



Siriwong Inventory Control System

By

Mr. Pisit Dumrongkulkumjorn

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

October 1999

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The Graduate School of Assumption University has approved this 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.

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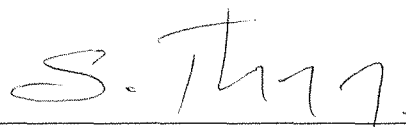
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ABSTRACT

Due to the business recession today, the managements of the organizations do not emphasize only on the expanding of their products market but also try to decrease their operating cost, the unnecessary expenses which might be caused by inaccuracy, carelessness or even inexperience of their staff. The time schedule is one matter that is important. It must be set and followed up. Thus the importance of computerization is increasing in order to respond to the needs and demands of reliability, timing and accuracy of information, which are necessary in running business.

The proposed system is developed to improve efficiency and capability in controlling the water stock in and out and the storage materials (bottles, buckets). It provides timing and accuracy in delivery service. The scope of this project, Inventory Control System, is mainly involved with providing the Production Department with timely supply raw materials (bottles, and buckets). This project aims at providing a computerized system to the staff who are concerned with the inventory section in order to carry out their work more efficiently and accurately to meet the increasing customers' demand. The project is also used to eliminate the risk of business loss due to loss of storage materials (return of reusable material buckets).

ACKNOWLEDGEMENTS

This Project is successfully done with the great help and cooperation from many people. The writer would like to express his gratitude to his advisor; Air Marshal Dr. Chulit Meesajjee, Dean, Graduate School of Computer Information Systems, for his valuable guidance and suggestions during the period. His gratitude and thanks also go to Project Committee, Members of the Graduate School for their advice.

The writer particularly appreciate the sharing of all available information which is useful to his report by Khun Kanokwan Sirimaung, Marketing Manager of Siriwong Company.

Finally, the writer sincerely thanks his family and friends, especially friends of the university who were very cooperative, advocating, understanding and supportive throughout his study at Assumption University.

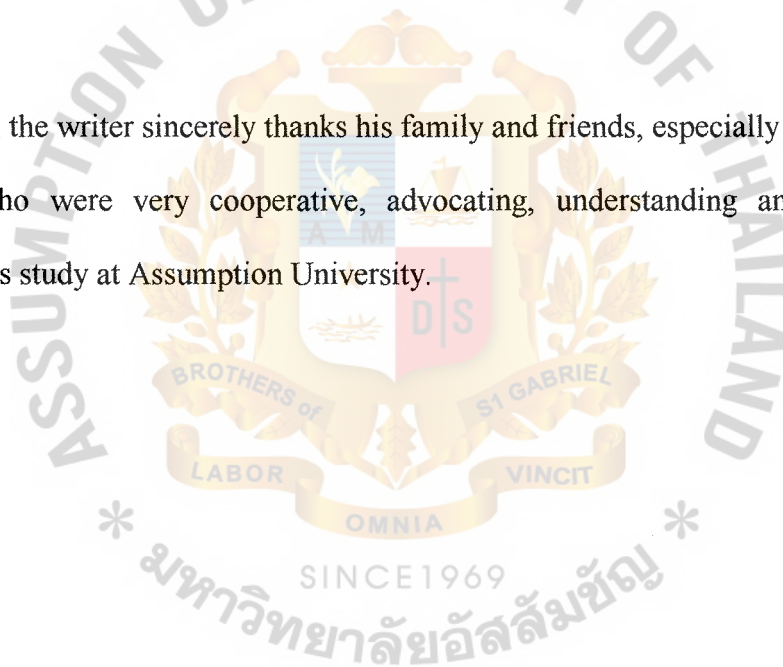


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I. INTRODUCTION

1.1 Background of the Project

Due to a very little earning per product of water business, the storage material and inventories have to be controlled efficiently. The important problems that must be solved for the management are controlling product inventories and the storage materials at the time of replenishing the goods to meet customer satisfaction in delivery when they order the economic quantity, and the methods of preventing the loss of storage materials.

Nowadays every business plans and tries to generate its organization to survive at the time of business uncertainty that is caused by the nation's economy crisis. It's a very fierce competition in every business with a limited budget and an accelerated time for management to make strategic decision. Only the provision of accurate, complete and fast information can possibly reduce the uncertainty and risk.

Thus in today's context of information needs, without computerization, manual provision of information is inadequate. The use of the computerized system is also increasing day by day. Since the use is increasing, it is not very expensive to have a computerized system for an organization.

1.2 Objective of the Project

The objectives of the project, Siriwong Inventory Control System, are as follows:

1. To control the use of material of the company including the movement of product in and out.
2. To reduce inventory holding cost.
3. To reduce unnecessary expenses which may be caused by the carelessness or inexperience of their staff.

4. To develop the computerized system that can reduce manual work and produce report that covers major aspects and satisfies the management and user requirement.
5. To effectively gather the information into the computer system for further reference, that is all the details for the stock are recorded completely.
6. To reduce the time consumption of the operation task.
7. To efficiently use of human resource.
8. To provide security to the system so that only authorized people are able to use the system.

1.3 Scope of the Project

Since the existing system is operated manually, all elements will be replaced by the inventory control system which are summarized as follows:

1. Inventory turnover management:
 - Demonstrate the products moveing in and out.
 - Provide update quantity of products in the stock.
 - Define minimum level of inventory.
 - Eliminate the shortage and lost of products in stock.
2. Provide the updated inventory information.
3. Provide the updated supplier information.
4. Generate report to management team.
 - Prepared summary report to executive in order to evaluate the performance of the operation, and to support the decision making for strategic management.

1.4 Project Plan

The scheduled plan of the system development project and the related Gantt Chart of the project are shown in Figures 1.1, 1.2 and 1.3

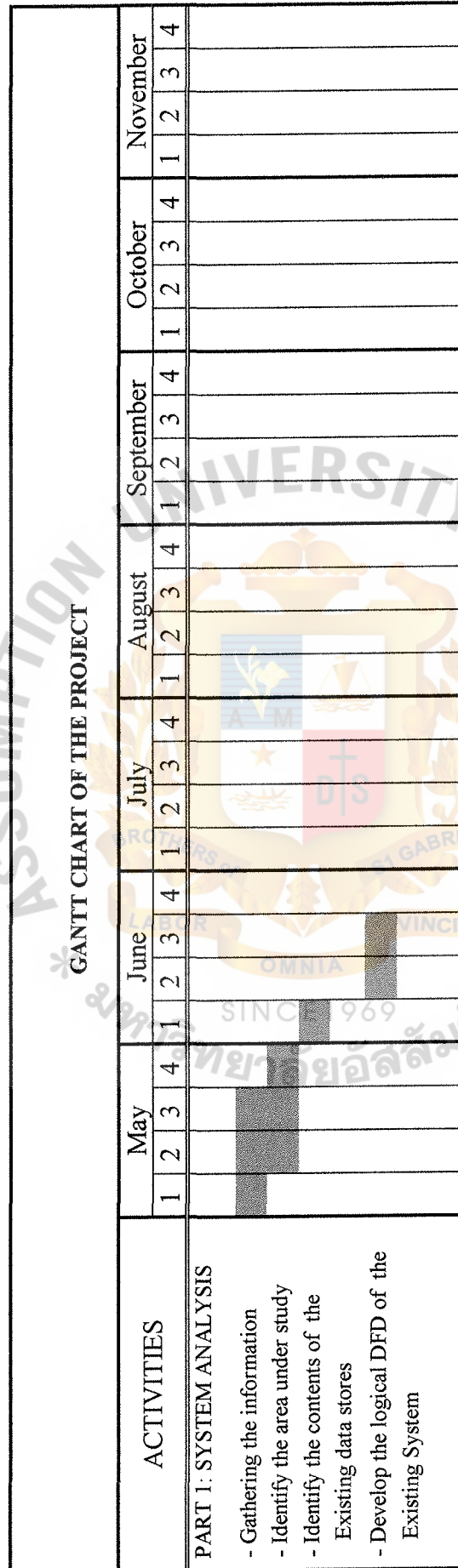


Figure 1.1. Gantt Chart of the Project.

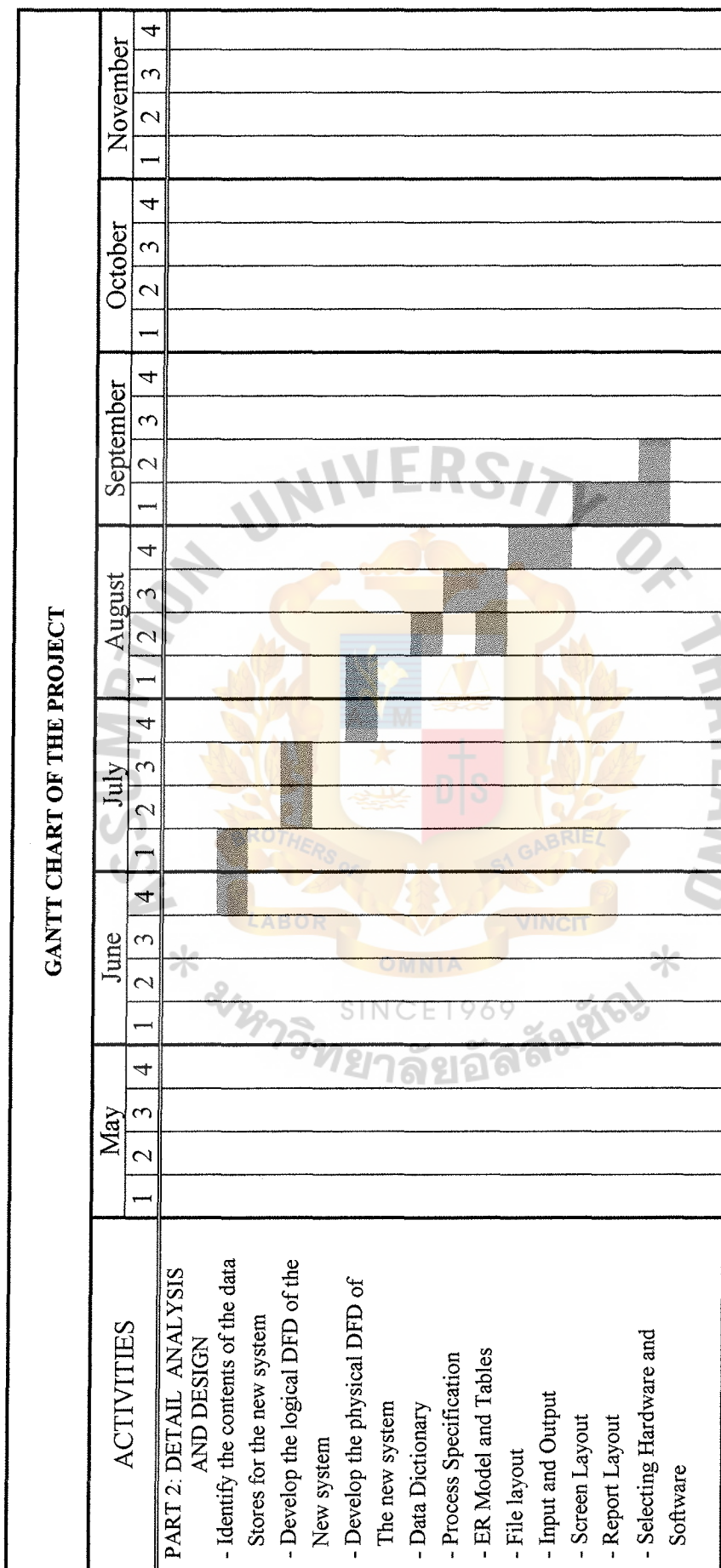


Figure 1.2. Gantt Chart of the Project.

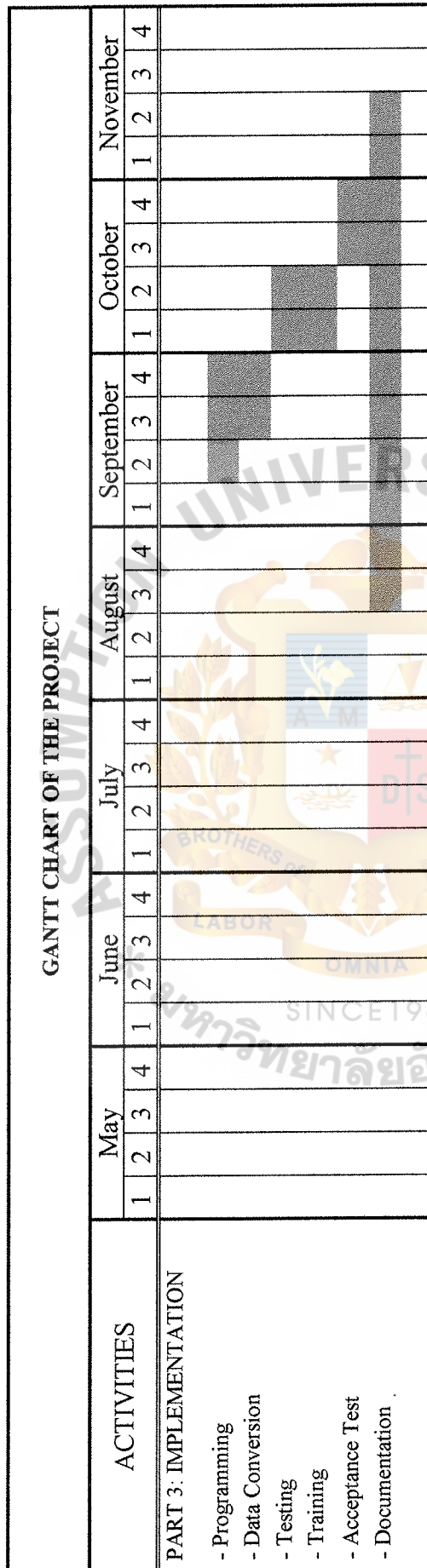


Figure 1.3. Gantt Chart of the Project.

II. THE EXISTING SYSTEM

2.1 Back Ground of the Organization

“D-til drinking water” was established in February 1998 under the registered named “Siriwong Company”. From the beginning, the business have run about marble furniture manufacturer under the first business name “Por-Karnchang”. It produces and sells products to both direct and indirect consumers. Due to the economic recession in 1997, most of businesses were slow down, the owner realized that high quality of drinking water still be needed. Pure and clean water is niche in drinking water market. With a vision of the owner, another line of business has been started to operate under the name of “Siriwong Company” producing a new brand of drinking water with the concept of serving clean and pure water align with it high quality production.

There are 5 product categories of D-til Drinking Water which divided into 2 major product types PET. Bottle and PolyCarbonate bottle.

1. PET. Glass with PE. Cover

- Size 180 cc.
- Size 200 cc.
- Size 220 cc.

2. PET. Bottle with PE. Cover

- Size 500 cc.
- Size 750 cc.
- Size 1000 cc.
- Size 1500 cc.
- Size 2000 cc.
- Size 5000 cc.

3. PET. Bucket

- Size 12 Litres
- Size 15 Litres
- Size 18.9 Litres
- Size 20 Litres

4. Poly Carbonate Bottle

- Size 950 cc.
- Size 1000 cc.
- Size 1500 cc.

5. Poly Carbonate Bucket

- Size 12 Litres
- Size 15 Litres
- Size 18.9 Litres
- Size 20 Litres

The production capacity per day is 15,000 litres with 15 staff members in production and delivery. The existing market is in Saraburi where the factory is located and in the nearby provinces.

The contact address and numbers is 49 Moo 2, Napralarn, Chalermprakiat, Saraburi 18240, telephone number (036) 334-419, fax number (036) 334-158.

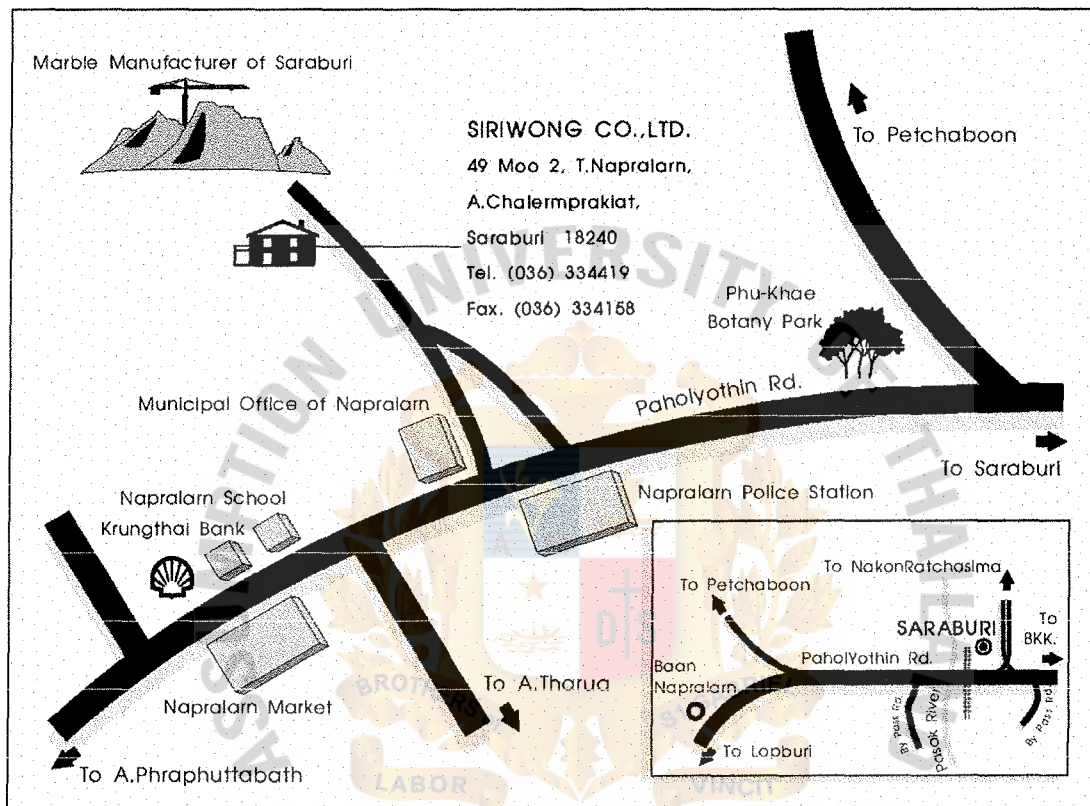


Figure 2.1. Map of Siri Wong Company.

2.2 Existing Business Function

There are 5 departments in the organization. Each department's function is given below:

Sale & Marketing Department

The marketing department starts the business by obtaining potential customers in possible areas to gain as many orders as it can to accelerate and operate the business.

Accounting Department

Accounting department is responsible for budgeting all expenses, calculating and estimating cash flow, recording daily accounting entry, and preparing monthly and yearly income statements and other necessary accounting reports.

