



# SALES INFORMATION SYSTEM OF THE BOOK PROMOTION COMPANY

by

MS. THEINGI WIN

Final Report of the Three - Credit Course  
CS 6998 System Development Project

Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Master of Science  
in Computer Information Systems  
Assumption University

November 1996

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CS 6998 SYSTEM DEVELOPMENT PROJECT**

**SUBMITTED TO**

**THE GRADUATE SCHOOL OF COMPUTER INFORMATION SYSTEMS  
ASSUMPTION UNIVERSITY  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE IN COMPUTER INFORMATION SYSTEMS**

**NOVEMBER 1996**



Project Title : Sales Information System  
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Academic Year : 1996

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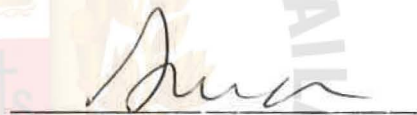
The Graduate School of Assumption University had approved this final report of the three credit course, CS 6998 System Development Project, submitting in partial fulfillment of the requirements for the degree of Master of Science in Computer Information Systems.

**Approval Committee:**



(Prof.Dr.Srisakdi Charmonman)

Advisor



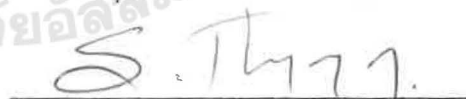
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Member

November 1996

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## ABSTRACT

This System Development Project provides the analysis, design, and implementation of Sales Information System for a book promotion company. The analysis and design process cover the current problem definitions, information gathering and understanding of the existing system, the new requirements, and areas for improvements. It also includes the design of new system that is presented by using dataflow diagram, Structure Chart, file design, table design, hardware & software requirement, security controls and cost & benefits analysis to solve or minimize the problems.

The implementation consists of coding, testing, conversion, training, and system maintenance. The new system can help to reduce the operating costs and time consuming, and can help to increase the efficiency of service to members.

The existing system operates inefficiently; Sales data is not up-to-date, time to process Sales invoice and delivery the goods.

This project is intended to provide the best solution to solve the problem by applying a computerized system. It can provide timely and accurately information to the managements. It save time, cost and eliminate the redundancy operations.

## ACKNOWLEDGEMENTS

The author wishes to express her gratitude to her advisor, Prof. Dr. Srisakdi Charmonman, for his valuable guidance during the period of the project. The author is also grateful to the Project Committee Members of the Graduate School of Computer Information at Assumption University for their kind suggestion.

And also would like to thank to all the lecturers of the MS(CIS) program.





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# 1. INTRODUCTION

## 1.1 BACKGROUND OF THE PROJECT

Book Promotion Company is a small agent in delivering newspapers, magazines and all kinds of book to newsstands within specific area. It is a family business, located at Ramkhamhaeng Road, and founded in early 1987.

Management information system (MIS) is the heart of the organization. To compete effectively in the world market, executives now realize that they must take full advantage of their information resources.

The management of the company believe in the concept of MIS and would like to set up the sales information system in their organization since it is not only managing the meaningful information for analyzing, evaluating, planning and controlling, but also enhancing them in decision making, offering better service to customers, developing of new products, competing with their competitors, and etc.

Additionally, this system supports the management at all levels in the long term and the short term strategic planning and operations which finally reach the company objectives and policies.

Due to a very strong competition in this type of business company needs to improve its present operation and makes it much more effective. The most important factor which can make the business successful is “ delivery time ”. It means that “ Book Promotion ” will have more and more customers if the products can be delivered to them faster than its competitors.



## 1.2 OBJECTIVES OF THE PROJECT

The objectives of Sales Information System project are as follow :

1. To study the existing system.
2. To analyze and design the computer system for Sales department and management of the company.
3. To provide accurate and meaningful information for top management so that they can make better decision both in short term and long term strategic planning.
4. To develop the management information system for the organization.
5. To support management with the timely information and report which enhance them to analyze and understand the market situation so that they are able to encourage their salesforce to meet the sales target.

## 1.3 SCOPE OF THE PROJECT

The scope of the project includes departments and activities that are relevant to the sales information system of the Book Promotion company.

These are:

1. Sales activities which include
  - Sales planning
  - Cost sheets and proposal
  - Sales reports
2. Service activities which include
  - Transportation
  - Job submission and keeping service records
3. Accounting and administration activities which include
  - Contract
  - Invoice

4. Marketing activities include keeping customer records to provide new opportunities for the organization.
5. Management activities include providing reports to support decision making.

#### **1.4 DELIVERABLES**

The deliverables for the project on “ Sales Information System” are as following :

1. A Software package (FOXPRO) for “ Sales Information System ”.
2. Screen layout for user-interfaces.
3. Various hard copy layouts containing :
  - 3.1 Customer report
  - 3.2 Product report
  - 3.3 Sales report by customer
  - 3.4 Sales report by product
  - 3.5 Inventory report
  - 3.6 Sales report by Salesman
  - 3.7 Daily Sales report
  - 3.8 Monthly summarize report
  - 3.9 Inventory movement report
  - 3.10 Back order report
  - 3.11 Employees summary report

## 1.5 PROJECT PLAN

The project plan is represented in Gantt Chart as follows :

ACTIVITIES	JUL				AUG				SEP				OCT			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<u>SYSTEM ANALYSIS:</u>																
- Identify the area under study	Δ															
- Develop physical DFD of the existing system		Δ														
- Identify the contents of the existing data stores			Δ	Δ												
<u>DETAIL ANALYSIS AN DESIGN</u>																
- Develop the context diagram					Δ											
- Develop the physical DFD of the new system					Δ	Δ										
- Identify the contents of the data stores						Δ	Δ									
- Database design							Δ									
- Screen design								Δ								
- Report design								Δ	Δ							
- Program design								Δ	Δ							
<u>CODING AND TESTING</u>																
- Planning									Δ							
- Tesing									Δ							
- Integrated test									Δ	Δ						
- Acceptance test									Δ	Δ						
<u>IMPLEMENTATION</u>																
- Installation												Δ	Δ			
- Training													Δ	Δ		
- Documentation														Δ	Δ	Δ



## **2. EXISTING SYSTEM**

### **2.1 BACKGROUND OF THE ORGANIZATION**

The Book Promotion Company Limited is located at Ramkhanhaeng Road, Bangkok. It was founded in early 1987. Now, it has only thirty staffs and all work is carried out manually.

The company operates all of its areas management, marketing, services and sales in accordance with high principles in regard to the customers' greatest benefit.

For the marketing department, sales analysis is essential to evaluate sales performance, salesman, inventory and forecasting sales planning in the next period of time.

The sales information system is designed to meet the users' requirement. It has to be developed in a timely accurate and controllable manner including easy use for the users to analyze sales performance and direct the information efficiently and effectively.

### **2.2 PROBLEMS OF THE EXISTING SYSTEM**

The current system of the company is as a manual system that supports every departments.

The problems with the current systems are as following :

1. The paper works are more and some are in consistency, repetitive, and not available.
2. The data are not up to date because of the more paper works.

5. Poor follow up procedure.
6. Poor planning in replenishing stock.
7. There are duplicate of filing the documents.

### **2.3 AREAS FOR IMPROVEMENT OF EXISTING SYSTEM**

Due to the weaknesses of the current system, areas for improvement are defined as follow.

- Reduce some overlap functions between section which causes the duplication of work.
- Data/Information can be shared and retrieved by several user simultaneously.
- More accuracy and efficiency for work control.
- The top management nowadays, realize on the above problems and would like to use the computer system to enhance them to solve all the problems.
- Additionally the MIS (Management Information System) must be implemented to support the computer system in order that the meaningful information will be arranged in such the way that the executives can use them as a tool to compete with their competitors and improve the sales and marketing system to accurate on their planning controlling and implementation.

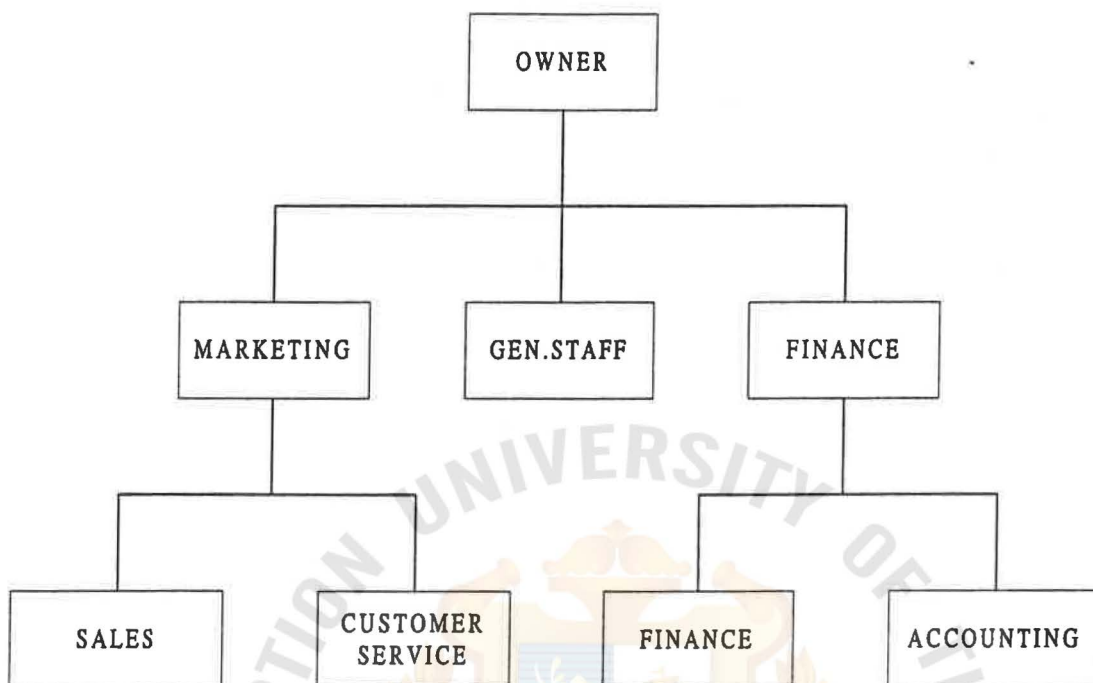


Figure 2.1 : Organization Chart Of Book Promotion Company



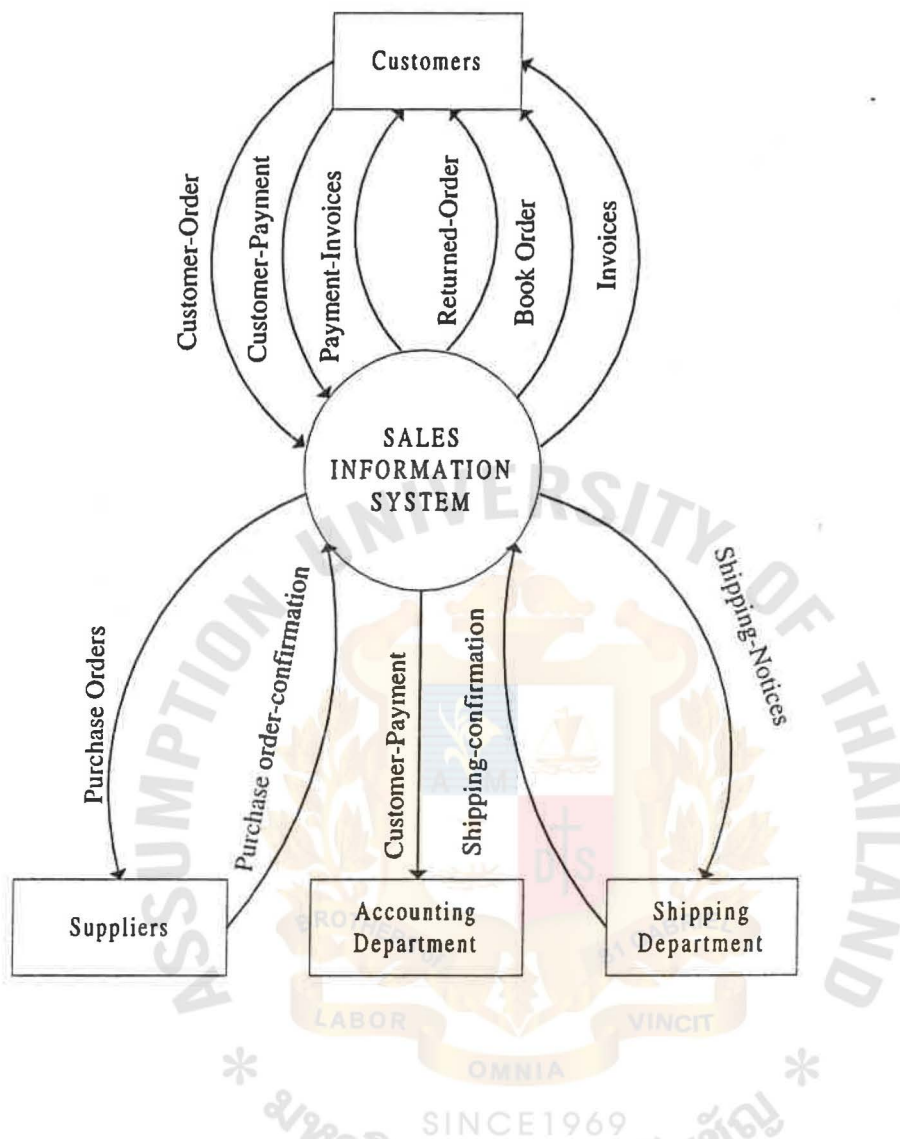


Figure 2.2 : Context Diagram of The Sales Information System of Book Promotion Company

