

MOVERS TRANSPORT SYSTEM



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DECLARATION

I declare that I am the sole creator of this wonderful project under the supervision of my teacher Mr. Humphrey Otiende and the blessings of the Almighty God.

I ascertain that this is my work and it is original.

DEDICATION

I hereby dedicate this project work to

ACKNOWLEDGEMENT

I acknowledge the following people who made it possible for me to develop this project work:

- (i) My parent for providing me with financial aid
- (ii) The school administration for providing me with the equipment i.e., computers to use in my project work
- (iii) My teacher Mr. Humphrey Otiende For equipping me with the necessary educational skills I needed in order to undertake this project work

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Abbreviations

- ❖ LS-Large scale
- ❖ SS-Small scale
- ❖ Ksh-Kenyan shilling
- ❖ GHZ-Gigahertz
- ❖ CD-compact disk
- ❖ GB-gigabytes
- ❖ DVD-digital versatile disk

INTRODUCTION

Movers is a company that deals with the transportation of various agricultural goods for farmers between farms and retail outlets. The company was started on July 2004 by two businessmen, Mr. Fedart Opollo and Mrs. Linde Wanjala, to help farmers to transport their produce and since then it has grown into a reputable establishment. The company's headquarters are found in Kitale Town in Transnzoia County. The company works with various large scale and small-scale farmers. The small-scale farmers have organized themselves into small groups called 'chamas'. The company works with a network of drivers and loaders who are responsible for the transportation. Due to the increasing competition from the upcoming companies and some internal problems that arose due to entropy of the old system, the management of the Movers company has decided to develop a computerize system which they hope will not only improve the operation within the company but will also enable the company to grow. The management hopes that the new system will reduce some of the costs of running activities in the company and increase the company's profits.

CHAPTER 1: ANALYSIS

Problem definition.

The existing manual system in the Movers company has many shortcomings which are bringing about undue costs to the company and lowering its profits. The growth of the company in the recent years has led to inefficiency in the running of activities in the company. There have been cases of delayed products delivery, some of the produce gets destroyed before reaching its destination among other problems.

The task at hand is to develop a computerized database system for the company that will be able to improve its internal efficiency and hopefully the company's profits.

THE EXISTING SYSTEM.

Overview of the existing system.

Many processes in the Movers Company are done manually by the employees. All of these tasks carried out are recorded on the record books and stored in the file room of the company. The company works with large scale farmers who are registered individually and small-scale farmers who have registered themselves as Chamas. The company owns several vehicles including pick-ups, Trailers, Lorries and Refrigerated trucks with which it uses to transport the various farmers' goods.

In the current system, farmers come to the headquarters to register themselves. Their records are taken by the appropriate employees of the company. In order to make orders for the transport vehicles, farmers who are far write postal letters while those near have to come to the center to make the order. The payments are done on spot. The drivers and loaders are called out at random to drive vehicles and there is no specific routine for servicing and managing the vehicles. The drivers and loaders are paid in a day's work. All the transactions are done manually.

The process of writing, accessing and updating records is done by employees and the reports are also compiled by the employees. This process is cumbersome and gives inconsistent results. At the end of each year, the company gives a 20% of the total revenue as tax to the government. The company's profits are also done then.

The structure of the system.

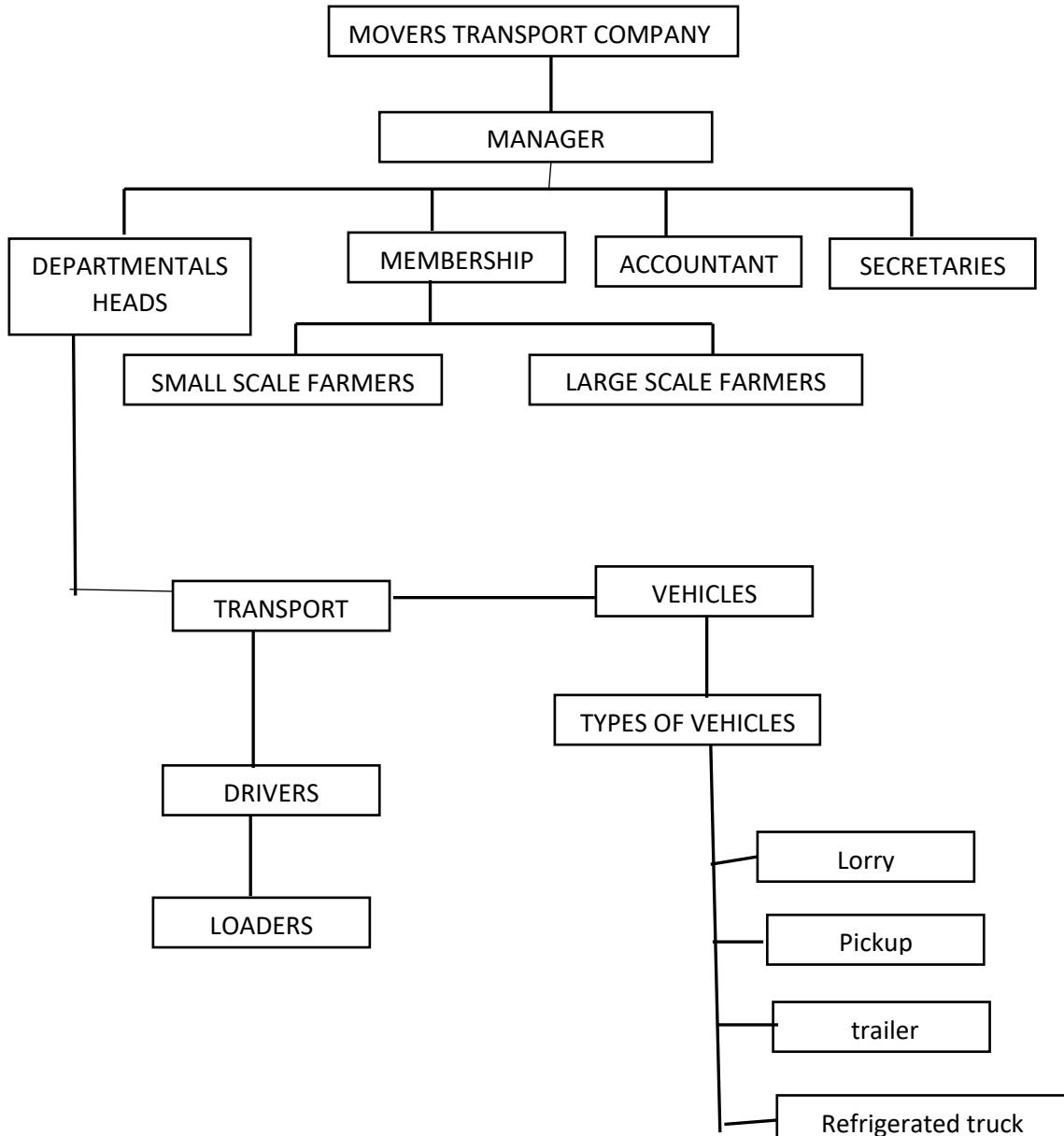


Figure 1: System structure

Advantages of the system.

- The company has created many jobs to the locals and even the unskilled personnel are able to work efficiently because there are no complex processes in the company.
- There is a good rapport between employees in the company because they actively interact.
- The company's processes are cost effective to run because it does not require skilled personnel and the work can be done with little supervision.

Disadvantages of the system.

- There is excess labor in the company and some of it is not well utilized leading to job duplication in the company.
- The records kept in the company i.e.: Farmers, Drivers, Loaders, vehicles and products records are redundant leading to difficulty in compiling expenses reports at the end of each month and year.
- Some records are lost because the filing system is not convenient.
- Some workers have delayed payment and some orders are unattended to leading to dissatisfaction from both parties.
- The management cannot handle their expansive business appropriately because the various activities in the company are hard to track accordingly.
- It is difficult to deal with errand drivers because records of their offenses are not well kept and some drivers pay their way out of the offense.
- The customer care service is not efficient because the farmers complain do not reach the headquarters on time. Most of the complaints are not well followed up.

Due to the disadvantages of this manual system, the management has found it necessary to develop a computerized system to replace it.

THE PROPOSED SYSTEM.

The new computerized system is going to be developed in order to address the shortcomings of the manual system. The new system is anticipated to improve the company's services and hence the company's profits.

The objectives of the new system are as follows:

- I. To improve service delivery to farmers
- II. To improve internal decision making in the organization by making the record keeping process fast and accurate.
- III. To improve employee and vehicle management.
- IV. To ensure proper record keeping in all departments.
- V. To improve summary making process in the company
- VI. To ensure that there are quicker and more reliable transaction processes.

Scope of the system.

The expected system is expected to cover the following areas:

Maintaining records of members, vehicles, loaders, drivers, goods transported, orders, offenses and expenses for each vehicle. The system is also expected to generate various reports, Calculate the company's revenue and overall profits.

Although the computerized system is expected to cover the areas stated above, it is not expected to monitor the employees' work.

Benefits of the new system.

The proposed system will have the following benefits

- All the records in the company will be kept electronically hence it will be accurate, easy and saves space.
- The new system will support real-time processing hence orders will be well handled and booking of vehicles will be possible.
- Employees will be assigned specific tasks hence there will be no job duplication thus the company will reduce its running costs.
- Orders and payments will be done online thus ensuring safe exchange of money and transactions.
- The data can be easily backed up in the cloud. The data security is well ensured because files can be locked using access level passwords to prevent unauthorized access.
- There will be increased profits in the company because of the efficiency of the new system.

Shortcomings of the new system.

Some of the problems that the new system may face include:

- The initial cost of setting up and running the new system is very high and will reduce the company's profits.
- Some workers will be retrenched since computers will take over their jobs.
- The company will incur extra costs because of the need to employ skilled personnel.

FEASIBILITY OF THE PROPOSED SYSTEM.

This is the analysis that takes into consideration all the factors involved in developing the new system and establishing whether or not undertaking the project is beneficial to the company.

Schedule Feasibility.