Inventory Department

This department systematizes the goods in stock in order to maintain the minimum amount and prevent the lack of inventory.

Production Department

The production department must coordinate with the inventory department. When we recognize that the inventory has reached the limited minimum quantity, the production department prepares to produce the goods in order to keep and sell immediately after we got an order.

Purchasing Department:

The function of the purchasing department is to collect the requisition of raw material from the Inventory Department. After that they contact the Suppliers and ask them to send their price list. After receiving the price list, the department determines from whom they should buy the products and then orders the raw material.

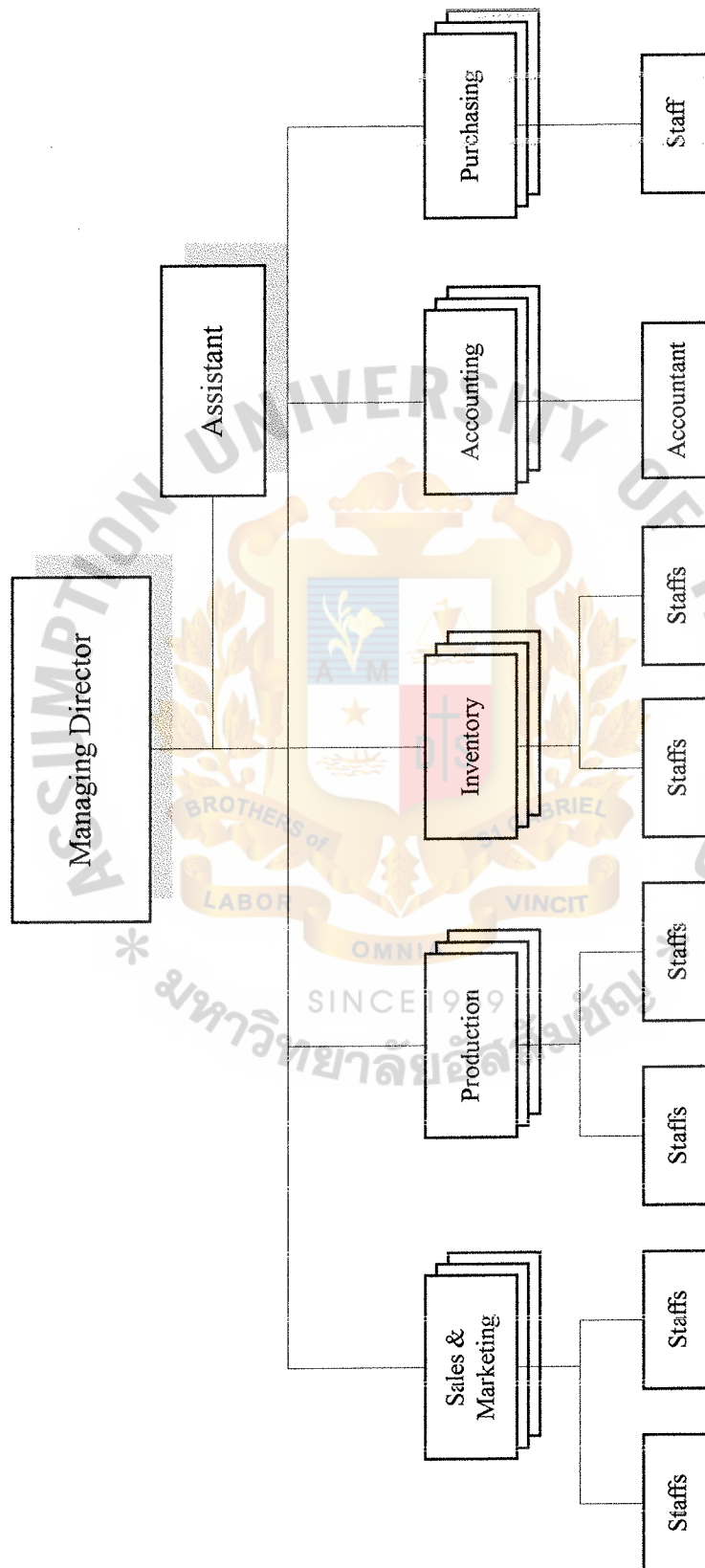


Figure 2.2. Siri Wong Company's Organization Chart.

2.3 Current Problems and Areas for Improvement

Information Exchange: Since the present system is manually managed, the information exchange is not done properly since anyone can collect the request and issue the raw material. Therefore, sometimes, the data are not updated properly in the registers.

Data Isolation: With the present system, many unrelated data are written in the register and some of the data are even written more than once in the same register in different formats.

Security: With the present system, all the information is kept in the register and the unauthorized person can access this data. Therefore, there is no security.

Work and Time: Due to the incorrect information and because of no security, the workload increases since inventory controller has to verify all the registers and find out the correct details. Because of the extra work, more time is consumed, therefore the whole company's work is affected.

All of the above points are to be improved. This can be done, making the present system computerized so that the computerized system will handle all the improvement areas such as security, data isolation, information exchange and work and time.

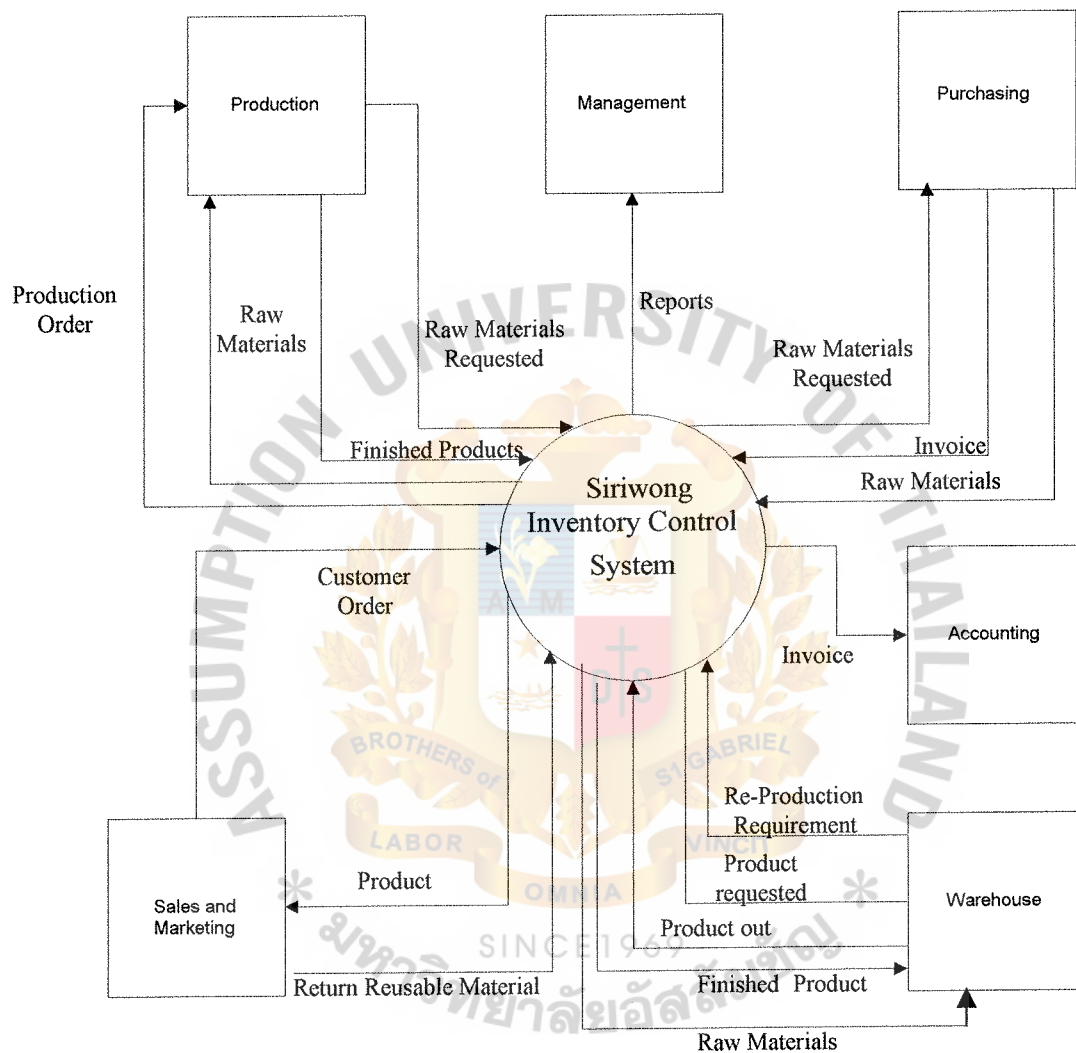


Figure 2.3. Context Diagram of the Existing System.

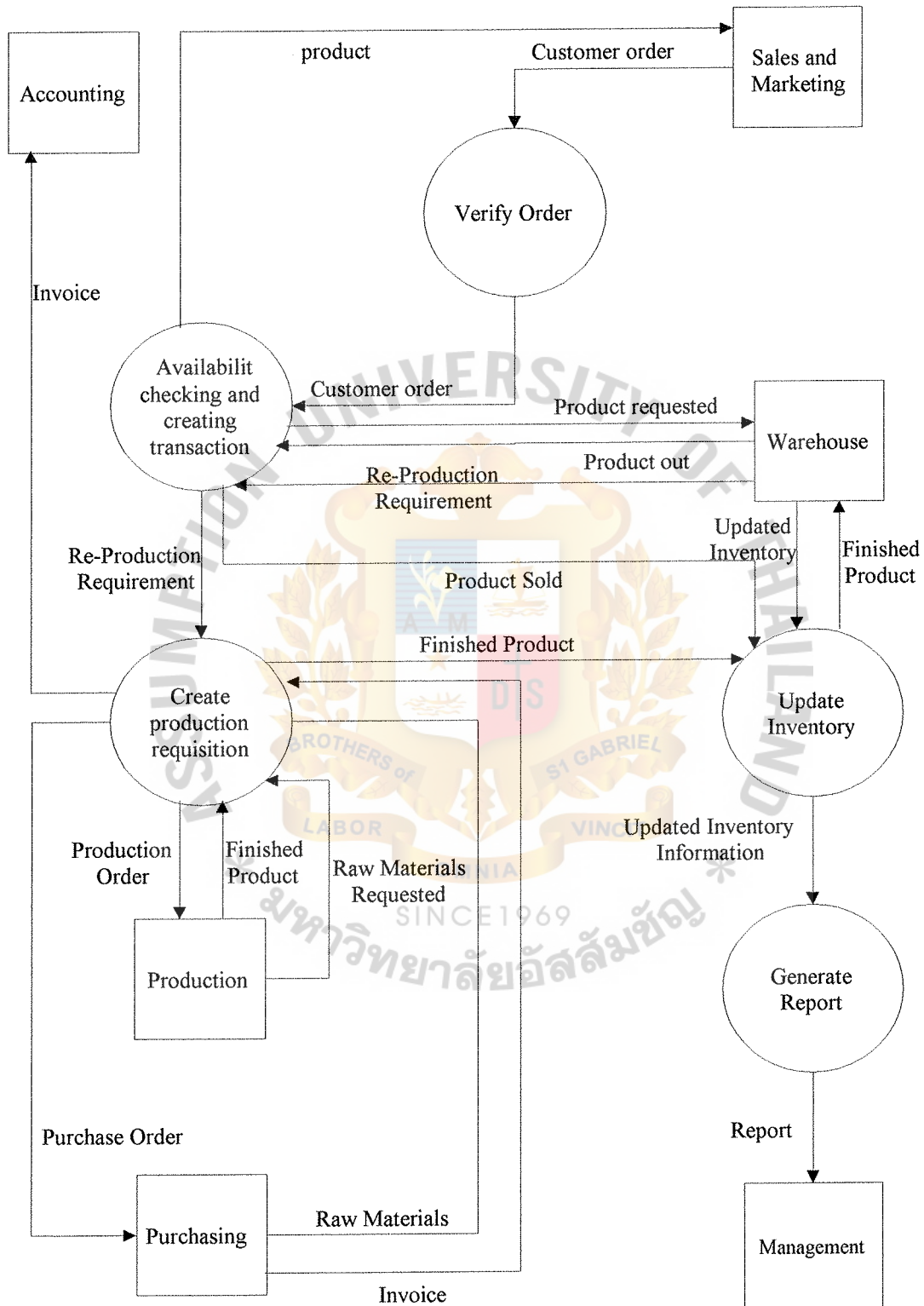


Figure 2.4. Data Flow Diagram Level 0 of the Existing System.

III. THE PROPOSED SYSTEM

3.1 User Requirement

The proposed system is required to solve the problems of the existing system, which are previously mentioned. The following objectives are the requirements of the user:

1. To remove data redundancy
2. To reduce work and save time
3. To provide security by allowing authorized person to access the data on the computer
4. To exchange information easily with other departments without any problems
5. To update the details of raw material issued and received
6. To allow the manager to retrieve data via the computer system
7. To reduce paper work

3.2 System Design

In the proposed system the top-down approach is used and pseudocode is written as the modular approach for programming.

3.2.1 Top-down Approach

In designing the proposed system the top-down approach is used since it is easy to visualize the system with the help of a picture. The advantage of using this approach is it includes avoiding chaos of attempting to design a system “all at once”. It has the ability to have separate system analysis team to be working in parallel on different but necessary subsystems.

3.2.2 Modular Development

Once the top-down design approach is taken, the modular approach is used in

programming. This approach involves in breaking the programming into logical manageable portions or modules. It helps in interfacing between modules rather than neglecting them.

While doing the modular programming, the programmer kept in mind the following points:

1. Keep each module to a manageable size (ideally including only one function).
2. Pay particular attention to the critical interfaces (the data and control variables that are passed to other modules).
3. Minimize the number of modules the user needs to modify when making changes.
4. Maintain the hierarchical relationships set up in top-down phases.

3.2.3 Structure Chart

A Structure chart is a graphic tool for depicting the portioning of a system into modules, the hierarchy, and the organization of those modules. Communication interfaces between the modules. The structure chart for the proposed system is put in Appendix D.

3.2.4 Pseudocode

The uses of pseudocode are common and can be understood easily as they are written in simple English. It explains the logic of each module on a structure chart. The data flow diagrams are also used to write the pseudocode logic. In the proposed system we have used the data flow diagram. The pseudocodes are shown in process specification.

3.3 Hardware and Software Requirements

3.3.1 Hardware Requirements

The present hardware can be used to keep only detail Product and Raw material

Information. To prepare for increasing performance, the new system requires the Local Area Network system to share the whole database with all the departments. All hardware list that should be used in the system are listed below:

1. File Server 1 Unit
 - PC Compatible Intel Pentium III 450MHz.
 - 128MB SDRAM, 6.4 GB HDD
 - 40xCD-ROM, 10/100 LAN Card Installed
2. PC Workstation 5 Units
 - PC Compatible Intel Celeron 433MHz.
 - 32MB SDRAM, 4.5 GB HDD
 - 40xCD-ROM, 10/100 LAN Card Installed
3. Network Peripherals
 - 3COM SuperStack II Hub 10, 12 ports 1 Unit
 - HP Printer Server, 1 serial ports 1 Unit
4. UPS 1 Unit
 - SYNDOME UPS SZ-501, Backup time 20 min.
5. Printer
 - HP LaserJet 5P, 2MB RAM 1 Unit
 - NEC P1300, 24 pins, 136 cols, 216 cps, 8KB 1 Unit
6. Wiring Job 10 Points
 - Installation of Network Point includes UTP Cable
 - RJ-45 Connectors, RJ-45 Wall Plate

3.3.2 Software Requirements

The present software has to upgrade to a new version and add more software for Siriwong Inventory Control System. All software list for the new system are listed

below:

1. Operating Systems: Windows98 Thai Edition
2. Database Management System: Microsoft Access97
3. Network Operating System: Novell Netware 4.11
4. General Purpose: Microsoft Office97 Thai Edition
5. Program Developer : Microsoft Visual Basic 6.0

3.4 Data Communication and Network

From the background of Siriworng Company, they used manual operations to help them in their work. Now we will design to use automation system in full function in their work. In the future, if staff want some details or information about the stock of products or materials, they can search the information from the computer in their department.

We decided to use the work group feature of Windows technology for the new system. It will provide a better means to access, share data and resources, and there will be no redundancy.

The network diagram of Siriwong Inventory Control System is shown in figure 3.1

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2. Database Management System: Microsoft Access97
3. Network Operating System: Novell Netware 4.11
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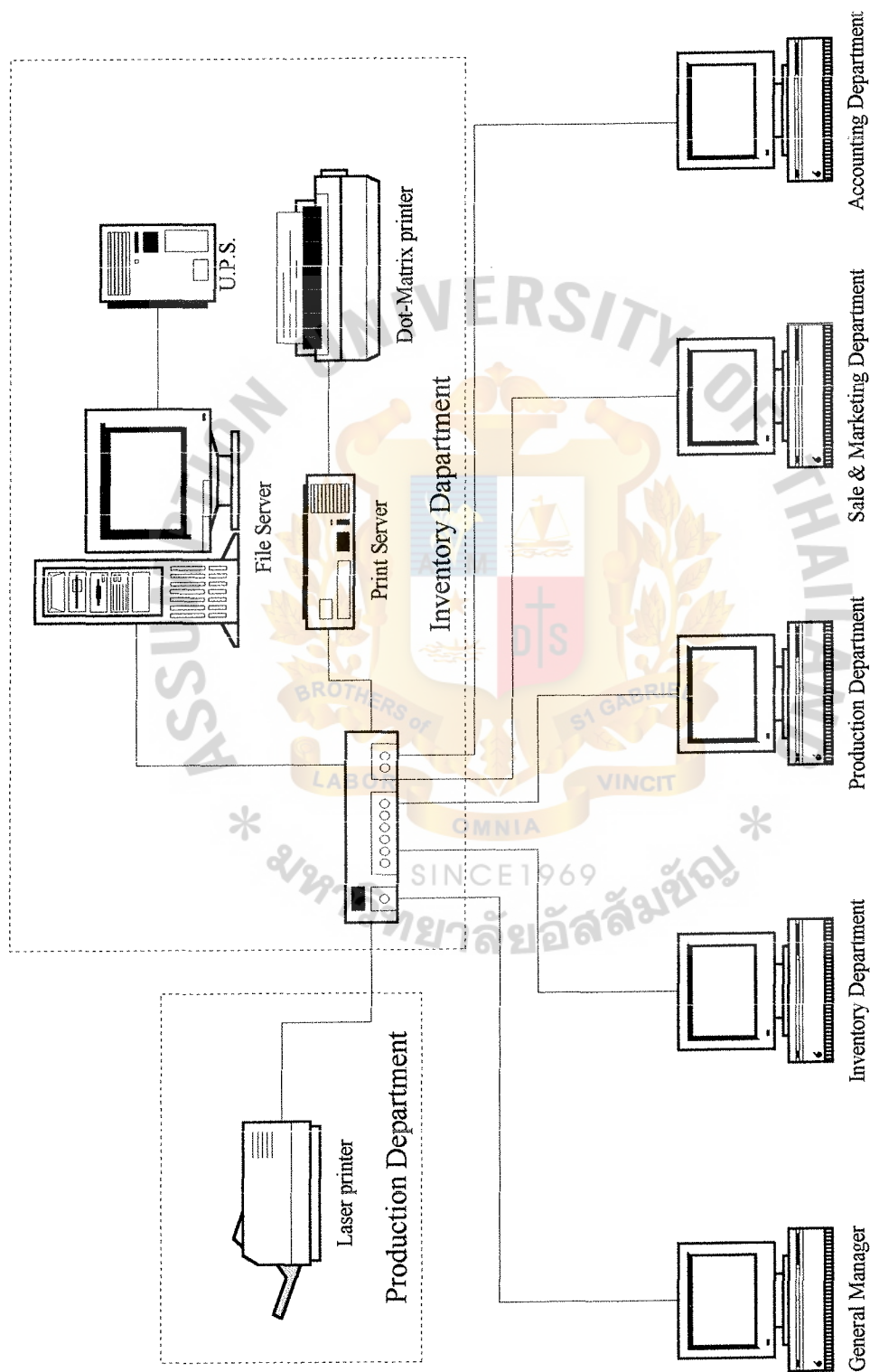


Figure 3.1. Network Configuration for the Proposed System.