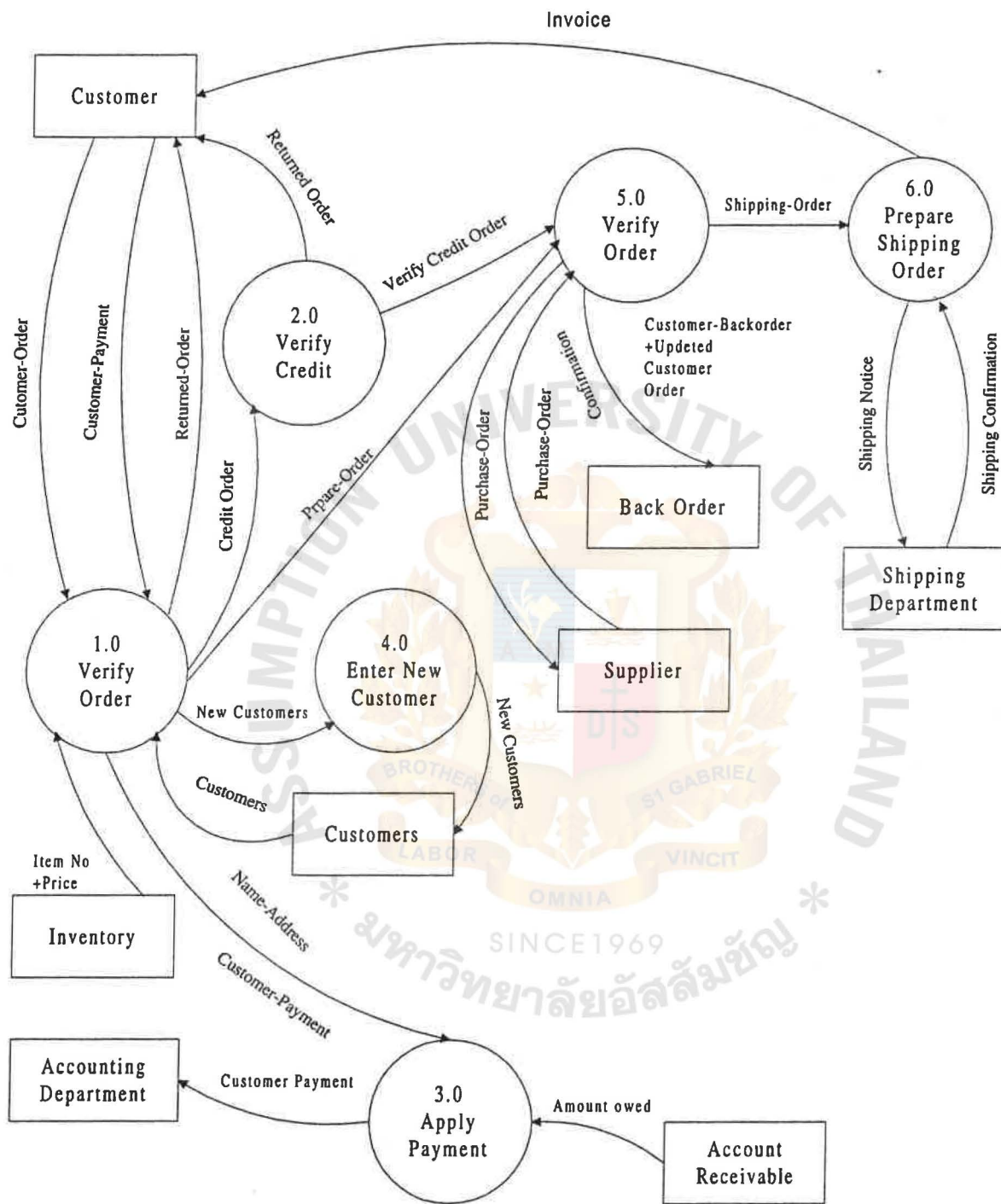


Figure 2.3 : Level 0 Dataflow Diagram of the Existing System

### 3. PROPOSED SYSTEM

#### 3.1 USERS REQUIREMENT

After analyzing the exiting system, we can identify the users requirement as follow:

- Reducing time and increasing accuracy in issuing order form, quotations, contracts and invoices.
- Providing accuracy and meaningful information so that the management are able to make the better decision on planning, forecasting, and controlling.
- Increasing volumes of work.
- Generating reports on time and upon request.
- Reducing redundancy and mistaking by recording data only on time.

#### 3.2 INFORMATION REQUIREMENT

- Customer report
- Product report
- Sales report by customer
- Sales report by salesman
- Inventory report
- Sales performance report by salesman
- Daily sales report
- Customer status report
- Monthly summarize report.
- Inventory movement report.
- Goods return report.
- Back order report.

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### 3.3 ASSUMPTION OF THE PROJECT

- It has to be assumed that .
- System that we design will be used only on the sales and marketing department.
- System will interface to other systems by manual expect the accounting department which will use the file server to share the database.

### 3.4 SYSTEM DESIGN

The designed system are set up according to the user requirement model so that the reports or output of the system will be generated by using the data or information, control and resources from the system. Furthermore the proposed system focuses on the design of an efficient sales information system for the Book Promotion company which aims to achieve all user requirements.

The computerized system that should be designed for replacing the manual existing system. It should be integrated all business application together to increase the efficiency of the work accurate information for any levels is selected has capable to handle the new requirement system. All the existing system will be redesign. The computerized system for the new system will be established at each area as follow :

- Sales Department
- Marketing Department
- Accounting Department.
- Warehouse Department.



## 4. SYSTEM REQUIREMENT

### 4.1 HARD WARE & SOFTWARE REQUIREMENT

Following are the hardware and software requirements for the proposed system.

#### HARDWARE REQUIREMENT

- |  |       |        |
|--|-------|--------|
| 1. The 80486DX2-80 SPEED 285 Mhz               | 1 set | 65,000 |
| 80486DX-80 BIT MICROPROCESSOR                  |       |        |
| - MEMORY 4 MB (4096)                           |       |        |
| - DRIVE 1.44 MB                                |       |        |
| - SUPER IDE VL BUS 32 BIT                      |       |        |
| - MONITOR COMTECH NOW-INTERLACED LOW RADIATION |       |        |
| - KEYBOARD 101 KEY                             |       |        |
| - MINI TOWER CASE                              |       |        |
| - HARD DISK 420 MB                             |       |        |
|  |       |        |
| 2. UPS Power Saver UPS 350 VA-120 KVA          | 1 Set | 15,000 |
| 3. HP LASER 4P                                 | 1 Set | 28,500 |

#### SOFTWARE REQUIREMENT

Operating System	MS-DOS Version 6.0
System Development Software	FoxPro version 2.0 for windows
	FoxPro 2.5 Distribution Kit
Documentation Preparation Software	Microsoft Windows 3.1
	Microsoft Word 6.0
	Microsoft Excel 5.0

### 4.2 COST / BENEFIT ANALYSIS

#### 4.2.1 TANGIBLE BENEFITS

The yields for the tangible benefit for the Sales information are quite clear, as the problem of not being able to issue invoices on time and customer's rejection of order as well as losses due to calculation of wrong prices can solved, and converted to monetary terms as follows:

1. Reduce Order Cancellation	35,000 / year
2. Reduce losses from wrong Pricing calculation	15,000 / year
3. Faster Issuing of Invoices	15,000 / year
4. Better Profitability control to Product Pricing	15,000 / year
5. Decreased Over time charges	25,000 / year
<b>Total</b>	<b>105,000 / year</b>

#### 4.2.2 INTANGIBLE BENEFITS

Following are the Intangible benefits expected from the system :

1. Improved customer services
2. Up-to-date and accurate information system for management's decision making.
3. Reinforce good cooperate image to the company.
4. Better evaluation of the product trends and profitability trends.
5. Improve the morale of the company staffs.
6. Reduced problems encountered by existing system.
7. Help better the sales forecast including the inventory control.

#### HARDWARE & SOFTWARE COSTS

Computer	65,000
LIPS Power Server	15,000
HP LASER 4P	28,500
Software Cost	<u>5,000</u>
	<u>113,500</u>

#### IMPLEMENT COSTS

System design & Programming Costs	70,000
Training Costs( 7,200 * (1.3) )	5,040

Total Investment Cost  $113,500 + 75,040 = 188,540$

#### OPERATING CASH FLOW AFTER TAX

Cost Savings	105,000
Operating Costs	26,600
Net Cash Flow ( A-B )	78,400 Before-tax

Depreciations / year = ( Depreciable Cost - Salvage value )/ Useful Life

Useful Life = 5 years. Salvage Value = 0

$$\begin{aligned}\text{Depreciation / year} &= ( 113,500 + 70,000 - 0 ) / 5 \\ &= 36,700\end{aligned}$$

$$\begin{aligned}\text{Cash flow After-Tax} &= ( \text{Saving} - \text{Operation Cost} ) ( 1 - \text{TaxRate} ) + \text{Depreciation} * \text{Tax Rate} \\ &= 78,400 * ( 1 - 0.3 ) + 36,700 ( 0.3 ) \\ &= 75,890 / \text{year}\end{aligned}$$

#### 4.2.3 SOFTWARE DEVELOPMENT COST

The Software should be designed where by the users maintain the system themselves. Users are two clerks who will undergo about 2 weeks of training at a computer center.

System Design and Programming Costs	70,000
Training & development costs	7,200

#### 4.2.4 OPERATING COST

The operating costs are the costs necessary for the computers to be able to operate without any problems. These includes maintenance charges as well as computer stationery costs.

Computer Ribbons ( per year )	7,200
Computer Stationery ( per year )	14,400
Computer Maintenance Costs	5,000

#### 4.2.5 Present Value of The Proposed System

Using the basic formula for Present Value

NPV	= Net Present Value
PV	= Cost of the new system
R	= Cash Flow (savings)
K	= cost of money (Interest rate)
N	= Number of years savings available
NPV	= $R_1 (1+K)^{-1} + R_2 (1+K)^{-2} + \dots + R_N (1+K)^{-N}$

$$\begin{aligned}
 \text{Cash Flow After Tax} &= 75,890 / \text{year} \\
 K &= 8 \% \\
 PV &= 188,540 \\
 N &= 5 \text{ years}
 \end{aligned}$$

$$\begin{aligned}
 NPV &= 75,890 / (1.08)^1 + 75,890 / (1.08)^2 + 75,890 / (1.08)^3 + 75,890 / (1.08)^4 + 75,890 / (1.08)^5 - \\
 &188,540 \\
 &= 114,471.97
 \end{aligned}$$

#### 4.2.6 Payback Period to Install the System Using the basic formula after-tax payback of :

$$\text{Payback Period} = I / \{(1-T)R\}$$

where

$$\begin{aligned}
 I &= \text{Investment or Capital Expenditures} \\
 &= 188,540 \\
 R &= \text{Annual Savings} \\
 &= 105,000 \\
 T &= \text{Tax Rate} \\
 &= 30 \% \\
 &= 188,540 / \{(1-0.3) * 105,000\} \\
 &= 2.5 \text{ years or 2 years 5 month}
 \end{aligned}$$

#### 4.3 SECURITY AND CONTROL

The following security and control should be concerned for the computer based sales system :

##### Data Accuracy

1. All the data entry and modification must be double checked either from the screen display or from the printout that generated after processes.
2. All the resource documents must be checked by the authorized officer when they pass from one process to another.



### **System Security**

1. All the data files and system programs must be stored on secondary storage medium such as floppy diskette to ensure the correctness of data and operations.
2. Back up all the files every times the database are update or modified. And it recommended that the backup should be done within that day and separately keep all the file in safe place.
3. Only authorized personnel can access to the system and do data entry, modify and correct the data.
4. All the source documents must be stored in a safe place.
5. The computer hardware office must be securely locked after office hour.
6. Only the authorized personnel should sign in the source documents as request and the copy of those documents should be sent to other related sections for reference
7. Produce only the required output reports

## **4.4 PROJECT IMPLEMENTATION**

The new system which consists of hardware and software is installed at this stage. Three tasks have to be performed in order to get new system to the operational stage.

### **1. Program the system**

This is the point at which the program for the sales information system is coded. The program is developed from the program flowchart and data flow diagram Each module of the program is debugged again so that the system of program can operate as a complete application system. After that, the documentation of the program is prepared.

### **2. Test the Program**

Testing is the process of executing a program is tested to make sure it performs satisfactory. A test data is created and input to the system and the program is run in order to test all possible situations that night occur in the future.

#### **• Program Testing**

Each module of the program is tested the to make sure it performs satisfactory. A test data is created and input to the system and the program is run in order to test all possible situations that night occur in the future.

- **System Testing**

The objectives of entire system testing is to ensure that users have adequate documentation to run the system. To ensure that the users are able to input the data properly and to ensure that the overall system flow works properly. Above all, to ensure that the entire system functions as a whole.

### **3. Implementation**

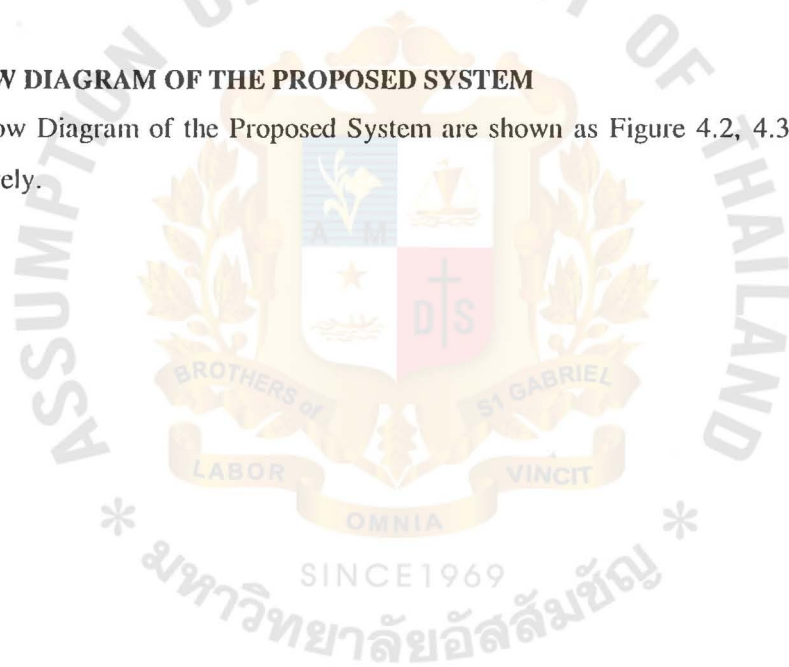
This is a point at which users actually interacts with the system. The users will undergo a training and will get into the stream of the system.

#### **4.5 CONTEXT DIAGRAM OF THE PROPOSED SYSTEM**

Context Diagram of the proposed system is shown as Figure 4.1

#### **4.6 DATA FLOW DIAGRAM OF THE PROPOSED SYSTEM**

Data Flow Diagram of the Proposed System are shown as Figure 4.2, 4.3, 4.4, 4.5, and 4.6 respectively.



