Practical Development of Information System in Business Context:
Inventory and Production System for Hiwa Interpack Co., Ltd.

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Project Name: Production System, Hiwa Co.

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Advisor: A. Dhirachat Chayaporn

Academic Year: December 2002

The Department of Business Information Systems, ABAC School of Management has approved the aforementioned project, which includes complete Project Write-up and System submitted in fulfillment of the 3-credit course BIS 4995 Information System Development towards the requirements for the Bachelor's Degree of Business Administration in Business Information Systems

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        Member   Member

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PROJECT WRITE-UP

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Submitted in Partial Fulfillment
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I. INTRODUCTION

1.1 Background of the Organization

In 1975, Hiwa International Co., Ltd. was established by Mr.Suthep and Mrs.Roongvilai Suwannagate. The company was doing business as a manufacturer of Carton Boxes. The process just printing and finishing the carton boxes. The business was growing fast. The owners of the company had a vision of expand their business. They established a new plant in the year 1982, bought an corrugator machine in order to producing sheet board paper under the name Hiwa Interpack Co., Ltd. The company was continuing expand. In 1987, R.S.Press Co., Ltd was established in order to provide printing material products. Also in this year Hiwa Interpack Co., Ltd was set up a new corrugator machine line to satisfy their customer demand. 2 years after, R.S.Press Co., Ltd was purchased a brand new Roland printer machine. To celebrate of the brand new machine, the owner Mr.Suthep were selected to take doctorate degree from Kenshington University, California, U.S.A. Dr.Suthep continuing develop their business. Hiwa Interpack Co., Ltd purchased new corrugator machine to satisfy their customer demand in 1993. Nowaday Hiwa Interpack Co., Ltd has 3 lines of corrugated sheet board paper machine. The capacity of Hiwa Interpack Co., Ltd becomes 70,000 tons per year. The management system has to expand by the side.

Location

127 Moo 7 Petchkasem 81 Rd. Suanluang, Kratoomban, Samutsakorn

Structure
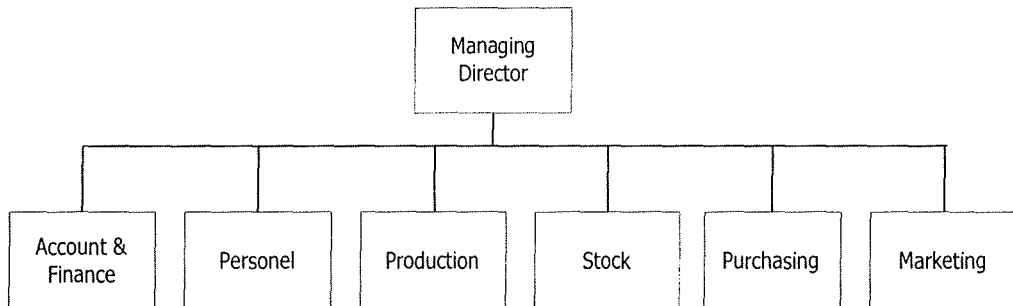
Figure 1-1   Organization Chart

Job Description

Corrugated Board   : Produce Single Wall and Double Wall Corrugated Paper

Board through the scheduled customer order.

Single Face Sheet   : Produce Single Face Corrugated Sheet through the

Scheduled customer order.

1.2   Objectives of the System

(1)   To reduce the time of Production Planning.

(2)   To provide the correct calculation of Raw Materials required.

(3)   To reduce the production cost.

(4)   Report immediately while the job done.

(5)   More effective in controls the machine.

1.3   Scope of the System

(1)   Inventory Management System.

(2)   Production Planning System.

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1.4   Project Plan

The tentative plan for this project: "Production & Stock Management of Hiwa Interpack Co., Ltd." is exhibited in Figure.

No.	Task Name	September				October				November				December			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	I. Analysis of the Existing System																
	Study the Existing System	█	█														
1.	Identify the Existing Problems		█	█													
2.	Existing Data Flow Diagram			█	█												
	II. Preliminary Investigation																
3.	Define the objectives and scope					█	█										
4.	Hardware Requirements						█	█									
5.	Software Requirements							█	█								
	III. Analysis and Design of the Proposed System																
6.	Entity-Relationship Diagram									█							
7.	Database Design										█						
8.	Data Flow Diagram											█					
9.	Process Specification											█					
10.	Data Dictionary												█				
11.	Interface Design												█				
12.	Report Design													█			
	IV. Implementation of the Proposed System																
13.	Coding														█		
14.	Testing															█	
15.	Documentation																█

Figure 1-2   Project Plan for : Production & Stock Management of Hiwa Interpack Co., Ltd

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II.   THE EXISTING SYSTEM

2.1   Background of Existing System

The Company already has some hardware and software used in some departments. In Department of Production still using manual operation with no document control system.
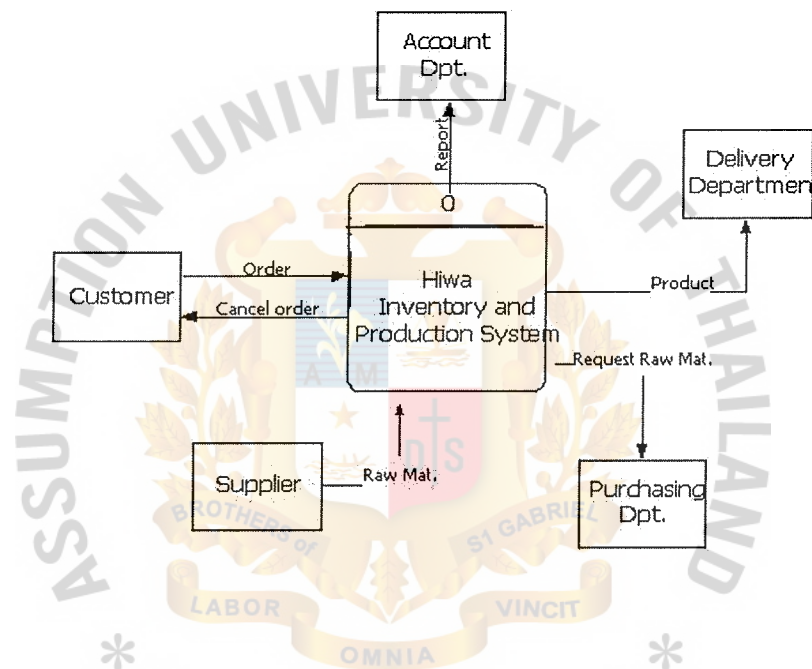
Figure 2-1   Context Diagram of Existing System

2.2   Problem Definition

(1)   The Production Planning consume much time.

The Production Planning Step stills using manual calculation. Its caused many errors in the calculation of Raw Material required.

(2)   No authorities of Decision Logic System.

All of decision were made by the Managing Director.

(3)   High Cost of Production.

Wrong calculation of Raw Material required in production caused high waste.

III. THE PROPOSED SYSTEM

3.1 System Specification

(1) Hardware Requirements

Table 3-1 Hardware Requirements

HAREWARE	SPECIFICATION
CPU	CPU Pentium III 800
RAM	SD-RAM 256 Mb
Hard disk	HDD 40 GB

We Desired to use CPU Pentium III 800 because now in the market when compare the potential with cost CPU Pentium III 800 is the best and Pentium is more reliable than other CPU. We use SD-RAM 256 Mb because SD-RAM is Cheapest and not necessary to use other type of RAM because SD-RAM speed can handle system tasks. Hard disk we choose HDD 40 GB This spec of hard disk can handle can keep all of data for many decades.

