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Designing Accounting Software Using Microsoft Access For Cv C&L Ocean Ship

Dea Tiara Monalisa Butar-Butar¹, Juwenni²

Affiliation

Email of correspondence: dea@uib.ac.id¹, 2042076.juwenni@uib.edu²

Abstract

Interviewing, documentation and observation become the tools that helping to find the deficient accounting recording system in CV C&L Ocean Ship is a result of manual transaction recording, causing inefficiencies and rendering financial reports irrelevant. This situation leads to potential inaccuracies and gaps in the completeness of reports crucial for decision-making. The objective of this community service initiative is to establish a Microsoft Access-based accounting system, encompassing forms, a bookkeeping system, and financial reporting. The methodology involves data collection through observations and partner interviews. The system includes three master lists there are main menu, transaction menu and report menu. The main menu has chart of account, inventory, supplier list, customer list, sales list, and employee list. Transaction menus have six forms to help owner record their daily transaction. The last one is the report menu contains nine types of financial reporting to assist the owner in knowing better about the company. These outputs are designed to assist Micro, Small, and Medium Enterprises (MSMEs), like CV C&L Ocean Ship, in gaining insights into inventory turnover and financial conditions beyond just cash flows. Consequently, MSMEs can enhance decision-making processes, boost sales, and better monitor their inventory.

Keywords: *Accounting System Computerized, Microsoft Access, Financial Reports.*

Introduction

Micro, Small, and Medium Enterprises (MSMEs) are an important pillar supporting the country's economic growth (Dea Tiara Monalisa Butar-Butar & Stefy, 2023). According to data from the Ministry of Cooperatives and Small and Medium Enterprises, the number of MSMEs in Indonesia has reached more than 64 million, reflecting around 97% of the national workforce. This is because the existence of MSMEs is quite dominant in the Indonesian economy (Sarfiyah et al., 2019).

This data also equal to the growing number of shipbuilding companies in Batam City presents a substantial opportunity for entrepreneurs, including CV C&L Ocean Ship, which operates in shipbuilding, repair, and wholesale trade. Besides of this growth, there is some problem that entrepreneurs face especially for small businesses. One of them is the limited knowledge of accounting, and don't take financial report too seriously. Some companies still do their bookkeeping manually (Ardiansyah, 2019). Entrepreneurs typically prioritize profit maximization and tend to neglect the significance of financial reports, as they perceive profit mainly through the cash receipts and disbursements of the business.

The absence of standardized accounting bookkeeping practices can hinder entrepreneurs from obtaining sufficient information about their business conditions. Conversely, implementing bookkeeping aligned with accounting standards ensures that the information generated provides a comprehensive understanding of their business conditions. Consequently, MSME owners can leverage this information to inform their every business decision. The remedy to this challenge is to adopt an accounting recording system that utilizes continuously evolving technology. This system, grounded in technology, is designed to efficiently process transaction data and generate more precise financial reports.

At present, CV C&L Ocean Ship still employs a semi-manual bookkeeping approach, utilizing Microsoft Excel for cash transaction recording. Unfortunately, the recording lacks details on transactions like sales, purchases, operational costs, and inventory, influencing the owner's decision-making process. Additionally, due to insufficient records, the business faces limited market opportunities, and the owner remains unaware of precise profit and loss figures. This lack of accurate information hampers the owner's ability to take appropriate actions for the business (Butar & Indrianto, 2024). In response to these challenges, community service activities aim to develop an accounting system using the Microsoft Access application to assist MSMEs in effectively documenting their business operations.

Methods

In conducting research, an unavoidable aspect is data collection. Data collection is mandatory with the aim of understanding the condition of a particular object. Therefore, several techniques are employed in carrying out this practical work, including:

1. Observation

One of the commonly used data collection techniques is observation, also known as "observers" (Hasanah, 2017). After conducting the observation

technique, it is expected to conclude the behavior and meaning of the observed conditions (Kawasati, 2019). In this research, the author observed the business to gather data and information, providing a general overview and insights into the business activities.