3.5 Security and Control

Security and Control is very important when a computer-based information system is involved. It is a very broad and complex area. It encompasses not only the day-to-day protection of the computer hardware and software, but also the integrity of data, the privacy of data, the safeguarding of all physical facilities, and the avoidance of disastrous losses. Many of the security controls attempt to prevent or detect unauthorized access to the data, computer equipment, or other physical facilities. Other security controls are corrective in nature, since they enable losses of data or facilities to be recovered or reconstructed. Some security controls are highly technical and sophisticated, especially when providing security for centralized data base and data communication networks.

The following security and control methods are proposed to avoid attacks the computer system may face:

1. To prevent from unauthorized access
 - Use log-in name and password before entering the system
 - Force to change password within a specific time
2. To prevent the error of accident that may destroy the files.
 - Back up process is necessary and is used to recovery any destroyed or wrong files
3. To assure data completeness and accuracy starting from input to output.
 - Check list report
 - Edit report
4. To assure right function for each level users
 - To set menu for each user to log into the system depending on related function tasks.

3.6 Cost and Benefit Analysis

3.6.1 Cost Analysis

Table 3.1. Cost Analysis, in Baht.

Description	Unit Price	Qty.	Total
File Server			
PC Compatible Intel Pentium III 450MHz. 128MB SDRAM, 6.4 GB HDD 40xCD-ROM, LAN Card	65,000	1	65,000
PC Workstation			
PC Compatible Intel Celeron 433MHz. 32MB SDRAM, 4.5 GB HDD 40xCD-ROM, LAN Card	35,000	5	175,000
Network Peripherals			
3COM SuperStack II Hub 10, 12 ports	8,500	1	8,500
HP JetDirect Ex Plus Printer Server, 1 Serial	5,500	1	5,500
UPS			
SYNDOME UPS SZ-501 Backup time 20 mins.	5,800	1	5,800
Printer			
HP LaserJet 5P, 2MB RAM	25,000	1	25,000
NEC P1300, 24 pins, 136 cols, 216 cps, 8KB	11,000	1	11,000
Wiring Job			
Installation of Network Point includes UTP RJ-45 Connectors, RJ-45 Wall Plate	3,000	10	3,000
Software			
Novell Netware (10 users) CD-ROM	65,000	1	65,000
Windows98 Thai Edition	5,500	1	5,500
MS Office97 Thai Edition	12,500	1	12,500
MS Visual Basic 6.0	9,500	1	9,500
Grand Total (Baht)			391,300

3.6.2 Benefit Analysis

Benefit analysis is the method of evaluating the purposed computer information system. When computer information systems are concerned, costs can be difficult to calculate. Benefits can be even harder to determine that costs.

The Inventory Control System for Siriwong Company is studied and quantified separately. There are two types of benefits: Intangible Benefits and Tangible Benefits.

Intangible Benefits: are those delivered, indefinable improvement from which values can be exclusive.

- Improving the decision making process
- Enhancing accuracy
- Becoming more competitive advantage in stock management
- Increasing the business standard
- Increasing job satisfaction for employees by elimination tedious tasks
- Smoothing of operation

Tangible Benefits: are realized when the proposed system is projected to make or save money for the company.

- Reduction of human resource	150,000 Bht.
- Reduction of time consumption in completing the task	34,000 Bht.
- Reduction of errors in updating stock	56,000 Bht.
- Reduction of paper work	<u>5,000</u> Bht.
Total tangible benefit	<u>245,000</u> Bht.

3.6.3 Cost/Benefit Analysis

Payback Period

The payback period method determines the length of time of operation that the proposed system needs to pay back cost of investing before it is profitable. The

payback period formula is shown as follows

$$\begin{aligned}
 P &= I/(1-T)R \\
 I &= \text{Investment Cost} \\
 &= \text{Bht } 391,300 \\
 T &= \text{Tax} \\
 &= 30\% \\
 R &= \text{Annual Saving realized by investment} \\
 &= \text{Bht } 115,000 \\
 \text{Payback Period} &= 391,300 / (1-0.3) \text{ } 245,000 \\
 &= 2.28 \text{ years}
 \end{aligned}$$

Table 3.2 shows the costs of the manual system and the computerized system. The investment of the computerized system in the first year is higher than the investment of the manual system. But in the middle period of the second year, the cost of the manual system is higher than the computerized system. When we consider the total cost for a few years, we will see that the cost of the computerized system is lower than the cost of the manual system.

Table 3.2. Cost Comparison between The Computerized and The Manual Systems.

Cost Items	Year				
	1999	2000	2001	2002	2003
Computerized System					
- Hardware Costs and Related	296,100	-	-	-	-
- Software Cost and Overhead	92,500	40,000	44,000	48,400	53,240
- Implementation Cost	10,000	-	-	-	-
- Salaries	360,000	396,000	435,600	479,160	527,076
- Office Equipment	70,000	30,000	33,000	36,300	39,930
- Office Supplies	15,000	16,500	18,150	19,965	21,962
- Maintenance Cost	-	50,000	55,000	60,500	66,550
Total Cost (Baht)	843,600	532,500	585,750	644,325	708,758
Accumulative Cost (Baht)	843,600	1,376,100	1,961,850	2,606,175	3,314,933
Manual System					
- Office Equipment	150,000	40,000	44,000	48,400	53,240
- Office Supplies	20,000	22,000	24,200	26,620	29,282
- Salaries	510,000	561,000	617,100	678,810	746,691
- Maintenance Cost	-	20,000	22,000	24,000	26,000
Total Cost (Baht)	680,000	643,000	707,300	777,830	855,213
Accumulative Cost (Baht)	680,000	1,323,000	2,030,300	2,808,130	3,663,343

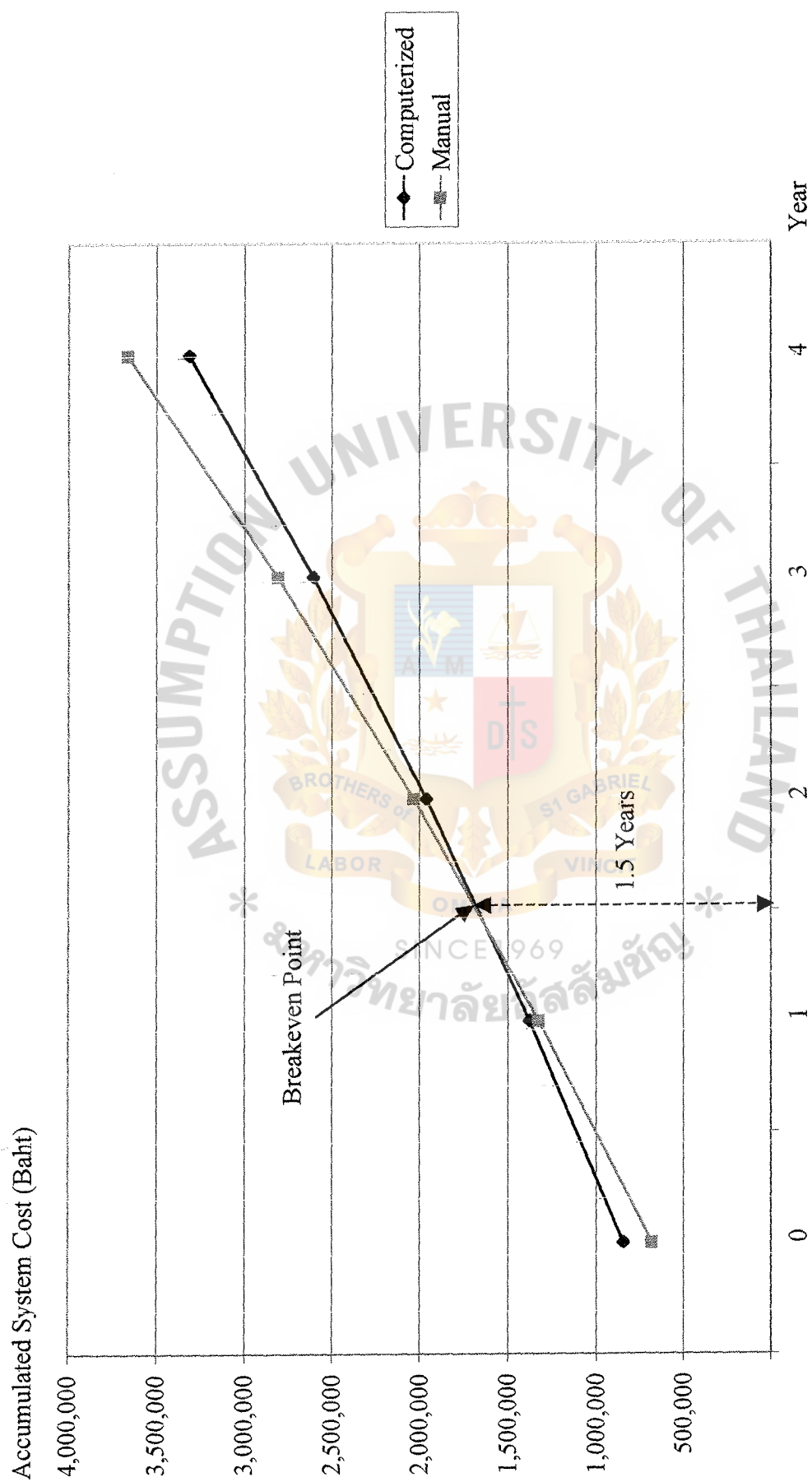


Figure 3.2. The Manual System Cost VS The Computerized System Cost.

IV. PROJECT IMPLEMENTATION

4.1 Project Management

Project management is the planning which includes all of the activities required to select a system analysis team, assign members of the team to appropriate projects, estimate time required to complete each task, and schedule the project so that tasks are completed in a timely fashion.

The system analyst's first decision is to determine the detail that goes into defining activities. The first level of detail is the system's development life cycle itself, while the other extreme is to include every detailed step the optional answer to planning and scheduling lies.

4.2 Project Implementation

Project implementation includes all those activities that take place to convert from the old system to the new one. Successful implementation may not guarantee improvement in the organization using the new system, but improper installation will prevent it. The project implementation consists of the activities as follows:

4.2.1 Training

System can succeed or fail because of the way they are operated and used. Therefore, the quality of training received by the personnel involved with the system in various capacities helps or hinders, and may even prevent, the successful implementation of an information system. Those who will be associated with or affected by the system must know in detail what their roles will be, how they can use the system, and what the system will or will not do. Both systems operators and users need training.

The objectives of the training depend on the requirements of the user's job. The method depends on the user's job, personality, background and experience; from a

combination of lecture, demonstration, hand-on, to study. The sites of training depend on the training objectives, cost, and availability; from free vendor sites with operable equipment; in-house installation; to rented facilities. The materials of the training depend on users' needs; operating manuals; cases, prototypes of equipment and output.

The training should be divided into two groups. One is the operation training and the other is user training. The training course is involved in different tasks. The training are dependent on the work function of each staff. Each training course has details like the following:

Operation Training

Training will be for system administrator who is responsible for keeping the equipment running, providing the necessary support service, or introducing the application to end-users. Their training must cover the handling of all possible operations, and the performance of routine operations should be second nature.

Training also involves familiarization with running the procedures, including the mounting of tapes, loading of disks, copying files, backing up data. Operators must know when the various procedures are appropriate and how to accomplish them.

Malfunctions are bound to occur. Operators and system administrators need to know what the most likely malfunctions are, how to detect them, and what steps to follow when they arise. For example, they must know how to detect damage to data on a server, and what to do about it.

User Training

When both the application program itself and the equipment are new to the users, users training will address fundamental matters first. End-users need to know how to turn on a workstation, how to insert diskette into the workstation, and how to load a program into the system. They also want to be sure when it is safe to take certain

actions without risking the loss of their data. Usually it is not enough to ask whether a certain topic has been made clear. Some may be embarrassed to admit that they have not understood. It is much better to have the trainees demonstrate.

The bulk of user training deals with user of the system itself. Training in data handing or entry of details into the system includes both learning how to enter the data and recognizing what the data should look like. Users must be shown how to add data, make changes or edit it, formulate inquiries to retrieve specific information, and delete records of data. These functions are the most basic features of the system, and the person conducting the training session must be sure every one understands them and can perform them comfortably.

4.2.2 Conversion

Conversion is the process of changing from the old system to the new one. There are many conversion strategies available to analysts, and there is also a contingency approach that takes into account several organization variables in deciding which conversion strategy to use. There is no single best way to proceed with conversion.

Conversion is more than just starting to use the Inventory Control System for the water business. It includes the creation of all required master and transaction files, establishing back-up copies of master file and database, and converting tested programs to operating status.

The data conversion must be carefully planned and also cross-checked to see that it is done correctly. We consider the ramifications of transferring a file from the manual to the computer-based system with checking for completeness and accuracy.

Normally, the existing system is manual, so cut over conversion system is not good because cut over system takes place all at once, rapidly. If the system for the business fails, all the work will stop and make the work damaged. More over, staff

have never operated the computer system. So it should be a step by step converse. We must let staff be familiar with the computer and provide training to staff sequentially. We will use parallel systems that the Inventory Control System for the company is operated side by side with the old one to ensure that data will not be lost if a problem arises. We can test the correction or completeness of the informational report of the system in the real world and compare with the old system.

The parallel system is safe and ensures that the works will not fail but it wastes much more time to finish the same work. And the cost is higher because we must duplicate work, produce redundant reports that we must prepare the budget to serve this point.

4.3 Testing

System testing is the method to ensure the project for completeness, correctness, reliability, and maintainability. System testing is aimed at finding any discrepancies between the system and its original objectives. Testing is a mean to turn up heretofore-unknown problems, not to demonstrate the perfection of programs, manuals or equipment. System testing is performed to determine how well the system will perform and whether it meets the original specifications.

The system as a working whole must also be tested. This includes testing the interfaces between subsystem, the correctness of output, and the usefulness and understandability of the system and output.

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Normally the company uses the manual system to control the stock of inventories and storage materials. When the business volume increases, the management foresees the need to pay more attention to the stock of goods and materials which might be lost while storing and to keep up the minimum quantity in stock in order to achieve the fast delivery service. Then the computerized system is developed to replace the existing system. The new system includes MS Visual Basic to write the application program and uses MS Access as the database management system. We will have the security and control from MS Visual Basic that uses the password and authorized access to the data.

Cost and Benefit analysis is used to determine the proposed system. From the analysis, the selected system will meet the equilibrium within 2.28 years. We expect this selected candidate will reach 81% of achievement compare with the other candidates. Then, implementation of the system follows, plan for training the user about the system using on-site training because of the number of users and conversion of the system by using the parallel strategy to make the customer feel secure. The last step is the post implementation review about the new system to collect the feedback about the new system from the customer whether the new system satisfies their requirements and improve the capacity of the system.

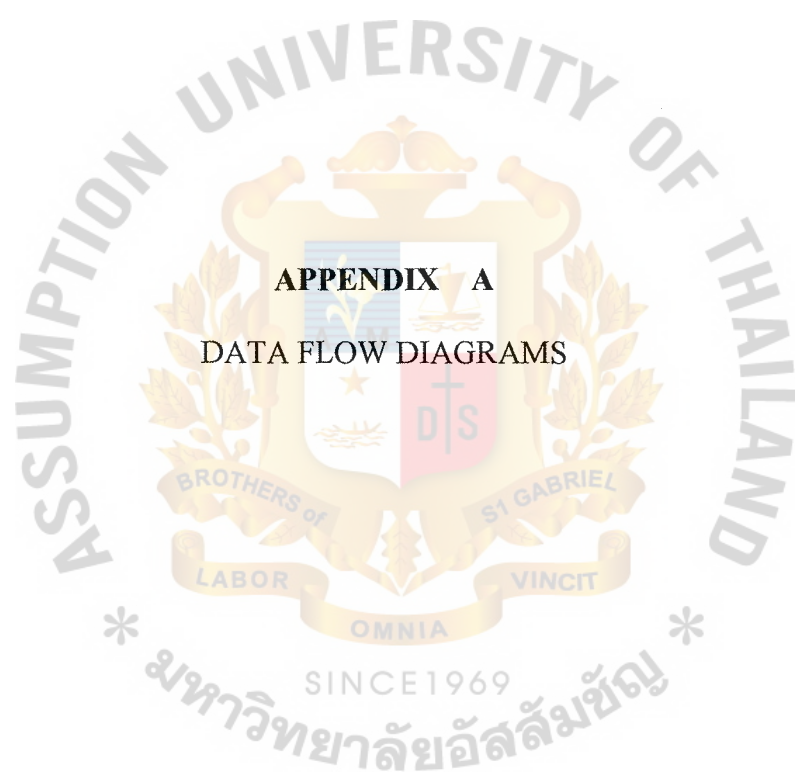
5.2 Recommendations

In any step of system development, the staff and other users should participate. The reasons are that they will gradually be familiar with the new system and have a chance to know the misunderstanding and miscommunication between the developers and all users. So both sides can tune or correct any mistakes before it will be too late.

The documentation is a very important thing because it guides users to operate the system. It is useful for the future if they have any expansion, any enhancement or any development. So we should give importance to documentation. It should be clear, precise, concise, and complete in every point.

The system developed in this project still needs ongoing development, revision and modification similar to any other software system to meet the future user requirements.

