Dagang				
3400 Persediaan Barang Dagang				
3500 Persediaan Barang Dagang				
3600 Persediaan Barang Dagang				
3700 Persediaan Barang Dagang				
3800 Persediaan Barang Dagang				
3900 Persediaan Barang Dagang				
4000 Persediaan Barang Dagang				
4100 Persediaan Barang Dagang				
4200 Persediaan Barang Dagang				
4300 Persediaan Barang Dagang				
4400 Persediaan Barang Dagang				
4500 Persediaan Barang Dagang				
4600 Persediaan Barang Dagang				
4700 Persediaan Barang Dagang				
4800 Persediaan Barang Dagang				
4900 Persediaan Barang Dagang				
5000 Persediaan Barang Dagang				
TOTAL				

Picture 22.

Trial Balance Source: Author (2021)

16. Income Statement

The Income Statement can be accessed on the report menu. The income statement contains the income earned by user, and the expenses made by the user during a certain period.

Rekening	Saldo Awal	Saldo Akhir	Debit	Kredit
4000 Laba Rugi				
4100 Laba Rugi				
4200 Laba Rugi				
4300 Laba Rugi				
4400 Laba Rugi				
4500 Laba Rugi				
4600 Laba Rugi				
4700 Laba Rugi				
4800 Laba Rugi				
4900 Laba Rugi				
5000 Laba Rugi				
TOTAL				

Picture 23.

Income Statement Source: Author (2021)

17. Statement of Financial Position

The statement of financial position can be accessed on the report menu. The statement of financial position serves to show the state of assets, liabilities, and user equity at the end of the period

Rekening	Saldo Awal	Saldo Akhir	Debit	Kredit
1000 Kas				
1100 Piutang Usaha				
1200 Persediaan Barang Dagang				
1300 Persediaan Barang Dagang				
1400 Persediaan Barang Dagang				
1500 Persediaan Barang Dagang				
1600 Persediaan Barang Dagang				
1700 Persediaan Barang Dagang				
1800 Persediaan Barang Dagang				
1900 Persediaan Barang Dagang				
2000 Persediaan Barang Dagang				
2100 Persediaan Barang Dagang				
2200 Persediaan Barang Dagang				
2300 Persediaan Barang Dagang				
2400 Persediaan Barang Dagang				
2500 Persediaan Barang Dagang				
2600 Persediaan Barang Dagang				
2700 Persediaan Barang Dagang				
2800 Persediaan Barang Dagang				
2900 Persediaan Barang Dagang				
3000 Persediaan Barang Dagang				
3100 Persediaan Barang Dagang				
3200 Persediaan Barang Dagang				
3300 Persediaan Barang Dagang				
3400 Persediaan Barang Dagang				
3500 Persediaan Barang Dagang				
3600 Persediaan Barang Dagang				
3700 Persediaan Barang Dagang				
3800 Persediaan Barang Dagang				
3900 Persediaan Barang Dagang				
4000 Persediaan Barang Dagang				
4100 Persediaan Barang Dagang				
4200 Persediaan Barang Dagang				
4300 Persediaan Barang Dagang				
4400 Persediaan Barang Dagang				
4500 Persediaan Barang Dagang				
4600 Persediaan Barang Dagang				
4700 Persediaan Barang Dagang				
4800 Persediaan Barang Dagang				
4900 Persediaan Barang Dagang				
5000 Persediaan Barang Dagang				
TOTAL				

Picture 24.

Statement of Financial Position Resource: Author (2021)

18. Statement of Owner Equity

The Statement of Owner Equity can be accessed on the report menu. The Statement of Owner Equity provides information to users about the increase or decrease in the user's wealth over a certain period.

Rekening	Saldo Awal	Saldo Akhir	Debit	Kredit
3000 Modal				
3100 Modal				
3200 Modal				
3300 Modal				
3400 Modal				
3500 Modal				
3600 Modal				
3700 Modal				
3800 Modal				
3900 Modal				
4000 Modal				
4100 Modal				
4200 Modal				
4300 Modal				
4400 Modal				
4500 Modal				
4600 Modal				
4700 Modal				
4800 Modal				
4900 Modal				
5000 Modal				
TOTAL				

Picture 25.

Statement of Owner Equity Source: Author (2021)

Conditions after the implementation of the system at Depot Air Galon Yoyo, namely the recording of transactions become more neat and organized, business owners can find out the company's income and expenses, business owners can monitor the amount of inventory and debt owned by their business, and MSMEs can complete financial reports in a short time so that the right decisions can be made in a short time as well.

Conclusions

Outputs in the form of bookkeeping administration and financial reports generated by the system can help MSMEs in optimizing their financial management with a computer-based accounting recording system. The system designed can make the recording of transactions becomes more neat and organized, business owners can find out the company's income and expenses, business owners can monitor the amount of inventory and debt owned by their business, and MSMEs can complete financial reports in a short time so that the right decisions can be made in a short time as well. For the convenience of using the system by business owners, the system is designed according to the needs of MSMEs, therefore there is a lack of function in the system designed. Weaknesses that need to be overcome are the absence of accounts receivable reports, and the absence of a login menu to increase security. Future researchers are expected to be able to design a more complete accounting record system by correcting the weaknesses of the system output designed for this community service activity.

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