2. Interview

Interviewing is one of the data collection techniques involving interaction between the researcher and the informant by asking questions related to the research (Bastian et al., 2019). In this study, the author obtained information about issues faced by the informant related to the implementation of practical work. In this regard, the researcher acquired data and information such as the business and owner's profile, and also discussed issues related to the practical work.

3. Documentation

Documentation is a data collection technique involving the collection of important data such as records, transaction data, reports, etc. (Kawasati, 2019). In this research, the documentation technique was used to gather transactions and partner's notes, which were subsequently used in the process of developing a system that is more suitable for the partner.

Community service activities are carried out at the CV C&L Ocean Ship located at Ruko Tunas Regency Blok A4 No 3A Sagulung, Batu Aji, Batam City. Activities will be held from July 28, 2023, to November 30, 2023. In the early stage of implementation, from July to August, researchers surveyed the location and asked for approval from business owners to carry out community service activities. This period also identified and analyzed problems by conducting interviews with business owners. Furthermore, from August to October, data collection is carried out for the system to be designed and do the system design. Then, in November testing and implementation of the system that has been designed. The preparation of the work practice report is carried out from the first week of November to the 4th week of November.

Result and Discussion

From this project, we have made a simple accounting system for owners using Microsoft Access. While in this system contains three menus, such a main menu, transaction menu, and report menu. The details of those three menus will in below:

a. Main Menu

The main menu will automatically appear as the first display to show choices of the database. This menu contains some general things for company management easier to recap all company information.

Picture 1.
Main Menu



Source: Author (2023)

In this menu contain six lists, there are:

1. Chart of Account (COA)

In this list, we can easier to see what account we have and add another account.

Picture 2.
Chart of account



Source: Author (2023)

2. Inventory

Because this company is a general supplier trade company, they have their own inventory and they need to track their inventory all the time. Same as COA, in this inventory list also could add and see inventory at the same time.

Picture 3
List of Inventory



Source: Author (2023)

3. Sales List

This list is a things that this company sell to customers and the selling price. Aim to easier see what this they sell without see the inventory list because contain their buying cost.

Picture 4
Sales List



Source: Author (2023)

4. Supplier List

This list is to list all supplier name. Beside that also could delete or add new supplier name.

Picture 5
Supplier List



Source: Author (2023)

5. Customer List

Same as supplier list, in this customer list is to make easier see how many customers we have and could edit, delete and add new customer name.

Picture 6
Customer List

CV C&L OCEAN SHIP
Shipbuilding, Repair & Wholesale

Customer List

Customer Code:

Customer Name:

Customer Address:

Save Delete New

← → ↶ ↷

Source: Author (2023)

6. Employee List

The last one is employee list it help owner to see their employee details.

Picture 7
Employee List

CV C&L OCEAN SHIP
Shipbuilding, Repair & Wholesale

No Employee:

Name Employee:

Phone:

Address:

Save Delete New

← → ↶ ↷

Source: Author (2023)

b. Transaction Menu

The next is transaction master list, this master list is the core important part in accounting cycle. Because from these transactions, we will obtain outputs in the form of financial reports that will give owner to analysis about their business.

Picture 8
Transaction Menu



Source: Author (2023)

This master list contain seven types of form transaction.

1. Purchase payment form

This form is used to record when do payments to the supplier.

Picture 9

Purchase payment form



Source: Author (2023)

2. Purchase invoice form

This form is used to record purchase transaction, every time purchase need recorded in this form to ensure all purchase are recorded.

Picture 10

Purchase invoice form



Source: Author (2023)

3. Sales form

This form as their name sales, means this form is used to record sales transactions. This form helps to track all sales that happen and prevent from any fraud happening.

Picture 11
Sales form



Source: Author (2023)

4. Receive payment form

This form name it deposit in the system. This form is used to help record and track receive payments that have been collected.

Picture 12
Receive payment form



Source: Author (2023)

5. Ending inventory form

This form used to check and track end stock of inventory in the end of period.

Picture 13
Ending inventory form



Source: Author (2023)

6. General journal form

This general journal is used when recording financial and non-financial transactions, and used as an adjusting entry at the end of the year.