The distribution of the system construction process in the 7 months that I have been allocated is as shown in the table below:

TASK	MONTH	WEEK	ACTIVITY
MILESTONE 1			
INITIAL STUDY	July	2-4	<ul style="list-style-type: none"> ❖ Title page set up ❖ Making preliminary pages ❖ Introduction
ANALYSIS	August	1-4	<ul style="list-style-type: none"> ❖ Problem definition ❖ The existing system analysis ❖ Analysis of the proposed system.
SYSTEM DESIGN	September	1-4	<ul style="list-style-type: none"> ❖ System Flowchart design. ❖ Making fields ana data types. ❖ Input design. ❖ Output design.
MILESTONE 2			
SYSTEM CONSTRUCTION	October	2-4	<ul style="list-style-type: none"> ❖ Creating tables and their relationships. ❖ Making input screens. ❖ Data Manipulation ❖ Output screens.
DEMONSTRATION AND DEVELOPING USER MANUAL	November	1-4	<ul style="list-style-type: none"> ❖ Testing the system. ❖ Navigation and data maintenance ❖ Input validation.

			<ul style="list-style-type: none"> ❖ Making reports.
MISCELLANEOUS AND DOCUMENTATION	December	1-3	<ul style="list-style-type: none"> ❖ Conclusion. ❖ Writing a full detailed documentation.

Table 1: Schedule feasibility table

Legal Feasibility.

Developing the system will be under the Nation's and county's laws. All the necessary permits are easy to acquire. The system does not violate any stated laws hence it is worth pursuing.

Operational Feasibility.

All the employees of the company were shown the new system and most of them were happy with it. They gave the new system a high rating of 9/10 points.

The farmers who were informed of this new system found it satisfactorily good because it solved most of the problems that they faced owing to the previous manual system.

The management has also agreed to go forward with the new system because they know that with it the company will run much smoother and the profits will increase significantly.

Technical feasibility.

The Equipment needed for developing the new system is readily available in the market. A good system analyst and programmer is also there, me. The company will get 4 more programmers to assist me in developing the new system. The staff group has enough skills to learn how to use the new system.

Economic Feasibility.

This has been done to establish the cost and benefits of running the new system in comparison with the existing manual system. The study finds out whether or not the implementation of the new system is sustainable in the long run. The table below shows the economic feasibility of the two systems:

YEAR 1		
AREA	MANUAL SYSTEM	COMPUTERISED SYSTEM
(i) Staff/Labor	432000	400000
(ii) Stationery	80000	50000

(iii) Electronic accessories	110000	280000
(iv) Electricity cost	65000	130000
(v) Other management costs	33000	85000
TOTAL COST	720000	945000
YEAR 2		
AREA	MANUAL SYSTEM	COMPUTERISED SYSTEM
(i) Staff/Labor	420000	330000
(ii) Stationery	65000	45000
(iii) Electronic accessories	90000	80000
(iv) Electricity cost	60000	140000
(v) Other management costs	25000	43000
TOTAL COST	660000	638000
YEAR 3		
AREA	MANUAL SYSTEM	COMPUTERISED SYSTEM
a) Staff/Labor	429000	200000
b) Stationery	70000	38000
c) Electronic accessories	80000	65000
d) Electricity cost	70000	120000
e) Other management costs	29000	22000
TOTAL COST	678000	445000

Table 2: economic feasibility table

Total cost in Three years; -

- Manual system-expensive
- Computerized system-cheaper

The computerized system will be more profitable in the long run.

System Justification.

Developing the new system is possible because all the items needed are available. Pursuing the new system will be costly at first but as it has been seen it will be beneficial in the long run. The new system will contribute positively to the growth of the company as its costs will be less compared to the profits it will bring up in the future. The project is therefore worth pursuing.

INVESTIGATION AND FACT FINDING

The management has seen the benefits that the new system will bring to the company and have decided to go forward with the project. The next task is to find out the user requirements through the collection of facts. In order to do this, I carried out my investigation using the following methods:

- Interviews

I conducted various interviews which involved the farmers, various workers at the company and the management. The interviews mainly involved their opinion on the current system and what they feel about the proposed system.

- Observation

I was able to observe the day to day running of activities in the company. I was able to see the various processes that were undertaken in the company and learn some of the problems that the employees and farmers faced.

- Questionnaires

Due to secrecy and fear of some employees to reveal crucial information about the company, I decided to construct some questionnaires and distribute them randomly to the workers, farmers and management members. This enabled me to get some classified information concerning the company.

- Participation.

For a whole three days, I accompanied a worker, farmer and a manager throughout their days so that I could see their daily activities. This gave me a clear feeling of the way the current system works and how I should improve it in the new computerized system.

- Studying documents.

I visited the company's file room and saw how the various files were written and stored also got a chance to look at the various reports generated in the company.

Conclusion.

Although the manual system has been working in the company, many of the workers and employees are not happy with it because it is slow and inefficient, in contrary, the embers are happy with the new computerized system because it will make their work easier and the company's activities will run more smoothly.

REQUIREMENT SPECIFICATION.

Table specification.

(a) Farm produce table.

- Type
- Amount
- Perishable

(b) Farm input details table.

- Type
- Quantity
- Price
- Availability

(c) Large scale farmers details.

- Names, age, gender
- ID number
- Location
- Product
- Telephone No

(d) Small scale farmers' groups table.

- Group ID
- No. of farmers
- Name of representative
- ID No. of leader
- Location
- Products.

(e) Small scale farmers details table.

- Names of farmer, age, gender

- Group ID
- ID number
- Location
- Produce
- Telephone No.

(f) Employees details table

- Names
- Employee ID
- ID Number
- Telephone Number

(g) Vehicles details table

- Vehicle type
- Product transported
- Load capacity
- Driver's name
- Servicing cost
- Fuel Amount used
- Cost per Km

(h) Drivers Details Table

- Names, age, gender
- Driver's ID
- Vehicle driven
- ID Number
- Tel Number
- Offenses committed
- Number of trips

(i) Loaders Details.

- Names, age, gender
- ID Number

- Tel Number
- Vehicle
- Amount Paid.

(j) Orders table.

- Name
- Group
- Vehicle
- Product
- Location
- Distance
- cost

(k) Drivers' payment table

- Name
- ID Number
- Vehicle
- No. of trips
- Offences

Form specification

Farm produce Form

- Type
- Amount
- Perishable

Farm input details Form.

- Type
- Quantity
- Price

- Availability

Large scale farmers details.

- Names, age, gender
- ID number
- Location
- Product
- Telephone No

Small scale farmers' groups Form.

- Name of group
- No. of farmers
- Name of representative
- ID No. of leader
- Location
- Products.

Small scale farmers details Form.

- Names of farmer, age gender
- ID number
- Location
- Produce
- Telephone No.

Employees details Form

- Names, age, gender
- ID Number
- Telephone Number

Vehicles details Form

- Vehicle type
- Product transported
- Load capacity
- Driver's name

- Servicing cost
- Fuel Amount used
- Cost per Km

Drivers Details Form

- Names
- Vehicle driven
- ID Number
- Tel Number
- Offenses committed
- Number of trips

Loaders Details Form

- Names
- ID Number
- Tel Number
- Vehicle
- Amount Paid.

Orders Details Form

- Name
- Group
- Vehicle
- Product
- Location
- Distance
- Cost

Drivers' payment Form.

- Name
- ID Number
- Vehicle

- No. of trips
- Offences

Process specification.

- 1) Compute each of the following:
 - a) Computing the payment for a loader and a driver
 - b) Calculating the penalties surcharged on drivers
 - c) Finding the amount of loading fee per vehicle per trip
 - d) Computing expenses for each vehicle
 - e) Calculate the revenue per vehicle per trip
 - f) Calculating the tax payable by the company
 - g) Computing the total company expenses
 - h) Calculating the total revenue for the company
 - i) Finding the overall profit of the company.

Hardware and software specification

Hardware specification.

- A. Processor speed: 3.20GHz
- B. Processor type: Pentium (R) Dual-Core
- C. RAM size: 16.0 GB
- D. Hard disk memory space: 500 GB
- E. Input devices: Pointing devices (PS/2mouse)
Keying in devices (Keyboard)
- F. Output devices: monitors (High resolution, Touch screen)
Printers (Laser printer)
- G. Storage devices: flash disks, CDs for backup processes

Software specification.

- Operating system: Graphical User Interface Windows 10

- Application software: Microsoft Suite 2019 with:
 - ✓ Microsoft word 2019
 - ✓ Microsoft access 2019
 - ✓ Microsoft publisher 2019
- System software: Microsoft windows

Output specification.

The following are the output screens:

(a) Drivers Payment Report.

- First name
- Last Name
- ID Number
- Vehicle
- Amount Per Trip
- Number of trips
- Offenses
- Surcharges
- Total Salary
- Grand Total

(b) Loaders Payment Report

- First name
- Last Name
- ID Number
- Vehicle
- No. of vehicles loading
- Total Salary
- Grand Total

(c) Vehicle expenses Report

- Type of vehicle
- Vehicle ID
- Fueling Cost
- Servicing And Repairing Cost
- Insurance Cost
- No Of Times serviced
- Total Maintenance Cost

- Grand Total

(d) Other Salaries Reports

- First Name
- Last Name
- ID Number
- Amount Paid
- Grand Total

(e) Other Expenses Report

- Buying New vehicles
- Emergencies
- Office maintenance
- Calling bill
- Electric bill
- Water bill
- Total

(f) Tax payable report

- Year
- Month
- Revenue
- Tax

(g) Total expenses report

- Year
- Month
- Drivers' salary
- Loader's salary
- Vehicle maintenance
- Other salaries
- Other company expenses

- Tax paid
- Total company expenditure

(h) Transportation income report

- Vehicle type
- Vehicle ID
- Load capacity
- Cost per Km
- Number of Trips
- Distance Travelled
- Total amount paid

(i) Other Income generators report

- Selling of old vehicles
- Others
- Total

(j) Total Revenue generated report

- Year
- Month
- Transport Charges
- Other Incomes
- Grand Total

(k) Company's profit report

- Year
- Total Revenue
- Total Expenditure
- Profit

(l) Company's Resources report

- Category
- Category ID
- Number

(m) Farmers Report

- Farmer Category
- Category ID
- Number of Farmers

CHAPTER 2: SYSTEM DESIGN.

Table design.

(i) Large scale farmers table.