(2) Software Requirements

Table 3-2 Software Requirements

SOFTWARE	SPECIFICATION
Operating System	Microsoft Window 2000
Application	Microsoft Visual Basic 6.0 & Microsoft Access 97

We choose Microsoft Window 2000 because the company already uses it as their Operating system and it is stable and reliable enough for our system and we developed the system by using Microsoft Visual Basic 6.0 because our

programmer expert in this application system the database we use Microsoft access 97 because company already have it and because our database design is not complicate so Microsoft Access 97 can be use.

3.2 System Design

(1) Data Flow Diagram
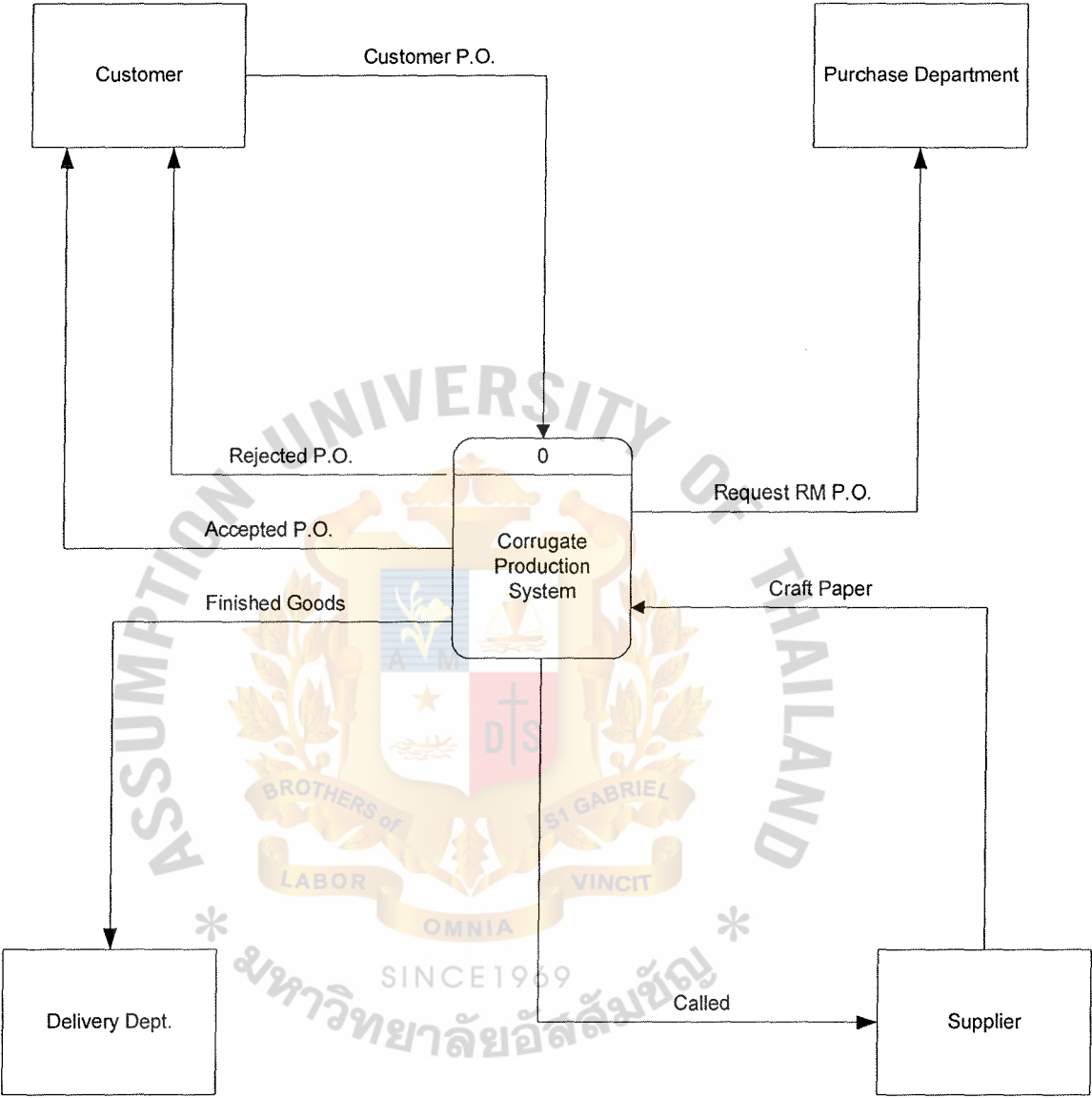
Figure 3-1 Context Diagram
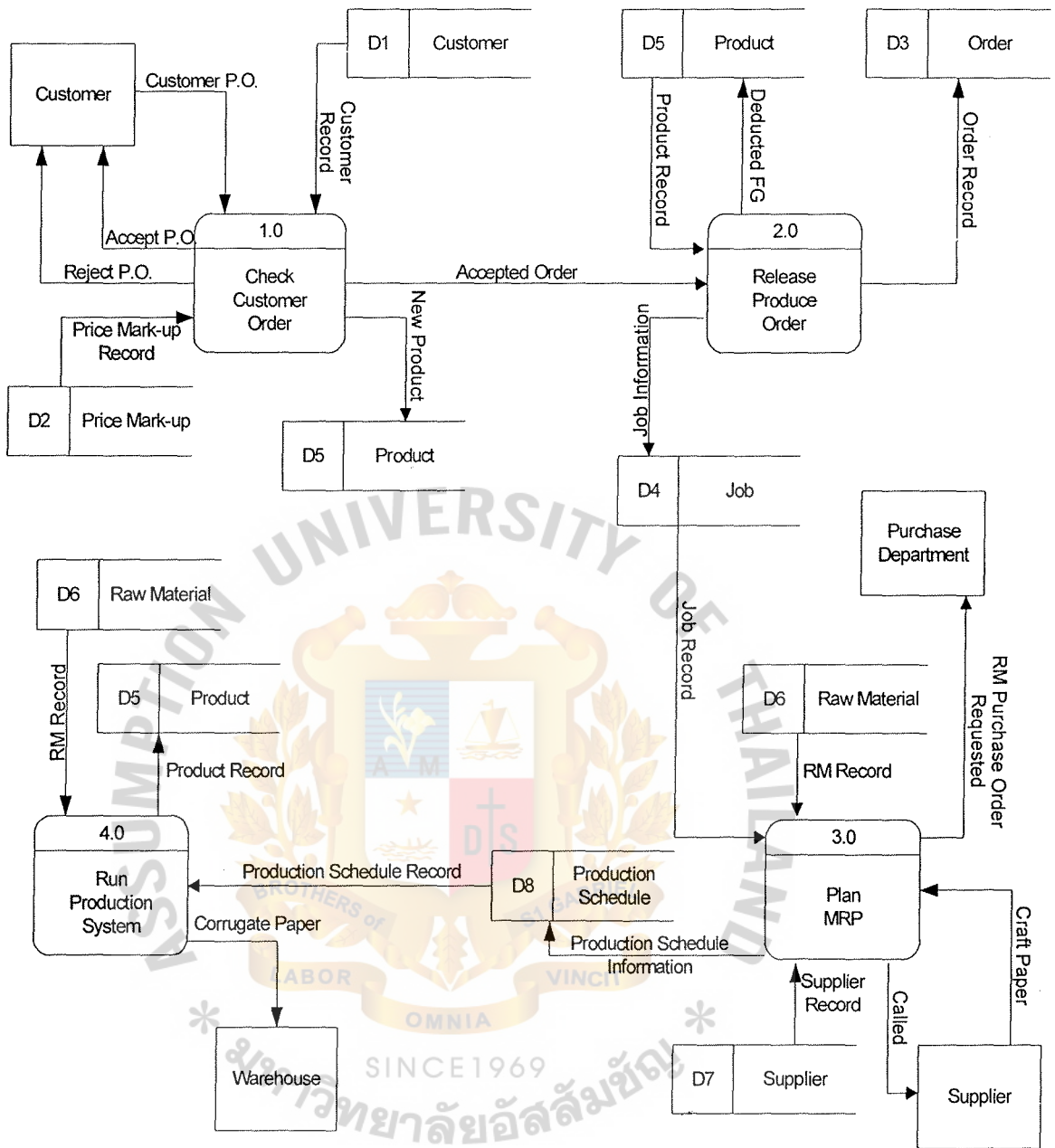
Figure 3-2   Data Flow Diagram - Level 0