Further ongoing development in this system may be done in case of the company has the policy to separate the sales office site from the factory site to locate near the main road. For the proposed LAN Network, it can be expanded to connect the sales office site and the factory site together to increase some necessary facilities performance and changing some existing facilities. In the future, if the company increase the scale of production, the larger volume and line of products will also increase. Inventory management is very important. To increase the efficiency of the system, the bar code system for the product items is recommended to control the time consumption and mistake in typing of the staff.



APPENDIX A

DATA FLOW DIAGRAMS

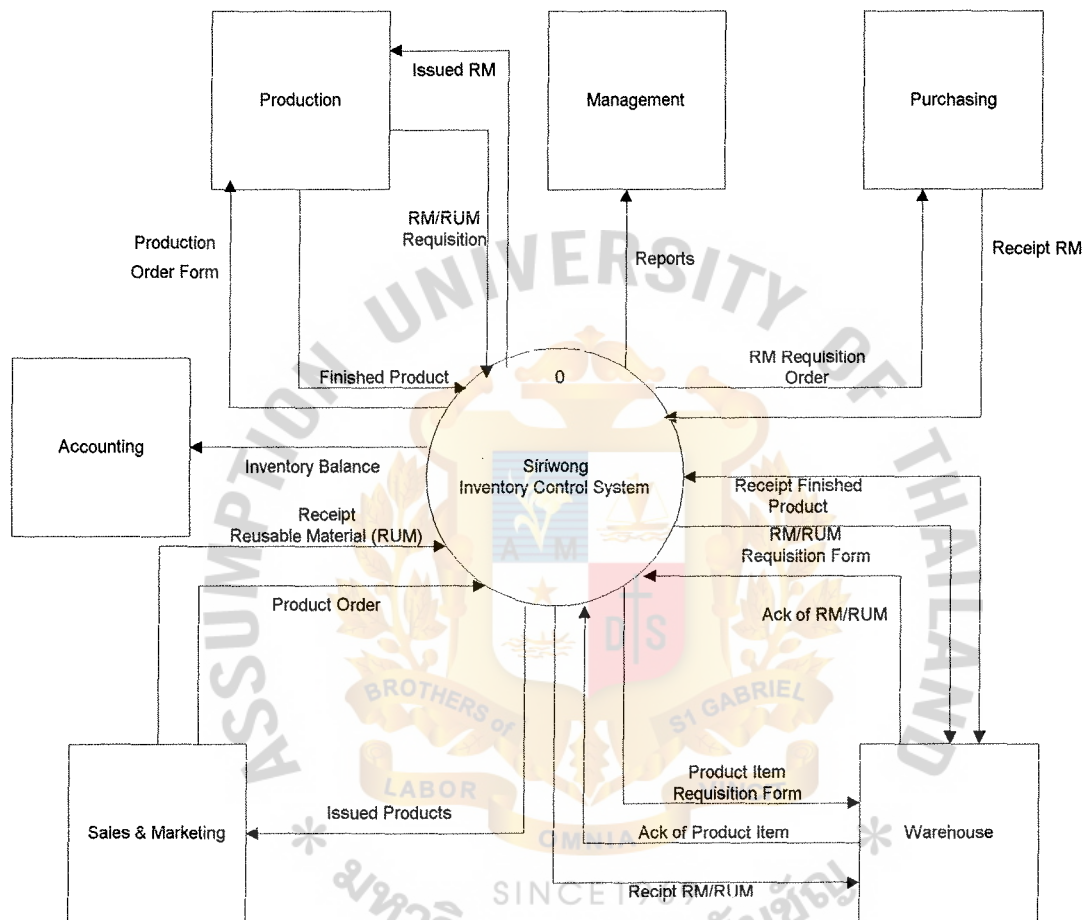


Figure A.1. Context Diagram of the Proposed System.

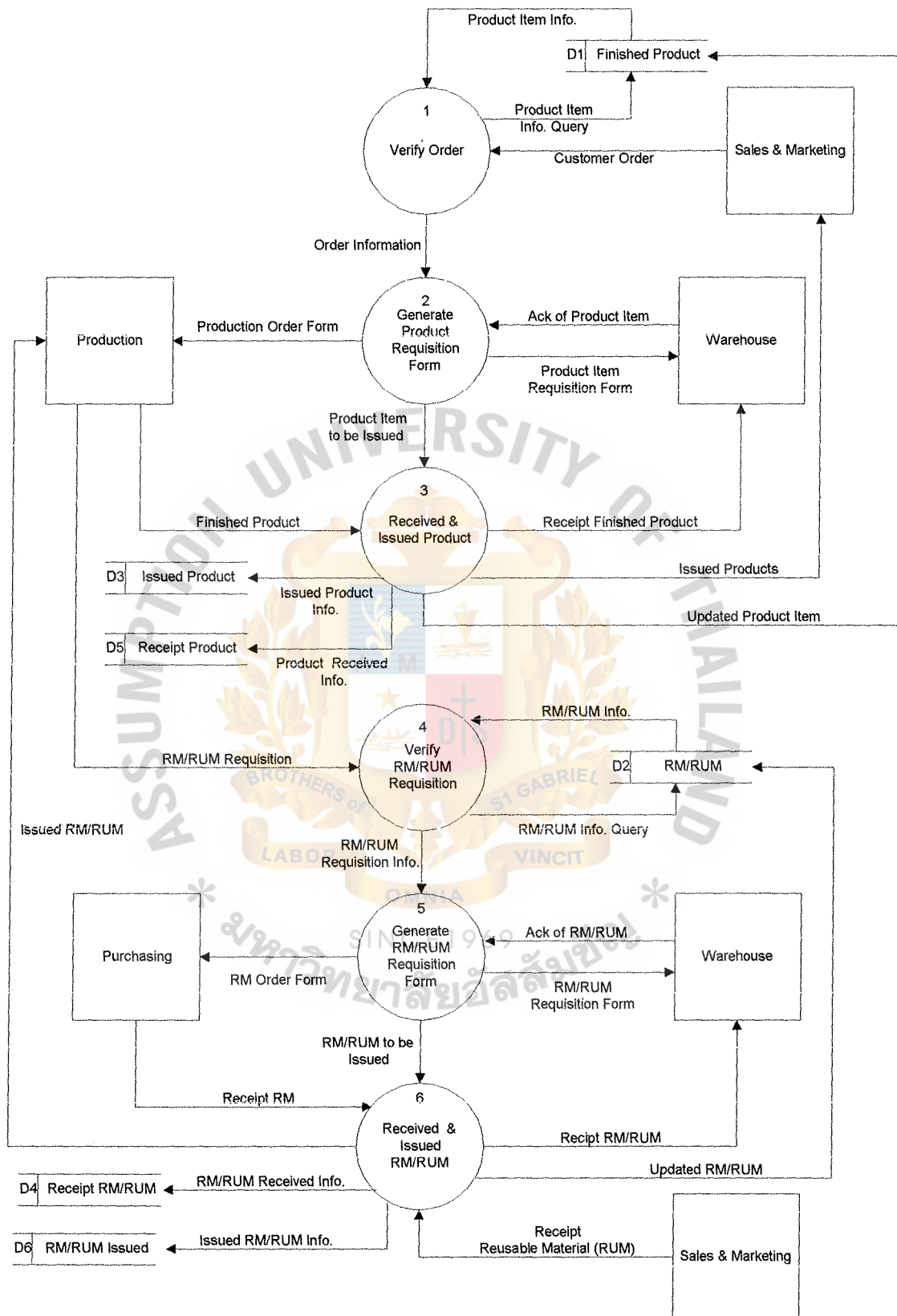


Figure A.2. DFD Level 0 of the Proposed System.

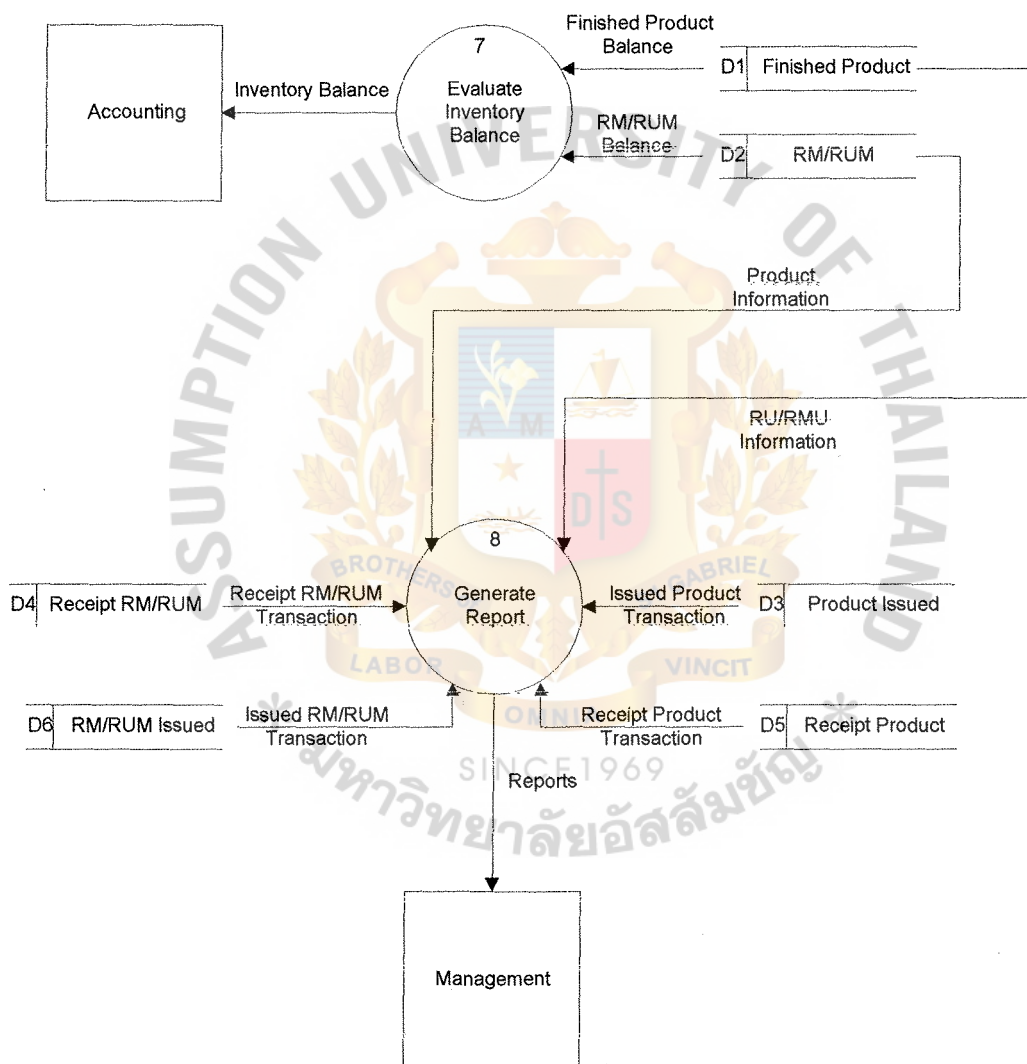


Figure A.3. DFD Level 0 of the Proposed System.

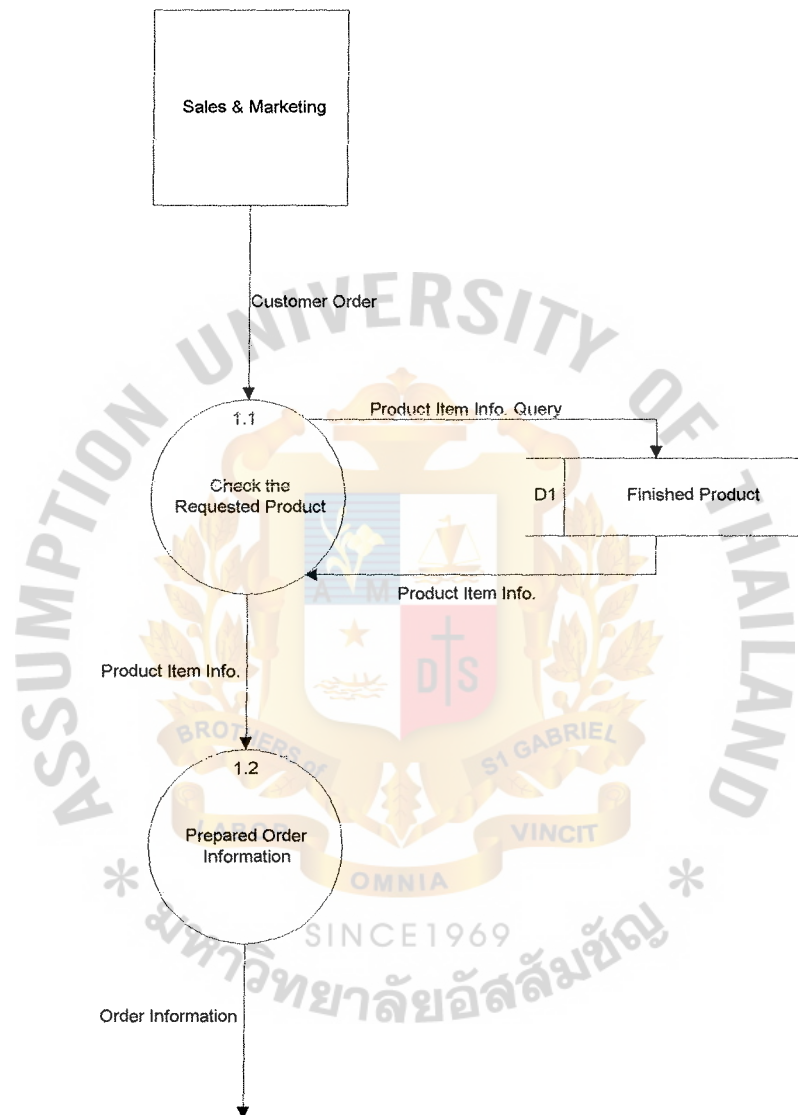


Figure A.4. DFD Level 1 of the Proposed System.

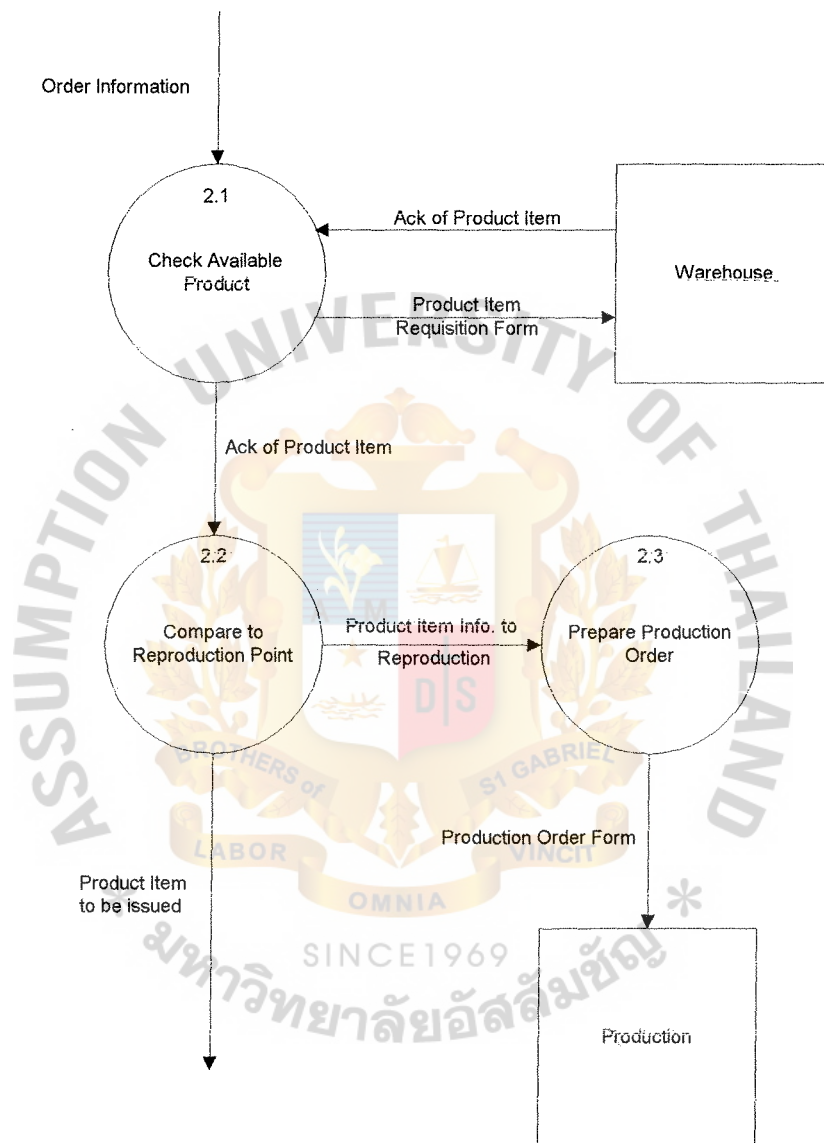


Figure A.5. DFD Level 1 of the Proposed System.