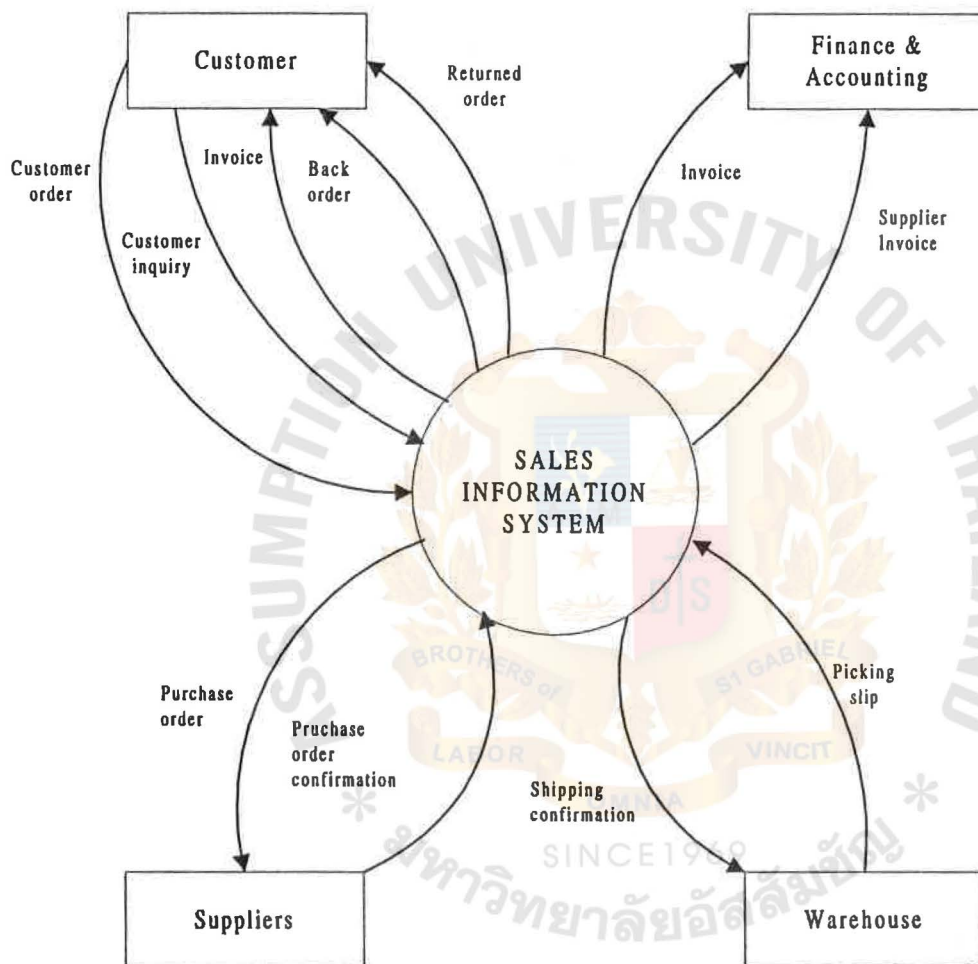


Figure 4.1 : Context Diagram of the Proposed System

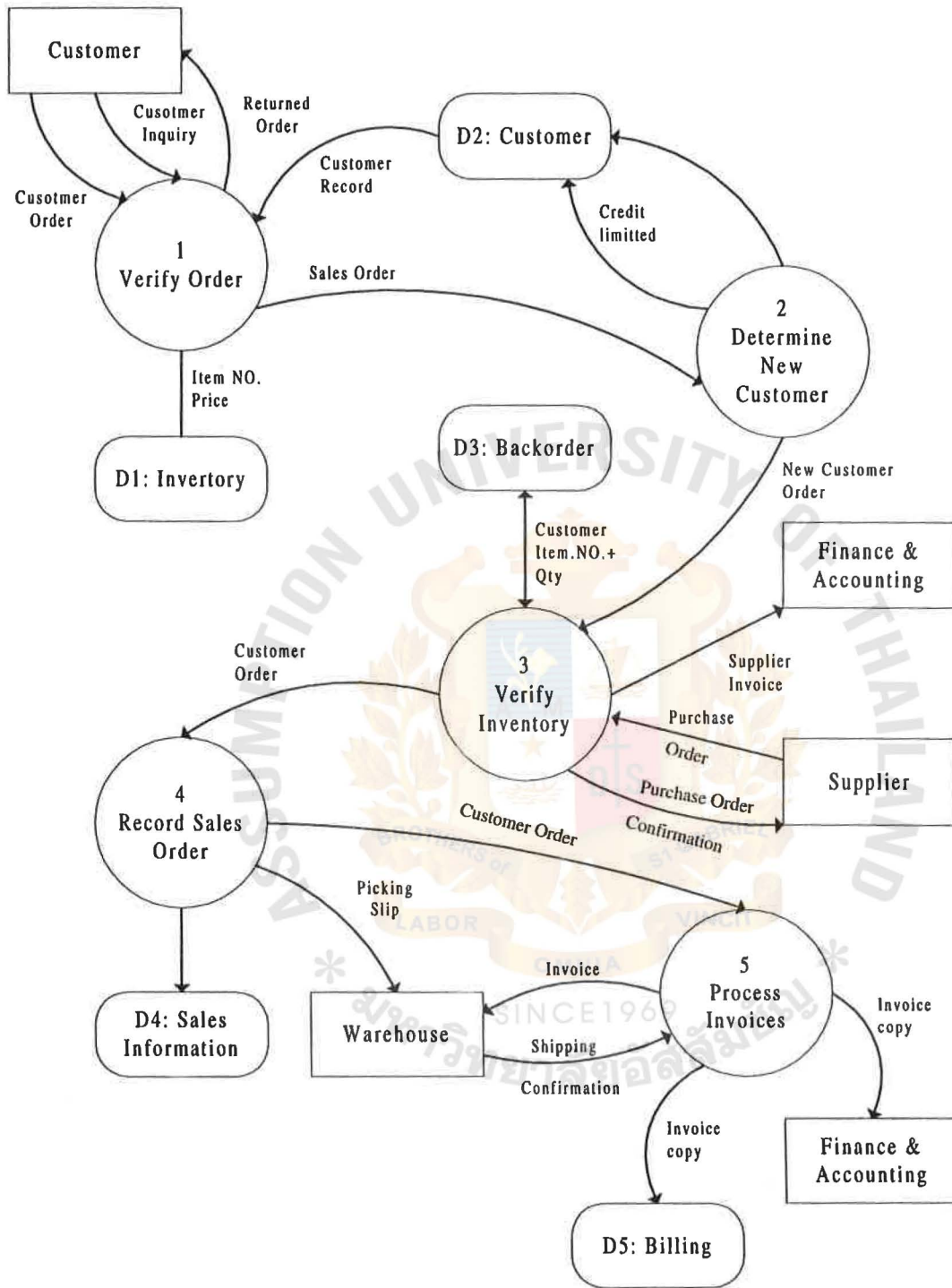


Figure 4.2 : Dataflow Diagram Level 0 of the Proposed System



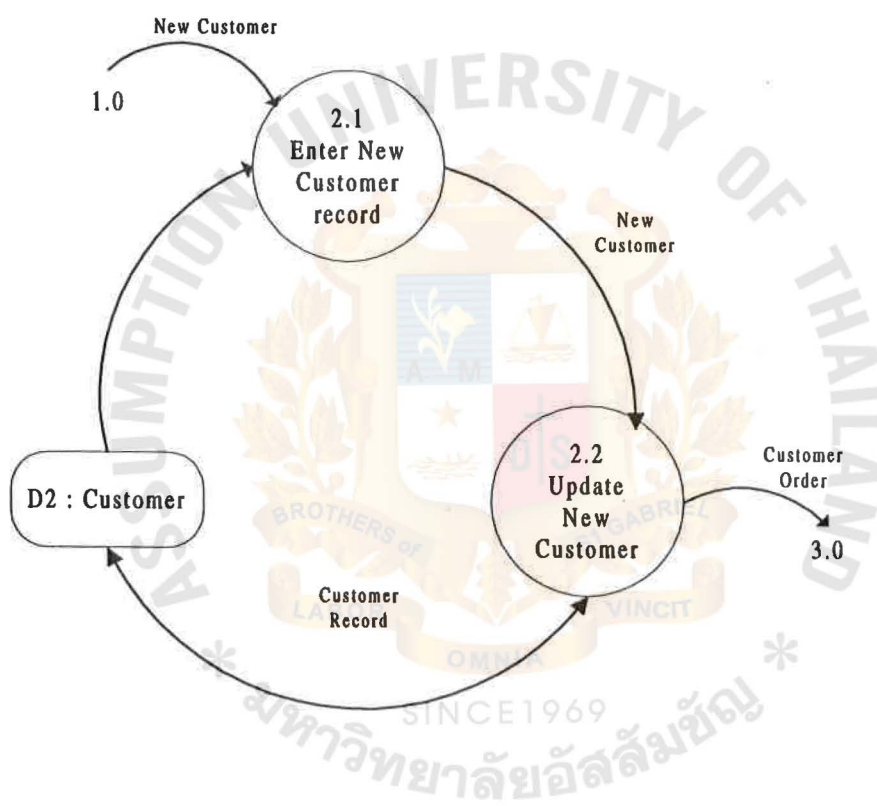


Figure 4.3 : Process 2.0 Level 1 of the Proposed Systems

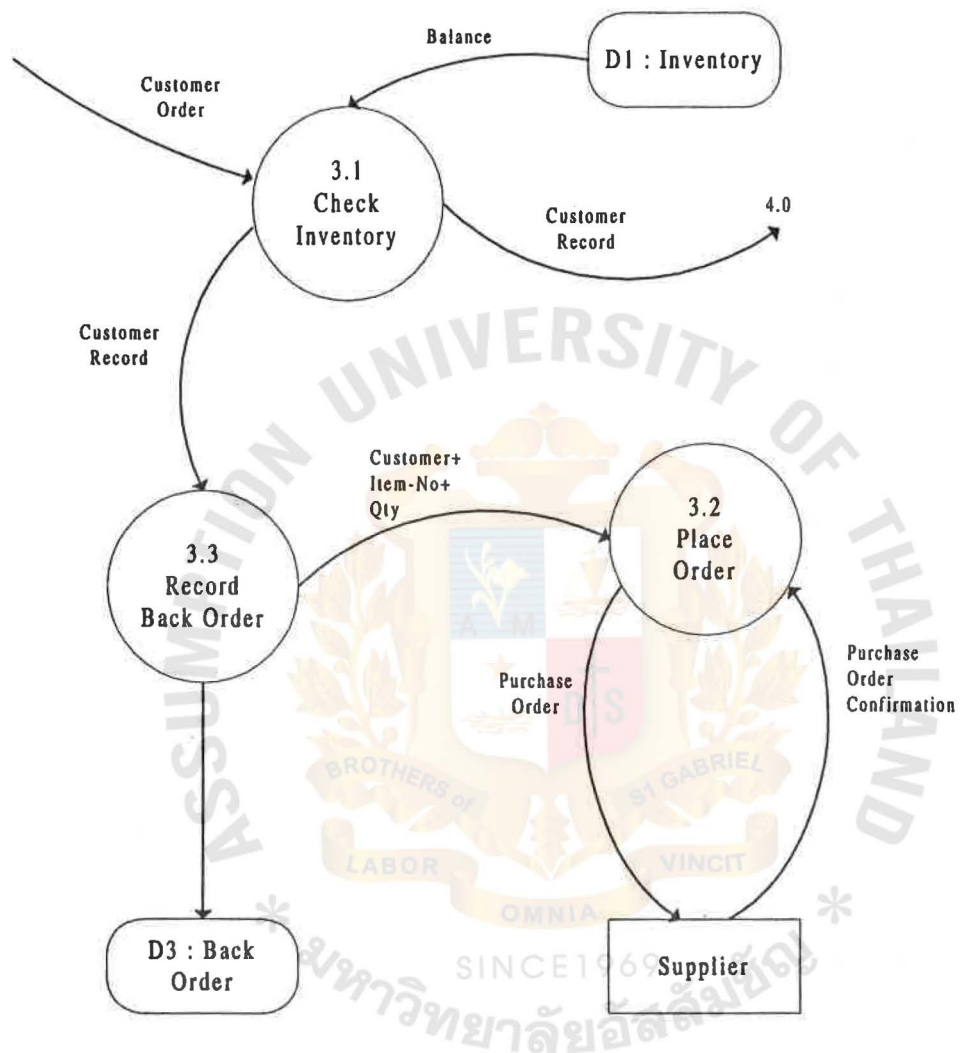


Figure 4.4 : Process 3.0 Level 2 of the Proposed Systems

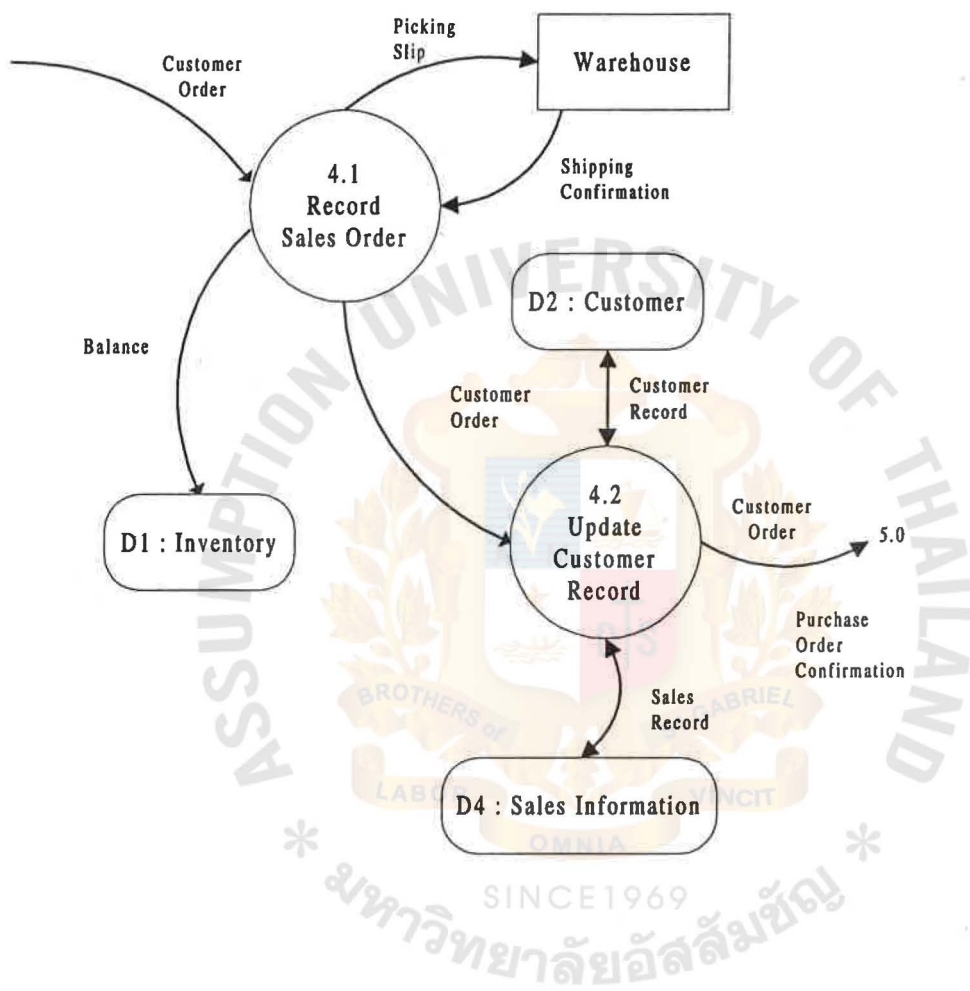


Figure 4.5 : Process 4.0 Level 1 of the Proposed System

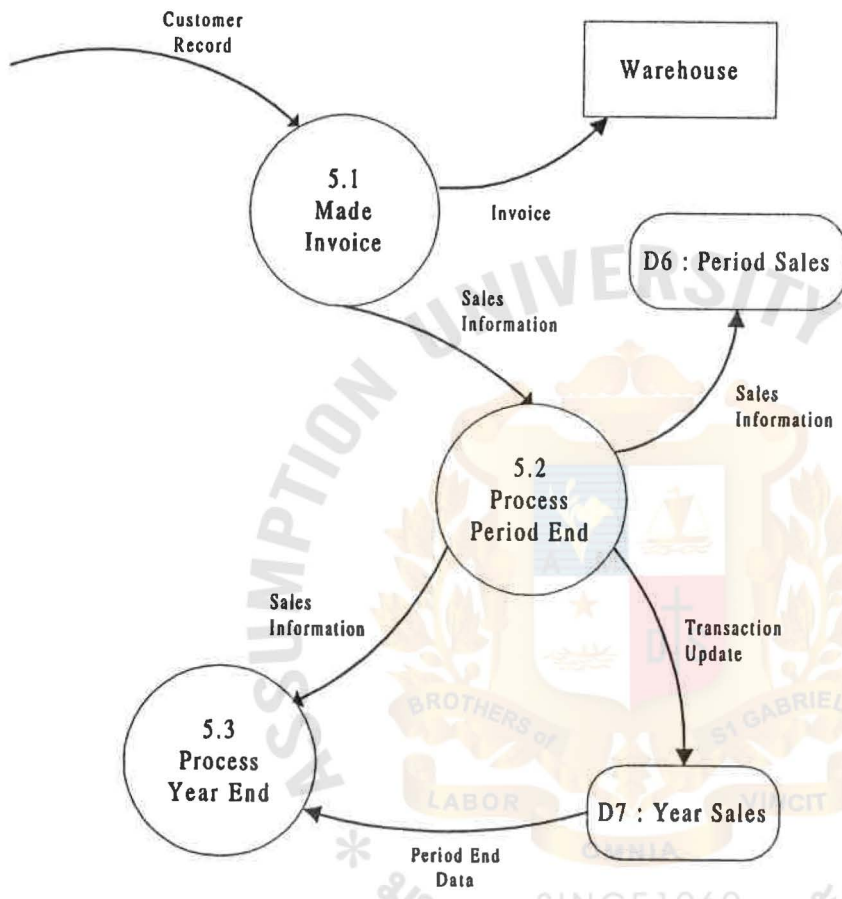


Figure 4.6 : Process 5.0 Level 1 of the Proposed System



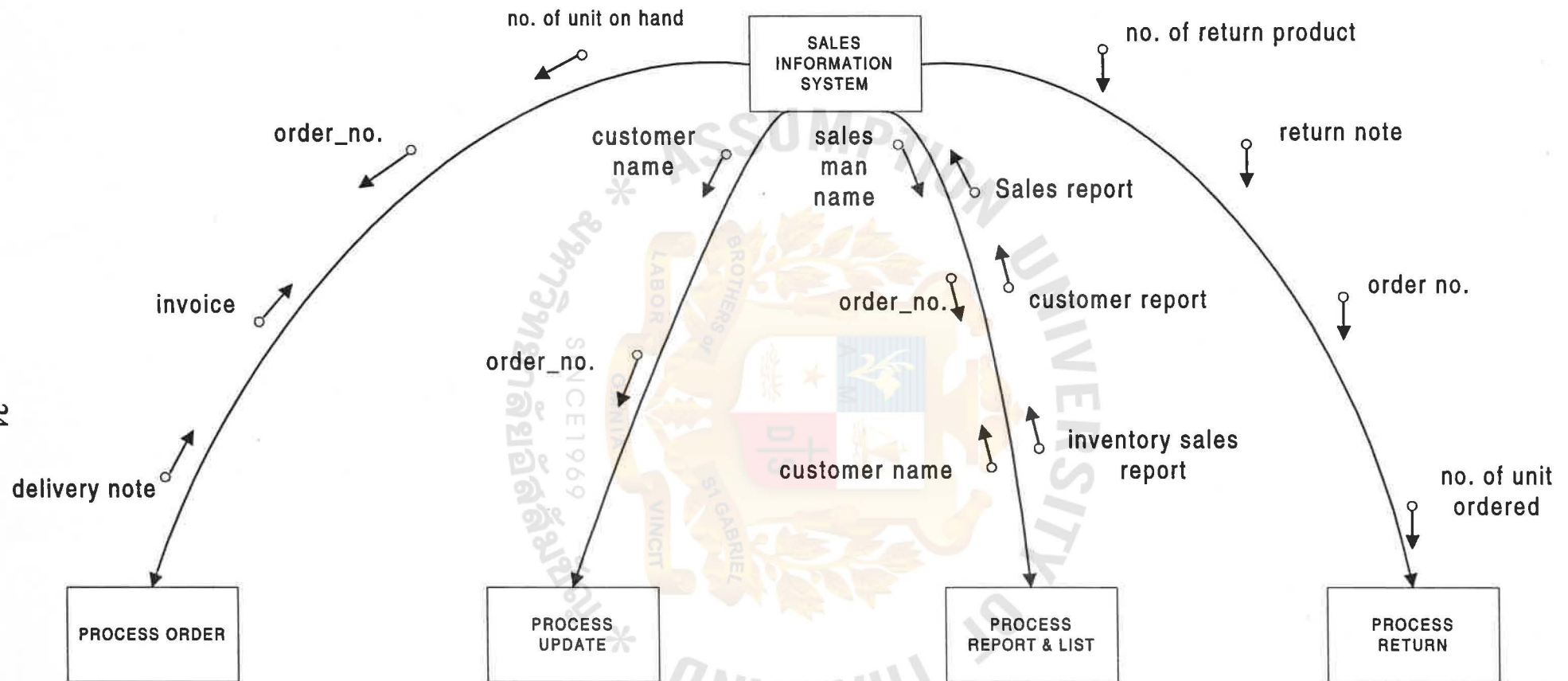


Figure 4.7 : Structure Chart Level 0 : Sales Information System

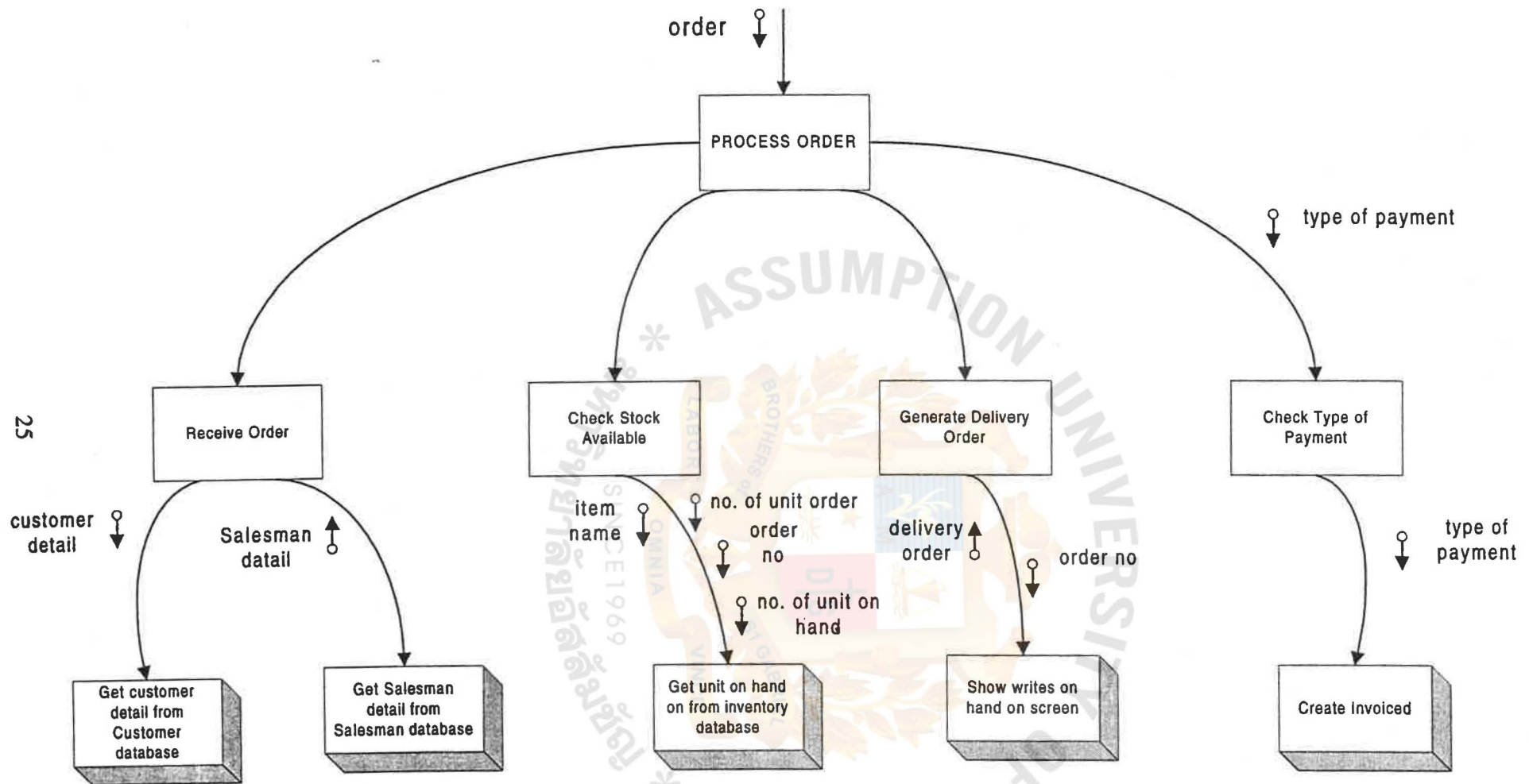


Figure 4.8 : Structure Chart Level 1.0 : Process Order

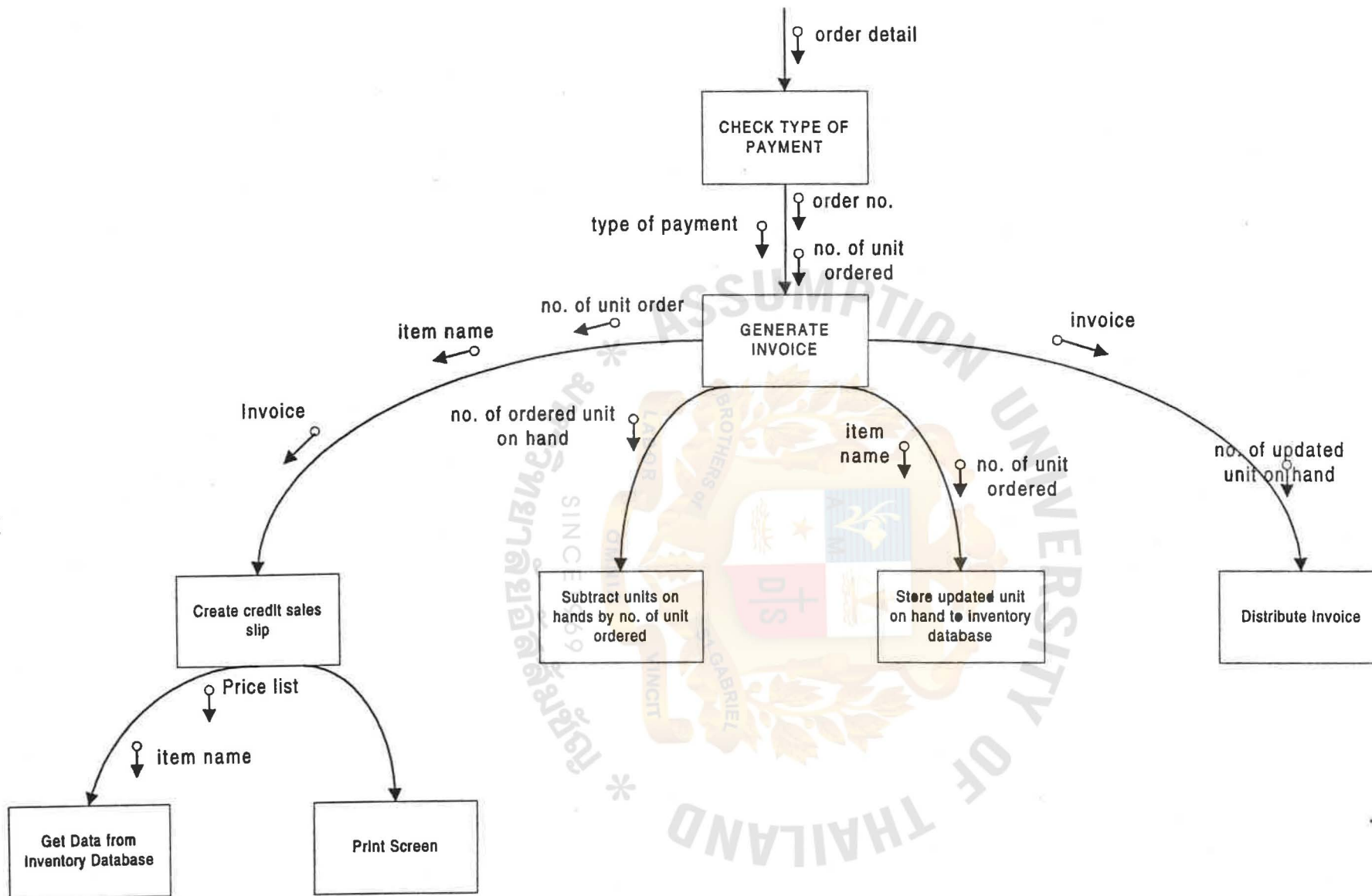


Figure 4.9 : Structure Chart Level 1.1 : Generate Invoice

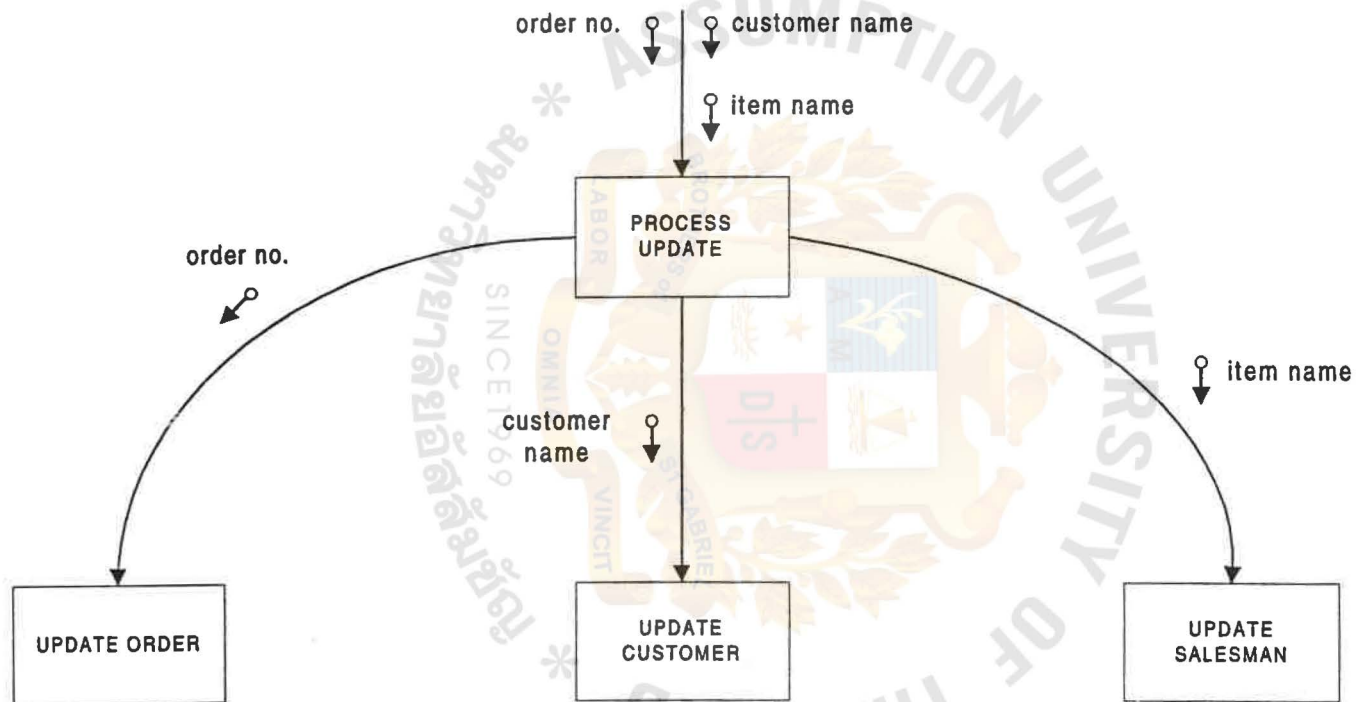


Figure 4.10 : Structure Chart Level 2 : Process Update

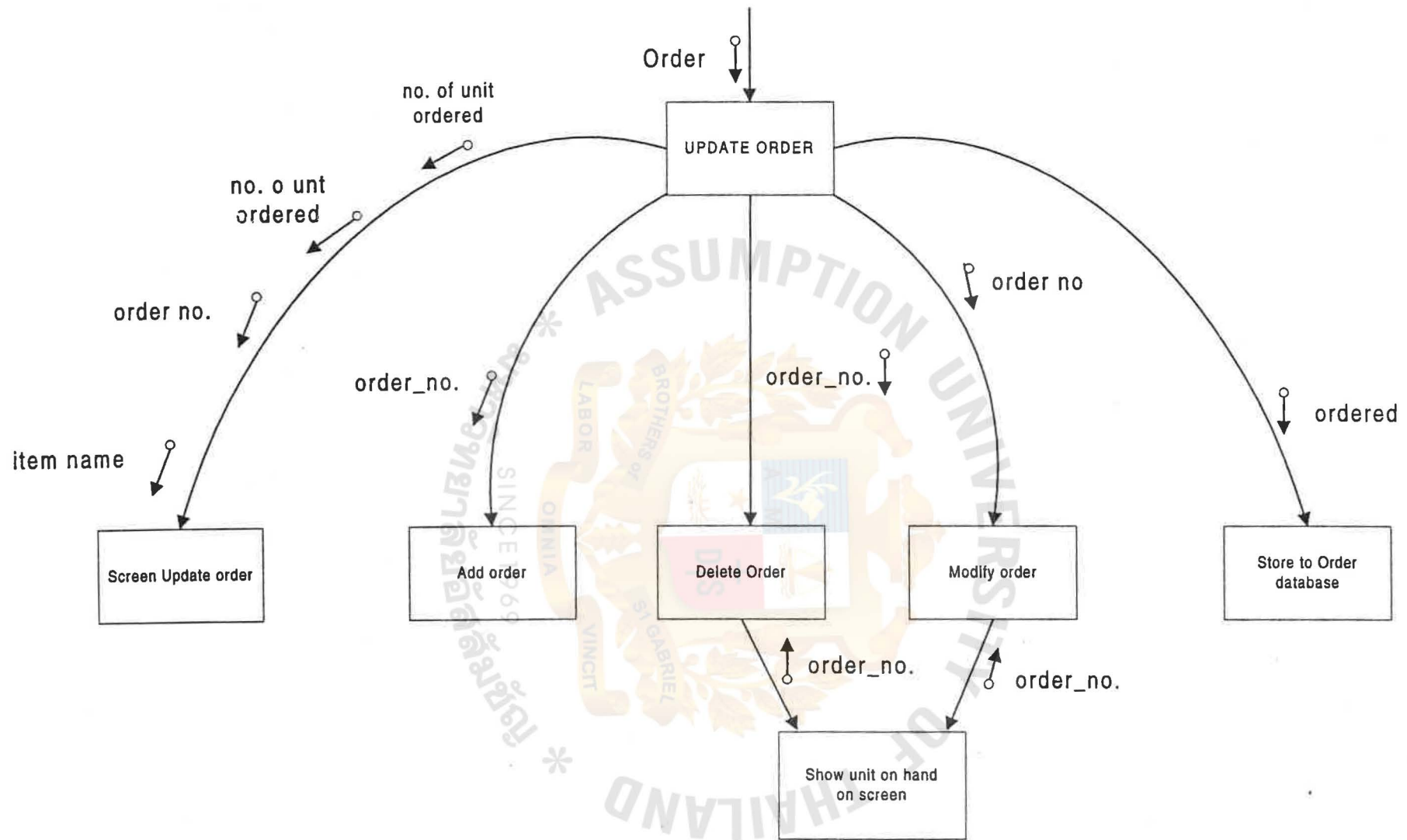


Figure 4.11 : Structure Chart Level 2.1 : Update Order



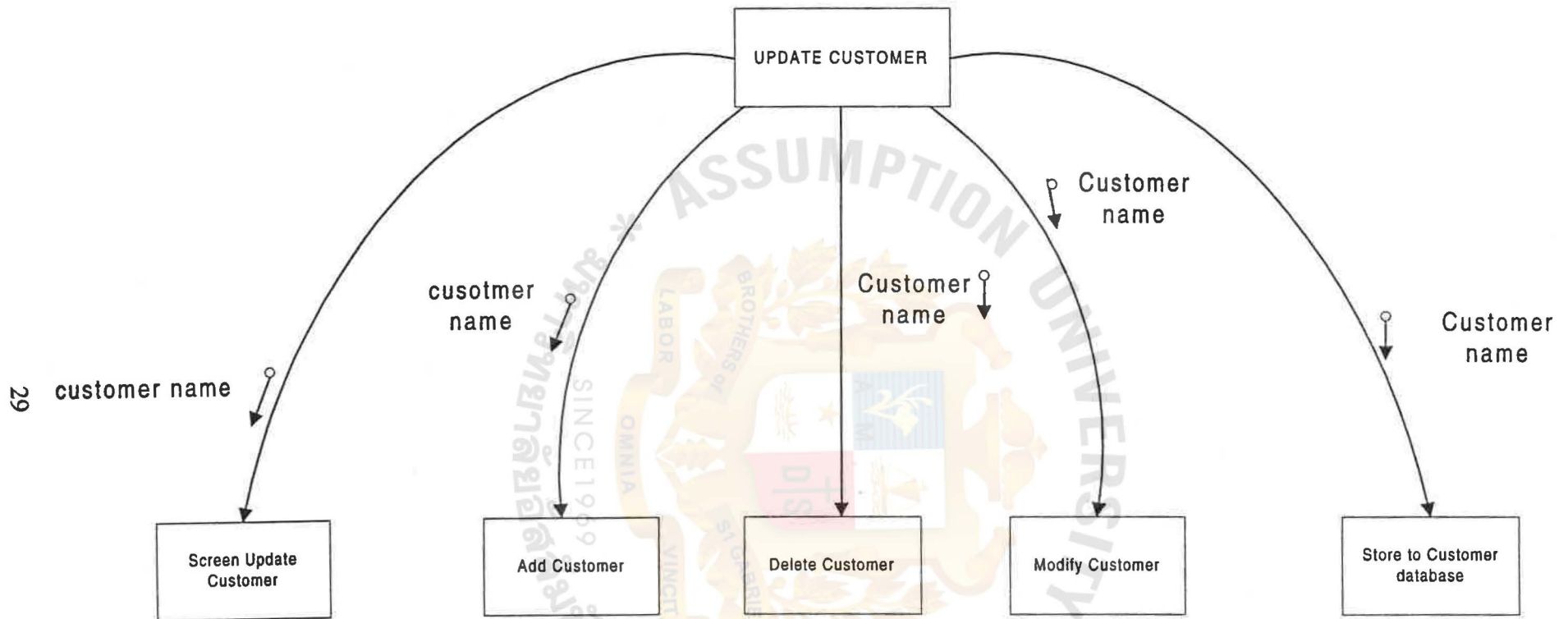


Figure 4.12 : Structure Chart Level 2.2 : Update Order