Picture 14
General journal form



Source: Author (2023)

c. Report Menu

And the last one is the report master list, in this master list contains trial balance, profit and loss, general ledger, balance sheet, worksheet, sales report, purchase report and the last one is inventory report because this company is a general supplier company that has its own inventory.

Picture 15
Report Menu



Source: Author (2023)

This report menu has nine types of report that help the owner to know better about their company in the past year.

1. Balance sheet

The financial position statement is a document comprising assets, liabilities, and equity, aiming to provide insights into the financial health of a business. This report serves as a valuable tool for decision-making, particularly when a business is seeking a loan or considering capital deposits. A business is considered financially sound when its liabilities are not surpassing its assets and equity.

Picture 16
Balance Sheet

CV C&L OCEAN SHIP STATEMENT OF FINANCIAL POSITION		
Asset		
110	Cash	\$127,806,000.00
111	Bank Mandiri	\$0,000,000.00
112	Inventory	\$1,068,636.00
113	Supplies	\$0.00
120	Equipment	\$0.00
121	Accumulated Depreciation - Equipment	\$0.00
210	Accounts Payable	(\$30,796,000.00)
211	Unearned Revenue	(\$10,000,000.00)
	Sub-Total	Rp93,119,636
Liabilities & Equity		
310	Capital	(\$80,000,000.00)
311	Dividing	\$0.00
312	Income Summary	(\$33,119,636.00)
	Sub-Total	-Rp93,119,636

Source: Author (2023)

2. Income statement

Income statement help to show summarizes sales and expenses. From this report, we can know profit or loss at selected period.

Picture 17
Income Statement

CV C&L OCEAN SHIP		STATEMENT OF PROFIT OR LOSS	
Revenue			
Sales			\$52,256,000.00
	Sub Total		\$52,256,000.00
COST			
Purchases			(\$41,886,946.00)
Ending Inventory			\$1,556,946.00
	Sub Total		\$40,886,946.00
Expenses			
Salaries Expense			(\$8,400,000.00)
	Sub Total		(\$8,400,000.00)
	Grand Total		\$2,969,053.99

Source: Author (2023)

3. Worksheet

Worksheet is a report that shows all account in one report with debit and credit in the selected period. This report is used to track the details of debit and credit.

Picture 18
Worksheet

CV C&L OCEAN SHIP		WORKSHEET	
Account	Debit	Credit	Balance
Dr. Cash			\$100,000.00
Dr. Accounts Receivable			\$200,000.00
Dr. Inventory			\$300,000.00
Dr. Prepaid Insurance			\$100,000.00
Dr. Equipment			\$500,000.00
Dr. Accumulated Depreciation			(\$100,000.00)
Dr. Accounts Payable			(\$200,000.00)
Dr. Unearned Revenue			(\$100,000.00)
Dr. Common Stock			\$1,000,000.00
Dr. Retained Earnings			\$1,000,000.00
Dr. Dividends			(\$50,000.00)
Dr. Sales			\$5,000,000.00
Dr. Sales Discounts			(\$100,000.00)
Dr. Sales Returns and Allowances			(\$200,000.00)
Dr. Cost of Goods Sold			(\$40,000,000.00)
Dr. Freight			(\$100,000.00)
Dr. Insurance Expense			(\$100,000.00)
Dr. Depreciation Expense			(\$100,000.00)
Dr. Salaries Expense			(\$8,400,000.00)
Dr. Interest Expense			(\$100,000.00)
Dr. Income Tax Expense			(\$100,000.00)
Dr. Interest Revenue			(\$100,000.00)
Dr. Dividend Revenue			(\$100,000.00)
Dr. Other Income			(\$100,000.00)
Dr. Other Expenses			(\$100,000.00)
Dr. Net Income			\$2,969,053.99

Source: Author (2023)

4. Sales report

Same as the name, this report only shows sales at selected period, to see the detail of sales. From this report, we could know which inventory, and which customers purchase the most.