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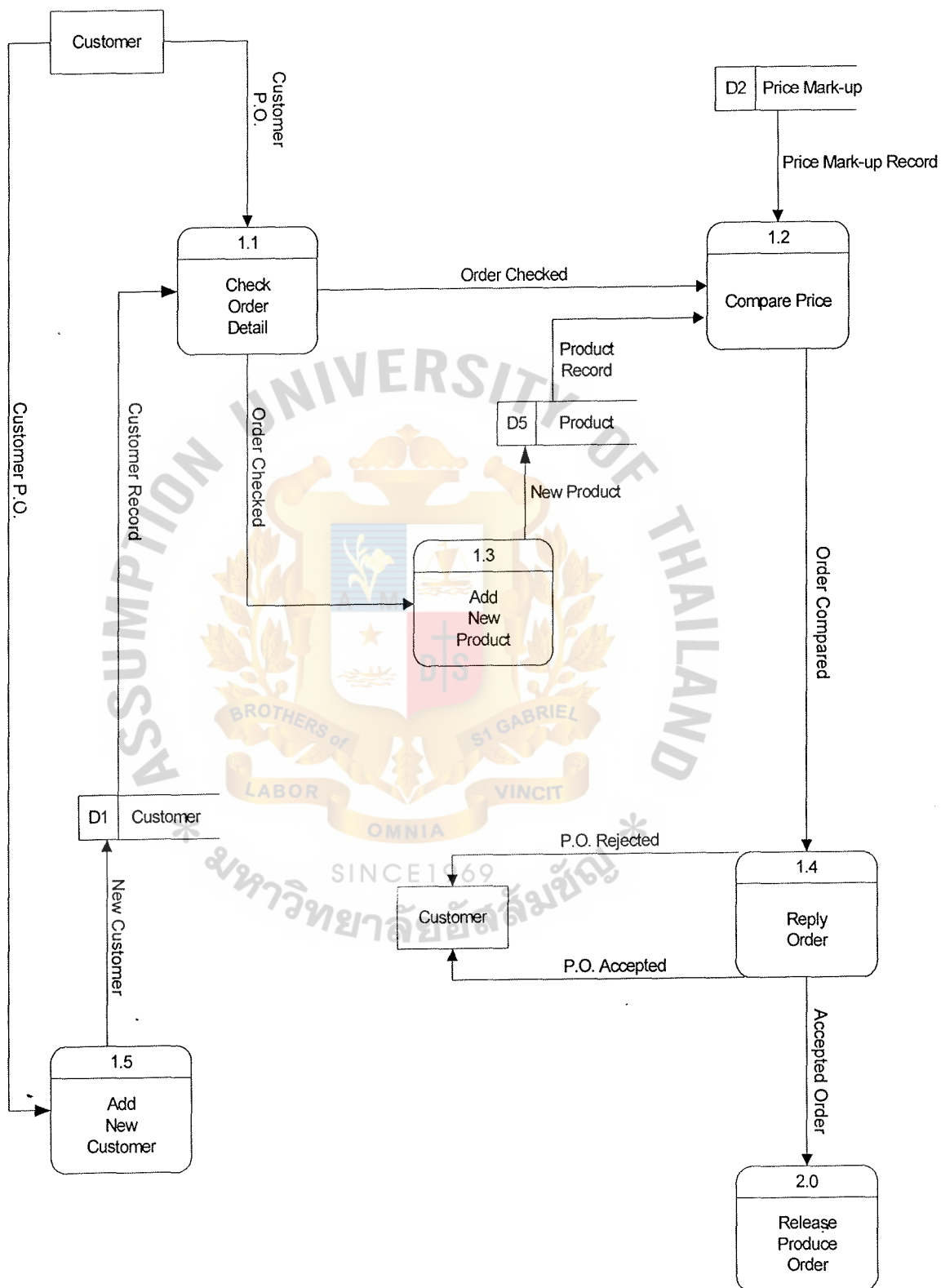
Figure 3-3   Data Flow Diagram – Level 1 for Process 1
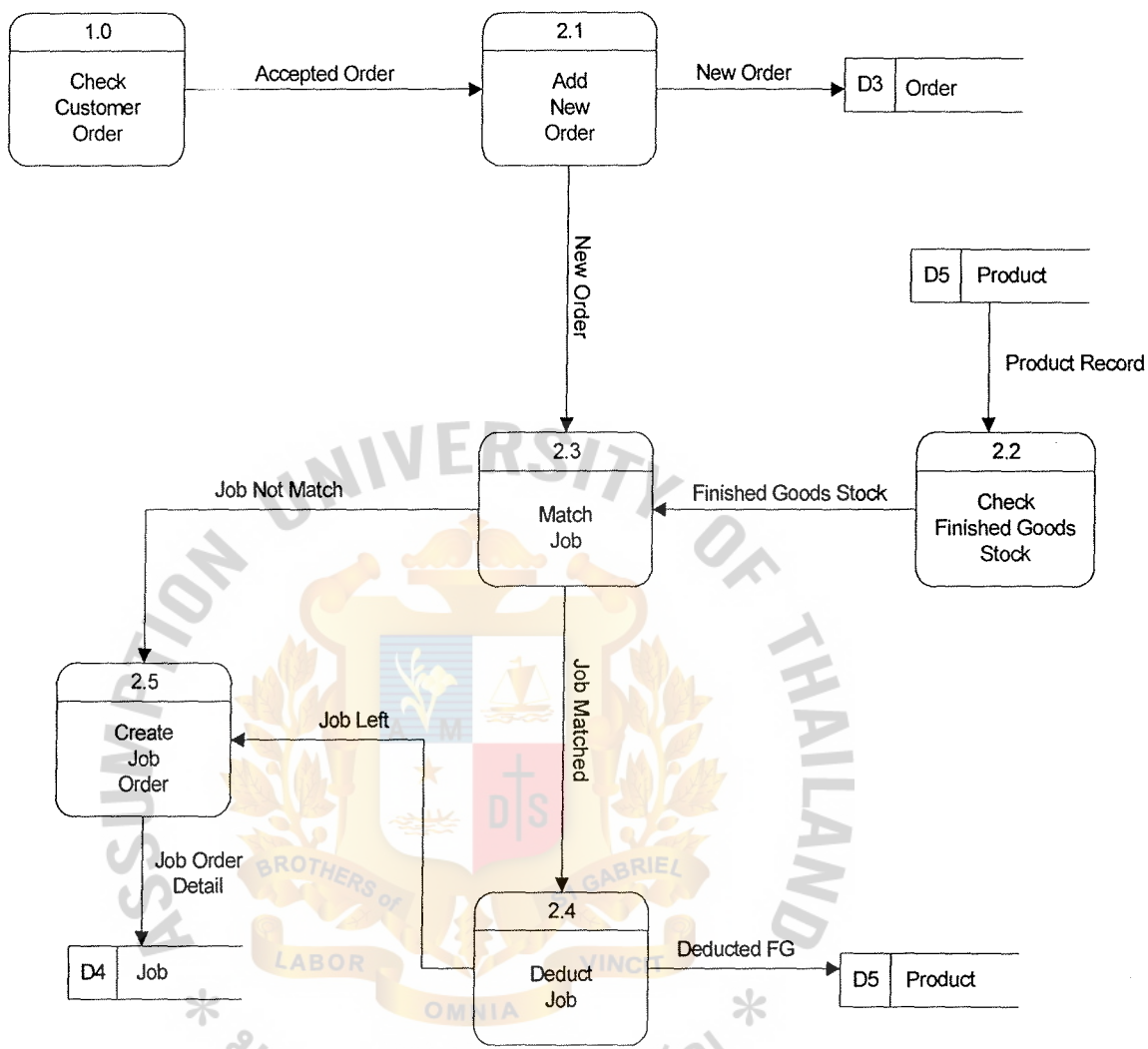
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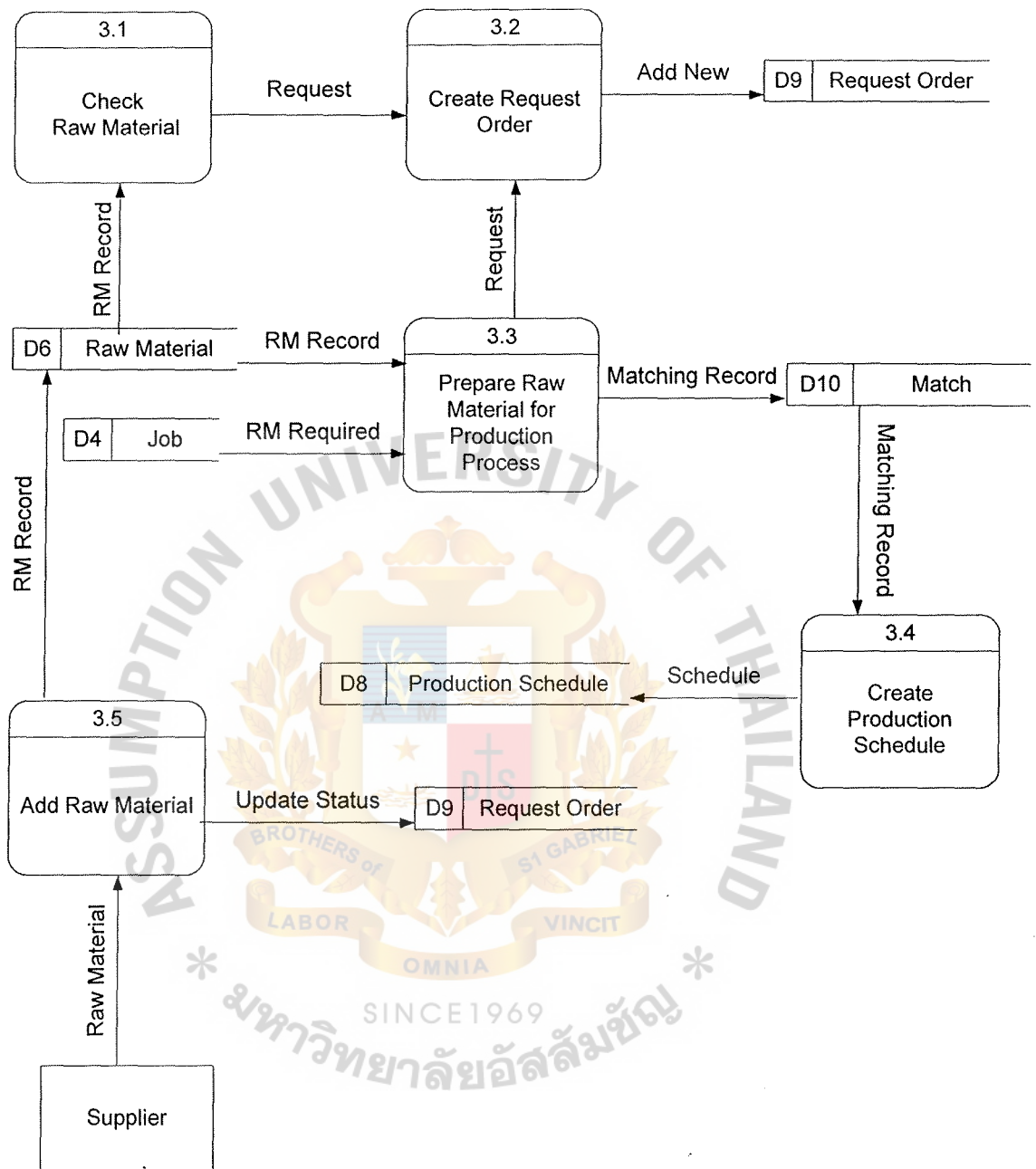
Figure 3-5   Data Flow Diagram – Level 1 for Process 3
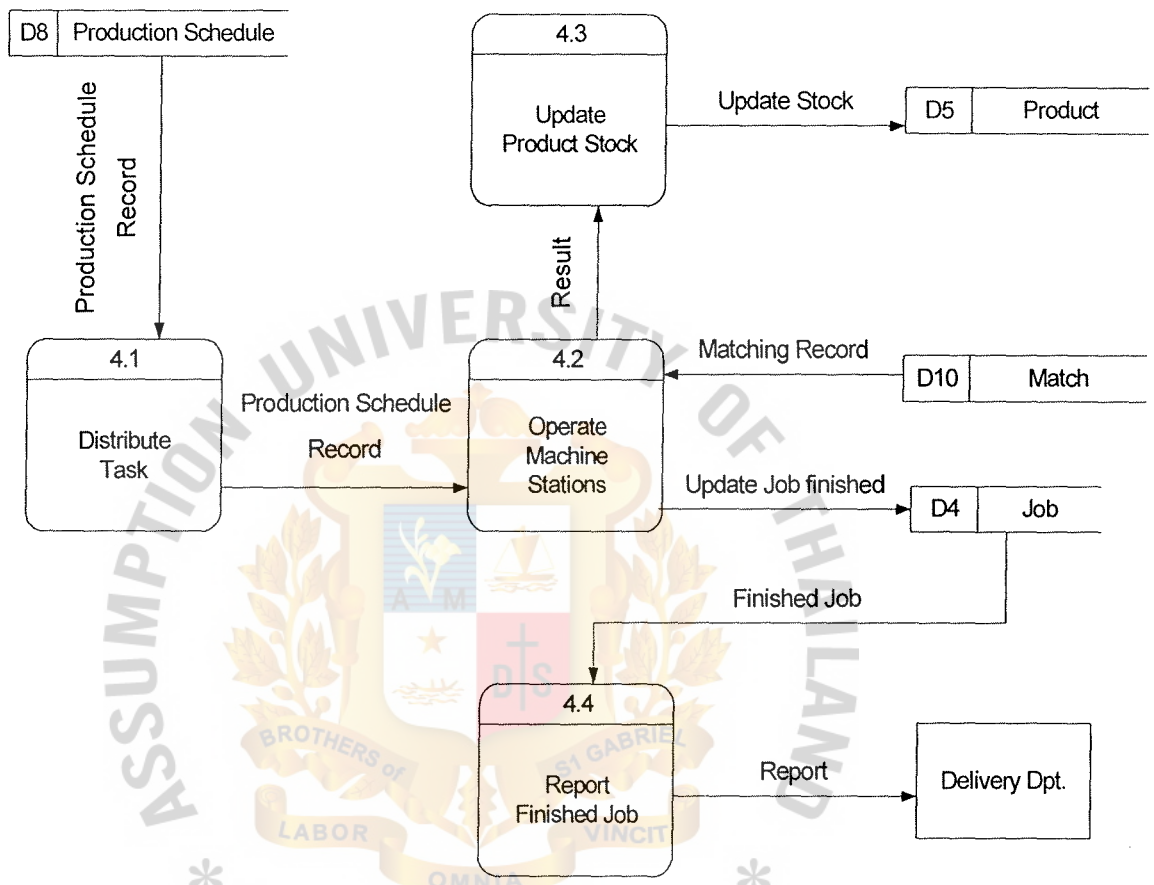
Figure 3-6   Data Flow Diagram – Level 1 for Process 4