Field Name	Data type
First Name	text
Last name	Text
Age	Text
Gender	text
ID number	Text
Location	Text
Product	text
Telephone number	text

Table 3:Large scale farmers' table

(ii) Small scale farmers groups table

Field Name	Data type
Name of Group	Text
No. of farmers	Number
Name of leader	text
Tel. of Leader	text
Location	Text
Products	text

Table 4:small scale farmers groups table

(iii) Small scale farmers details table

Field Name	Data type
First Name	Text
Last Name	Text
Age Gender	Text

Id Number	Text
Location	Text
Produce	Text
Tel No.	text

Table 5:Small scale farmers details table

(iv) Farm produce details table

Field Name	Data type
Type	Text
Amount	Number
Perishable	Yes/No
Availability	text

Table 6:Farm produce details table

(v) Farm input details table

Field Name	Data type
Type	Text
Quantity	Number
Price	Currency
Availability	text

Table 7:Farm inputs details table

(vi) Employees details table

Field Name	Data type
First Name	Text
Last Name	Text
Age	Text
Gender	Text

ID Number	Text
Tel. number	Text
Category	Text

Table 8:Employee details table

(vii) Drivers details Table

Field Name	Data type
First Name	Text
Last Name	Text
Age	Text
Gender	Text
ID Number	Text
Tel. number	Text
Vehicle	Text
Offenses	Number

Table 9:Drivers details table

(viii) Loaders details table

Field Name	Data type
First Name	Text
Last Name	Text
Age	Text
Gender	Text
ID Number	Text
Tel. number	Text
Vehicle loading	Text
Amount paid	Currency

Table 10:loaders details table

(ix) Drivers' payment table

Field Name	Data type
Name	Text
ID Number	Text
Vehicle	Text
No. of trips	Number
Offenses	Number

Table 11:Drivers' payment table

(x) Orders table

Field Name	Data type
Category	Text
First Name	Text
Last Name	Text
Vehicle	Text
Location	Text
Distance	Number
Type of product	Text
Total cost	Currency
Order date	Date/Time
Payment Date	Date/Time

Table 12:Orders table

Input screen design

(i) The form below allows entry of farm produce details.

Type	<input type="text"/>	 ADD REC
Amount	<input type="text"/>	
Perishable	<input type="text"/>	
 PREV  SELECT  NEXT  MENU		

Figure 2: Farm produce entry form

(ii) The form below allows entry of Farm inputs details

Type	<input type="text"/>	Availability	<input type="text"/>	 ADD REC
Quantity	<input type="text"/>			
Price	<input type="text"/>			
 PREV  SELECT  NEXT  MENU				

Figure 3: Farm inputs entry form

(iv) Large scale farmers details form.

FirstName	<input type="text"/>	Location	<input type="text"/>
Last Name	<input type="text"/>	Product	<input type="text"/>
Gender	<input type="text"/>	Telephone No.	<input type="text"/>
D.O.B	<input type="text"/>	AADD REC	
ID Number	<input type="text"/>	DEL REC	
PREV		SELECT	NEXT
		MENU	

Figure 4:Large scale farmers details form

(v) Small Scale farmers groups form

Group Name	<input type="text"/>	Location	<input type="text"/>
No. of Farmers	<input type="text"/>	Product	<input type="text"/>
Name of Rep.	<input type="text"/>	Telephone No.	<input type="text"/>
D.O.B	<input type="text"/>	AADD REC	
ID Number of Rep	<input type="text"/>	DEL REC	
PREV		SELECT	NEXT
		MENU	

Figure 5:Small scale farmers groups form

(vi) Small Scale farmers details form

FirstName	<input type="text"/>	Location	<input type="text"/>
Last Name	<input type="text"/>	Product	<input type="text"/>
Gender	<input type="text"/>	Telephone No.	<input type="text"/>
Group Name	<input type="text"/>		
D.O.B	<input type="text"/>	AADD REC	
ID Number	<input type="text"/>	DEL REC	
PREV		SELECT	NEXT
		MENU	

Figure 6:Small scale farmers details form

(vii) Employee details Form

FirstName	<input type="text"/>	ID Number	<input type="text"/>
Last Name	<input type="text"/>	Category	<input type="text"/>
Gender	<input type="text"/>	Telephone No.	<input type="text"/>
D.O.B	<input type="text"/>	AADD REC	
		DEL REC	
PREV		SELECT	NEXT
		MENU	

Figure 7:Employee details form

(viii) Vehicles' Details entry form

Vehicle type	<input type="text"/>	Servicing Cost	<input type="text"/>
Products	<input type="text"/>	Cost of fuel	<input type="text"/>
Load Capacity	<input type="text"/>	Cost per Km	<input type="text"/>
Driver's Name	<input type="text"/>	<input type="button" value="ADD REC"/> <input type="button" value="DEL REC"/>	
		<input type="button" value="PREV"/>	<input type="button" value="NEXT"/>
		<input type="button" value="SELECT"/>	<input type="button" value="MENU"/>

Figure 8: Vehicles details form

(ix) Drivers' details entry Form

FirstName	<input type="text"/>	Offenses Committed	<input type="text"/>
Last Name	<input type="text"/>	No. of Trips	<input type="text"/>
Gender	<input type="text"/>	Telephone No.	<input type="text"/>
D.O.B	<input type="text"/>	<input type="button" value="ADD REC"/>	
ID Number	<input type="text"/>	<input type="button" value="DEL REC"/>	
		<input type="button" value="PREV"/>	<input type="button" value="NEXT"/>
		<input type="button" value="SELECT"/>	<input type="button" value="MENU"/>

Figure 9: Drivers details form

(x) Loaders Details Form

FirstName	<input type="text"/>	Vehicle	<input type="text"/>
Last Name	<input type="text"/>	Amount paid	<input type="text"/>
Gender	<input type="text"/>	Telephone No.	<input type="text"/>
D.O.B	<input type="text"/>	AADD REC	
ID Number	<input type="text"/>	DEL REC	
<input type="button" value="PREV"/>		<input type="button" value="SELECT"/>	<input type="button" value="NEXT"/>
		<input type="button" value="MENU"/>	

Figure 10:Loaders details form

(xi) Drivers Payment Form

FirstName	<input type="text"/>	Vehicle	<input type="text"/>
Last Name	<input type="text"/>	No. Of Trips	<input type="text"/>
ID Number	<input type="text"/>	Offenses	<input type="text"/>
<input type="button" value="AADD REC"/>		<input type="button" value="DEL REC"/>	
<input type="button" value="PREV"/>		<input type="button" value="SELECT"/>	<input type="button" value="NEXT"/>
		<input type="button" value="MENU"/>	

Figure 11:Drivers' payment form

(xii) Orders Entry Form.

FirstName	<input type="text"/>	Location	<input type="text"/>
Last Name	<input type="text"/>	Distance	<input type="text"/>
Category	<input type="text"/>	Cost.	<input type="text"/>
Product	<input type="text"/>	<input type="button" value="ADD REC"/>	
ID Number	<input type="text"/>	<input type="button" value="DEL REC"/>	
<input type="button" value="PREV"/>		<input type="button" value="SELECT"/>	<input type="button" value="NEXT"/>
		<input type="button" value="MENU"/>	

Figure 12: Orders entry form

Output design

Driver's Details Report

MOVERS TRANSPORT SYSTEM

First Name	Last Name	ID Number	Vehicle
1			
2			
3			
4			

Figure 13: Drivers 'details report

Driver's Payment Report

MOVERS TRANSPORT SYSTEM

First Name	ID Number	Vehicle	Amount Per Trip	Number of trips	Total Salary
1					
2					
3					
4					

Grand totals

Figure 14:Drivers' payment report

Driver's Offenses Report.

MOVERS TRANSPORT SYSTEM

First Name	ID Number	Offenses	Times Surcharged	Times suspended
1				
2				
3				
4				

Figure 15:drivers' offenses report

Loaders details Report

MOVERS TRANSPORT SYSTEM

First Name	Last Name	ID Number	Vehicle
1			
2			
3			
4			

Figure 16: loaders' details report

Loader's payment report

MOVERS TRANSPORT SYSTEM

First Name	ID Number	Vehicle	Number of vehicles loading	Total Salary
1				
2				
3				
4				
Grand totals				

Figure 17: Loaders' payment report

Vehicle Details Report

MOVERS TRANSPORT SYSTEM

Vehicle type	Reg Number	Driver's Name	Loader's Name
1			
2			
3			

Figure 18: vehicles details report

Vehicle Expenses Report

MOVERS TRANSPORT SYSTEM

Vehicle Type	Reg Number	Fueling cost	Service and repair cost	No of times serviced	Total cost
1					
2					
3					
4					
5					
Grand Totals					

Figure 19:Vehicle expenses report

Other expenses Report

MOVERS TRANSPORT SYSTEM

Buying Vehicles	Emergencies	Office maintenance	Calling bills	Electric bill	Water bill
Totals					
Grand Totals					

Figure 20:Other expenses reports

Other salaries report

MOVERS TRANSPORT SYSTEM			
First name	Last Name	ID Number	Salary
1			
2			
3			
4			
Grand Total			

Figure 21:Other salaries report

Monthly tax paid report

Month	Total Revenue	Total expenditure	Tax
Grand Totals			

Figure 22:monthly tax paid

Total yearly tax report

Year	Month	Tax
1		
2		
3		
4		
Grand totals		

Figure 23:Yearly tax

Total Monthly expenses report

Month	Drivers' salary	Loaders' salary	Vehicle maintenance cost	Other salaries	Other expenses	Tax paid
Grand Totals						

Figure 24:Total monthly expenses report

Total yearly expenses report

Year	Month	Expenditure
1		
2		
3		
Grand totals		

Figure 25:Total yearly expenses report

Monthly transport income report

Month	Vehicle type	Vehicle ID	load capacity	Cost Per km	Distance travelled	No of trips
1						
2						
3						
Grand totals						