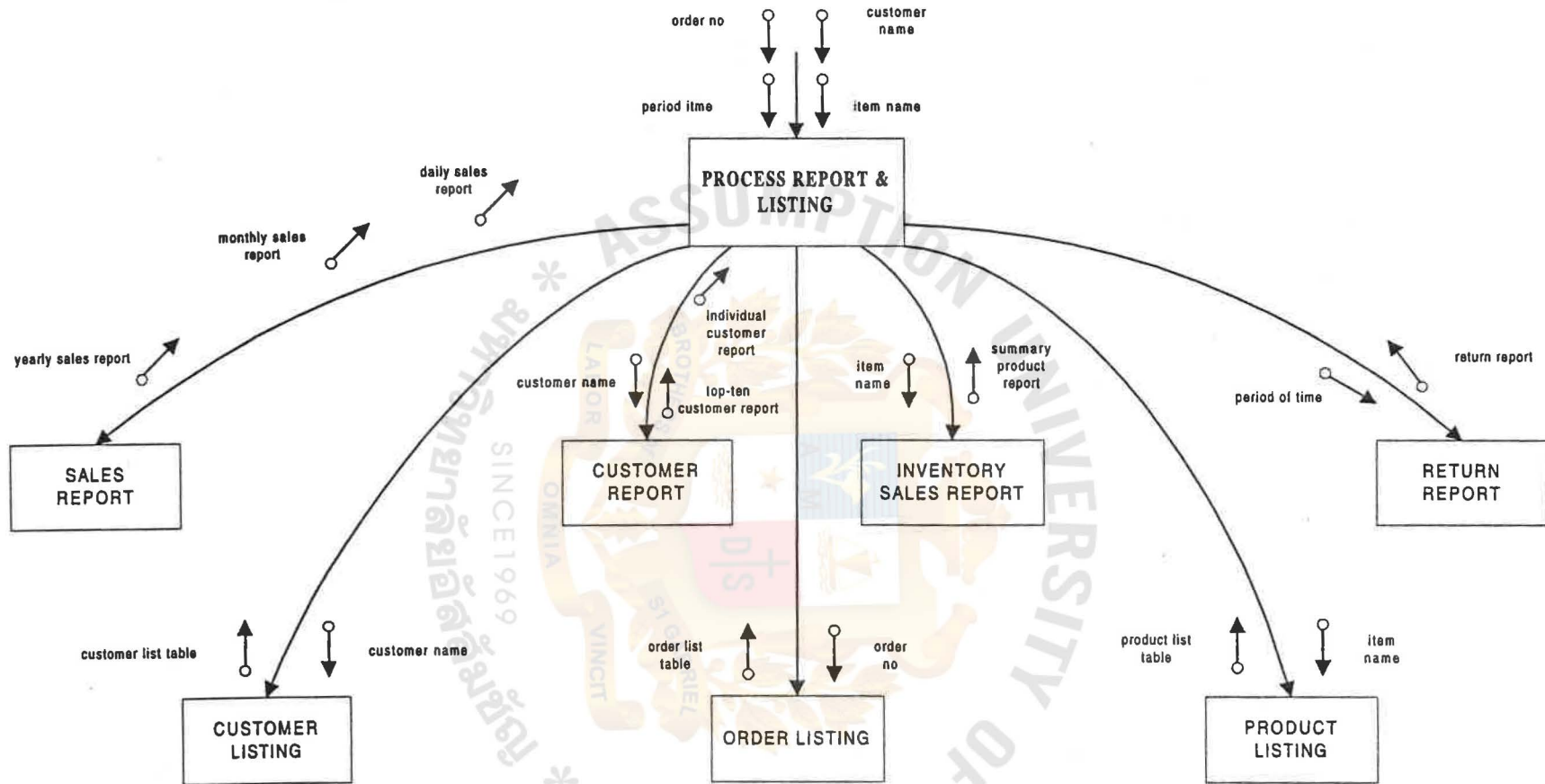


Figure 4.13 :Structure Chart Level 3 : Process Report

#### 4.7 DATA DICTOTIONARY OF THE PROPOSED SYSTEMS

The data dictionary of the Proposed system is shown as the table 4.1

**Table 4.1 : Data Dictionary of the Proposed Systems**

1.	Backorder	Data Store D3
2	Balance	Stock on hand at that moment.
3	Billing	Data Store D5
4	Customer	Data StoreD2
5	Customer Inquiry	Inquiry from customer.
6	Customer Order	Order from customer
7	Customer Record	Record that contains customer data.
8	Inventory	Data Store D1
9	Invoice	Notice of order details and amount due
10	Item no.	sent to customers.
11	Item no. + price	Item no. on order but out of stock.
12	Period sales	Filling terms used for Data StoreD1
13	Picking Slip	Data StoreD6
14	Purchase Order	Document that requires warehouse to finished as for the order.
15	Returned Order	Order Return to customer, not due to out-of-
16	Sales Information	Data Store D4
17	Shipping Confirmation	Notice by warehouse that confirms to delivery the finished goods to the customer as order.
18	Year Sales	Data Store D7

## 4.8 DATA STORES AND DATA ELEMENTS

### DATASTORES

- Datastore D1 : Inventory
- Datastore D2 : Customer