(2)   Entity-Relationship Diagram
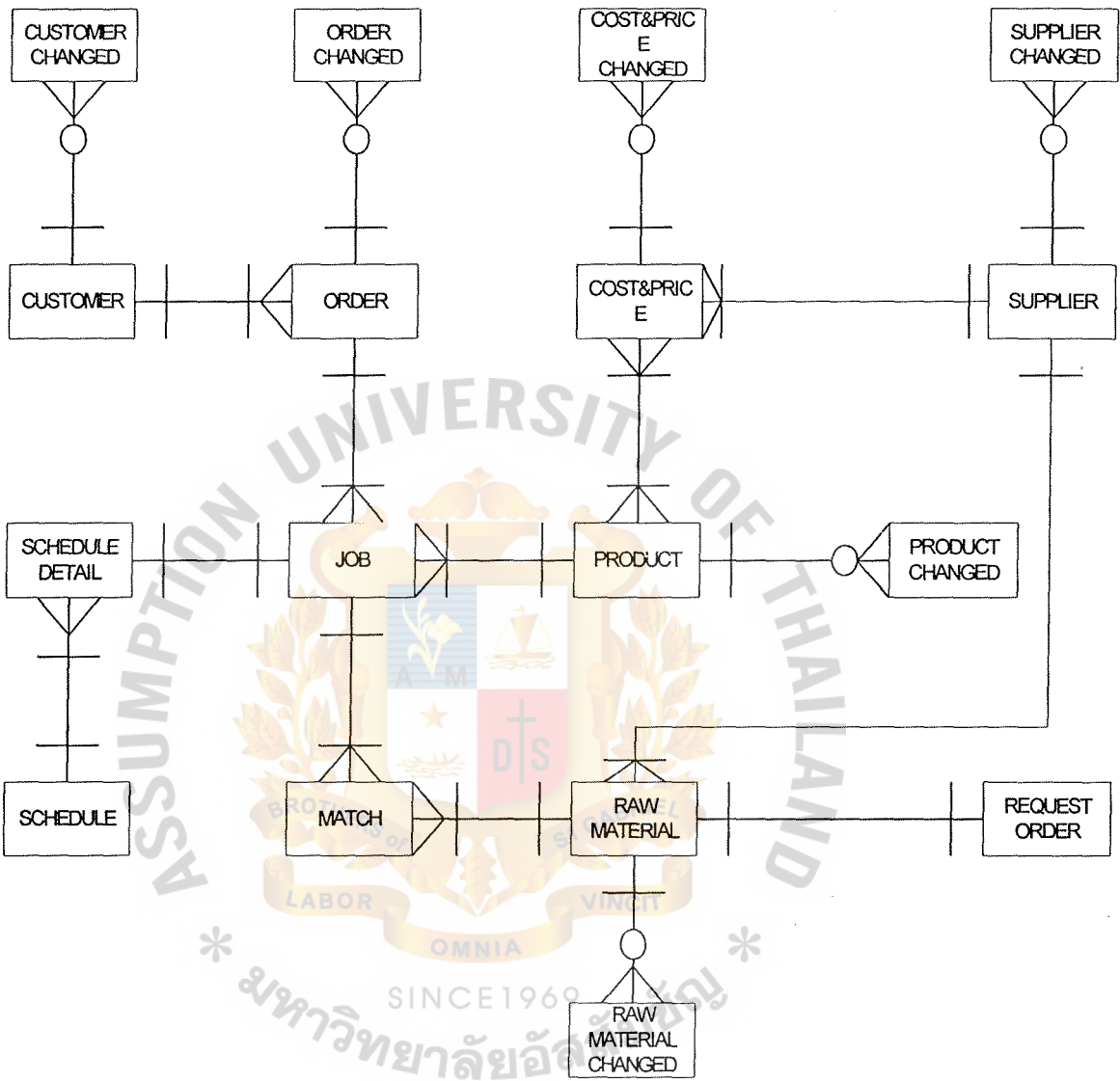
Figure 3-7 Entity-Relationship Diagram