Figure 26:monthly transport income report

Yearly transportation income report

Year	Month	Total Income
Grand total		

Figure 27:Yearly transport income report

Other income report

Month	Income area	Total
Grand total		

Figure 28:Other incomes reports

Monthly Revenue report

MONTH	
TRANSPORTATION INCOME	Other incomes
GRAND TOTAL	

Figure 29:Monthly revenue report

Yearly Revenue Report

	Year	
	Month	Revenue
1		
2		
3		
<i>Grand total</i>		

Figure 30:Yearly revenue report

Monthly company's profit report

MONTH	TOTAL REVENUE	Total Expenditure	Profit
GRAND TOTAL			

Figure 31;Monthly company profit report

Yearly company's profit report

Year	Month	Total revenue	Total expenditure	Profit
1				
2				
3				
Grand totals				

Figure 32:yearly company profit report

Company's Resources report

Category	Category ID	Number

Figure 33:Company's resources report

Company's members report

CATEGORY	CATEGORY ID	NUMBER

Figure 34:Company's members report

Entity relationship diagrams

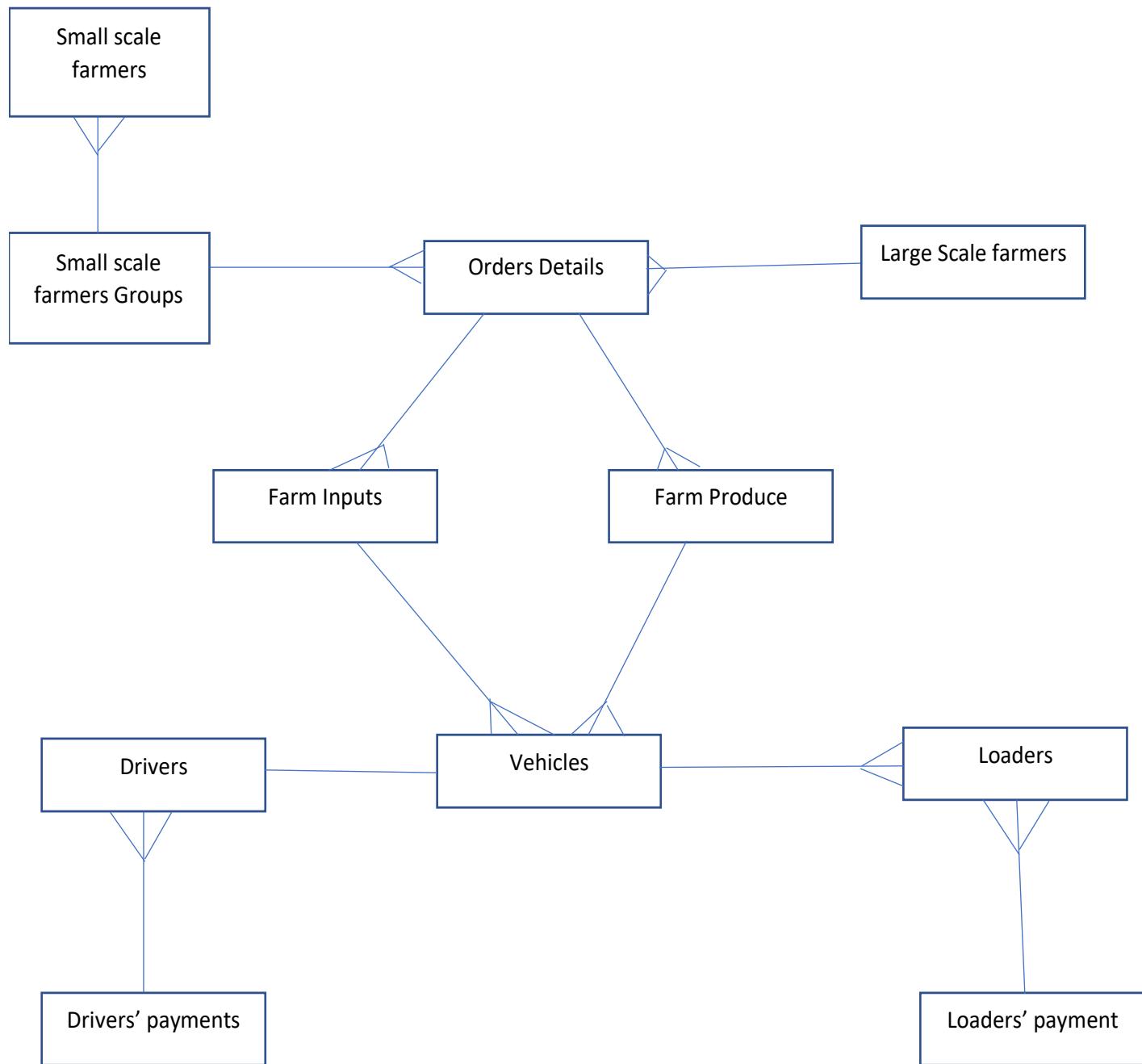


Figure 35: Entity relationship diagram

System flowchart design

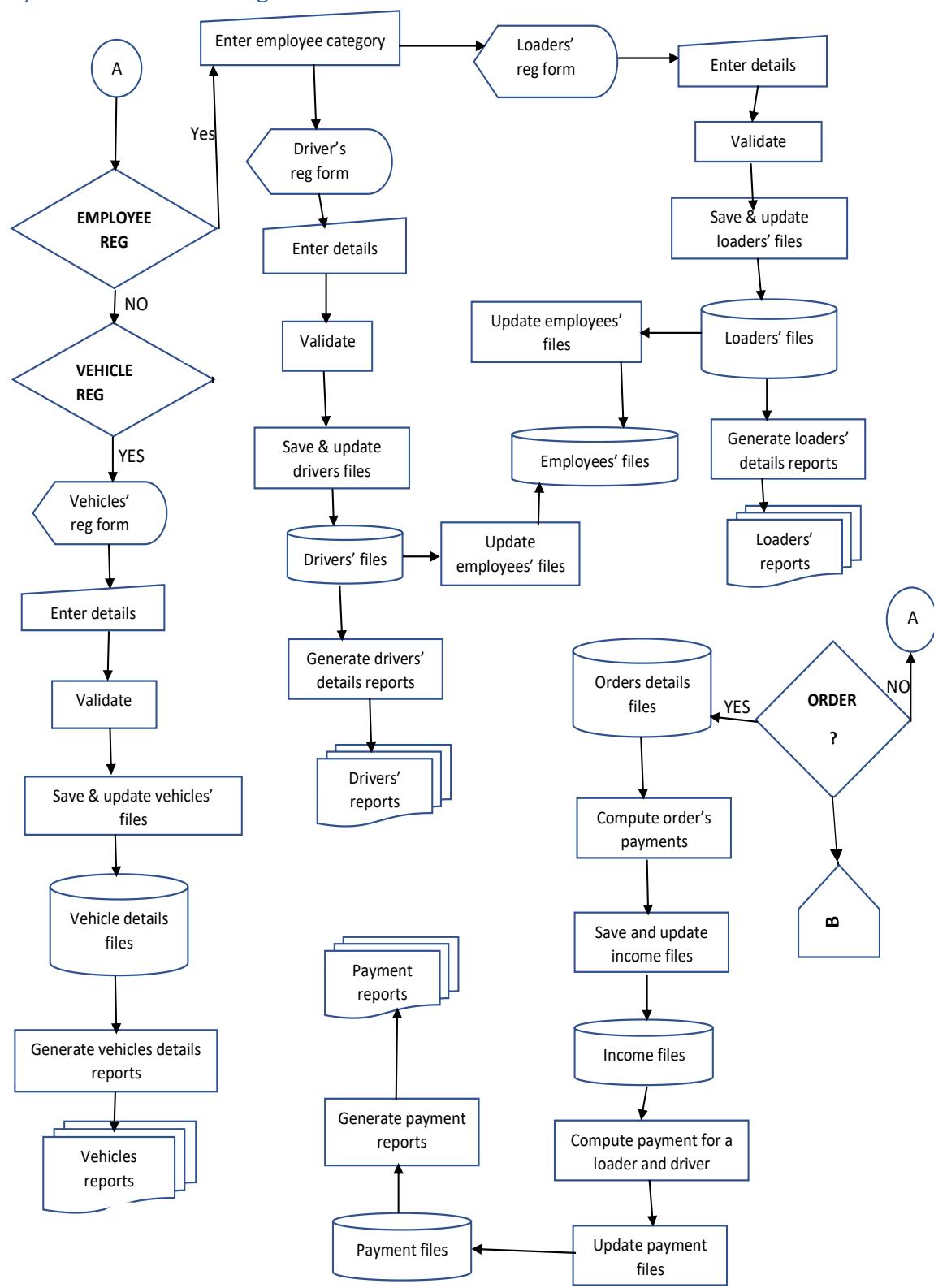


Figure 36: System flowchart

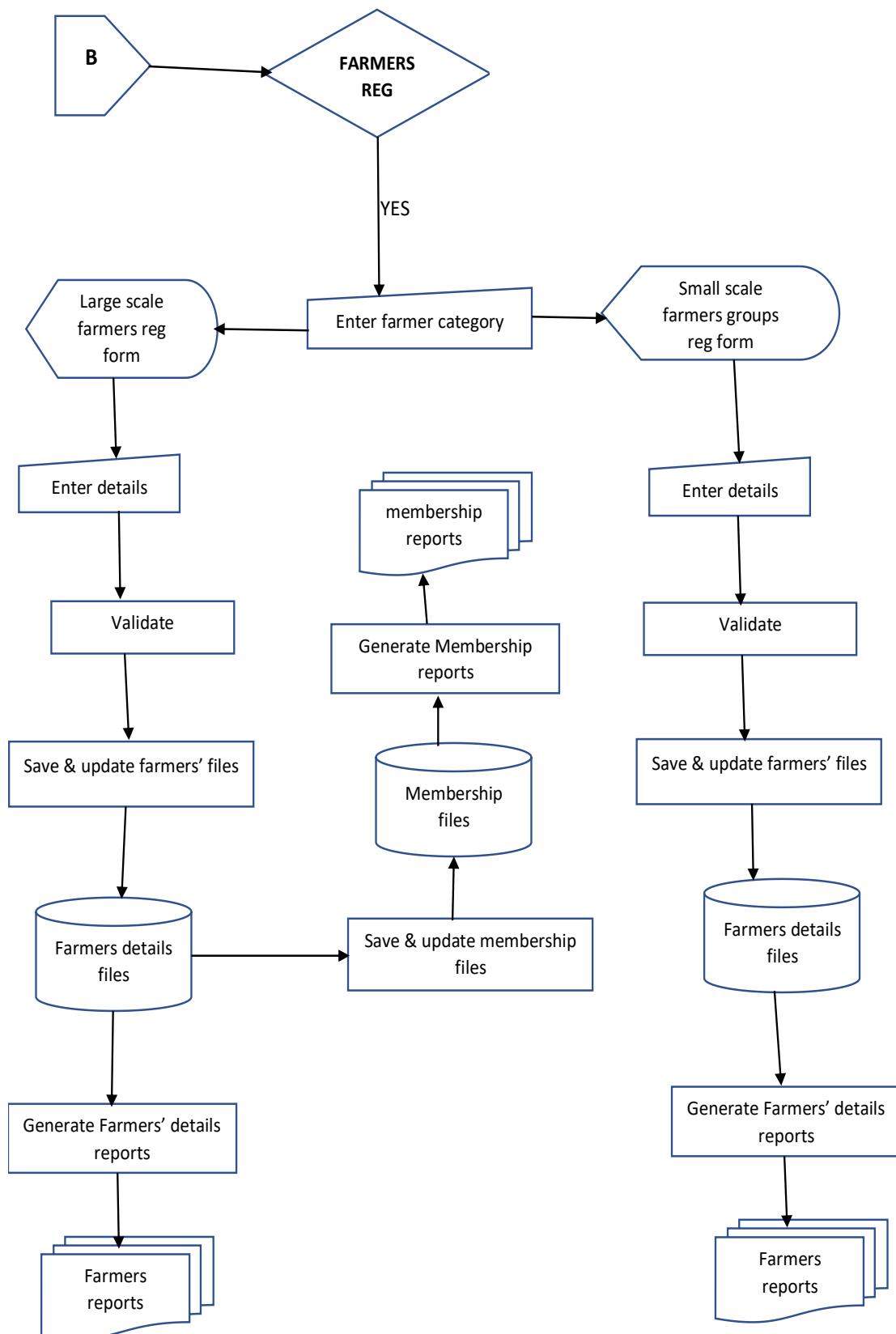


Figure 37:system flowchart

CHAPTER THREE: USER MANUAL

A. Installation process and requirement

Hardware requirement

- Processor speed: 3.20GHz
- Processor type: Pentium (R) Dual-Core
- RAM size: At least 16.0 GB
- Hard disk memory space: At least 500 GB
- Input devices: Pointing devices (PS/2mouse)
Keying in devices (Keyboard)
- Output devices: monitors (High resolution, Touch screen)
Printers (Laser printer)
- Storage devices: flash disks, CDs

Software requirement

- Application software: Microsoft Suite 2019 with:
 - ✓ Microsoft word 2019
 - ✓ Microsoft access 2019
 - ✓ Microsoft publisher 2019
- System software: Microsoft window7/8/10/11

To install the system:

- i. Switch on the computer.
- ii. Put the CD or DVD containing the access document into a working CD or DVD drive.
- iii. Locate the Movers Transport System access document on the CD or DVD storage.
- iv. Copy it and paste it on the desktop.

Loading process

- i. Switch on the computer.
- ii. Once the computer is on, on the desktop, open the access document **Movers transport system** by double clicking on its icon.
- iii. On opening the system, the splash screen shown below appears:



Figure 38:Splash screen photo

- iv. Upon appearing of this screen, you will have to wait for approximately 3 seconds before you see the main menu which appears as follows;



Figure 39:Main menu photo

Navigation guide

- The main menu displays buttons which are used to carry out different functions in the system.
Choose the form required by pressing the appropriate buttons.

The following are the forms available in the system:

(i) Driver's details form

This form lets you register a new driver into the system.

Driver's ID	<input type="text" value="3001"/>	Add Record
Fname	<input type="text" value="Brian"/>	Save Record
Lname	<input type="text" value="Masinde"/>	Print Record
Age	<input type="text" value="28"/>	
Gender	<input type="text" value="Male"/>	
ID Number	<input type="text" value="26354201"/>	
Tel number	<input type="text" value="0713141516"/>	
Vehicle	<input type="text" value="Pickup"/>	Print Form
Number of Offenses	<input type="text" value="1"/>	Close Form
No. of trips	<input type="text" value="9"/>	Main Menu
Payment per trip	<input type="text" value="Ksh2,000.00"/>	Quit App
Next Record		Prev Record
		Find Record

Figure 40:Form for driver's details

a) Driver's offenses form

This form lets you record all the offenses committed by a driver during his working time. The details of the offenses are entered here.

The screenshot shows a Windows-style application window titled "Drivers Offenses Form". The main area contains several input fields:

- Driver's ID: D001
- Fname: Brian
- Vehicle: Pickup
- Date of offense: 12/13/2014
- Number of offenses: 1
- Offense type: Overspeeding
Overloading
- Charge per offense: Ksh2,000.00

On the right side of the form, there are several buttons:

- Add Record
- Save Record
- Print Record
- Print Form
- Close Form
- Main Menu
- Quit App

At the bottom left are three navigation buttons: Next Record, Prev Record, and Find Record.

Figure 41:Form for drivers' Offenses

b) Large scale farmers details form

Large scale farmers are registered into the system using this form.

The screenshot shows a Windows-style application window titled "Large scale farmers details Form". The main area contains several input fields:

- Farmer ID: L001
- ID Number: 20315689
- FName: James
- Lname: Inyanje
- Group: Large Scale
- Age: 42
- Gender: Male
- Location: Mwalli
- Product: Flowers
- Telephone no: 0790112113

On the right side of the form, there are several buttons:

- Add Record
- Save Record
- Print Record
- Print Form
- Close Form
- Main Menu
- Quit App

At the bottom left are three navigation buttons: Next Record, Prev Record, and Find Record.

Figure 42:LSF-details form

c) Large scale farmers orders form

All the orders placed by large scale farmers are done using this form.

The screenshot shows a Windows-style application window titled "Large scale farmers orders form". The main area contains several input fields for order details:

Order Code	<input type="text" value="1"/>
Farmer ID	<input type="text" value="L001"/>
Products	<input type="text" value="Cereals"/>
Vehicle ID	<input type="text" value="V001"/>
Amount(kg)	<input type="text" value="300"/>
Distance(km)	<input type="text" value="55"/>
Order Date	<input type="text" value="5/19/2018"/>