- Datastore D3 : Backorder
- Datastore D4 : Sales Information
- Datastore D5 : Billing
- Datastore D6 : Period Sales
- Datastore D7 : Yearly Sales

**Table 4.2 : Data Stores and Data Elements**

	Data Element	Description	Type	Width	DEC
D1: Inventory	PAGE	Page	N	2	-
	P_CODE	Product Code	C	16	-
	P_NAME	Product Name	C	35	-
	REORDER	Reorder Point	N	3	-
	P_DATE	Purchase Date	D	8	-
	INV_BOOK	Invoice Book Number	N	2	-
	INV_NO	Invoice Number	N	6	-
	P_QTY	Purchase Quality	N	3	-
	P_SALE	Retail Price	N	7	2
	S_DATE	Sales Date	D	8	-
	S_BOOK	Bill book number	N	2	-
	S_NO	Bill Number	N	2	-
	S_QTY	Sales Quantity	N	6	-
	QTY	Stock Quantity	N	3	-

**Table 4.3 : Data Stores and Data Elements**

	Data Element	Description	Type	Width	DEC
D2:Customer	F_DATE	First Date	D	8	-
	L_DATE	Last Date	D	8	-
	DATE	Date	D	8	-
	PAGE	Page	N	2	-
	SEQ	Sequence	N	2	-
	CUST_ID	Customer ID	C	4	-
	CUST_NAME	Customer	C	50	-
	CUST_ADDR	Address	C	50	-
	CUST_CITY	City	C	14	-
	CUST_ZIP	Zip Code	C	5	-
	CUST_TEL	Telephone	C	18	-
	L_C_DATE	Last Contact Name	D	8	-
	CRE_TERM	Credit Term	C	2	-
	S_CODE	Sales Code	C	3	-
	S_NAME	Sales Name	C	50	-
	DUE_DATE	Due Date	N	2	-
	S_DISC	Sales Discount	N	5	2
	T_S_NET	Total Sale Net Price	N	12	2
	REMARK	Remark	X	10	-