Picture 19
Sales Report

Item No	Item Name	Item Qty	Item Price	Amount
CL001	Minyak Resin	60	\$70,000.00	Rp4,200,000
CL002	Kain Fiber	64	\$35,000.00	Rp2,240,000
CL003	Pigmen Pewarna	59	\$320,000.00	Rp18,880,000
CL004	Catalyzt	54	\$43,000.00	Rp2,322,000
CL005	Tepung Talk	56	\$35,000.00	Rp1,960,000
CL006	Aerocyl	74	\$290,000.00	Rp21,460,000
		367		Rp1,195,000

Source: Author (2023)

5. Purchase report

Purchase report show the detail and total purchase at the selected period.

Picture 20
Purchase Report

Item No	Item Name	Item Qty	Item Price	Total
CL001	Minyak Resin	60	\$56,000.00	\$3,360,000.00
CL002	Kain Fiber	64	\$66,000.00	\$4,224,000.00
CL003	Pigmen Pewarna	59	\$320,000.00	\$18,880,000.00
CL004	Catalyzt	54	\$43,000.00	\$2,322,000.00
CL005	Tepung Talk	56	\$35,000.00	\$1,960,000.00
CL006	Aerocyl	74	\$290,000.00	\$21,460,000.00
		367		Rp52,206,000

Source: Author (2023)

6. Inventory report

This report help to show ending inventory that still left.

Picture 21
Inventory report

CV C&L OCEAN SHIP							
ENDING INVENTORY REPORT							
Thursday, November 2, 2023							
Item No	Item Name	Zn	Total Price	Average Cost	Qty	Balance Qty Name	Inventory Value
C.001	Minyak Raste	62	\$2.370.000,00	Rp35.000	60	2 Kg	Rp70.000
C.002	Kain Fiber	88	\$1.770.000,00	Rp20.018	84	2 Kg	Rp55.936
C.003	Plymen Pasarna	62	\$14.680.000,00	Rp240.000	59	3 Kg	Rp720.000
C.004	Gendeyet	55	\$425.000,00	Rp7.500	54	1 Barel	Rp15.000
C.005	Tepung Tali	60	\$940.000,00	Rp16.000	56	4 Kg	Rp64.000
C.006	Aeroyal	78	\$35.980.000,00	Rp460.000	74	1 Kg	Rp146.000
							Rp1.559.000
							Rp1.068.636

Source: Author (2023)

7. General journal report

This report used to show all transaction recorded using general journal form.

Picture 22
General journal report

CV C&L OCEAN SHIP					
GENERAL JOURNAL REPORT					
Date	Account No	Account Name	Description	Debit	Credit
10/5/2023	110	Cash	Beginning Balance of 2023	Rp75.000,000	Rp0
10/5/2023	111	Bank Mandiri	Beginning Balance of 2023	Rp5.000,000	Rp0
10/5/2023	310	Capital	Beginning Balance of 2023	Rp0	Rp80.000,000
11/30/2023	610	Salaries Expenses	Gaji Bulan Niv	Rp8.600,000	
11/30/2023	130	Cash	Gaji Bulan Niv	Rp0	Rp8.600,000
11/30/2023	112	Inventory	ENDING INVENTORY 2023	Rp1.068.636	Rp0

Source: Author (2023)

8. Trial balance

Trial balance is a report to help see the balances between assets, liabilities and equity. And to ensure all the report is balance means correct, doesn't lack any wrong number.

Picture 23
Trial Balance

CV C&L OCEAN SHIP				
Adjusted Trial Balance, year of 2023				
Account No	Account Name	Debit	Credit	
110	Cash	\$17,808,000.00	\$0.00	
111	Bank Mandiri	\$9,000,000.00	\$0.00	
112	Inventory	\$1,068,636.00	\$0.00	
210	Accounts Payable	\$0.00	\$30,700,000.00	
311	Unearned Revenue	\$0.00	\$81,000,000.00	
310	Capital	\$0.00	\$81,000,000.00	
410	Debit	\$0.00	\$92,200,000.00	
511	Purchase	\$11,888,000.00	\$0.00	
513	Ending Inventory	\$0.00	\$1,068,636.00	
610	Salaries Expense	\$6,600,000.00	\$0.00	
TOTAL		\$47,896,636.00	\$47,896,636.00	

Source: Author (2023)

9. General ledger

General ledger is a report to show detail transactions for each account. This report help for tracking and see details of expense or anything.