On the right side of the form, there are several command buttons:

- Add Record
- Save Record
- Print Record
- Print Form
- Close Form
- Main Menu
- Quit App

At the bottom left are navigation buttons: Next Record, Prev Record, and Find Record.

Figure 43:LSF-orders form

d) Loaders details form

Details of loaders are recorded into the system using this form.

The screenshot shows a Windows-style application window titled "Loaders' details form". The main area contains several input fields for loader details:

Loader ID	<input type="text" value="L001"/>
FName	<input type="text" value="Mweti"/>
LName	<input type="text" value="Kioko"/>
Age	<input type="text" value="21"/>
Gender	<input type="text" value="male"/>
Vehicle ID	<input type="text"/>
Vehicle type	<input type="text" value="Pickup"/>
Tel Number	<input type="text" value="0732404280"/>
No of loading sessions	<input type="text" value="29"/>
Loaders pay per session	<input type="text" value="Ksh200.00"/>

On the right side of the form, there are several command buttons:

- Add Record
- Save Record
- Print Record
- Print Form
- Close Form
- Main Menu
- Quit App

At the bottom left are navigation buttons: Next Record, Prev Record, and Find Record.

Figure 44:Loaders details form

e) Other employees' details form.

Other employees in the company are registered using this form.

The screenshot shows a Windows-style application window titled "Other employees Details Form". The main area contains several input fields for employee information:

Employee ID	E1001	Add Record
FName	Chris	Save Record
LName	Chebellion	Print Record
ID number	26428094	
Age	32	Print Form
Gender	Male	Close Form
Total salary	\$36,000.00	Main Menu

Below the input fields are three buttons: "Next Record", "Prev Record", and "Find Record". To the right of the input fields are four buttons: "Add Record", "Save Record", "Print Record", and "Print Form". Further down on the right are four more buttons: "Close Form", "Main Menu", and "Quit App".

Figure 45:Other employees details form

f) Other expenses form

All other expenses that are incurred in the company are recorded using this form.

The screenshot shows a Windows-style application window titled "Other expenses form". The main area contains several input fields for recording expenses:

N_Month	April	Add Record
Buying new vehicles	Ksh0.00	Save Record
Emergencies	Ksh5,698.00	Print Record
office maintenance	Ksh5,845.00	
calling bill	Ksh650.00	Print Form
Electricity bill	Ksh1,563.00	Close Form
Water bill	Ksh5,635.00	Main Menu

Below the input fields are three buttons: "Next Record", "Prev Record", and "Find Record". To the right of the input fields are four buttons: "Add Record", "Save Record", "Print Record", and "Print Form". Further down on the right are four more buttons: "Close Form", "Main Menu", and "Quit App".

Figure 46:Other expenses form

g) Other incomes entry form

All the other incomes generated into the company using other means are recorded using this form.

The screenshot shows a software application window titled "Other incomes entry form". The main area contains three data entry fields: "Income Code" (K001), "N-month" (April), and "Selling old vehicles" (\$1,565,931.00). To the right of these fields are four buttons: "Add Record", "Save Record", "Print Record", and "Print Form". Below the input fields are three navigation buttons: "Next Record", "Prev Record", and "Find Record". To the right of these navigation buttons are five more buttons: "Print Form", "Close Form", "Main Menu", and "Quit App".

Figure 47:Form for other incomes

h) Small scale groups form

All the groups of small-scale farmers are registered using this form.

The screenshot shows a software application window titled "Smal scale Farmers Groups form". The main area contains eight data entry fields: "Group ID" (G001), "Name of Group" (Kifaru), "Number of farmers" (5), "Name of leader" (Joseph), "Group" (small scale), "Tel of leader" (0737425049), "Location" (Kwanza), and "Products" (Cereals). To the right of these fields are four buttons: "Add Record", "Save Record", "Print Record", and "Print Form". Below the input fields are three navigation buttons: "Next Record", "Prev Record", and "Find Record". To the right of these navigation buttons are five more buttons: "Print Form", "Close Form", "Main Menu", and "Quit App".

Figure 48:Form for SSF-groups

i) Small scale farmers details form

The details of the small-scale farmers who are in groups are recorded using this form.

The screenshot shows a Windows-style application window titled "Small Scale Farmers details form". The form contains the following fields:

Farmer ID	SS01	Add Record
ID Number	10123453	Save Record
Fname	Catherine	Print Record
LName	Mathoka	
Group ID	G005	
Age	48	
Gender	Female	
Location	Bidii	
Produce	Flowers	
Tel Number	0795467881	

At the bottom left are buttons for "Next Record", "Prev Record", and "Find Record". At the bottom right are buttons for "Print Form", "Close Form", "Main Menu", and "Quit App".

Figure 49:Form for SSF-details

j) Small scale group orders form

All the orders placed by the small-scale farmers groups are done using this form.

The screenshot shows a Windows-style application window titled "Small Scale Groups Orders form". The form contains the following fields:

Order Code	1	Add Record
Group ID	G001	Save Record
Products	Fertilizers	Print Record
Amount(kg)	36	
Vehicle ID	V011	
Distance	64	
Order Date	2/10/2019	

At the bottom left are buttons for "Next Record", "Prev Record", and "Find Record". At the bottom right are buttons for "Print Form", "Close Form", "Main Menu", and "Quit App".