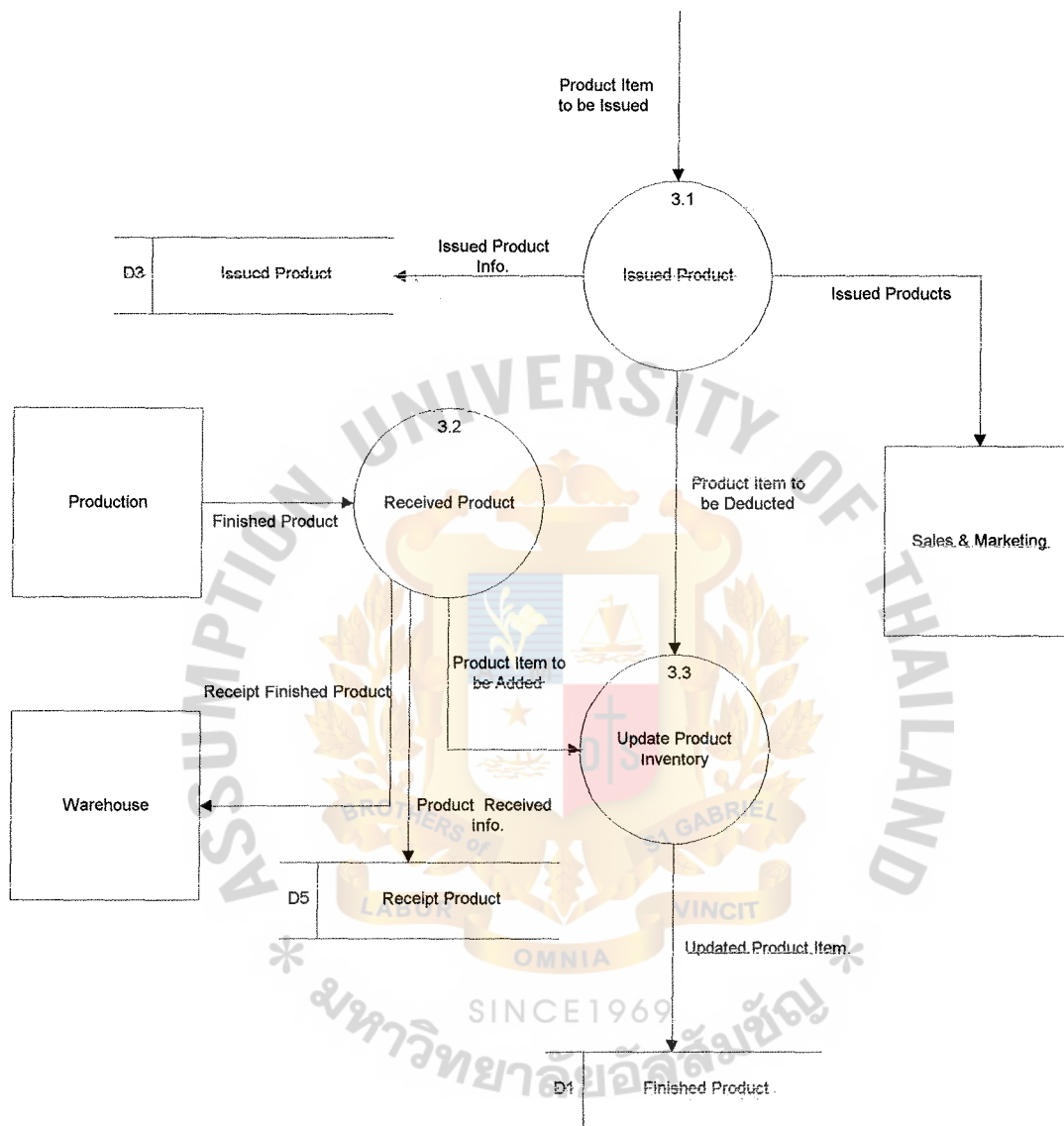


Figure A.6. DFD Level 1 of the Proposed System.

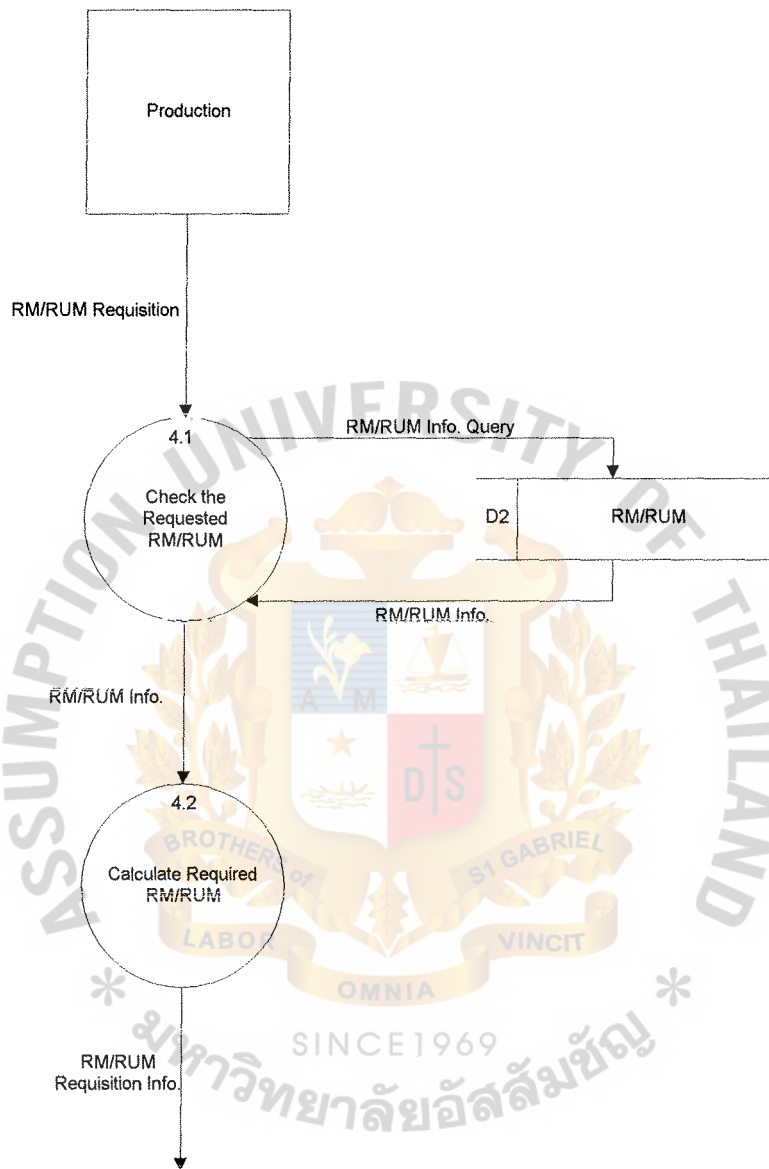


Figure A.7. DFD Level 1 of the Proposed System.

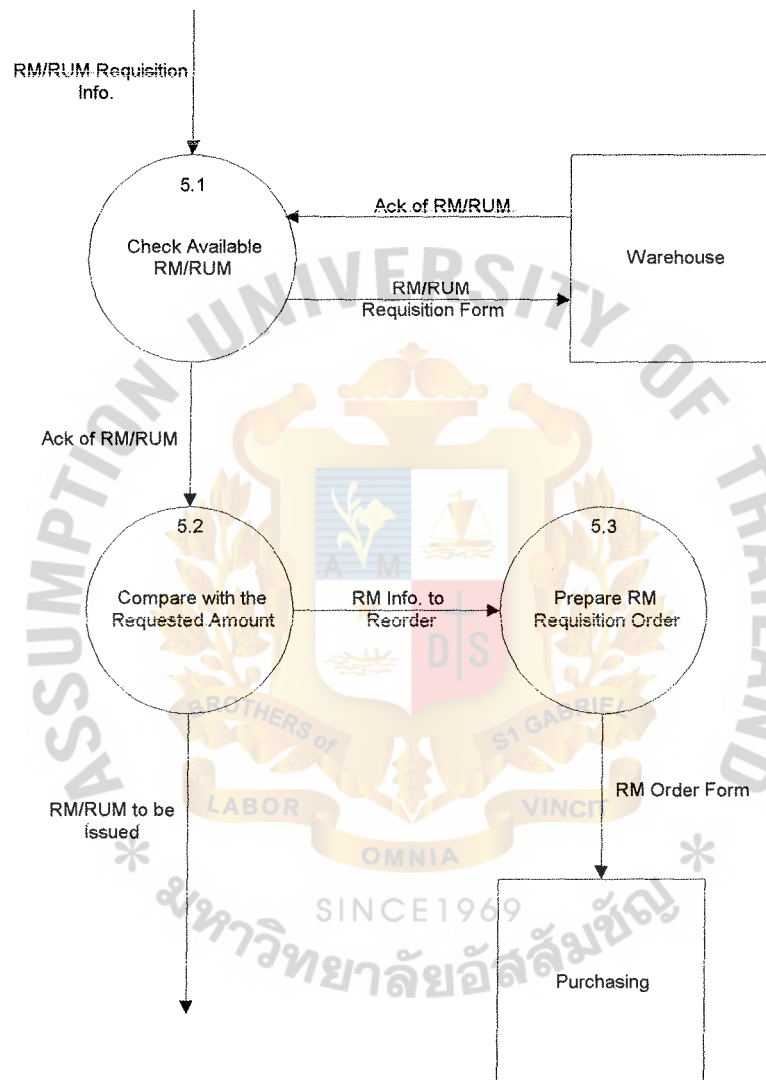


Figure A.8. DFD Level 1 of the Proposed System.

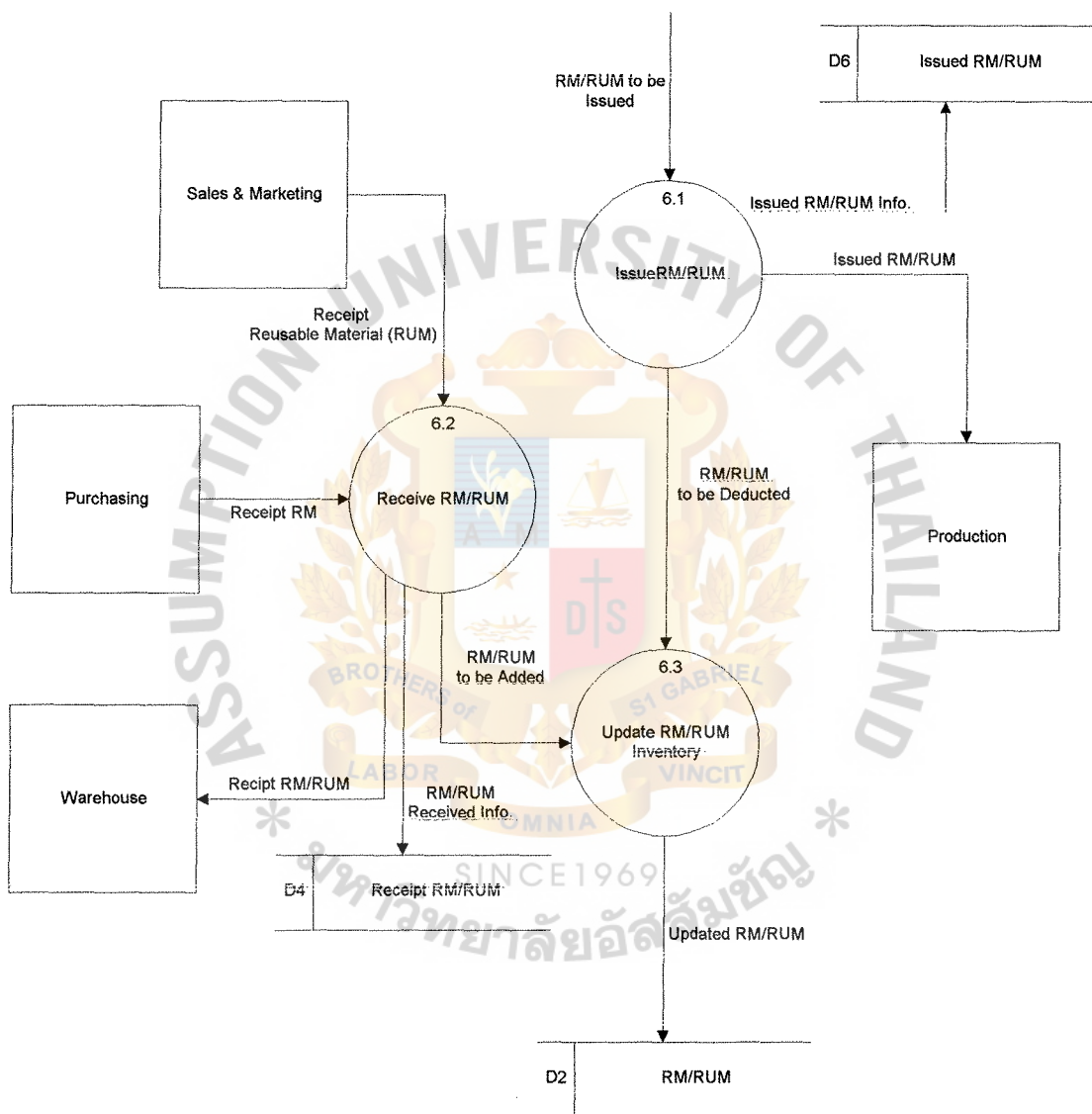


Figure A.9. DFD Level 1 of the Proposed System.



DATA DICTIONARY

For Data Flows

Ack of Product Item	= Acknowledgement of Product available in the warehouse
Ack of RM/RUM	= Acknowledgement of Raw Material inventory and Reusable Material inventory available in the Warehouse
Customer Order	= Customer Order information sent by the Sales Department
Evaluate Inventory Balance	= Calculate Product and Raw Material balance
Finished Product	= Product to be stocked after the production
Finished Product Balance	= Total balance of the Finished Product for the evaluation of the inventory balance
Generate Product Requisition form	= Create the Product Requisition transaction to request the product from the Warehouse
Generate RM/RUM Requisition form	= Create the Material Requirement transaction to request the Raw Material and Reusable Material from the Warehouse
Generate Report	= Process of preparing report to support Management Decision Making
Inventory Balance	= Inventory balance of Finished Product and Raw Material sent to the Accounting Department for early ending of accounting entry

Issued Product	= Issued Product to the Sales and Marketing Department responsible for the Customer Order
Issued Product Info.	= Information of Product Issued transaction to be kept in the data storage
Issued Product Transaction	= Detail of Issued Product Transaction for generating report
Issued RM/RUM	= Issued Raw Material and Reusable Material to the Production Department responsible for the RM/RUM requisition
Issued RM/RUM Info.	= Information of Raw Material and Reusable Material issued transaction to be kept in the data storage
Issued RM/RUM Transaction	= Detail of Issued RM/RUM Transaction for generating report
Order Information	= Information of Finished Product which is requested by Customer Order
Product Item Info.	= Validation of product information requested in the Customer Order
Product Item Requisition form	= Form used to request the product from the Warehouse
Product Item to be Issued	= Detail of Product Item to be Issued
Product Item Info. Query	= Product information requested
Product Received Info.	= Information of Product Received transaction to be kept in the data storage

Production Order Form	= Production Order Information sent to the production department for the shortage product reproduction
Receipt Finished Product	= Detail of Finished Product to be stocked in the Warehouse
Receipt Product Transaction	= Detail of Receipt Product Transaction for generating report
Receipt Reusable Material	= Detail of Reusable Material returned from customer
Receipt RM	= Detail of Raw Material received from Purchasing Department
Receipt RM/RUM	= Details of Raw Material and Reusable Material to be stocked in the Warehouse
Receipt RM/RUM Transaction	= Detail of Receipt RM/RUM transaction for generating report
Received & Issued Product	= Create Product Received and Issued transaction, and Update transaction
Received & Issued RM/RUM	= Create RM/RUM Received and Issued transaction, and Update transaction
RM Order Form	= RM Order Information sent to the purchasing department for the shortage material purchasing
RM/RUM	= Raw Materiel/Reusable Material
RM/RUM Balance	= Total balance of Raw Material and Reusable Material for the evaluation of the inventory balance

RM/RUM Info.	= Validation of RM/RUM information requested in the RM/RUM requisition
RM/RUM Info. Query	= Information of RM/RUM for production requested
RM/RUM Order Info.	= Information of RM/RUM which is requested by Production Department
RM/RUM Requisition	= Requested of RM/RUM for production from Production Department
RM/RUM Received Info.	= Information of RM/RUM received transaction to be kept in the data storage
RM/RUM Requisition form	= Form used for requesting the RM/RUM from the Warehouse
RM/RUM to be Issued	= Detail of RM/RUM Item to be Issued
Updated Product Item	= Product amount and information to be changed in the data storage
Updated RM/RUM	= RM/RUM amount and information to be changed in the data storage
Verify RM/RUM Requisition	= Process of checking the validation of RM/RUM and preparation of the requisition information
Verify Order	= Process of checking the validation of Finished Product requested and preparation of the order information

DATADITIONARY

For Data Stores

No.	File Name	Input	Output
D1	Finished Product	Finished Product Record	Finished Product Record
D2	RM/RUM	Raw Material Record	Raw Material Record
D3	Product Issued	Issued Product Record	Issued Product Record
D4	Receipt RM/RUM	Issued RM/RUM Record	Issued RM/RUM Record
D5	Receipt Product	Receipt Product Record	Receipt Product Record
D6	RM/RUM Issued	Issued RM/RUM Record	Issued RM/RUM Record





APPENDIX C

PROCESS SPECIFICATION

PROCESS SPECIFICATION

Process: 1

Name: Verify Order

Input Data Flows:

Customer Order

Product Item Info.

Output Data Flows:

Product Item Info. Query

Order Information

Process Logic:

BEGIN

GET Customer Order

READ Product Info. FROM Finished Product File

CREATE Order Information

SEND TO Process 2

END

Process: 1.1

Name: Check Requested Product

Input Data Flows:

Product Order

Product Item Info.

Output Data Flows:

Product Item Info. Query

Product Item Info.

Process Logic:

BEGIN

GET Customer Order

READ Product Info. FROM Finished Product File

SEND TO Process 1.2

END

Process: 1.2

Name: Prepared Order Information

Input Data Flows:

Product Item Info.

Output Data Flows:

Order Information

Process Logic:

BEGIN

GET Product Item Info.

CREATE Order Information

SEND TO Process 2

END



Process: 2

Name: Generate Product Requisition Form

Input Data Flows:

Order Information

Ack of Product Item

Output Data Flows:

Product Order Form

Product Item Requisition Form

Process Logic:

BEGIN

GET Order Information

CREATE Product Item Requisition Form

SEND TO Warehouse

GET Ack of Product Item FROM Warehouse

COMPUTE Product Inventory

IF Product Inventory \leq Reproduction Point THEN

CREATE Production Order Form SEND TO Production

ELSE

CREATE Product Item to be Issued SEND TO Process 3

END IF

END

Process: 2.1

Name: Check Available Product

Input Data Flows:

Order Information

Ack of Product Item

Output Data Flows:

Ack of Product Item

Product Item Requisition Form

Process Logic:

BEGIN

GET Order Information

CREATE Product Item Requisition Form

SEND TO Warehouse

GET Ack of Product Item FROM Warehouse

SEND TO Process 2.2

END

Process: 2.2

Name: Compare to Reproduction Point

Input Data Flows:

Ack of Product Item

Output Data Flows:

Product Item Info. To Reproduction

Product Item to be issued

Process Logic:

BEGIN

GET Ack of Product Item

COMPUTE Product Inventory

IF Product Inventory \leq Reproduction Point THEN

CREATE Product Item Info to Reproduction

SEND TO Process 2.3

ELSE

CREATE Product Item to be Issued SEND TO Process 3

END IF

END

Process: 2.3

Name: Prepare Production Order

Input Data Flows:

Product Item Info. To Reproduction

Output Data Flows:

Product Order Form

Process Logic:

BEGIN

GET Product Item Info. To Reproduction

CREATE Production Order Form

SEND TO Production

END



Process: 3

Name: Received & Issued Product

Input Data Flows:

Product Item to be Issued

Finished Product

Output Data Flows:

Receipt Finished Product

Issued Products

Updated Product Item

Issued Product Info.

Product Received Info.

Process Logic:

BEGIN

GET Product Item to be Issued

SEND Issued Products TO Sales & Marketing

WRITE Issued Product Info. TO Issued Product File

GET Finished Product FROM Production

SEND Receipt Finished Product TO Warehouse

WRITE Product Received Info. TO Receipt Product File

UPDATE Finished Product File

END

Process: 3.1

Name: Issued Product

Input Data Flows:

Product Item to be Issued

Output Data Flows:

Product Item to be Deducted

Issued Products

Issued Product Info.