**Table 4.4 : Data Stores and Data Elements**

	Data Element	Description	Type	Width	DEC
D3:Backorder	PAGE	Page	N	2	-
	DATE	Date	D	8	-
	SEQ	Sequence	N	2	-
	C_CODE	Class Code	C	2	-
	P_CODE	Product Code	C	16	-
	P_NAME	Product Name	C	35	-
	RES_QTY	Reserve Quantity	N	2	-
	CUST_NAME	Customer Name	C	50	-
	CUST_TEL	Customer Telephone	C	50	-
	RES_DATE	Reserve Date	D	8	-
	RES_STAT	Reserve Status	C	1	-

**Table 4.5 : Data Stores and Data Elements**

	Data Element	Description	Type	Width	DEC
D4:Sale Information	F_DATE	First Date	D	8	-
	L_DATE	Last Date	D	8	-
	DATE	Date	D	8	-
	PAGE	Page	N	2	-
	SEQ	Sequence	N	2	-
	CUST_ID	Customer ID	C	4	-
	CUST_NAME	Customer Name	C	50	-
	DUST_ADDR	Customer Address	C	50	-
	S_BOOK	Bill book number	N	2	-
	S_NO	Bill number	N	6	-
	P_CODE	Product Code	C	16	-
	P_NAME	Product Name	C	35	-
	S_CODE	Sales Code	C	3	-
	S_NAME	Sales Name	C	50	-
	DISCOUNT	Discount	N	5	-
	S_QTY	Sales Quantity	N	3	-
	DUE_DATE	Due Date	D	8	-
	S_NET	Sales Net Price	N	10	2
	REMARK	Remark	X	10	-

**Table 4.6 : Data Stores and Data Elements**

	Data Element	Description	Type	Width	DEC
D5:Billing	SW_BOOK	Bill box number	N	2	-
	SW_NUMBE	Bill number	N	6	-
	CUST_ID	Customer ID	C	4	-
	CUST_NAME	Customer name	C	50	-
	SW_DATE	Sale Date	D	8	-
	CUST_ADDR	Customer Address	C	50	-
	CUST_TEL	Customer Telephone	C	50	-
	SEQ	Sequence	N	2	-
	P_CODE	Product Code	C	16	-
	P_NAME	Product Name	C	35	-
	S_CODE	Sales Code	C	3	-
	SW_DISC	Sales Discount	N	5	2
	CRE_TERM	Credit Term	C	2	-
	CUE_DATE	Due Date	D	8	-
	SW_PRICE	Sales Price per	N	8	2
	SW_QTY	Sale Quantity	N	3	-
	SW_AMOUNT	Sales Amount	N	9	2

**Table 4.7 : Data Stores and Data Elements**

	Data Element	Description	Type	Width	DEC
D6:Period Sales	CUST_ID	Customer ID	C	4	-
	CUST_NAME	Customer Name	C	50	-
	S_DATE	Sales Date	D	8	-
	CUST_ADDR	Customer Address	C	50	-
	CUST_TELL	Customer Telephone	C	50	-
	SEQ	Sequence	N	2	-
	P_CODE	Product Code	C	16	-
	P_NAME	Product Name	C	35	-
	S_CODE	Sales Code	C	3	-
	S_PRICE	Sales Price Per Unit	N	8	-
	S_QTY	Sales Quantity	N	3	-
	S_AMOUNT	Sales Amount	N	9	-
	S_TOT	Total Sales With VAT	N	10	-
	S_DISC	Sale Discount	N	5	-
	S_TOT_INV	Total Sales Without VAT	N	10	-
	S_VAT	Sales VAT	N	8	-
	S_NET	Sales Net Price	N	10	-

**Table 4.8 : Data Stores and Data Elements**

	Data Element	Description	Type	Width	DEC
D7:Year Sales	CUST_ID	Customer ID	C	4	-
	CUST_NAME	Customer Name	C	50	-
	S_DATE	Sales Date	D	8	-
	CUST_ADDR	Customer Address	C	50	-
	CUST_TEL	Customer Telephone	C	50	-
	SEQ	Sequence	N	2	-
	P_CODE	Product Code	C	16	-
	P_NAME	Product Name	C	35	-
	S_CODE	Sales Code	C	3	-
	S_PRICE	Sale Price Per Unit	N	8	2
	S_QTY	Sale Quantity	N	3	-
	S_AMOUNT	Sales Amount	N	9	2
	S_TOT	Total Sales With VAT	N	10	2
	S_DISC	Sale Discount	N	5	2
	S_TOT_NV	Total Sale Without VAT	N	10	2
	S_VAT	Sales VAT	N	8	2
	S_NET	Sales Net Price	N	10	2



## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 CONCLUSIONS

This study of this project is to analyze, design and implement the Sales Information System. During the analysis of existing system, some problems are found. The operation are done manually with the improper data recording and time consuming. Therefore, the new system has been designed for solving these problems. Searching the method can be done faster and more effective. The data can be retrieved correctly and quickly. The operations can meet user objectives and serve management and customers demand with fast, complete, and accurate information.

So, Sales Information System is intentionally designed for a trading company with the resolution to provide the computer information system including sales analysis reports to come up with the users' requirement.

This system is based on the process from verifying customer, the order processing until issuing invoice for the customer. Each end of period the sales analysis reports will be generated for the users including the management to analyze later on.

As the development of the Sales Information System, the advantages can be summarized as follow:

- Be more efficient and effective in the operation.
- Encourage the employees to do the job systematically.
- Management can utilize the up-to-date information from the system.
- Help streamline the order processing subsystem.
- Reinforce the corporate image in public.

The security and control include data accuracy control, backup copies concern, authorized personnel allowance and installation of hardware and software concern.

The use of password can protect access of the system from unauthorized person and the source documents copies are given to those interrelated section.

## **5.2 RECOMMENDATIONS**

Although this project emphasized only on the Sales Information Systems, some part of the system is still required to be developed. However, the management requires information from every departments to support the decision making process. After this sales information is implemented effectively, the relevant activities must be computerized and the data must be linked together.

It is recommended that the activities which should be further analyzed, designed and implemented with the other subsystem are Inventory system, Accounting system etc. In part of the Inventory system should be implemented and updated automatically, as well. This will help more efficient preparation and stock-on-hand to the company. And the Accounting system should be interfaced and updated information to General Ledger, input/output tax reports, and so on. After these systems are computerized and the data of the overall organization are fully integrated, the management will have more complete and up-to-date information to assist in the decision making process.

The designed system need to be planned for further expansion. The package software that the users have to use should be standardized in order that all of the users are able to use the system more easily. They also support the users to understand the system and how to use the system to ease their jobs. The later will be able to control and implement the hardware and software of the system. They will closely engage with the users of the system so they will know the problems that the real users need to be faced and they can support the users to cope the problems.

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**APPENDIX A**  
**PROCESS**  
**SPECIFICATION**



## PROCESS SPECIFICATION

PROCESS NO. : 1

PROCESS NAME : VERIFY CUSTOMER ORDER

BGIN

ACCEPT Customer order form

FIND cust-record IN CUSTOMERS with cust-no.  
matching order-cust in customer order form

IF RECORD CAN BE FOUND

DISPLAY Cust=payment-status

IF status = 'yes'

DISPLAY customer name, customer address

ELSE

reject customer order

\* note : This means the order will not be processed and  
further \*

END

ELSE

Valid-Value = 'no'

ENDIF

END



## PROCESS SPECIFICATION

PROCESS NO. : 2.1

PROCESS NAME : ENTER NEW CUSTOMER

BEGIN :

ACCEPT Customer inf.

FIND cust-name in CUSOTMER

IF NAME CAN BE FOUND

DISPLAY cust-name, cust-no.

ELSE

STORE Customer inf.

ENDIF

END



## PROCESS SPECIFICATION

PROCESS NO. : 2.2

PROCESS NAME : UPDATE CUSTOMER FILE

BEGIN

CASE Valid-Value = 'no'

Tentative-Customer-no. = "new"

Customer-no = next available customer-no.

Customer = customer-no.+ customer name  
+ customer address + customer telephone  
+ credit limit + term of payment

ACCEPT customer-record

APPEND new customer-record to customer

END CASE

CASE change information = "yes"

FIND customer in CUSTOMER with matching customer-  
no.

IF record cannot be found customer-change-response  
= "No such customer"

DISPLAY customer-change-response

ELSE

READ customer record

## PROCESS SPECIFICATION

PROCESS NO. : 3.1

PROCESS NAME : CHECK INVENTORY

BEGIN

Total-price = 0

REPEAT UNTIL      There are no more order-items in customer order

                    FIND      quantity-ordered in customer order unit-price, discount  
                                    IN PRODUCT

                    ADD      (quantity-ordered, unit-price, discount) to total-price

END REPEAT

MULTIPLY    Total price

FIND      customer in customer with customer-no. = customer-no. in  
                    customer order

READ      customer record

IF      current balance + total price > credit-limit

                    DISPLAY "Order exceeds customer's credit limit"

                    \* note : This means no further processing of the order will take  
                                    place \*

ENDIF

END

## PROCESS SPECIFICATION

PROCESS NO. : 3.2

PROCESS NAME : PLACE ORDER

```
BEGIN          DO WHILE Valid-Value = "yes"
    FIND        customer in CUSTOMER with customer-no.
                matching customer-no. in customer order
    DISPLAY      customer-name, customer address, term of payment,
                delivery place
    END DO
    DO WHILE     there are more order-items in order-details
        FIND     product in PRODUDT with product-no. matching
                product-no. in customer order
        IF        record cannot be found Order-response = "No such
                product"
            DISPLAY order-responses
            EXIT
            *note : This means the order will not be processed and further*
        ENDIF
    END DO
END
REPLACE        customer name, customer address, customeer
                telephone, credit limit,term of payment with
                customer name, customer address, customer-
                telephone, credit limit, term of payment IN
                customer- change-information, customer-
                change-res-ponse= "change accepted"
    ENDIF
END CASE
END
```

## PROCESS SPECIFICATION

PROCESS NO. : 3.3

PROCESS NAME : RECORD BACK ORDER

BEGIN

FIND invoice in INVOICE with invoice-no. = invoice-no.

in goods-return-information goods-return-details = invoice-no.,

invoice-date,

customer-name,

type of customer

DISPLAY goods-return-details

FIND product-no. in INVOICE with product-no. = product-  
no. in goods-return-information Total price = 0

REPEAT UNTIL There are no more return-items in  
goods-return-information

FIND product-no., product-name, unit price  
in INVOICE return-quantity in goods-  
return information

ADD (return-quantity, unit price)

to total price

END REPEAT

MULTIPLY Total price

END



## PROCESS SPECIFICATION

PROCESS NO. : 4.1

PROCESS NAME : RECORD SALES ORDER REPORT

BEGIN

DO WHILE

There are more product-record IN Customer order

READ next product-record WRITE product-record

To sales order report

ENDDO

END



## PROCESS SPECIFICATION

PROCESS NO. : 5.1

PROCESS NAME : PROCESS INVOICE

BEGIN

FIND Customer in CUSTOMER with customer-no. = customer-no. in  
order details customer-details = customer name, customer address, delivery place,  
them of payment DISPLAY customer-details

FIND product IN PRODUCT with product-no. =  
product-no. in order details  
product - details = product name, unit price  
DISPLAY product-details

END



## PROCESS SPECIFICATION

PROCESS NO. : 5.2

PROCESS NAME : PROCESS PERIOD END

BEGIN

    FIND        product-record IN PRODUCT with product-no. matching  
order-items in sales order details

        READ        product-information record

        IF          on hand quantity < order quantity

                DISPLAY "INADEQUATE STOCK"

                \* note : This means no further processing of this  
                order \*

        ELSE

                DISPLAY "ADEQUATE STOCK"

        ENDIF

    END DO

END

## PROCESS SPECIFICATION

PROCESS NO. : 5.3

PROCESS NAME : PROCESS YEAR END

BEGIN

REPEAT UNTIL      There are no more delivery-items in invoice  
FIND                product in PRODUCT with product-no. = product-no.  
                         in invoice  
READ                on-hand-quantity record  
SUBTRACT          delivery-quantity from on-hand-quantity  
WRITE               on-hand-quantity record  
READ                on-hand-quantity record  
SUBTRACT          delivery-quantity fro on-sale-quantity  
WRITE               on-sale-quantity record

END REPEAT

END

## **APPENDIX B**

### **INPUT FORM**

**The input forms are given in table B-1 to B-2**



## CUSTOMER RECORD

CUSTOMER ID : \_\_\_\_\_

NAME : \_\_\_\_\_

ADDRESS : \_\_\_\_\_

CITY : \_\_\_\_\_

ZIP CODE : \_\_\_\_\_

TELEPHONE : \_\_\_\_\_

CONTACT : \_\_\_\_\_

SALESCODE : \_\_\_\_\_

DISCOUNT : \_\_\_\_\_

CREDIT TERM : \_\_\_\_\_

RECORDED BY : \_\_\_\_\_ APPROVED BY : \_\_\_\_\_

DATE : \_\_\_\_ / \_\_\_\_ / \_\_\_\_ DATE : \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**Figure B-1 : Input Form-Customer Record**

SALES ORDER

DATE :   /   /   ORDER NO.

SALESCODE :

CUSTOMER ID :

COMPANY NAME :

ADDRESS :

ITEM NO.	DISCRIPTION	UNITS PRICE	QTY	AMOUNT

RECORDED BY :   APPROVED BY :

DATE :   /   /   DATE :   /   /

Figure B-2 : Input Form-Sales Order

## APPENDIX C

### OUTPUT FORM

The out put forms are given in table C-1 to C-17

**BOOK PROMOTION CO., LTD**  
**Table C-1 : PURCHASE ORDER**

**CUST CODE :** \_\_\_\_\_ **P/O NO :** \_\_\_\_\_

**CUSTOMER NAME :** \_\_\_\_\_ **DATE :** \_\_\_\_\_

ADDRESS : \_\_\_\_\_

PROD.#	DESCRIPTION	QTY.	@	DISC.	TOTAL

Authorized signature : \_\_\_\_\_

**BOOK PROMOTION CO., LTD**  
**Table C-2 : INVOICE**

DATE : \_\_\_\_\_ NO. : \_\_\_\_\_

**CUSTOMER NAME :** \_\_\_\_\_ **CODE :** \_\_\_\_\_

ADDRESS: \_\_\_\_\_

ITEM	CODE	DESCRIPTION	QTY.	@	TOTAL

Received By : \_\_\_\_\_ CASH/CHQ. NO. \_\_\_\_\_



**BOOK PROMOTION CO., LTD**  
**Table C-3 : SUMMARY INVOICE**

BILLING DATE : \_\_\_\_\_ S\_INV. DATE : \_\_\_\_\_

**CUSTOMER NAME :** \_\_\_\_\_ **S\_INV. NO. :** \_\_\_\_\_

**ADDRESS :** \_\_\_\_\_ **CUST. CODE :** \_\_\_\_\_

INV.#	PERIOD	DUE DATE	OWE	PAID	BAL.	REMARK
 <p>ASSUMPTION UNIVERSITY OF THAILAND</p> <p>BROTHERS of ST GABRIEL</p> <p>LABOR OMNIA VINCIT</p> <p>SINCE 1969</p> <p>* มหาวิทยาลัยอัสสัมชัญ *</p>						

Accountant : \_\_\_\_\_

Cashier/Collector : \_\_\_\_\_

Cash/Cheque No : \_\_\_\_\_

Date : \_\_\_\_\_

**BOOK PROMOTION CO., LTD**  
**Table C-4 : DELIVERY ORDER**

D/O NO. : \_\_\_\_\_ DATE : \_\_\_\_\_

CUSTOMER NAME : \_\_\_\_\_ CUST. CODE : \_\_\_\_\_

ADDRESS : \_\_\_\_\_

ITEM	CODE	REF.	DESCRIPTION	QTY.