Figure 50:Form for SSFG-orders

k) Vehicle details entry form

The various vehicles used by the company are registered using this form.

Vehicle Details entry form

Vehicle ID	V001	service and repair cost	Ksh29,600.00
Vehicle Type	Pickup	Next Record	Add Record
Product transported	Cereals	Prev Record	Save Record
Load capacity	1	Find Record	Print Record
Driver ID	D001		
Loader ID	L001	Print Form	
Number of loaders	2	Close Form	
Driver's Name	Brian	Main Menu	
Cost per km	Ksh200.00	Quit App	
payment per loader	Ksh200.00		
Number of drivers	1		
Cost per driver	Ksh2,000.00		
fuel cost	Ksh25,600.00		
Insurane cost	Ksh13,300.00		

Figure 51:Form for Vehicle details

- The system generates reports as the output.

On the main menu are the various buttons that are used to display the various reports generated by the system. The reports that will be seen are as follows:

a. Driver's details report

The summary for the number of drivers per vehicle and their total salaries will be seen as shown below

Drivers' details report									
Vehicle	Driver's ID	Fname	Lname	Age	Gender	ID Number	Tel number	Number of Offenses	Total Driver's salary
Lorry	D018	Owen	Tiusi	36	Male	21654212	0712458741	1	Ksh9,000.00
	D011	Oliver	Njuti	53	Male	35692125	0732369852	0	Ksh15,000.00
	D002	Jacob	Musilli	34	Male	24161591	0719246045	0	Ksh15,000.00
	D009	Benjamin	Rieko	41	Male	52352525	0774125865	1	Ksh6,000.00
	D008	James	Meeka	26	Male	52552333	0712578694	1	Ksh18,000.00
	D010	Elijah	Msambwa	89	Male	12469412	0752634128	0	Ksh9,000.00
								72000	
Pickup	D001	Brian	Masinde	28	Male	26354201	0713141516	1	Ksh18,000.00
	D021	Jigi	Mwanjigu	32	Female	58691111	0745456321	3	Ksh12,000.00
	D006	Noah	Kaoti	32	Male	32464645	0713454525	8	Ksh4,000.00
	D005	Len	Kiprotich	36	Male	16385232	0785215469	4	Ksh14,000.00
	D007	Williams	Nzioki	48	Male	32563233	0796314984	2	Ksh6,000.00
								54000	
Refrigerated truck	D017	Jayden	Omolo	24	Male	31215454	0789065032	2	Ksh5,000.00
	D015	Michael	Owino	19	Male	39876164	0713245697	2	Ksh35,000.00
	D020	Chris	Wamalwa	30	Male	23321452	0789562312	0	Ksh25,000.00
	D003	Mary	Wanjiru	25	Female	52134570	0720945101	2	Ksh40,000.00
	D004	Mary	Wanjiru	25	Female	52134570	0720945101	2	Ksh20,000.00
								125000	
Trailer	D012	Lucas	Mwerate	35	Male	02124653	0712987474	0	Ksh32,000.00

Figure 52:Report for drivers' details

b. Driver's offenses report

The summary for the offenses committed by each driver is seen as shown below

Drivers Offenses report							
Offense type	Driver's ID	Fname	Vehicle	Date of offense	Number of offenses	Charge per offense	Surcharge
Drunk driving							
Overloading	D004	Oscar	Trailer	6/15/2020	3	Ksh1,500.00	Ksh4,500.00
Overloading							
Overspeeding	D002	Jacob	Lorry	9/16/2020	2	Ksh2,200.00	Ksh4,400.00
Overloading	D019	Isaac	Trailer	11/16/2018	3	Ksh2,200.00	Ksh6,600.00
Perishable goods got spoilt							
Overspeeding	D001	Brian	Pickup	12/13/2014	1	Ksh2,000.00	Ksh2,000.00
Overloading	D003	Mary	Refrigerated truck	7/3/2021	2	Ksh3,500.00	Ksh7,000.00
Perishable goods got spoilt	D015	Michael	Refrigerated truck	5/16/2020	4	Ksh3,500.00	Ksh14,000.00

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Figure 53:Report for Drivers' offenses

c. Large scale farmers report

The summary on large scale farmers will be generated as shown below

Large scale farmers Report									
Location	Farmer ID	ID Number	FName	Lname	Group	Age	Gender	Product	Telephone no
Bidii	L006	25898512	Rajuh	Rastogi	Large Scale	50	Male	Livestock	0748507079
	L003	30556472	Samuel	Wanyonyi	Large Scale	54	Male	Cereals	0717655432
Katio	L004	36142524	Orpha	Nyaboke	Large Scale	38	Female	Eggs	0754698740
	L009	98985289	Kingi	Amazon	Large Scale	56	Male	Flowers	0745654552
Kwanza	L007	52151250	Ken	Lusaka	Large Scale	59	Male	Fish	0745141470
	L010	25743737	Hamato	Yoshi	Large Scale	40	Male	Livestock	0789521440
Meso	L002	25589663	Ted	Andaje	Large Scale	47	Male	Milk	0766707680
	L005	98752312	Grace	Wanjiru	Large Scale	65	Female	Cereals	0745726465
Mwali	L001	20315689	James	Inyanje	Large Scale	42	Male	Flowers	0790112113
	L008	12021031	Eunice	Yaya	Large Scale	41	Female	Cereals	0717888038

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Figure 54:Report for large scale farmers

d. Loaders' information report

The summary on the loader's information is as shown below

Loaders' information report									
Vehicle type	Loader ID	FName	LName	Age	Gender	Tel Number	No of loading	Loaders pay per session	Total loader pay
Lorry									
	L016	Jedida	Mondindi	41	Male	0712464569	16	Ksh500.00	Ksh8,000.00
	L007	Peter	Mailu	21	Male	0793158469	25	Ksh300.00	Ksh7,500.00
	L002	Philori	Mwili	18	Female	0718052110	23	Ksh300.00	Ksh6,900.00
	L012	Alphonse	Oyunga	48	Male	0731623631	12	Ksh200.00	Ksh2,400.00
	L005	Richard	Kilusu	32	Male	0745467778	17	Ksh450.00	Ksh7,650.00
	L019	Vikio	Kirika	29	Male	0745129632	21	Ksh500.00	Ksh10,500.00
									42950
Pickup									
	L008	Moses	Kioko	42	Male	0764829551	14	Ksh300.00	Ksh4,200.00
	L011	Evans	Onderi	56	Male	0736978451	35	Ksh200.00	Ksh7,000.00
	L015	Faikel	Maina	26	Male	0712356946	34	Ksh300.00	Ksh10,200.00
	L021	Silvester	Olmasai	19	Male	0714524623	20	Ksh500.00	Ksh10,000.00
	L001	Mweti	Kioko	21	male	0732404280	29	Ksh200.00	Ksh5,800.00
									37200
Refrigerated truck									
	L014	Fuoti	Mkali	29	Male	0752526464	21	Ksh300.00	Ksh6,300.00
	L009	Daniel	Mutua	36	Male	0754128852	19	Ksh500.00	Ksh9,500.00
	L003	Alpha	Dawo	25	Male	0748121632	18	Ksh450.00	Ksh8,100.00
	L017	Jamu	Moguro	34	Male	0713415455	9	Ksh450.00	Ksh4,050.00
									27950

Figure 55:Report for loaders information

e. LS-farmers orders report

The summary for the orders done by large scale farmers is as shown below

LS_Farmers Orders Report							
Vehicle ID	Order Code	Farmer ID	Products	Distance(km)	Order Date	Cost per km	Total large scale order
V001	24	L003	Fertilizer	77	2/9/2019	Ksh200.00	Ksh15,400.00
	9	L001	Cereals	55	6/3/2019	Ksh200.00	Ksh11,000.00
	12	L009	Cereals	45	2/10/2019	Ksh200.00	Ksh9,000.00
	1	L001	Cereals	55	5/19/2018	Ksh200.00	Ksh11,000.00
	27	L006	Herbicides	15	4/3/2019	Ksh200.00	Ksh3,000.00
V002	18	L006	Cereals	25	4/1/2019	Ksh650.00	Ksh16,250.00
V003	8	L002	Milk	68	4/3/2019	Ksh1,500.00	Ksh102,000.00
	23	L002	Cereals	47	1/10/2019	Ksh1,500.00	Ksh70,500.00
	19	L007	Milk	12	4/2/2019	Ksh1,500.00	Ksh18,000.00
V004	7	L008	Cereals	29	4/1/2019	Ksh1,000.00	Ksh29,000.00
V006	4	L010	Manure	87	1/10/2019	Ksh1,000.00	Ksh87,000.00
V007	15	L003	Manure	56	3/13/2019	Ksh650.00	Ksh36,400.00
V009	20	L008	Cereals	49	5/12/2019	Ksh1,500.00	Ksh73,500.00
	16	L004	Herbicides	35	3/15/2019	Ksh1,500.00	Ksh52,500.00
	21	L009	Fertilizer	18	5/12/2019	Ksh1,000.00	Ksh18,000.00
V010	2	L005	Fertilizer	77	1/3/2019	Ksh1,000.00	Ksh77,000.00
	10	L010	Fertilizer	77	10/3/2019	Ksh1,000.00	Ksh77,000.00
	25	L004	Livestock	27	3/29/2019	Ksh1,000.00	Ksh27,000.00

Figure 56;Report for LSF-orders

f. Other employees' details report

The summary for the other employees' details is as shown below

Other employees Details Report						
Gender	Employee ID	FName	LName	ID number	Age	Total salary
Female	ET009	Mia	Khalifa	34576443	30	\$29,560.00
	ET006	Emma	Amelia	24555564	26	\$35,000.00
	ET005	Liam	Nyaboke	32416545	21	\$33,000.00
	ET004	Faith	Kerubo	31864589	44	\$40,000.00
	ET003	Lyn	Dada	81828384	35	\$29,000.00 \$166,560.00
Male	ET010	Alexender	Arnold	34656986	32	\$34,800.00
	ET008	Lucas	Wainaina	34546458	30	\$42,000.00
	ET007	Benjamin	Watako	13543463	27	\$29,500.00
	ET002	Victor	Kirui	16487072	40	\$27,000.00
	ET001	Chris	Chebellion	26428094	32	\$36,000.00 \$169,300.00 \$335,860.00