Picture 24
General ledger

CV C&L OCEAN SHIP				
GENERAL LEDGER				
Transaction No	Transaction Date	Description	Debit	Credit
110 Cash				
000001	10/01/2023	Beginning Balance of 2023	\$79,000,000.00	\$0.00
11001	10/07/2023	Pengisian Bulan Oktober 01	\$132,000.00	\$0.00
11002	10/19/2023	Pengisian Bulan Oktober 02	\$440,000.00	\$0.00
11001	10/26/2023		\$10,000,000.00	\$0.00
11003	10/26/2023	Pengisian Bulan Oktober 03	\$972,000.00	\$0.00
11004	10/30/2023	Pengisian Bulan Oktober 04	\$320,000.00	\$0.00
110001	11/01/2023	Cash	\$0.00	\$70,000.00
11005	11/01/2023		\$1,281,000.00	\$0.00
110002	11/10/2023	Cash	\$0.00	\$730,000.00
11006	11/16/2023	Pengisian November 2023	\$1,411,000.00	\$0.00
11007	11/16/2023	Pengisian Bulan November 2023	\$1,125,000.00	\$0.00

Source: Author (2023)

Following the implementation of a robust accounting system at CV C&L Ocean Ship, the bookkeeping process has become more systematic and orderly. The generated output now aids in furnishing information about both income and expenses, facilitating the provision of financial reports to owners to adjust their business conditions.

Conclusions

CV C&L Ocean Ship from starting operation applies semi-manual bookkeeping using books, stationary, and some assistance from Microsoft Excel. However, this manual approach has been observed to lead to disorganized transaction records, resulting in inefficiencies during the financial report finalization process. The current system often falls short of presenting accurate and relevant financial statements within a reasonable timeframe. Nevertheless, the manual bookkeeping system remains essential for the business owner to gain real-time insights into the business's status.

In response to the identified challenges faced by CV C&L Ocean Ship, we have devised a computer-based accounting recording system using Microsoft Access. This system aims to systematically organize operational transactions, addressing the drawbacks associated with manual methods. The design of the accounting recording system is tailored to meet the specific needs of the business owner, ensuring that administrative tasks are executed promptly and yielding precise information for financial reporting. The data extracted from these reports can serve as a crucial foundation for informed decision-making by the business owner.

References

- Ardiansyah, T. (2019). Model Financial Dan Teknologi (Fintech) Membantu Permasalahan Modal Wirausaha UMKM Di Indonesia. *Majalah Ilmiah Bijak*, 16(2), 158–166. <https://doi.org/10.31334/bijak.v16i2.518>
- Bastian, I., Winardi, R. D., & Fatmawati, D. (2019). Metoda pengumpulan dan teknik analisis data. *Penerbit Andi*, 53–99.
- Butar, D. T. M. B., & Indrianto, D. (2024). Pembuatan Sistem Pencatatan Pembelian Akuntansi Dengan Menggunakan Aplikasi Microsoft Access Pada Toko Jaya Agung. *Journal Of Human And Education (JAHE)*, 4(1), 158–163. <https://doi.org/10.31004/jh.v4i1.570>
- Dea Tiara Monalisa Butar-Butar, & Stefy. (2023). Perancangan Sistem Microsoft Office Access pada Toko Batam Sumber Indah. *TEKIBA : Jurnal Teknologi Dan Pengabdian Masyarakat*, 3(2), 84–88. <https://doi.org/10.36526/tekiba.v3i2.3303>
- Hasanah, H. (2017). *TEKNIK-TEKNIK OBSERVASI (Sebuah Alternatif Metode Pengumpulan Data Kualitatif Ilmu-ilmu Sosial)*.
- Kawasati, R. (2019). *Teknik Pengumpulan Data Metode Kualitatif*.
- Sarfiah, S. N., Atmaja, H. E., & Verawati, D. M. (2019). UMKM Sebagai Pilar Membangun Ekonomi Bangsa. *Jurnal REP (Riset Ekonomi Pembangunan)*, 4(2), 1–189. <https://doi.org/10.31002/rep.v4i2.1952>