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(3)   Database Design

There is 18 table of the database

1.   Cost & Price Table - Keep all current cost/kg, supplier, and price/kg of each grade of raw material (craft paper).

2.   Cost & Price Change Table – Keep record all change occur on cost/kg, supplier, and price/kg of each grade of raw material (craft paper).

3.   Customer Table – Keep current information of customer.

4.   Customer Change Table - Keep record all change occur on Customer.

5.   Job Table – Keep in formation and status of job.

6.   Login Table – Keep user name , Password and status of authority and login.

7.   Match Table – Keep the result of matching between raw material and job.

8.   Order Table – Keep information and status of the order.

9.   Order Change Table – Keep information of change in each order.

10. Product Table – Keep the information and stock of product.

11. Product Change Table – Keep information of changing of stock of the product.

12. Raw Material Table – Keep information and stock of raw material.

13. Raw Material Change Table – keep information of changing of raw material.

14. Request Order Table – Keep Information and status of request order.

15. Schedule Table – Keep information and status of Production schedule.

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16. Schedule Detail Table – Keep the detail in the Production Schedule (Job).

17. Supplier Table – Keep current information and cost of supplier.

18. Supplier change Table – Keep information of all Change occur on supplier.

Database Design is exhibited in Appendix C

(4) Process Specification

Table 3-3 Process Specification for Process 1.0

Process Name:	Check Customer Order
Data In:	(1) Customer Record (2) Customer P.O. (3) Price Mark-Up Record
Data Out:	(1) Accept P.O. (2) Reject P.O. (3) Accepted Order
Process:	(1) Check P.O. detail with customer record (2) Compare asking price with price mark-up record (3) If product not in the list then add to record (4) If customer not in the list then add to record (5) If asking price is equal or more than price mark-up then accept P.O. (6) If asking price is less than price mark-up then reject P.O.
Attachment:	(1) Customer (2) Data Store D1 (3) Data Store D2 (4) Data Store D5 (5) Process 2.0

Table 3-4 Process Specification for Process 1.1

Process Name:	Check Order Detail
Data In:	(1) Customer P.O. (2) Customer Record
Data Out:	(1) Order Checked
Process:	(1) Check customer is or is not in bad debt record
Attachment:	(1) Customer (2) Data Store D1 (3) Process 1.2 (4) Process 1.3

Table 3-5 Process Specification for Process 1.2

Process Name:	Compare Price
Data In:	(1) Order Checked (2) Product Record (3) Price Mark-Up Record
Data Out:	(1) Order Compared
Process:	(1) Compare customer asking price with mark-up price
Attachment:	(1) Data Store D2 (2) Data Store D5 (3) Process 1.1 (4) Process 1.4 (5) Process 1.5