Figure 57:Report for other employee details

g. Other expenses report

The summary for other company expenses will be displayed as shown

Other expenses Report							
N_Month	Buying new vehicles	Emergencies	office maintenance	calling bill	Electricity bill	Water bill	Total other expenses
April	Ksh0.00	Ksh5,698.00	Ksh5,845.00	Ksh650.00	Ksh1,563.00	Ksh5,635.00	Ksh19,391.00
February	Ksh0.00	Ksh2,569.00	Ksh6,312.00	Ksh892.00	Ksh8,922.00	Ksh6,426.00	Ksh25,121.00
January	Ksh0.00	Ksh5,412.00	Ksh2,489.00	Ksh800.00	Ksh6,325.00	Ksh4,652.00	Ksh19,678.00
June	Ksh245,748.00	Ksh4,562.00	Ksh4,596.00	Ksh930.00	Ksh6,324.00	Ksh9,462.00	Ksh271,622.00
March	Ksh0.00	Ksh3,235.00	Ksh3,645.00	Ksh760.00	Ksh4,005.00	Ksh4,896.00	Ksh16,541.00
May	Ksh0.00	Ksh3,125.00	Ksh2,526.00	Ksh580.00	Ksh5,048.00	Ksh5,896.00	Ksh17,175.00
July	Ksh0.00	Ksh3,100.00	Ksh2,356.00	Ksh1,200.00	Ksh9,320.00	Ksh5,500.00	Ksh21,476.00
August	Ksh0.00	Ksh7,632.00	Ksh3,652.00	Ksh850.00	Ksh7,600.00	Ksh4,566.00	Ksh24,300.00
September	Ksh0.00	Ksh7,523.00	Ksh3,125.00	Ksh965.00	Ksh8,000.00	Ksh4,358.00	Ksh23,971.00
October	Ksh0.00	Ksh6,452.00	Ksh3,120.00	Ksh230.00	Ksh7,823.00	Ksh9,500.00	Ksh27,125.00
November	Ksh562,356.00	Ksh2,350.00	Ksh2,256.00	Ksh980.00	Ksh5,600.00	Ksh6,985.00	Ksh580,527.00
December	Ksh623,210.00	Ksh5,521.00	Ksh2,589.00	Ksh700.00	Ksh6,300.00	Ksh3,426.00	Ksh641,746.00
							1688673

Monday, November 29, 2021

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Figure 58:Report for other expenses

h. Other incomes report

The summary for the other incomes will be displayed as shown

Other incomes report		
N-month	Income Code	Selling old vehicles
April	K001	\$1,565,931.00
August	K002	\$369,852.00
July	K003	\$256,000.00
November	K004	\$569,400.00
October	K005	\$783,200.00

Monday, November 29, 2021

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Figure 59:Report for other incomes

i. Small scale farmers details report.

The summary of the small-scale farmers will be as shown below;

Small Scale Farmers details report									
Group ID	Farmer ID	ID Number	Fname	LName	Age	Gender	Location	Produce	Tel Number
G001	SS33	86901001	Robert	Kimani	34	Male	Kwanza	Cereals	0719352160
	SS25	65147896	Ebenea	Talete	23	Male	Kwanza	Cereals	0743614447
	SS24	56945656	Maeve	Swalihi	50	Female	Kwanza	Cereals	0712591313
	SS18	32185314	Linde	Nairu	33	Female	Kwanza	Cereals	0744234299
	SS16	26504285	Joseph	Amuyu	21	Male	Kwanza	Cereals	0737425049
	5								
G002	SS20	33656590	Cyntia	Kiilu	39	Female	Meso	Livestock	0785963298
	SS29	78521489	Edwin	Kipyeno	33	Male	Meso	Livestock	0745468921
	SS03	12454963	Charles	Darwin	24	Male	Meso	Livestock	0712585841
	SS21	36362455	Mark	Maenge	41	Male	Meso	Livestock	0725256391
	SS32	86566222	Phoebe	Hunede	36	Female	Meso	Livestock	0745121245
	SS17	30194760	Reagan	Ochieng	28	Male	Meso	Livestock	0728946042
G003	SS26	65676971	Jodge	Mato	26	Male	Meso	Livestock	0781924060
	7								
	SS13	25656596	Aiden	Omilki	18	Female	Katio	Eggs	0745874154
	SS28	77996614	Mason	Mwangi	32	Male	Katio	Eggs	0741412563
	SS27	66154298	Susan	Kihika	19	Female	Katio	Eggs	0756753021
	SS31	81157290	Rose	Cherop	42	Female	Katio	Eggs	0735410220
G003	SS14	25689898	Henry	Kitaa	40	Male	Katio	Eggs	0789896323
	SS15	25885852	Levi	Luniu	26	Male	Katio	Eggs	0745211254
6									

Figure 60:Report for SSF details

j. SS-farmers orders report

The summary of the orders done by the small-scale farmers will be displayed as follows

SS-Farmers Orders Report						
Group ID	Order Code	Vehicle ID	Distance	Order Date	Cost per km	Total small scale Order cost
G001	21	V010	89	2/10/2019	Ksh1,000.00	Ksh89,000.00
	12	V001	68	1/5/2019	Ksh200.00	Ksh13,600.00
	25	V016	55	3/15/2019	Ksh650.00	Ksh35,750.00
	7	V021	34	4/1/2019	Ksh200.00	Ksh6,800.00
	1	V011	64	2/10/2019	Ksh200.00	Ksh12,800.00
G002	2	V001	38	2/19/2019	Ksh200.00	Ksh7,600.00
	26	V007	52	3/20/2019	Ksh650.00	Ksh33,800.00
	13	V010	55	1/10/2019	Ksh1,000.00	Ksh55,000.00
	8	V019	45	4/2/2019	Ksh650.00	Ksh29,250.00
	22	V020	25	2/19/2019	Ksh1,000.00	Ksh25,000.00
G003	17	V014	85	4/3/2019	Ksh1,500.00	Ksh127,500.00
	23	V001	12	2/19/2019	Ksh200.00	Ksh2,400.00
	3	V005	94	2/19/2019	Ksh650.00	Ksh61,100.00
	6	V012	21	3/20/2019	Ksh650.00	Ksh13,650.00
G004	14	V013	77	2/9/2019	Ksh1,000.00	Ksh77,000.00
	11	V017	48	5/15/2019	Ksh1,500.00	Ksh72,000.00
	4	V009	15	3/13/2019	Ksh1,500.00	Ksh22,500.00
	10	V014	39	5/12/2019	Ksh1,500.00	Ksh58,500.00
	19	V003	56	10/3/2019	Ksh1,500.00	Ksh84,000.00
	20	V001	35	3/15/2019	Ksh200.00	Ksh7,000.00
G004	24	V011	49	3/13/2019	Ksh200.00	Ksh9,800.00
	15	V006	60	3/29/2019	Ksh1,000.00	Ksh60,000.00

Figure 61:Report for SSF orders

k. Tax paid report

The summary of the tax paid by the company to the government will be displayed as shown below

The screenshot shows a report titled "Tax paid Report". At the top, there is a header bar with a green icon and the text "Tax paid Report". Below the header, the title "Tax paid Report" is displayed in a large, bold, dark font. The main content area contains two rows of data:

Company Revenue	Tax paid
Ksh5,884,833.00	Ksh1,176,966.60

At the bottom left, the date "Monday, November 29, 2021" is shown. On the right side, the text "Page 1 of 1" is visible.

Figure 62:Report showing tax paid

I. Total company expenses report

The summary for the total expenses done by the company will be as follows;

The screenshot shows a report titled "Total company expenses report". At the top, there is a header bar with a green icon and the text "Total company expenses report". Below the header, the title "Total company expenses report" is displayed in a large, bold, dark font. The main content area contains a table of expenses:

SumOfTotal Driver's salary	Ksh459,000.00
SumOfTotal loader pay	Ksh166,700.00
SumOfTotal salary	Ksh335,860.00
SumOfTotal other expense	Ksh1,688,673.00
SumOfTotal vehicle expen	Ksh1,705,700.00
SumOfTax paid	Ksh1,176,966.60
Company expenses	Ksh5,532,899.60

At the bottom left, the date "Monday, November 29, 2021" is shown. On the right side, the text "Page 1 of 1" is visible.

Figure 63;Report for total company expenses

m. Total company revenue report

The summary of the total revenue that the company gets is shown as follows;

Total company revenue report				
SumOfTotal large scale order cost	SumOfSelling old vehicles	SumOfTotal small scale Order cost	Sum Of Surcharge	Company revenue
Ksh1,175,400.00	Ksh3,544,383.0	Ksh1,126,550.00	Ksh38,500.00	Ksh5,884,833.00
Monday, November 29, 2021			Page 1 of 1	

Figure 64:Total revenue report

(a) Vehicle information report

The summary of the vehicles that the company owns and their various details is as shown below:

vehicle Information report												
Vehicle Type	Vehicle ID	Product transported	Load capacity	Driver ID	Loader ID	Number of loaders	Driver's Name	Cost per km	Fuel cost	Insurance cost	Service and repair cost	Total vehicle expense
Lorry												
V012	Farm inputs	7	D012	L012	6	Lucas	Ksh650.00	Ksh32,800.00	Ksh15,000.00	Ksh25,400.00	Ksh76,200.00	
V002	Livestock	7	D002	L002	6	Jacob	Ksh650.00	Ksh32,800.00	Ksh15,000.00	Ksh25,400.00	Ksh76,200.00	
V019	Livestock	7	D019	L019	6	Isaac	Ksh650.00	Ksh32,800.00	Ksh15,000.00	Ksh25,400.00	Ksh76,200.00	
V005	Livestock	7	D005	L005	6	Len	Ksh650.00	Ksh32,800.00	Ksh15,000.00	Ksh25,400.00	Ksh76,200.00	
V007	Farm inputs	7	D007	L007	6	Williams	Ksh650.00	Ksh32,800.00	Ksh15,000.00	Ksh25,400.00	Ksh76,200.00	
V016	Livestock	7	D016	L016	6	Jackson	Ksh650.00	Ksh32,800.00	Ksh15,000.00	Ksh25,400.00	Ksh76,200.00	
Pickup												
V008	Farm inputs	1	D008	L008	2	James	Ksh200.00	Ksh25,600.00	Ksh13,300.00	Ksh29,600.00	Ksh70,500.00	
V001	Cereals	1	D001	L001	2	Brian	Ksh200.00	Ksh25,600.00	Ksh13,300.00	Ksh29,600.00	Ksh70,500.00	
V011	Livestock	1	D011	L011	2	Oliver	Ksh200.00	Ksh25,600.00	Ksh13,300.00	Ksh29,600.00	Ksh70,500.00	
V021	Cereals	1	D021	L021	2	Jigi	Ksh200.00	Ksh25,600.00	Ksh13,300.00	Ksh29,600.00	Ksh70,500.00	
V015	cereals	1	D015	L015	2	Michael	Ksh200.00	Ksh25,600.00	Ksh13,300.00	Ksh29,600.00	Ksh70,500.00	
Refrigerated truck												
V014	Perishable goods	3	D014	L014	4	Taylor	Ksh1,500.00	Ksh19,000.00	Ksh18,000.00	Ksh32,000.00	Ksh74,000.00	
V009	Perishable goods	3	D009	L009	4	Benjamin	Ksh1,500.00	Ksh19,000.00	Ksh18,000.00	Ksh32,000.00	Ksh74,000.00	
V017	Perishable goods	3	D017	L017	4	Jayden	Ksh1,500.00	Ksh19,000.00	Ksh18,000.00	Ksh32,000.00	Ksh74,000.00	
V003	Perishable goods	3	D003	L003	4	Mary	Ksh1,500.00	Ksh19,000.00	Ksh18,000.00	Ksh32,000.00	Ksh74,000.00	
4												