Process Logic:

BEGIN

GET Product Item to be Issued

CREATE Issued Products

SEND TO Sales & Marketing

WRITE Issued Product Info. TO Issued Product File

SEND Product Item to be Deducted TO Process 3.3

END

Process: 3.2

Name: Received Product

Input Data Flows:

Finished Product

Output Data Flows:

Receipt Finished Product

Product Item to be Added

Product Received Info.

Process Logic:

BEGIN

GET Finished Product FROM Production

CREATE Receipt Finished Product

SEND TO Warehouse

WRITE Product Received Info. TO Receipt Product File

SEND Product Item to be Added TO Process 3.3

END

Process: 3.3

Name: Update Product Inventory

Input Data Flows:

Product Item to be Added

Product Item to be Deducted

Output Data Flows:

Updated Product Item

Process Logic:

BEGIN

GET Product Item to be Deducted

GET Product Item to be Added

COMPUTE Product Inventory

UPDATE Finished Product File

END

Process: 4

Name: Verify RM/RUM Requisition

Input Data Flows:

RM/RUM Requisition

RM/RUM Info.

Output Data Flows:

RM/RUM Info. Query

RM/RUM Requisition Info.

Process Logic:

BEGIN

GET RM/RUM Requisition

READ RM/RUM Info. FROM RM/RUM File

CREATE RM/RUM Requisition Information

SEND TO Process 5

END

Process: 4.1

Name: Check Requested RM/RUM

Input Data Flows:

RM/RUM Requisition

RM/RUM Info.

Output Data Flows:

RM/RUM Info. Query

RM/RUM Info.

Process Logic:

BEGIN

 GET RM/RUM Requisition

 READ RM/RUM Info. FROM RM/RUM File

 SEND TO Process 4.2

END

Process: 4.2

Name: Prepared Order Information

Input Data Flows:

RM/RUM Info.

Output Data Flows:

RM/RUM Requisition Info.

Process Logic:

BEGIN

GET RM/RUM Info.

CREATE RM/RUM Requisition Info.

SEND TO Process 5

END



Process: 5

Name: Generate RM/RUM Requisition Form

Input Data Flows:

RM/RUM Requisition Info.

Ack of RM/RUM

Output Data Flows:

RM/RUM Requisition Form

RM Order Form

Process Logic:

BEGIN

GET RM/RUM Requisition Info.

CREATE RM/RUM Requisition Form

SEND TO Warehouse

GET Ack of RM/RUM FROM Warehouse

COMPUTE RM Requirement

IF RM Inventory \leq RM Requirement THEN

CREATE RM Requisition Order SEND TO Purchasing

ELSE

CREATE RM/RUM Item to be Issued SEND TO Process 6

END IF

END

Process: 5.1

Name: Check Available RM/RUM

Input Data Flows:

RM/RUM Requisition Info.

Ack of RM/RUM

Output Data Flows:

Ack of RM/RUM

RM/RUM Requisition Form

Process Logic:

BEGIN

GET RM/RUM Requisition Info.

CREATE RM/RUM Requisition Form

SEND TO Warehouse

GET Ack of RM/RUM FROM Warehouse

SEND TO Process 5.2

END

Process: 5.2

Name: Compare with Requested Amount

Input Data Flows:

Ack of RM/RUM

Output Data Flows:

RM Info. to Reorder

RM/RUM to be issued

Process Logic:

BEGIN

GET Ack of RM/RUM

COMPUTE RM Requirement

IF RM Inventory \leq RM Requirement THEN

CREATE RM Info. to Reorder

SEND TO Process 5.3

ELSE

CREATE RM/RUM to be Issued SEND TO Process 6

END IF

END

Process: 5.3

Name: Prepare RM Requisition Order

Input Data Flows:

RM Info. to Reorder

Output Data Flows:

RM Order Form

Process Logic:

BEGIN

GET RM Info. to Reorder

CREATE RM Order Form

SEND TO Purchasing

END



Process: 6

Name: Received & Issued RM/RUM

Input Data Flows:

RM/RUM to be Issued

Receipt RM

Receipt RUM

Output Data Flows:

Issued RM/RUM

Updated RM/RUM

Issued RM/RUM Info.

RM/RUM Received Info.

Process Logic:

BEGIN

GET RM/RUM to be Issued

SEND Issued RM/RUM TO Production

WRITE Issued RM/RUM Info. TO Issued RM/RUM File

GET Receipt RM FROM Purchasing

SEND Receipt RM/RUM TO Warehouse

WRITE RM/RUM Received Info. TO Receipt RM/RUM File

UPDATE Finished Product File

END

Process: 6.1

Name: Issue RM/RUM

Input Data Flows:

RM/RUM to be Issued

Output Data Flows:

RM/RUM to be Deducted

Issued RM/RUM

Issued RM/RUM Info.

Process Logic:

BEGIN

GET RM/RUM to be Issued

CREATE Issued RM/RUM

SEND TO Production

WRITE Issued RM/RUM Info. TO Issued RM/RUM File

SEND RM/RUM Item to be Deducted TO Process 6.3

END

Process: 6.2

Name: Receive RM/RUM

Input Data Flows:

Receipt RM

Receipt RUM

Output Data Flows:

Receipt RM/RUM

RM/RUM to be Added

RM/RUM Received Info.

Process Logic:

BEGIN

GET Receipt RM FROM Production

GET Receipt RUM FROM Sales & Marketing

CREATE Receipt RM/RUM

SEND TO Warehouse

WRITE RM/RUM Received Info. TO Receipt RM/RUM File

SEND RM/RUM to be Added TO Process 6.3

END

Process: 6.3

Name: Update RM/RUM Inventory

Input Data Flows:

RM/RUM to be Added

RM/RUM to be Deducted

Output Data Flows:

Updated RM/RUM

Process Logic:

BEGIN

GET RM/RUM to be Deducted

GET RM/RUM to be Added

COMPUTE RM Inventory

UPDATE RM/RUM File

END

Process: 7

Name: Evaluate Inventory Balance

Input Data Flows:

Finished Product Balance

RM/RUM Balance

Output Data Flows:

Inventory Balance

Process Logic:

BEGIN

 READ Finished Product Balance

 FROM Finished Product File

 READ RM/RUM Balance

 FROM RM/RUM File

 COMPUTE Inventory Balance

 SEND TO Accounting

END

Process: 8

Name: Generate Report

Input Data Flows:

Product Information

RU/RUM Information

Issued Product Transaction

Receipt RM/RUM Transaction

Receipt Product Transaction

Issued RM/RUM Transaction

Output Data Flows:

Reports

Process Logic:

BEGIN

READ Product Information FROM Finished Product File

READ RM/RUM Information FROM RM/RUM File

READ Issued Product Transaction FROM Product Issued File

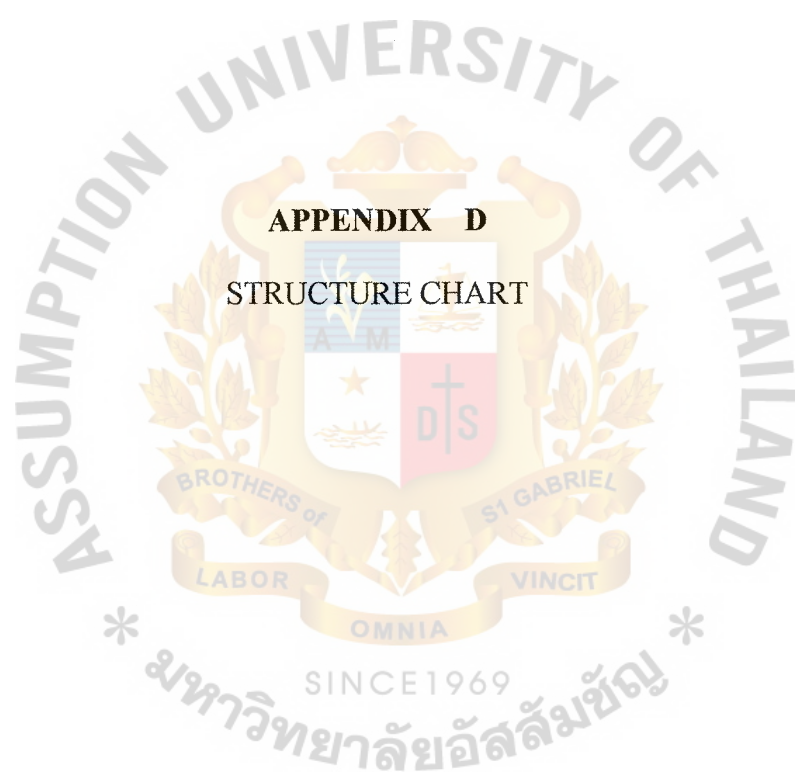
READ Receipt RM/RUM Transaction FROM Receipt RM/RUM File

READ Receipt Product Transaction FROM Receipt Product File

READ Issued RM/RUM Transaction FROM Issued RM/RUM File

CREATE Reports SEND TO Management

END



APPENDIX D

STRUCTURE CHART

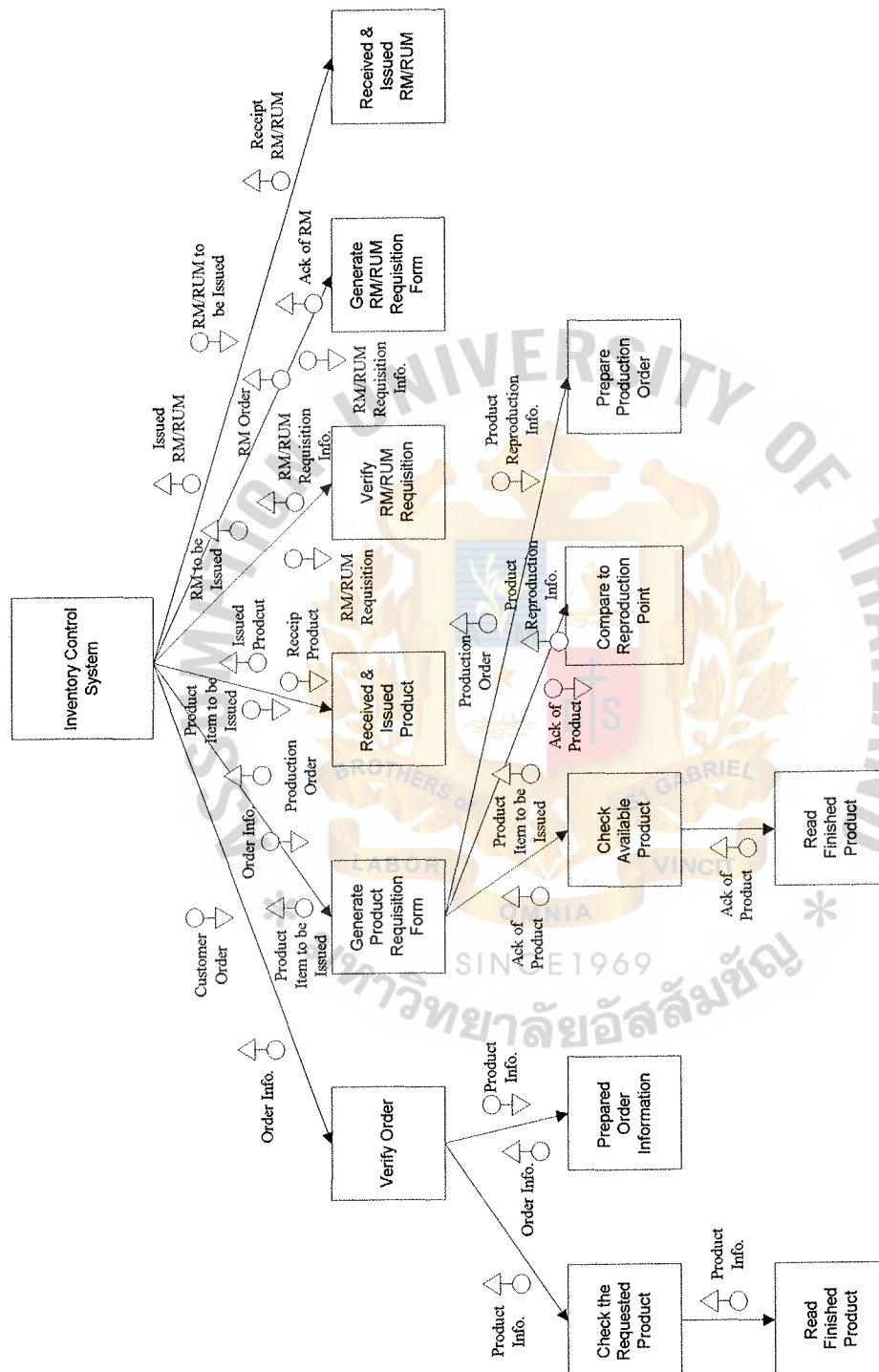


Figure D.1. Structure Chart for Siriwing Inventory Control System.

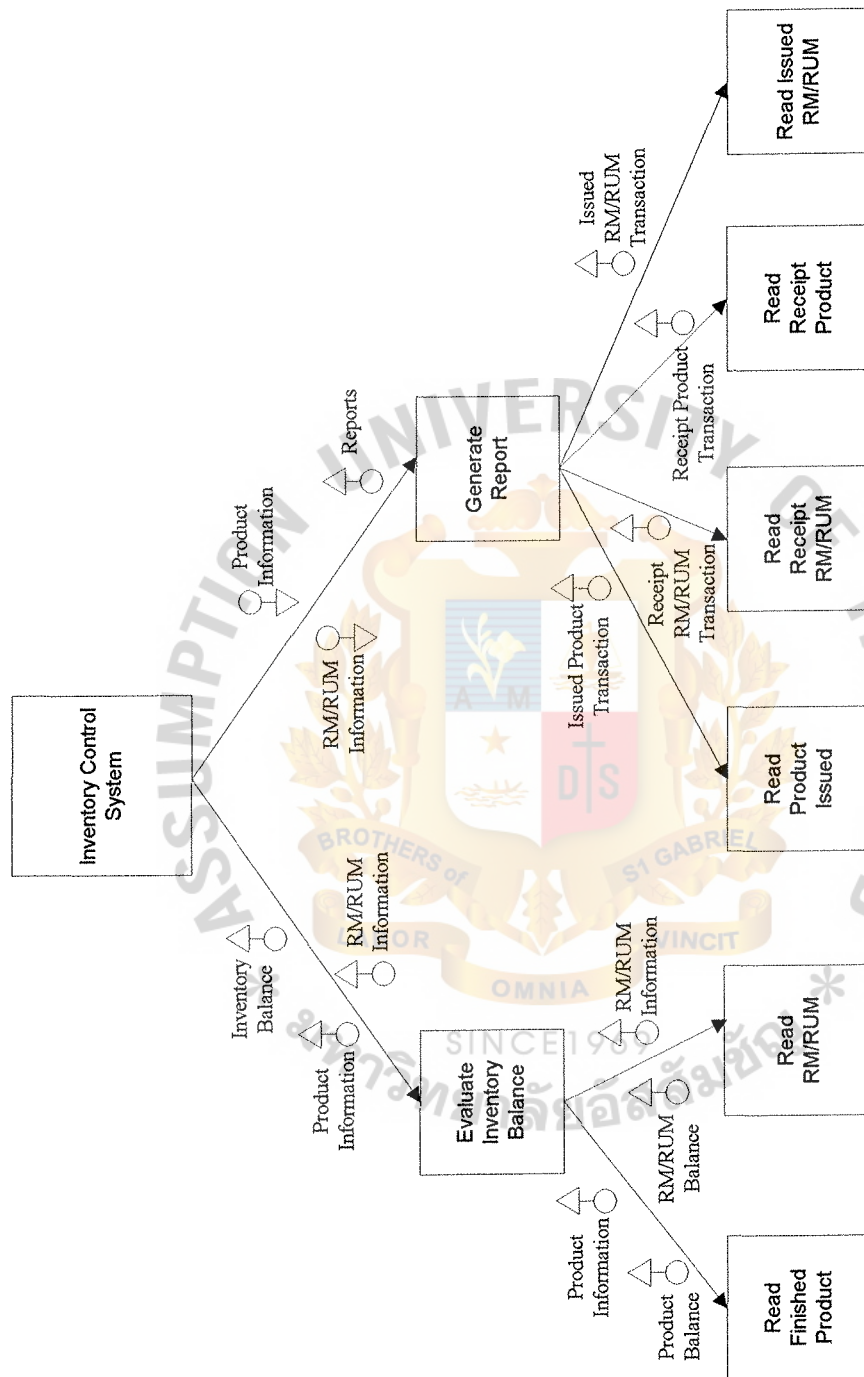


Figure D.2. Structure Chart for Siriwong Inventory Control System.

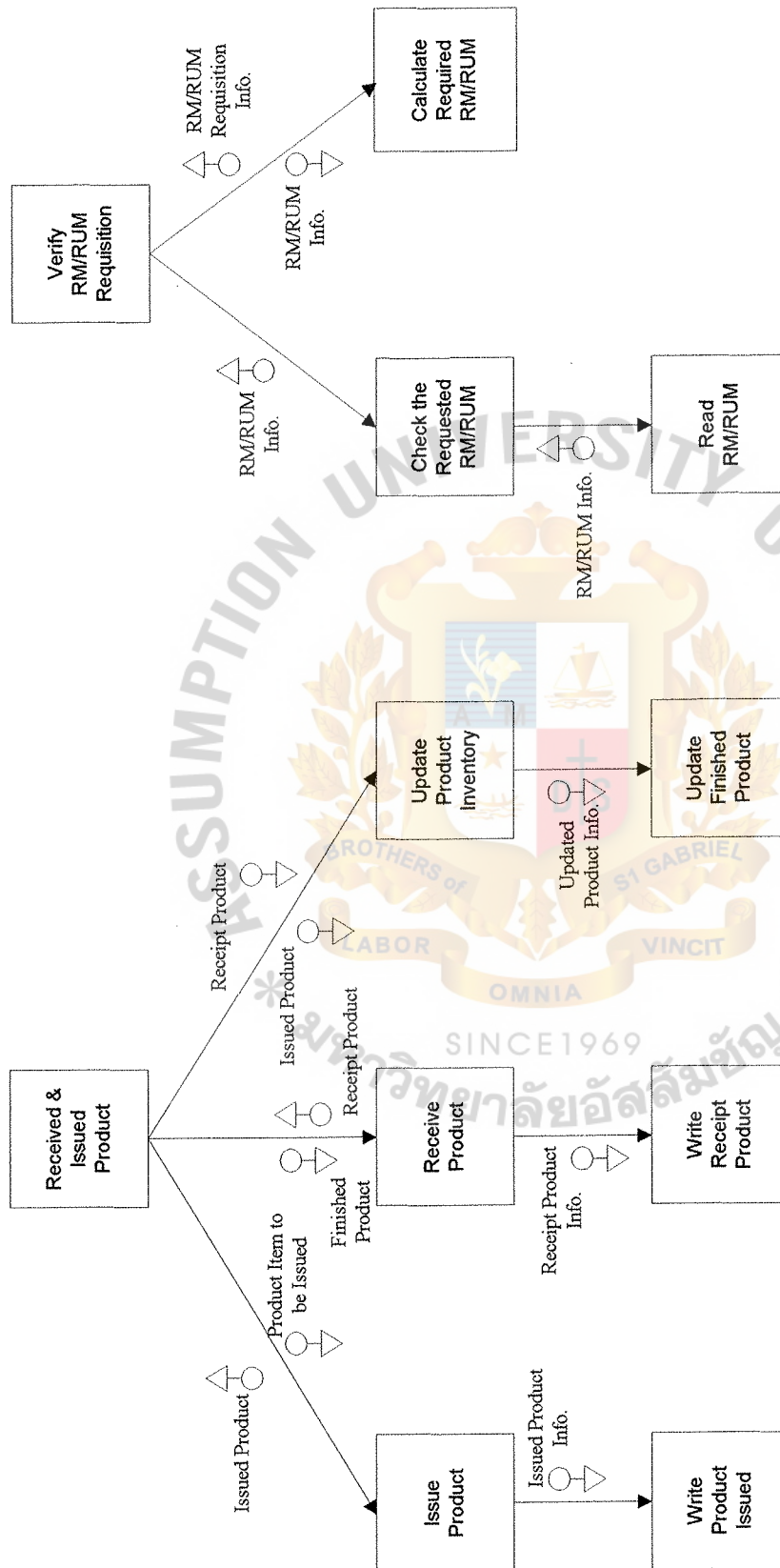


Figure D.3. Structure Chart for Siriwong Inventory Control System.