Table 3-6   Process Specification for Process 1.3

Process Name:	Add New Product
Data In:	(1) Order Checked
Data Out:	(1) New Product
Process:	(1) Add new product to product record
Attachment:	(1) Data Store D5 (2) Process 1.1

Table 3-7   Process Specification for Process 1.4

Process Name:	Reply Order
Data In:	(1) Order Compared
Data Out:	(1) P.O. Rejected (2) P.O. Accepted (3) Accepted Order
Process:	(1) Reply the order to customer.
Attachment:	(1) Customer (2) Process 1.2 (3) Process 2.0

Table 3-8   Process Specification for Process 1.5

Process Name:	Add New Customer
Data In:	(1) Customer P.O.
Data Out:	(1) New Customer
Process:	(1) Reject P.O. and notice to customer
Attachment:	(1) Customer

	(2)	Data Store D1

Table 3-9   Process Specification for Process 2.0

Process Name:	Release Produce Order	
Data In:	(1)	Accepted Order
	(2)	Product Record
Data Out:	(1)	Order Record
	(2)	Job Information
Process:	(1)	Record new order
	(2)	Split order into each job
	(3)	Get FG on hand information
	(4)	Match job with FG on hand
	(5)	If job match with FG on hand then deduct it and create job order for the rest
	(6)	If job not match create job order
Attachment:	(1)	Data Store D3
	(2)	Data Store D4
	(3)	Data Store D5
	(4)	Process 1.0

Table 3-10   Process Specification for Process 2.1

Process Name:	Add New Order	
Data In:	(1)	Accepted Order
Data Out:	(1)	New Order
Process:	(1)	Add new order to order record

Attachment:	(1) Data Store D3
	(2) Process 1.0
	(3) Process 2.2

Table 3-11   Process Specification for Process 2.2

Process Name:	Check Finished Goods Stock
Data In:	(1) Product Record
Data Out:	(1) Finished Goods Stock
Process:	(1) Get FG on hand information from product record
Attachment:	(1) Data Store D5
	(2) Process 2.3

Table 3-12   Process Specification for Process 2.3

Process Name:	Match Job
Data In:	(1) New Job
	(2) Finished Goods Stock
Data Out:	(1) Job Match
	(2) Job Not Match
Process:	(1) Match job with FG on hand
Attachment:	(1) Process 2.1
	(2) Process 2.2
	(3) Process 2.4
	(4) Process 2.5

Table 3-13   Process Specification for Process 2.4

Process Name:	Deduct Job
Data In:	(1) Job Matched
Data Out:	(1) Deducted Finished Goods (2) Job Left
Process:	(1) Deduct job with existing FG (2) Create job order for the rest
Attachment:	(1) Data Store D5 (2) Process 2.3 (3) Process 2.5

Table 3-14   Process Specification for Process 2.5

Process Name:	Create Job Order
Data In:	(1) Job Not Match (2) Job Left
Data Out:	(1) Job Order Detail
Process:	(1) Create job order and add to job record
Attachment:	(1) Data Store D4 (2) Process 2.3 (3) Process 2.4

Table 3-15   Process Specification for Process 3.0

Process Name:	Plan MRP
Data In:	(1) Job Record (2) Raw Material Record

	(3)	Craft Paper
	(4)	Supplier Record
Data Out:	(1)	Request Raw Material Order
	(2)	Production Schedule Record
Process:	(1)	Get RM and Job information
	(2)	Request RM P.O.
	(3)	Receive craft paper from supplier
	(4)	Add new production schedule information
Attachment:	(1)	Purchase Department
	(2)	Staff
	(3)	Data Store D4
	(4)	Data Store D6
	(5)	Data Store D7
	(6)	Data Store D8

Table 3-16   Process Specification for Process 3.1

Process Name:	Check Raw Material	
Data In:	(1)	Raw Material Record
Data Out:	(1)	Request
Process:	(1)	Get RM information
	(2)	Check that is it enough?
Attachment:	(1)	Data Store D6
	(2)	Process 3.2

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Table 3-17   Process Specification for Process 3.2

Process Name:	Create Request Order
Data In:	(1) Request
Data Out:	(1) Add New
Process:	(1) Receive request for RM order (2) Create request order
Attachment:	(1) Data Store D9 (2) Process 3.1 (3) Process 3.3

Table 3-18   Process Specification for Process 3.3

Process Name:	Prepare Raw Material for Production Process
Data In:	(1) RM Record (2) RM Required
Data Out:	(1) Request (2) Matching Record
Process:	(1) Create RM require (2) Get RM record and job require (3) Matching RM with job
Attachment:	(1) Data Store D4 (2) Data Store D6 (3) Data Store D9 (4) Data Store D10 (5) Process 3.2

Table 3-19 Process Specification for Process 3.4

Process Name:	Create Production Schedule
Data In:	(1) Matching Record
Data Out:	(1) Schedule
Process:	(1) Get matching record (2) Create new schedule
Attachment:	(1) Data Store D8 (2) Data Store D10

Table 3-20 Process Specification for Process 3.5

Process Name:	Add Raw Material
Data In:	(1) Raw Material
Data Out:	(1) Update Status (2) RM Record
Process:	(1) Receive RM from supplier (2) Add new information of RM (3) Check status of RM for arriving
Attachment:	(1) Supplier (2) Data Store D6 (3) Data Store D9

Table 3-21 Process Specification for Process 4.0

Process Name:	Run Production System
Data In:	(1) Production Schedule Record (2) Raw Material Record

Data Out:	(1) Product Record
	(2) Corrugate Paper
Process:	(1) Get production schedule record
	(2) Get RM record
	(3) Add FG information to product record
	(4) Keep FG into warehouse
Attachment:	(1) Warehouse
	(2) Data Store D5
	(3) Data Store D6
	(4) Data Store D8

Table 3-22   Process Specification for Process 4.1

Process Name:	Distribute Task
Data In:	(1) Production Schedule Record
	(2) Raw Material
Data Out:	(1) Task 1
	(2) Task 2
	(3) Task 3
Process:	(1) Get RM and production schedule record
	(2) Distribute task to its work station
Attachment:	(1) Data Store D6
	(2) Data Store D8
	(3) Process 4.2
	(4) Process 4.3
	(5) Process 4.4

Table 3-23   Process Specification for Process 4.2

Process Name:	Operate Machine Station
Data In:	(1) Production Schedule Record (2) Matching Record
Data Out:	(1) Result (2) Update Job Finished
Process:	(1) Running job according schedule. (1) Keep finished job in job file.
Attachment:	(1) Process 4.1 (2) Process 4.3 (3) Data Store 4 (4) Data Store 10

Table 3-24   Process Specification for Process 4.3

Process Name:	Update Product Stock
Data In:	(1) Result
Data Out:	(1) Updated Stock
Process:	(1) Update the change in product stock.
Attachment:	(1) Process 4.2 (2) Data Store D5

Table 3-25   Process Specification for Process 4.4

Process Name:	Report Finished Job
Data In:	(1) Finished Job
Data Out:	(1) Report

Process:	(1) Inform Delivery Department about finished goods.
Attachment:	(1) Delivery Department
	(2) Data Store D4

(5)   Data Dictionary

Table 3-15   Data Dictionary of Order Processing System Database

Field Name	Meaning
Accepted Order	*The customer order that company accept *
Address	*Address of customer or supplier *
	*Address No. + Road + City *
Ask Price	*Customer request product price *
	*unit: Baht; range: 00.00 *
Bad List	*The finance status of customer *
	*[Yes | No] *
Cheap Price	*The cheapest price of craft paper *
	*unit: Baht; range: 00.00 *
Company	*Name of customer's or supplier's company *
	*{legal-character} *
Contact Person	*Sales or purchaser of company *
Cost	*Cost of the product sold by the supplier to our company *
	*unit: Baht; range: 00.00 *
Cost of A	*Cost of raw material A *
	*unit: Baht; range: 00.00 *
Cost of I	*Cost of raw material I *
	*unit: Baht; range: 00.00 *
Cost of M	*Cost of raw material M *
	*unit: Baht; range: 00.00 *
Cost of SW	*Cost of raw material SW *