Figure 65:Vehicle information report

(b) Profit of the company report

The summary of the profit that the company gets will be as shown below

Profit of company report	
Company Revenue	Ksh5,884,833.00
Company expenses	Ksh5,532,899.60
Profit	Ksh351,933.40
Monday, December 13, 2021	Page 1 of 1

Figure 66:Profit of the company report

Error Handling

Although I have done my best to ensure that this system runs smoothly, there might be minor errors that one may encounter while using this system. The system is designed to display errors in case of data violation of the set validation rules. Here I am going to tackle these problems and how best to solve them.

a. Number of farmers violation

This error message will be displayed when the number of farmers who are in a new group are less than 5.

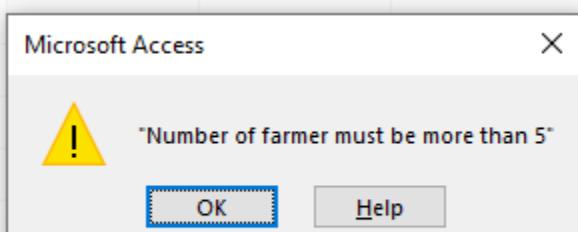


Figure 67: Number of farmers' error

This error can be corrected by ensuring that each group has at least five farmers.

b. Small Scale farmers Entry error

This error will occur when a small scale farmer registeres himself\herself in the large scale farmers details form. The error is as follows;

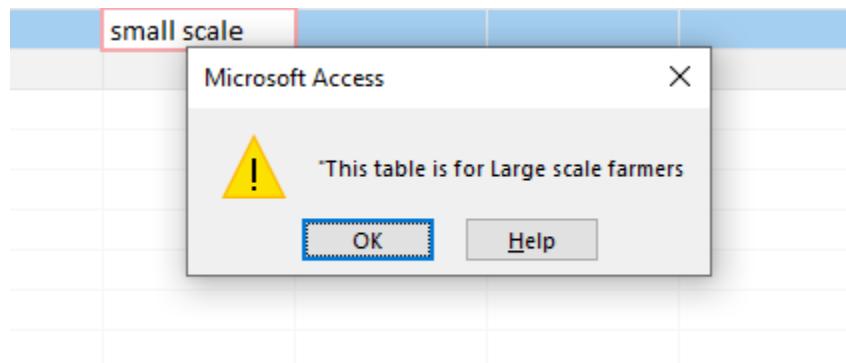


Figure 68: SSF-data entry error

The error can be correctede by using the correct form.

Distance travelled error

- This error occurs when the distance travelled that is entered is 0 or negative. This should be corrected by putting the correct positive number of kilometres.

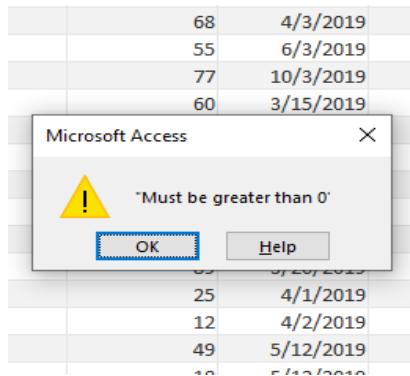


Figure 69:Distance travelled error

No loaders error.

- This error occurs when no loaders have been assigned to a vehicle. It should be corrected by assigning the vehicle the correct number of loaders.

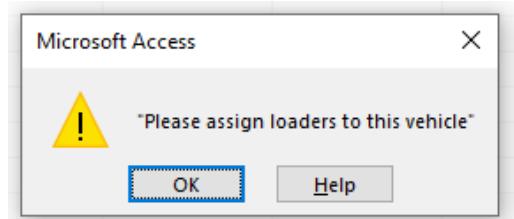


Figure 70:No loaders error

CHAPTER FOUR: MISCELLANEOUS

Conclusion

The journey that I have taken in Making this system for the **Movers Transport Company** has been very educating. I have developed this system with utmost care and I hope that it is going to bring a lot of efficiency in the company and more profits.

Recommendation

The following are the recommendations for the system:

- In order to ensure that this system runs optimally, the latest operating systems should be used coupled with the hardware specifications provided above.
- In order to prevent data loss from the system through malware attacks or illegal access by spyware, the latest antivirus should be installed on the computers.
- Stringent security measures like burglar proofing and user access passwords should be installed to ensure that the integrity of the data is maintained.
- Any necessary modifications (but with consent of the system developer) can be made to suit the organization's demands.
- The system should have offsite storage for backup purposes

Bibliography

Longhorn Computer Studies Form Three, by **S. Mburu** and **G. Chemwa; Longhorn Publishers**

Longhorn Computer Studies Form Four by **S. Mburu** and **G. Chemwa; Longhorn Publishers**

A+ Revision KCSE Computer Studies Question and Answers by **H. Otiende, J. Ndede, L. Rono**

Appendices

Appendix 1: Problem (Question Paper)

451/3

COMPUTER STUDIES

PAPER 3

(Project)

July 2021 to January 2022

7 months

THE KENYA NATIONAL EXAMINATIONS COUNCIL

Kenya Certificate of Secondary Education

Computer Studies

Paper 3 (Project)

7 months

Instructions to candidates

- (a) Candidates are expected to use a Database Management System when developing their projects.
- (b) A soft copy of the system and documentation must be stored in a removable storage medium (CD-R/CD-RW/DVD-R/DVD-RW).
- (c) Candidate's name and index number should appear on the cover page of the documentation and on the storage medium.
- (d) Each candidate should hand in a hard copy and a soft copy of the project documentation.
- (e) Candidates should answer the questions in English.

This paper consists of 3 printed pages. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing. © 2021 The Kenya National Examinations Council Turn over 921116 921116

MOVERS TRANSPORT SYSTEM

Movers is a company that provides transportation for various agricultural goods for farmers between farms and retail outlets. The company transports produce such as cereals, livestock and perishable goods like milk, eggs, fish and flowers. The company also transports farm inputs such as fertilizers, manure, herbicides, pesticides and seeds for planting to the farms.

Large scale farmers register individually as members of the company whereas small scale farmers are required to form groups in order to qualify for membership. A group has a minimum of five farmers and is recognized by a group name, location, nature of farm produce and details of individual farmers. The group can then order for transport as a unit.

The company owns pick-ups, trailers, lorries and refrigerated trucks. The charges for transported goods are based on the means of transport, load capacity and destination as shown in Table 1.

Table 1: Transport charges based on vehicles, load capacity and destination

Transport means	Load capacity in tones	Cost in KSh per km
Pick-up	1	100
Lorry	2	150
Trailer	3	200
Refrigerated truck	4	250

Table 13: Details for each vehicle table

Pick-up

Lorry

Trailer

Refrigerated truck

The company employs drivers and loaders where each driver is assigned a specific vehicle. Drivers are responsible for the vehicles and ensuring that goods reach their destination in good condition. A driver who commits an offence such as over speeding, overloading, driving while drunk or causes perishable goods to get spoilt due to misconduct is surcharged. A driver is served with a warning letter if surcharged three times in a month. A driver who has been served with a warning letter and commits an offence is suspended from duty for one month. If a driver is suspended twice within a period of six months, his/her services are terminated.

Each vehicle is allocated loaders whenever it is assigned a task. The number of loaders for a vehicle is based on its type as shown in

Table 2: Number of loaders and payments to drivers and loaders based on type of vehicle

Type of vehicle	Number of loaders	Amount paid to loader per vehicle (in KSh)	Amount paid to driver per vehicle (in KSh)
Pick-up	2	200	2000
Lorry	6	300	3000
Trailer	10	500	8000
Refrigerated truck	4	450	5000

Table 14: Table for payment of loader and driver

Vehicles are serviced and fueled before each trip and the expenses incurred are recorded.

The company remits 20% of the total revenue as tax to the government.

Develop a well-documented computerized database system for the company that will:

1. Maintain records of membership
2. Maintain records of vehicles

3. Maintain records of loaders and drivers
4. Maintain records of goods transported
5. Maintain records of farmers who are in groups
6. Maintain records of orders for transport
7. Maintain records of offences committed by drivers
8. Maintain records of expenses for each vehicle
9. Compute each of the following:
 - (i) Payment for a loader and a driver;
 - (ii) Penalties surcharged on drivers;
 - (iii) Loading fee per vehicle per trip;
 - (iv) Revenue per vehicle per trip;
 - (v) Expenses for each vehicle;
 - (vi) Tax payable;
 - (vii) Total company expenses;
 - (viii) Total revenue for the company;
 - (ix) Overall company profit.
10. Generate various reports.

FLOWCHART SYMBOLS

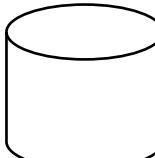
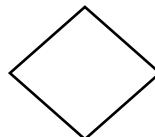
SYMBOL	NAME	MEANING
	Arrow	Show the logical flow of data
	Document	Opens document/generate report
	Storage Disk	Updates and access a file in a magnetic disk
	Parallelogram	Input/output
	Rectangle	Process
	Decision Box	Selection of options

Table 15; System flowchart symbols table