Recived By : \_\_\_\_\_

**BOOK PROMOTION CO; LTD**  
**Table C-1 : CUSTOMERS DETAILS REPORT**

Confidential				
CODE	NAME/ADDRESS	CONTACT	CR.TERM	REMARKS

Prepared by : \_\_\_\_\_ Prepared date : \_\_\_\_\_

**BOOK PROMOTION CO; LTD**  
**Table C-6 : PRODUCTS DETAILS BY CODE**

VENDOR CODE	VENDOR NAME	PRODUCT CODE	PRODUCT NAME

Prepared by : \_\_\_\_\_ Prepared date : \_\_\_\_\_

**BOOK PROMOTION CO., LTD**

### Table C-7 : STOCK CARD

DATE : \_\_\_\_\_ NO. : \_\_\_\_\_

SUPPLIERNAME : \_\_\_\_\_ SUP. CODE : \_\_\_\_\_

CODE	DESCRIPTION	IN	OUT	RETURN	BALANCE
	B/F				

CHECKED BY : \_\_\_\_\_ RECORDED BY : \_\_\_\_\_



**BOOK PROMOTION CO., LTD**  
**Table C-8 : STOCK REPORTS**

**DATE :** \_\_\_\_\_

NO. : \_\_\_\_\_

CODE	DESCRIPTION	AVAIL.	USED	BALANCE
	B/F			

CHECKED BY : \_\_\_\_\_ ACKNOWLEDGED BY : \_\_\_\_\_

**BOOK PROMOTION CO; LTD**  
**Table C-9 : INVENTORY REPORT**

P- CODE	P- NAME	QUANTITY	PACKING	COST	PRICE	TOTAL AMOUNT

Prepared by : \_\_\_\_\_

Prepared date : \_\_\_\_\_

**BOOK PROMOTION CO., LTD**  
**Table C-10 : SUMMARY REPORT**

VEND. CODE	PROD. CODE	ISSUED DATE	PROD. TYPE	ORDER	USED	BAL.	REMARKS

Prepared by : \_\_\_\_\_

Prepared date : \_\_\_\_\_

**BOOK PROMOTION CO; LTD**  
**Table C-11 : VENDORS DETAILS REPORT**

CODE	NAME/ADDRESS	DISC.	CR.TERM	Confidential REMARKS

Prepared by : \_\_\_\_\_ Prepared date : \_\_\_\_\_

**BOOK PROMOTION CO; LTD**  
**Table C-12 : BACK ORDER REPORT**

P_CODE	P_NAME	CUST_NAME	TYPE OF BOOK	QTY	DATE

Prepared by : \_\_\_\_\_ Prepared date : \_\_\_\_\_



**BOOK PROMOTION CO; LTD**  
**Table C-13 : EMPLOYEES SUMMARY REPORT**

I.D.	NAME/ADDRESS	TITLE	HIRE	GR.	Confidential SALARY

Prepared by : \_\_\_\_\_ Prepared date : \_\_\_\_\_

**BOOK PROMOTION CO; LTD**  
**Table C-14 : SALES REPORT BY CUSTOMER**

INV. NO	CUST- CODE	CUST- NAME	P- CODE	P- NAME	LAST AMOUNT	TOTAL AMOUNT

Prepared by : \_\_\_\_\_

Prepared date : \_\_\_\_\_

BOOK PROMOTION CO; LTD

Table C-15 : SALES REPORT BY SALESMAN

SALE-CODE	SALE-NAME	INV. NO.	AREA	P-NAME	QTY	LAST AMOUNT	QTY

Prepared by : \_\_\_\_\_

Prepared date : \_\_\_\_\_

**BOOK PROMOTION CO; LTD**  
**Table C-16 : MONTHLY SALES SUMMARY REPORT**

SALE- CODE	SALE- NAME	CUST- NAME	CUST- CODE	P- NAME	AMOUNT	THIS MONT	THIS MONTH

Prepared by : \_\_\_\_\_
Prepared date : \_\_\_\_\_

# BOOK PROMOTION CO; LTD

Table C-17 : SALES PERFORMANCE REPORT BY SALESMAN

	J	F	M	QUARTER	A	M	J	QUARTER	J	A	S	QUARTER	O	N	D	QUARTER	TOTAL
TARGET																	
ACTUAL SALES																	
LAST YEAR																	
ACTUAL SALES																	
THIS YEAR																	
% VARY																	



The logo of Assumption University of Thailand is a circular emblem. It features a central shield with a blue top section containing a white star and the letters 'A-M', and a red bottom section containing a white cross and the letters 'D-S'. The shield is flanked by golden laurel branches. Below the shield is a golden banner with the Latin motto 'LABOR OMNIA VINCIT'. The outer ring of the emblem contains the text 'ASSUMPTION UNIVERSITY OF THAILAND' at the top and 'มหาวิทยาลัยอัสสัมชัญ' at the bottom, with 'SINCE 1969' in the center of the bottom arc.