	*unit: Baht; range: 00.00 *
Cost/kg.	*Cost of the product sold by the supplier to our company per kilogram *
Craft Paper	*Raw material *
Craft paper Available	*Supplier have craft paper on hand *
	*RM. ID + RM. Name + Quantity *
Craft Paper Checked	*Check craft paper arrival *
	*RM. ID + RM. Name + Quantity *
Craft Paper Matched	*Match craft paper with job *
Craft Paper-Unavailable	*Supplier do not have craft paper on hand *
Credit Type	*Range of credit *
	*[Pay on purchase | 7 days | 15 days] *
Customer Name	*Customer's name *
	*{legal-character} *
Customer ID	*Identification number of customer *
	*{legal-character} *
Customer Information	* *
	*Cust. ID. + Company Name + Address + Tel. No. + Fax No. + Contact Person + Bad List + Credit Type *
Customer P.O.	*Customer's purchase order *
	Cust.Name + Address + Tel. No. + Fax No. + Contact person + P.O. ID. + OrderDate + ProductID.+ Ask Price + Quantity + DueDate

Customer Record	* *
Date Planned	*Arrange the date by nearest * *units: day/ month/ year; range: 1/ Jan/ '00-31/ Dec/ '99 *
Deducted FG	*Finished goods deducted *
Due Date	*The due date to send and receive product * *units: day/ month/ year; range: 1/ Jan/ '00-31/ Dec/ '99 *
Enough Stock	*Enough raw material stock on hand *
Fax No.	*Facsimile number * *{legal-character}9 *
Finished Goods-Information	*Information of finished goods * *ProductID. + Product Name + Width + Length + Quantity + Price *
Finished Goods Stock	*Stock on hand of finished goods *
Grade 1	*Grade of paper layer 1 *
Grade 2	*Grade of paper layer 2 *
Grade 3	*Grade of paper layer 3 *
Grade 4	*Grade of paper layer 4 *
Grade 5	*Grade of paper layer 5 *
Gram	*Thickness of paper * *units: gram *
In Date	*Install date of raw material * *units: day/ month/ year; range: 1/ Jan/ '00-31/ Dec/ '99 *

Job ID	*Identification number of job * *{legal-character} *
Job Left	*New job deduct by finished goods on hand *
Job Matched	*New job match with finished goods on hand *
Job Not Match	*New job not match with finished goods on hand *
Job Order Detail	*Information of job * *Job ID + Order ID. + Product ID. + Quantity + Job Run + Kg. 1 +Kg. 2 + Kg. 3 + Kg. 4 Kg. 5 + Due Date *
Job Record	* * *Job Order Detail *
Kg. 1	*Weight of paper layer 1* *units: kilogram *
Kg. 2	*Weight of paper layer 2* *units: kilogram *
Kg. 3	*Weight of paper layer 3* *units: kilogram *
Kg. 4	*Weight of paper layer 4* *units: kilogram *
Kg. 5	*Weight of paper layer 5* *units: kilogram *
Length	*Length of paper * *units: metre *
Length Planned	*Arrange the length of paper *

Net	*Net price of product * *unit: Baht; range: 00.00 *
New Customer	* * *Customer information *
New Job	* * *Job Information *
New Order	* * *Order Information *
New Product	* * *Product Information *
New Production - Schedule	*Schedule of production *
New RM.	*New raw material * *Raw Material Information
Not Enough Stock	*Not enough raw material in stock *
Order Checked	*Check order detail *
Order Compared	*Order price compared with mark-up price *
Order Date	*Date on which customer place order to our company * *units: day/ month/ year; range: 1/ Jan/ '00-31/ Dec/ '99 *
Order ID	*Identification number of the order placed to our company by the customer * *{legal-character} *
Other Supplier Called	*Call other supplier for craft paper *

P.O. Accepted	*Accept customer's P.O. *
P.O. No.	*Purchase order specific number *
	*{legal-character} *
P.O. Rejected	*Reject customer's P.O. *
Price	*Selling price of the product per item *
	*unit: Baht; range: 00.00 *
Price Mark-Up Record	* *
	*unit: Baht; range: 00.00 *
Price/kg.	*Selling price of the product per kilogram *
	*unit: Baht; range: 00.00 *
Product ID	*Identification number of product *
	*{legal-character} *
Production Schedule-Record	* *
	*Job ID. + Order ID. + Product ID. + Job Run Due Date *
Product Name	*Name of product *
	*{legal-character} *
Product Record	* *
	*Product ID. + Product Name + Width + Length + Quantity + Price *
Quantity	*Quantity of product or raw material *
RM. Deducted	*Deduct raw material by material used *
RM. P.O. Requested	*Request to order raw material *
RM. Record	* *
	*Grade + Gram + Width + Weight Available +

	P.O. No. + Supplier ID. + Supplier Name + Cost/Kg. + Weight Install + Install Date + Total Cost Install *
Raw ID	*Identification number of raw material * *{legal-character} *
Request Date	*Date of request raw material * *units: day/ month/ year; range: 1/ Jan/ '00-31/ Dec/ '99 *
Supplier Called	*Call supplier for craft paper *
Supplier ID	*Identification number of supplier * *{legal-character} *
Supplier Name	*Supplier's name * *{legal-character} *
T. Cost	*Total Cost * *unit: Baht; range: 00.00 *
Task 1	*Task of work station 1 *
Task 1 Completed	*Task of work station 1 completed *
Task 1 Material Used	*Material used by work station 1 *
Task 2	*Task of work station 2 *
Task 2 Completed	*Task of work station 2 completed *
Task 2 Material Used	*Material used by work station 2 *
Task 3	*Task of work station 3 *
Task 3 Completed	*Task of work station 3 completed *
Task 3 Material Used	*Material used by work station 3 *
Tel. No.	*Telephone number *

	*{legal-character} *
Total	*Total price of product *
	*unit: Baht; range: 00.00 *
VAT	*Value Add Tax *
	*unit: Baht; range: 00.00 *
Weight Available	*Weight of paper left *
	*units: kilograms *
Weight In	*Weight of paper install *
	*units: kilograms *
Width	*Width of paper *
	*units: inch *
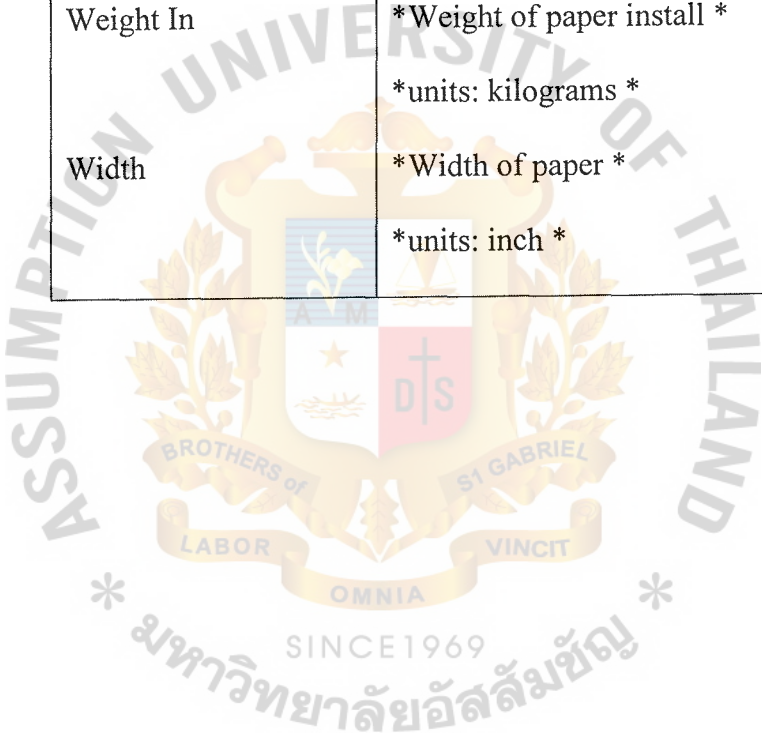
(6)   Interface Design