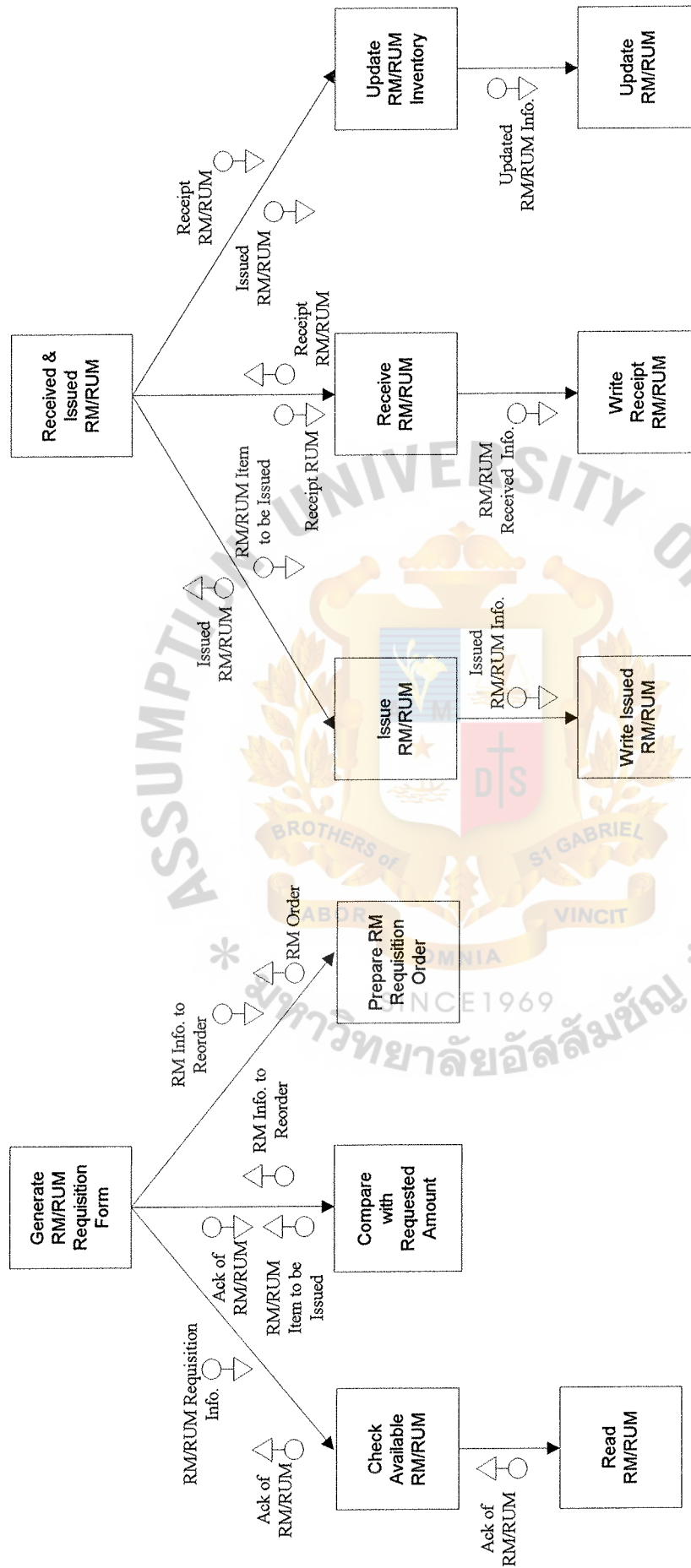


Figure D.4. Structure Chart for Siriwong Inventory Control System.



APPENDIX E

ENTITY-RELATIONSHIP DIAGRAM

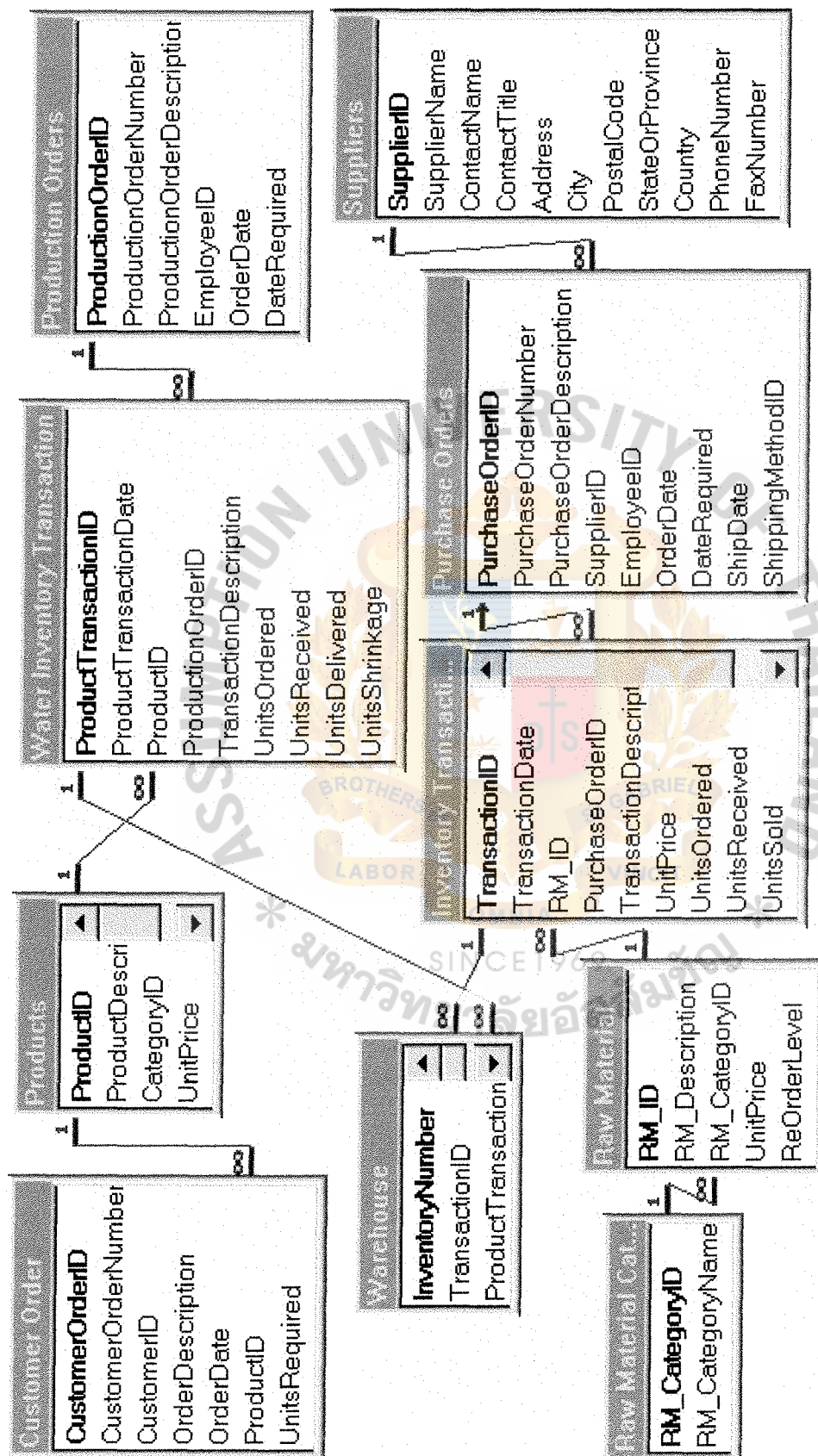
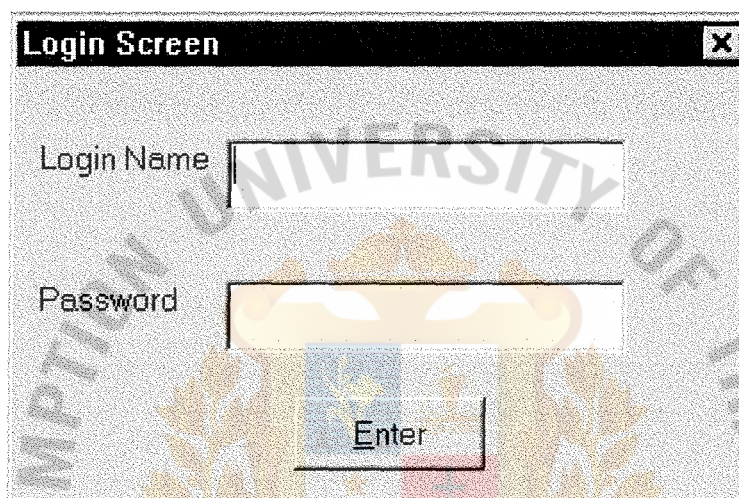


Figure E.1. Entity-Relationship Diagram.





A screenshot of a 'Login Screen' window. The window has a title bar with the text 'Login Screen' and a close button (X). Inside the window, there are two text input fields. The first is labeled 'Login Name' and the second is labeled 'Password'. Below the 'Password' field is a button labeled 'Enter'.

Figure F.1. Login Screen.

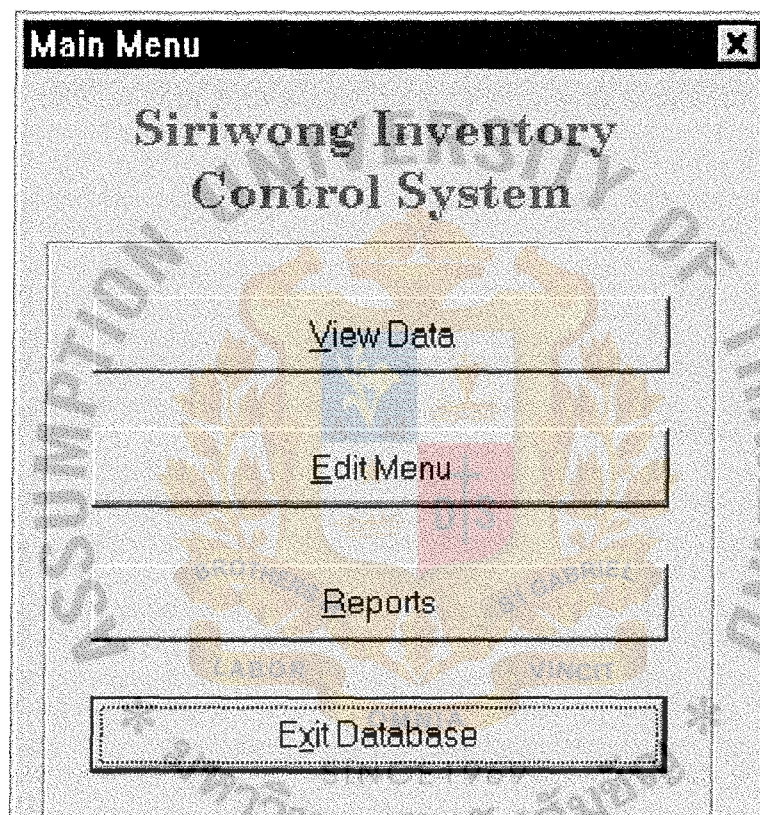


Figure F.2. Main Menu Screen.

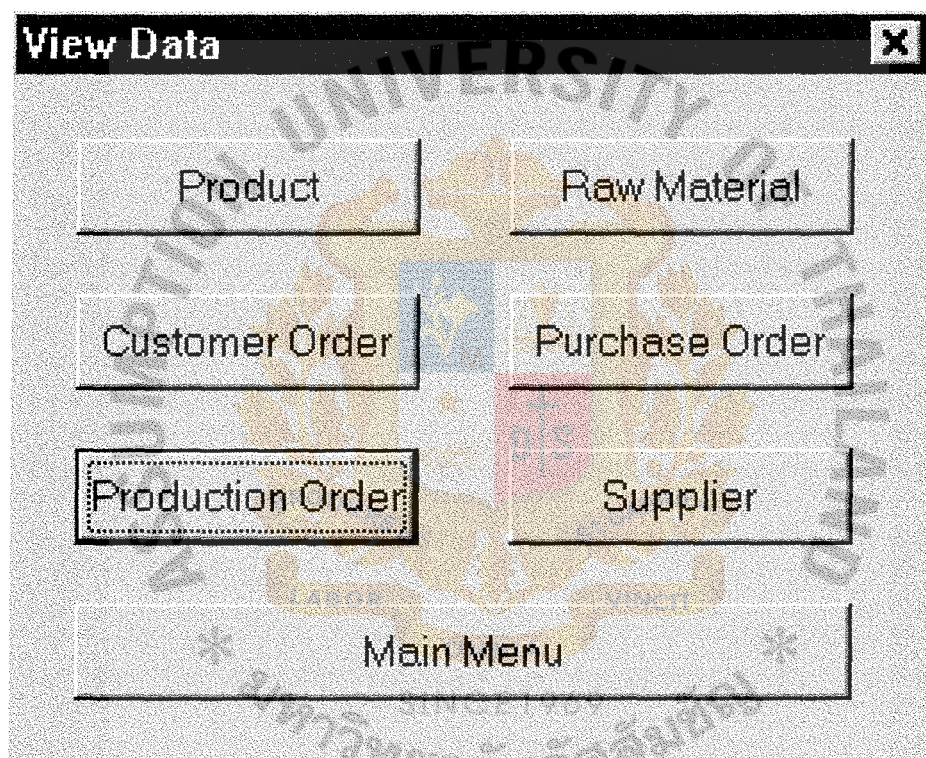


Figure E.3. View Data Screen.

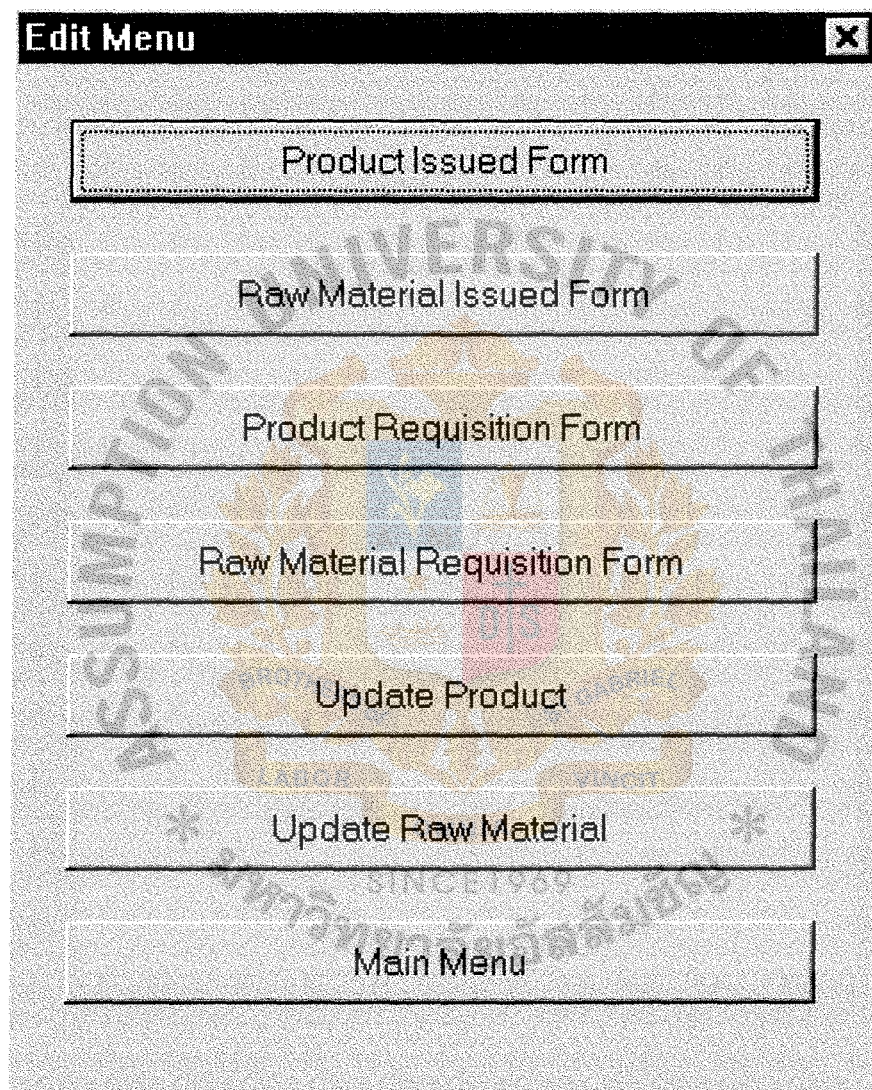


Figure F.4. Edit Menu Screen.