## **APPENDIX D**

### **SCREEN LAYOUTS**

**The screen layouts are given in figure D-1 to D-29**

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

SYSTEM PASSWORD

USER PASSWORD

Ready

NUM

Figure D-1 : Login Screen

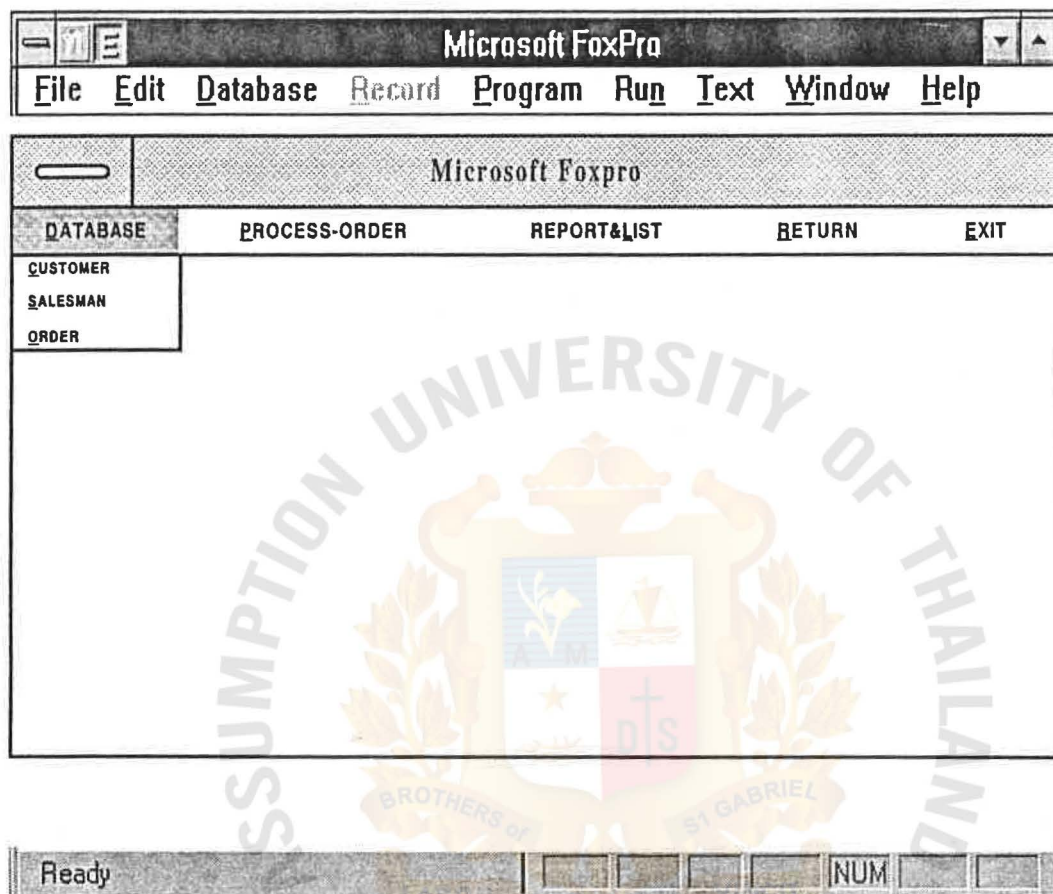


Figure D-2 : Database Screen

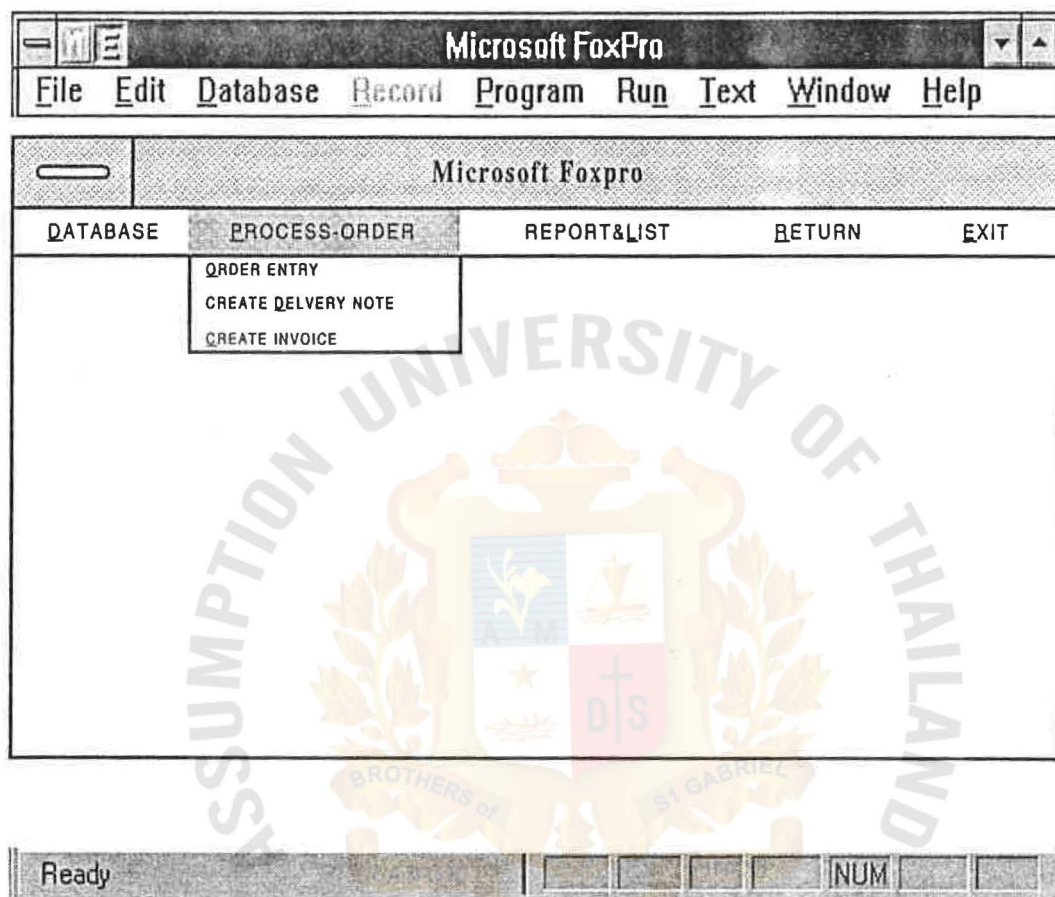


Figure D-3 : Process Order Screen

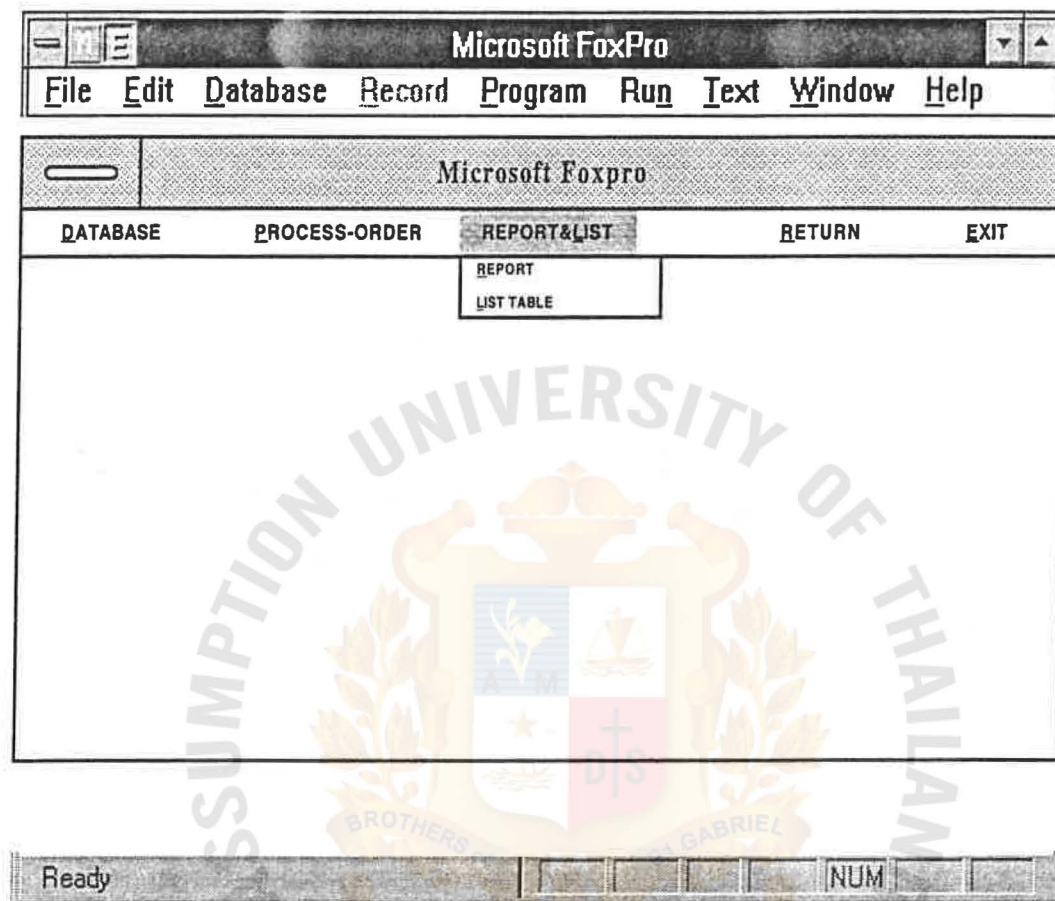


Figure D-4: Report & List Screen

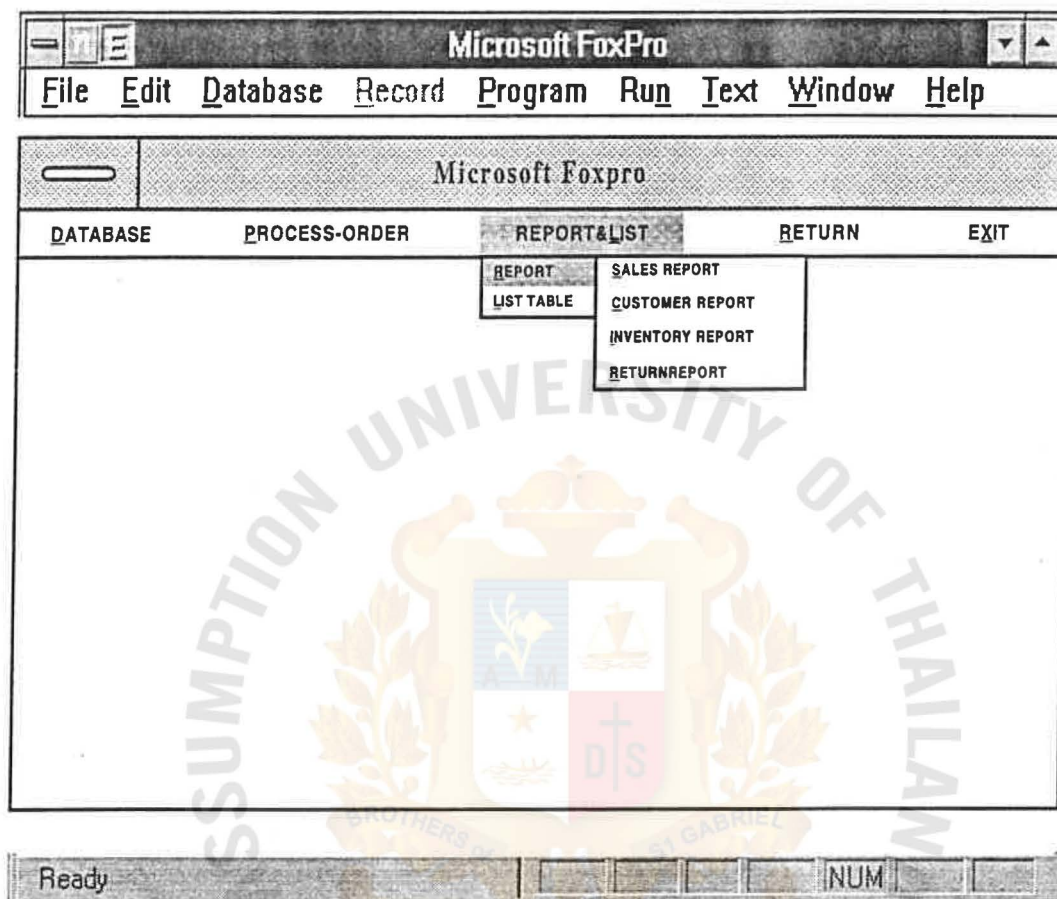


Figure D-5 : Report Screen



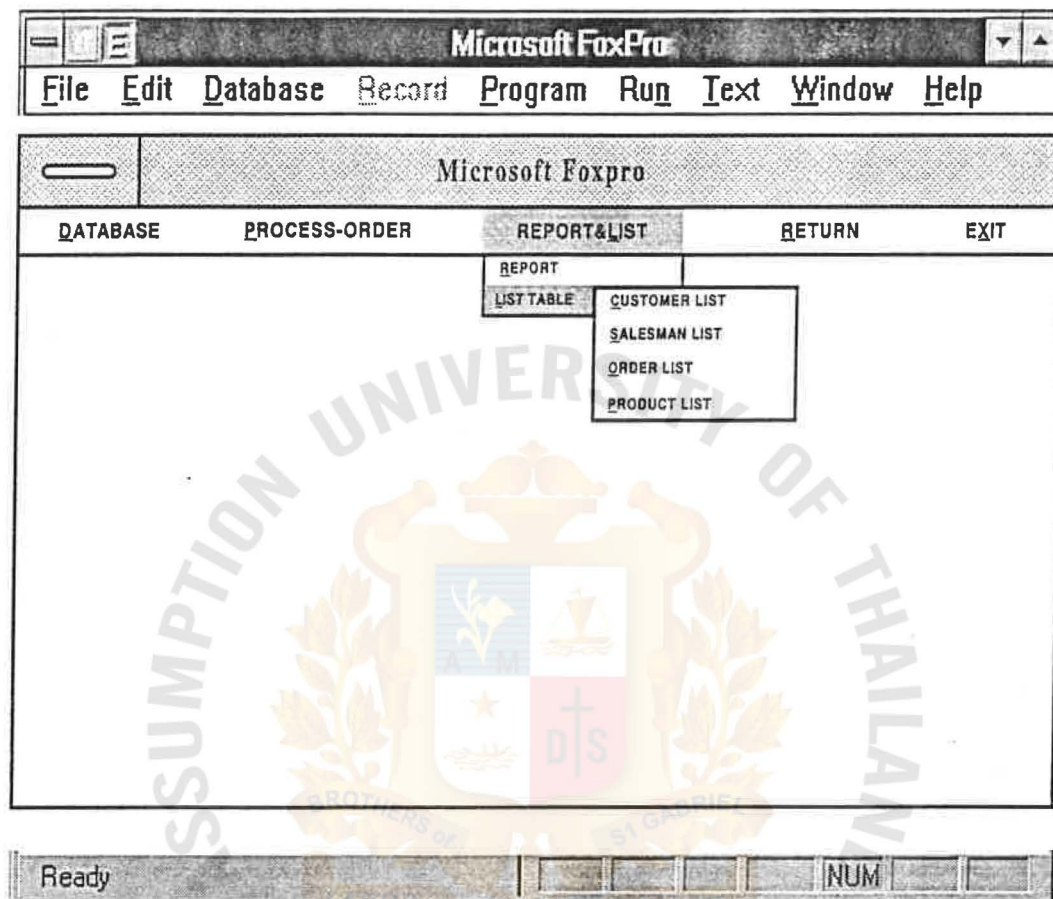


Figure D-6 : List Table Screen

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

RETURN ENTRY  
PRINT ACCEPT NOTE

Ready NUM

Figure D-7 : Return Screen


Microsoft FoxPro


File Edit Database Record Program Run Text Window Help


Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Customer Database*

CUSTOMER CODE  

CUSTOMER NAME  

AREA  

TOP PREVIOUS NEXT BOTTOM SAVE BROWSE DELETE QUIT

Ready NUM

Figure D-8 : Customer Database


Microsoft FoxPro


File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Salesman Database*

SALESMAN CODE  

SALESMAN NAME  

TOP PREVIOUS NEXT BOTTOM SAVE BROWSE DELETE QUIT

Ready NUM

Figure D-9 : Salesman Database

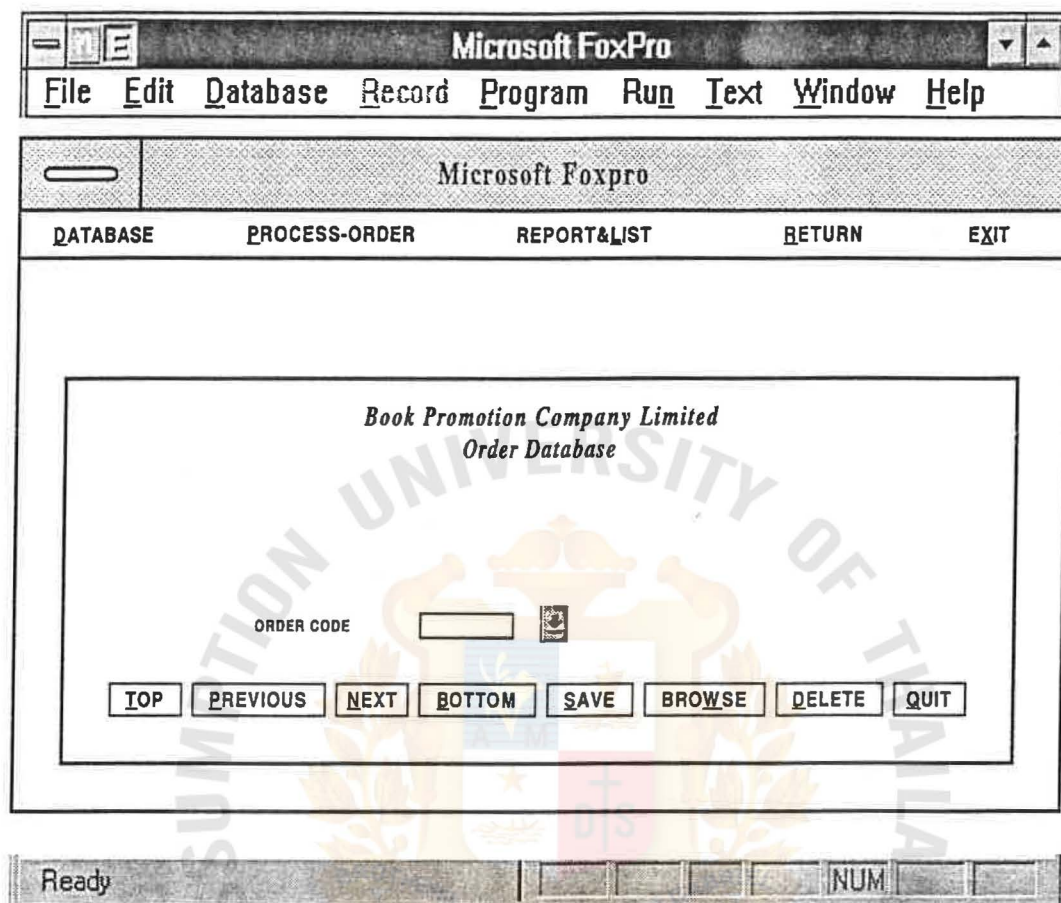


Figure D-10 : Order Database



The image shows a screenshot of the Microsoft FoxPro application window. The title bar reads 'Microsoft FoxPro'. The menu bar includes 'File', 'Edit', 'Database', 'Record', 'Program', 'Run', 'Text', 'Window', and 'Help'. Below the menu bar is a toolbar with icons for 'DATABASE', 'PROCESS-ORDER', 'REPORT&LIST', 'RETURN', and 'EXIT'. The main window displays a report titled 'Book Promotion Company Limited' and 'Daily Sales Report'. Below the title, there are two date input fields: 'Starting Date' and 'Ending Date', both with a date mask of '[xx/xx/xx]'. The status bar at the bottom shows 'Ready' and a numeric keypad with a 'NUM' label.

Figure D-11 : Daily Sales Report



Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited*  
*Monthly Sales Report*

Starting Date [xx/xx] Ending Date [xx/xx]

Ready NUM

Figure D-12 : Monthly Sales Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

Book Promotion Company Limited  
Yearly Sales Report

Year [xxxx]

Ready NUM

Figure D-13 : Yearly Sales Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited*  
*Individual Customer Report*  
*Daily*

Starting Date [xx/xx/xx] Ending Date [xx/xx/xx]

Ready NUM

Figure D-14 : Individual Customer Daily Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Individual Customer Report  
Monthly*

Starting Date [xx/xx] Ending Date [xx/xx]

Ready NUM

Figure D-15 : Individual Customer Monthly Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

Book Promotion Company Limited  
Individual Customer Report  
Yearly

Year [xxxx]

Ready NUM

Figure D-16 : Individual Customer Yearly Report



Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

Book Promotion Company Limited  
Area Customer Report  
Daily

Starting Date [xx/xx/xx] Ending Date [xx/xx/xx]

Ready NUM

Figure D-17 : Area Customer Daily Report



Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Area Customer Report  
Monthly*

Starting Month [xx/xx/xx] Ending Month [xx/xx/xx]

Ready NUM

Figure D-18 : Area Customer Monthly Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Top-Ten Customer Report  
Monthly*

Starting Month [xx/xx] Ending Month [xx/xx]

Ready NUM

Figure D-19 : Top-Ten Customer Monthly Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Top-Ten Customer Report  
Yearly*

Year

Ready NUM

Figure D-20 : Top-Ten Customer Yearly Report

The screenshot displays the Microsoft FoxPro application window. The menu bar includes File, Edit, Database, Record, Program, Run, Text, Window, and Help. Below the menu bar is a command bar with buttons for DATABASE, PROCESS-ORDER, REPORT&LIST, RETURN, and EXIT. The main area shows a report form titled "Book Promotion Company Limited Summary Product Sales Report Daily". This form contains two date input fields: "Starting Date" and "Ending Date", both with placeholder text "[xx/xx/xx]". At the bottom of the window is a status bar with the text "Ready" and a numeric field labeled "NUM".

Figure D-21 : Summary Product Sales Report Daily

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Summary Product Sales Report  
Monthly*

Starting Month [xx/xx] Ending Month [xx/xx]

Ready NUM

Figure D-22 : Summary Product Sales Report Monthly



The image shows a screenshot of the Microsoft FoxPro application window. The title bar reads "Microsoft FoxPro". The menu bar includes "File", "Edit", "Database", "Record", "Program", "Run", "Text", "Window", and "Help". Below the menu bar is a command menu with options: "DATABASE", "PROCESS-ORDER", "REPORT&LIST", "RETURN", and "EXIT". The main window area displays a report form titled "Book Promotion Company Limited Summary Sales Report Yearly". Inside the form, there is a label "Year" followed by a text input field containing "[xxxx]". At the bottom of the window is a status bar with the text "Ready" on the left and "NUM" on the right.

Figure D-23 : Summary Sales Yearly Report



Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Top-Ten Product Sales Report  
Daily*

Starting Date [xxxxxxxx] Ending Date [xxxxxxxx]

Ready

NUM

SINCE 1969

มหาวิทยาลัยอัสสัมชัญ

Figure D-24 : Top-Ten Product Sales Daily Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Top-Ten Product Sales Report  
Monthly*

Starting Date [xx/xx/xx] Ending Date [xx/xx/xx]

Ready NUM

Figure D-25 : Top-Ten Product Sales Monthly Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

*Book Promotion Company Limited  
Top-Ten Product Sales Report  
Yearly*

Year

Ready NUM

Figure D-26 : Top-Ten Product Sales Yearly Report

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

Book Promotion Company Limited  
Return Report  
Daily

Starting Date [xx/xx/xx] Ending Date [xx/xx/xx]

Ready NUM

Figure D-27 : Return Report Daily

Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

Book Promotion Company Limited  
Return Report  
Monthly

Starting Month [xx/xx] Ending Month [xx/xx]

Ready NUM

Figure D-28 : Return Report Monthly



Microsoft FoxPro

File Edit Database Record Program Run Text Window Help

Microsoft Foxpro

DATABASE PROCESS-ORDER REPORT&LIST RETURN EXIT

Book Promotion Company Limited  
Return Report  
Yearly

Year [0000]

Ready NUM

Figure D-29 : Return Report Yearly

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