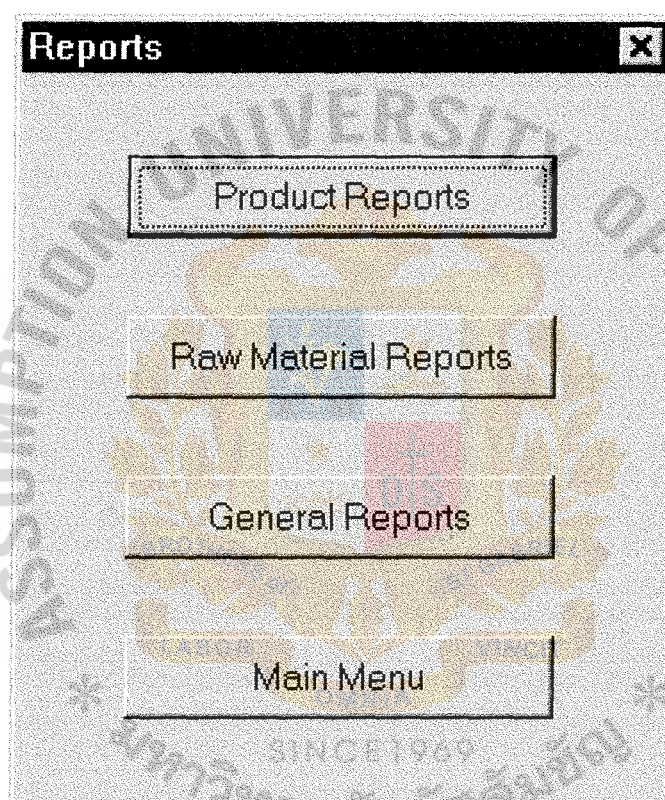


Figure F.5. Reports Screen.

Product Inventory [X]

Siriwong Inventory Control System

Product Inventory

Product ID Unit Price

Description Total Inventory

Category Name Reproduction Level

☐ ☐

ProductID	ProductDescription	CategoryName	Unit
<div style="text-align: center;">  <p>มหาวิทยาลัยศรีนครินทรวิโรฒ</p> <p>SINCE 1942</p> </div>			

Figure F.6. Product Information Screen.

Raw Material Inventory

Siriwong Inventory Control System

Raw Material Inventory

Raw Material ID Unit Price

Description Total Inventory

Category Name Reorder Level

RM_ID	RM_Description	RM_CategoryName	UnitPri

Figure F.7. Raw Material Information Screen.

Customer Order Data [X]

Siriwong Inventory Control System

Customer Order Data

Customer Order ID Order Date

Description

CustomerOrderID	CustomerOrderNumbe	CustomerID	OrderDescri
* มหาวิทยาลัยอัสสัมชัญ * SINCE 1969			

◀ ▶

◀ ▶

Cancel [Main Menu]

Figure F.8. Customer Order Data Screen.

Purchase Order Data [X]

Siriwong Inventory Control System

Purchase Order Data

Purchase Order ID Order Date

Description

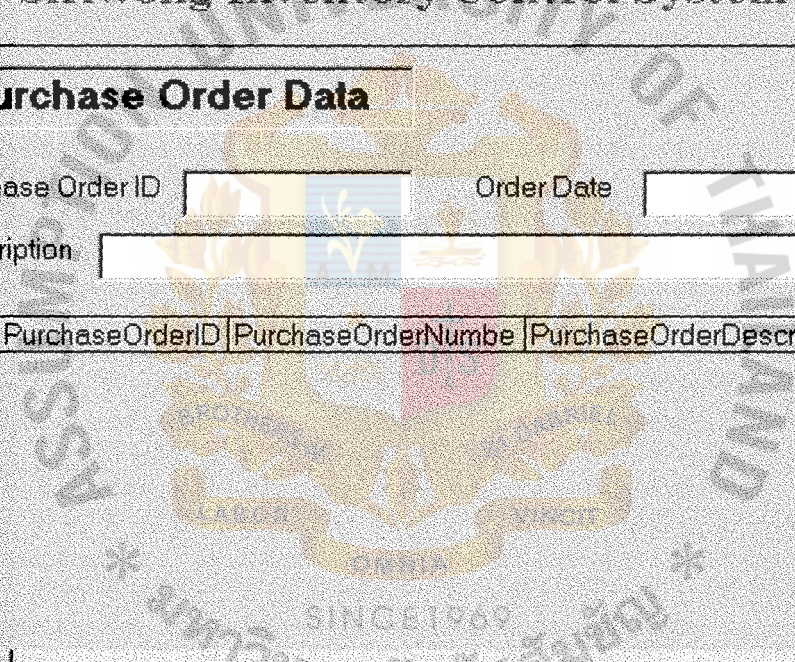
PurchaseOrderID	PurchaseOrderNumbe	PurchaseOrderDescription
		

Figure F.9. Purchase Order Data Screen.

Production Order Data [X]

Siriwong Inventory Control System

Production Order Data

Production Order ID Order Date

Description

ProductTransactionID	ProductTransactionDate	ProductID	Pro
* * * * *			

◀ | ▶

☐ ☐

Figure F.10. Production Order Data Screen.

[illegible]

Figure F.12. Raw Material Issue Form Screen.

Input Raw Material [X]

Siriwong Inventory Control System

Raw Material ID:

Description:

Category:

Unit Price:

Unit In Stock:

Reorder Level:

Raw Material Input Data

Fetch Add

Update Delete

Clear Close

Unit Received

Unit Sold

Main Menu

◀ ▶ Data1 ▶▶

Figure F.14. Raw Material Input Screen.



Figure F.15. Product Report Menu Screen.



Figure F.16. Product Issued Report Screen.

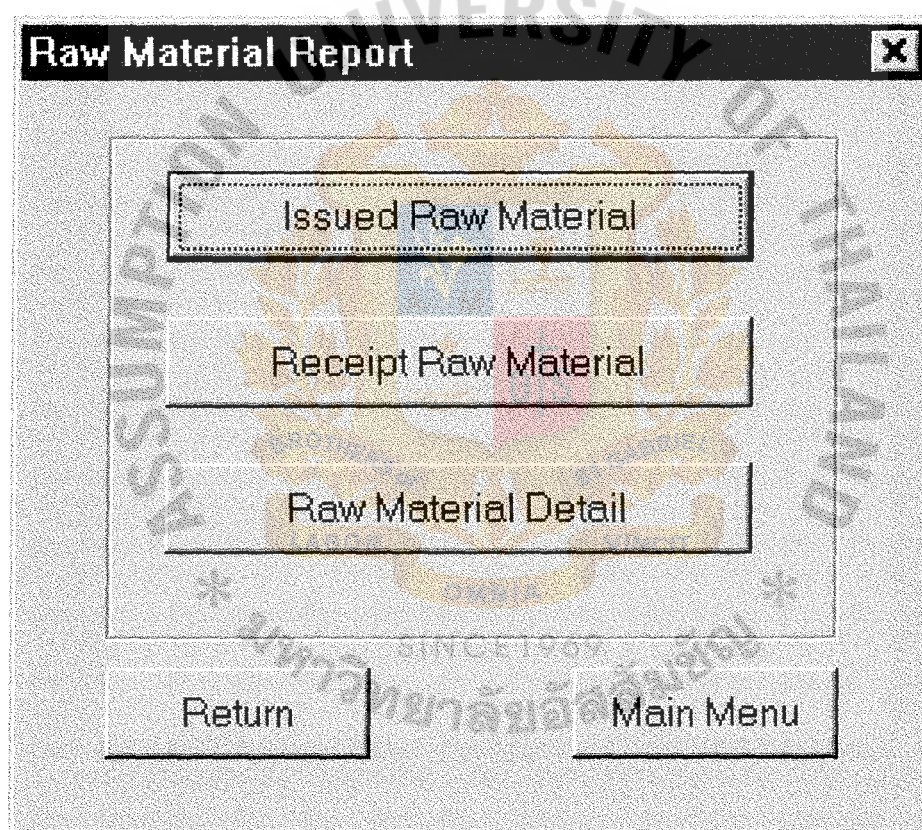


Figure F.17. Raw Material Report Menu Screen.

Report RM Issued [X]

Issued Raw Material Report

Orders by

- ☐ Raw Material Name
- ☐ Raw Material ID.No.
- ☒ Category
- ☐ Quantity

OK Cancel Main

Figure F.18. Raw Material Issued Report Screen.

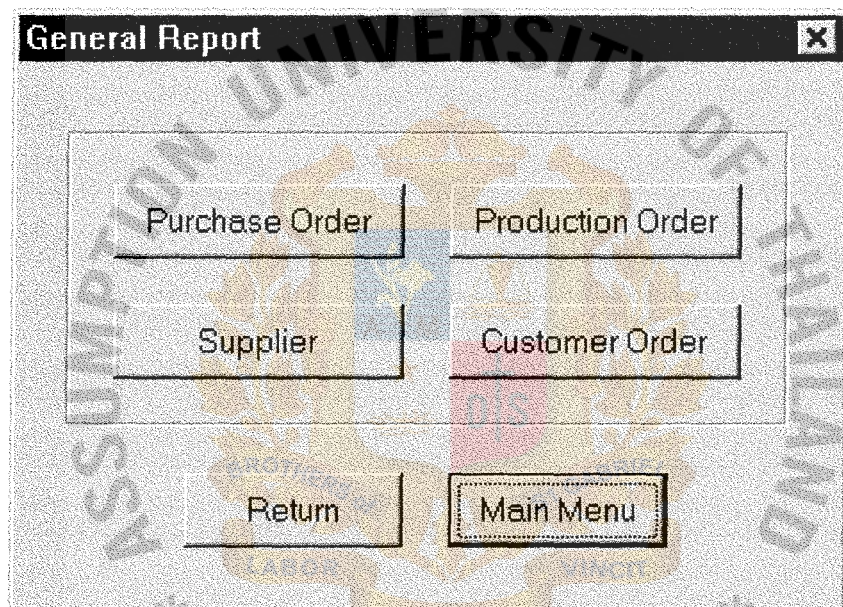


Figure F.19. General Report Menu Screen.

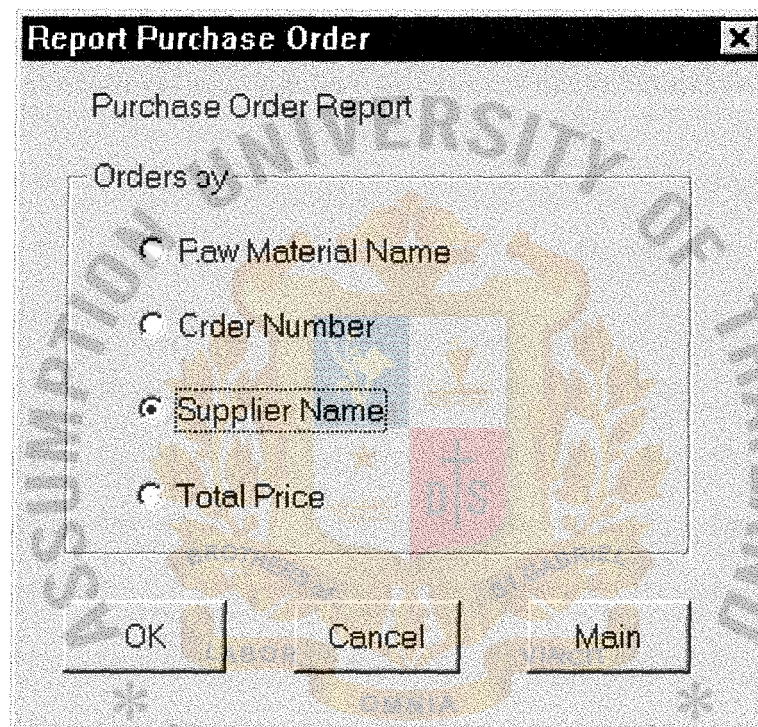


Figure F.20. Purchase Order Report Screen.



APPENDIX G

REPORT FORMAT

Siriwong Company

Report of Raw Material Issue by Issue Date:

Issue Date: 111111

Issue No.	RM_ID.	Description	Price/Unit	Qty
XXXXXXX	XXXXXX	XXXXXXX	XXXXXXX	XXXXXXX
XXXXXXX	XXXXXXX	XXXXXXXX	XXXXXXX	XXXXXXX
XXXXXXXX	XXXXXX	XXXXX	XXXXX	XXXXX
XXXXXX	XXXXXX	XXXXXX	XXXXXXXX	XXXXXX
XXXX	XXXXXXXXXX	XXXXXXX	XXXXXXXX	XXXX
XXXXXXX	XXXXXXXX	XXXXXXX	XXXXXXXX	XXXXXX
XXXXXXXX	XXXXXXXX	XXXXXXXXXX	XXXXXXXX	XXXXXXX
XXXXXX	XXXXXXXX	XXXXXXX	XXXXXXXXXX	XXXXXXX
XXXXXX	XXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXX
XXXXXX	XXXXXX	XXXXXX	XXXXX	XXXXXX
XXXXXXXX	XXXXXXXX	XXXXX	XXXXX	XXXXX
Xxx	Xxxx	XXXXXX	XXXXXXXX	XXXXXXX

Issue Date: 222222

Issue No	RM_ID	Description	Price/Unit	Qty
XXXXXXX	XXXXXX	XXXXXXX	XXXXXXX	XXXXXXXX
XXXXXXX	XXXXXXX	XXXXXXXX	XXXXXXX	XXXXXXX
XXXXXXXX	XXXXXX	XXXXX	XXXXX	XXXXX
XXXXXX	XXXXXX	XXXXXX	XXXXXXXX	XXXXXX
XXXX	XXXXXXXXXX	XXXXXXX	XXXXXXXX	XXXX
XXXXXXX	XXXXXXXX	XXXXXXX	XXXXXXXX	XXXXXX
XXXXXXXX	XXXXXXXX	XXXXXXXXXX	XXXXXXXX	XXXXXXX
XXXXXX	XXXXXXXX	XXXXXXX	XXXXXXXXXX	XXXXXXX
XXXXXX	XXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXX
XXXXXX	XXXXXX	XXXXXX	XXXXX	XXXXXX
XXXXXXXX	XXXXXXXX	XXXXX	XXXXX	XXXXX

Figure G.1. Report of Raw Material Issue.

Siriwong Company

Report of Product Issue by Issue Date.

Issue Date: 111111

Issue No	Product_ID	Description	Qty	Total Price
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx

Issue Date: 222222

Issue No	RM No.	Description	Qty	Total Price
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxxxx	Xxxxxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.2. Report of Product Issue.

Siriwong Company

Report of Product Items by Category ID

Category ID: PET2233

Product_ID	Description	Category	Price/Unit	Reproduction Level
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx

Category ID: PC3344

Product_ID	Description	Category	Price/Unit	Reproduction Level
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.3. Report of Product Details.

Siriwong Company

Report of Raw Materials by Category ID

Category ID: RUM2233

RM_ID	Description	Category	Price/Unit	Reorder Level
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx

Category ID: RM3344

RM_ID	Description	Category	Price/Unit	Reorder Level
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.4. Report of Raw Materials.

Siriwong Company

Report of Suppliers by City

City: AAAA

Supplier_ID	Supplier Name	Contact Title	Address	Phone
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx

City: BBBB

Supplier_ID	Supplier Name	Contact Title	Address	Phone
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.5. Report of Suppliers.

Siriwong Company

Report of Product Inventory by Month

Month: JJJJJJ

Product_ID	Description	Units Received	Units Sold	Total Balance
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxx	Xxxx	Xxxxxx	Xxxxxxxx	Xxxxxxx

Month: FFFFFF

Product_ID	Description	Units Received	Units Sold	Total Balance
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxx	Xxxxx	Xxxxx

Figure G.6. Report of Product Inventory.

Siriwong Company

Report of Raw Material Inventory by Month

Month: JJJJJJ

RM_ID	Description	Units Received	Units Released	Total Balance
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxx	Xxxx	Xxxxxx	Xxxxxxxx	Xxxxxxx

Month: FFFFFF

RM_ID	Description	Units Received	Units Released	Total Balance
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxx	Xxxxx	Xxxxx

Figure G.7. Report of Raw Material Inventory.

Siriwong Company

Report of Purchase Order by PO_No.

PO_No.: PO1111

Supplier Name: AAA

Date 111111

RM_ID	Description	Price/Unit	Qty	Total Price
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxxx	Xxxxxxxxx	Xxxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx

PO_No.: PO2222

Supplier Name: CCC

Date 333333

RM_ID	Description	Price/Unit	Qty	Total Price
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.8. Report of Raw Material Inventory.

Siriwong Company

Report of Production Order by Order No.

Order_No.: PO1111

Date 111111

Product ID	Description	Category	Qty	Date Required
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxxxx	Xxxxxxxxxx	Xxxxxxxxxxx	Xxxxxxxxxx
Xxxxxx	Xxxxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxx	Xxxxxxxx	Xxxxxxx

Order_No.: PO1111

Date 111111

Product ID	Description	Category	Qty	Date Required
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxxxx	Xxxxxxxxxx	Xxxxxxxxxxx	Xxxxxxxx
Xxxxxx	Xxxxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.9. Report of Production Order.

Siriwong Company

Report of Receipt Product by Product ID

Product ID: 111111 Product Name: AAAAA Category: AAA

Order Date	Order No.	Qty Ordered	Qty Received	Receipt Date
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxxxx	Xxxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxx

Product ID: 222222 Product Name: BBBB Category: BBB

Order Date	Order No.	Qty Ordered	Qty Received	Receipt Date
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxx	Xxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.10. Report of Product Received.

Siriwong Company

Report of Receipt Product by RM_ID

RM_ID: 111111 RM Name: AAAAA Category: AAA

Supplier Name	Order No.	Qty Ordered	Qty Received	Receipt Date
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxxxxxx	Xxxxxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxx	Xxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx

RM_ID: 222222 RM Name: BBBB Category: BBB

Supplier Name	Order No.	Qty Ordered	Qty Received	Receipt Date
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxxx	Xxxxxx	Xxxxxx	Xxxxxx

Figure G.11. Report of Raw Material Received.

Siriwong Company

Report of Raw Material Requisition by Category ID

Category ID: 11111

Category: AAA

Requisition_ID	RM_ID	RM Name	Date	Quantity
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxx
Xxxx	Xxxxxxxxx	Xxxxxx	Xxxxxxx	Xxxxx
Xxxxxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxxx	Xxxxxxxxxxx	Xxxxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxx	Xxxx	Xxxxxx	Xxxxxxx	Xxxxxxx

Category ID: 222

Category: BBB

Requisition_ID	RM_ID	RM Name	Date	Quantity
Xxxxxxx	Xxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxxx
Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxxxx	Xxxxxx	Xxxxx	Xxxxx	Xxxxx
Xxxxxx	Xxxxxx	Xxxxxx	Xxxxxxx	Xxxxxx
Xxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxx
Xxxxxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxxxx	Xxxxxxx	Xxxxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxxxxx	Xxxxxxxxx	Xxxxxxx
Xxxxxx	Xxxxxxx	Xxxxxx	Xxxxx	Xxxxxx
Xxxxxxxx	Xxxxxxx	Xxxxx	Xxxxx	Xxxxx

Figure G.12. Report of Raw Material Requisition.

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