There are 31 Interfaces:

1.   Login form - Let user log in to the system to identify who is using the system.

2.   Main menu form - Let user choose the system they want to work (Inventory, Production, Report, Security).

3.   Inventory menu form - Menu of all process in inventory system.

4.   Add customer form - Add customer record.

5.   Edit customer record form – Let user edit customer record.

6.   Add Raw material form - Add raw material in the system.

7.   Edit raw material form - Edit raw material information that may be have mistake on adding or check and update real weight of it.

8.   Check raw material form - Check raw material on hand and make request order.

9.   Add supplier form - Add supplier record to the system.

10.   Edit supplier form - Edit supplier record update current cost of each grade of craft paper that each supplier sold us.

11.   Set cost & price form - Set current supplier that we buy craft paper for each grade and price we will sell to customer.

12.   Check Product Form – Check current product price when customer order product that not in list.

13.   Edit Product Form – Update product stock when stock was checked for current status of product.

14.   Add order Form – Add customer order each order can have many job.

15. Edit Order Form – Change order(delete job in order) or delete order (delete all job in order).

16. Production Menu Form – Menu of all process in production system.

17. Matching Form – Match job with raw material.

18. Add or Edit Schedule Form – Add new schedule or edit existing schedule.

19. Machine Form – Control machine working process

20. Report Menu Form – Menu of all report.

21. Customer Order Report Form – Choose range of date user want to see the report of order that was ordered by customer.

22. Order Change Report Form – Choose range of date user want to see the report of order that was changed (Decrease only).

23. Order Delete Report Form – Choose range of date user want to see the report of order that was deleted.

24. Customer Change Report Form – Choose customer that user want to see the report of all change history of customer.

25. Customer Transaction Report – Choose customer that user want to see the report of all transaction history of customer.

26. Request Order report form - Choose range of date user want to see the report of request order that was made in that period.

27. Raw Material Installed Report - Choose range of date or PO no. that user want to see the report of Raw material that was installed in that period.

28. Raw Material Change Report Form - Select raw material that user want to see all change history of that raw material.

29. Supplier Change Report Form – Select Supplier that user want to see all change history of that supplier.

30. Cost Change Report Form - Select grade of craft paper to see all change history of each grade.

31. Product Change Report Form – Select Product to see all change history of it.

The Interface Design is exhibited in Appendix B.

(7)   Report Design

There are 13 reports

1.   Customer order report - Report of order that was order in select range of date can be daily weekly or monthly or any range up to user selection.

2.   Order change report - Report of order change in select range of date can be daily weekly or monthly or any range up to user selection.

3.   Order Delete Report - Report of order delete in select range of date can be daily, weekly or monthly or any range of date up to user selected.

4.   Customer Change Report - Report of all of customer change in the past till now.

5.   Customer Transaction Report - Report of all customer transaction history.

6.   Request Order Report - Report of request order that was made in select range of date can be daily weekly or monthly or any range up to user selection.

7.   Request Order Waiting List Report - Report of request that are in waiting list.

8.   Raw Material Report - Report of raw material install in select range of date can be daily weekly or monthly or any range up to user selection.

9.   Raw Material Change - Report of all change history of raw material.

10.   Supplier Change Report - Report of all change history of supplier.

11.   . Cost & Price Change History - Report of all change history of Cost & price of each grade.

12. Product Change Report - Report of all change history of Product.

13. Job Completed Report - Report of job complete in each day.

Report Design is exhibited in Appendix C

IV. SYSTEM IMPLEMENTATION

4.1 Overview of the System Implementation

The new system will be implemented to replace all work of the old system in both Inventory system and Production system by Direct Cut method. Because, the new system keep all data into database no need to use document to keep any data in the system any more this will save cost of the paper.

4.2 Test Plan

We use the Bottom Up Testing to test this program because it is easy to debuging and checking its code. We can check program while coding to make program more accuracy. We let the staff of this company who will be involved in program accompanying in testing it because they are the right person who will give us the right and accuracy information.

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

This program will help Hiwa Interpack Co., Ltd. To operate their business easier and quicker than the old system because they will use the online system to run their business. The staff of this company can get information immediately whenever they want and the program can reduce the duplication of job that can occur during the operation. Hiwa Interpack Co., Ltd. can save cost of production because they use the online computer that can save the cost to spend for paper. The staff can work effectively because they have more time to do other job.

5.2 Recommendations

For the more effectiveness in using this program, Hiwa Interpack Co., Ltd. should let their staff who will be involved or affected to the program to get training. If the user of this program do not understand the system, the company will fail to successful in information system that support their business.

APPENDIX A
DATABASE DESIGN

Table A-1   Cost&Price Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	Grade	varchar (1)	Y	Y		Raw,Product	A,I,K,M	Primary Key
2	SupplierID	integer	Y					Foreign Key
3	Cost/Kg	Single	Y					Attribute
4	Price/Kg	Single	Y					Attribute

Table A-2   Cost&Price Change Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	Grade	varchar (1)	Y	Y		Raw,Product	A,I,K,M	Primary Key
2	SupplierID	integer	Y					Foreign Key
3	Cost/Kg	Single	Y					Attribute
4	Price/Kg	Single	Y					Attribute
5	EditDate	date					Dd/mm/yy	Attribute
6	User	Varchar(8)						Attribute

Table A-3   Customer Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	CustomerID	integer	Y	Y		Order		Primary Key
2	Company	varchar (50)	Y					Attribute
3	CustomerName	varchar (50)	Y					Attribute
4	Address	varchar (80)			Y			Attribute
5	Telephone	int (9)					<area code, 7 digits>	Attribute
6	Fax	int (9					<area code, 7 digits>	Attribute
7	BadList	Yes/No	Y					Attribute
8	CreDit	Option					7days,15days,Pay on	Attribute

Table A-4   Customer Change Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ID	integer	Y	Y				Primary Key
2	CustomerID	integer	Y					Foreign key
3	Company	varchar (50)	Y					Attribute
4	CustomerName	varchar (50)	Y					Attribute
5	Address	varchar (80)			Y			Attribute
6	Telephone	int (9)					<area code, 7 digits>	Attribute
7	Fax	int (9					<area code, 7 digits>	Attribute
8	BadList	Yes/No	Y					Attribute
9	CreDit	Option					7days,15days,Pay on	Attribute
10	EditDate	date					Dd/mm/yy	Attribute
11	User	Varchar(8)						Attribute

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Table A-5   Job Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	JobID	integer	Y	Y		Order Detail		Primary Key
2	OrderID	integer	Y					Foreign Key
3	ProductID	Varchar(14)	Y					Foreign Key
4	Asking Price	single	Y					Attribute
5	Quantity	int						Attribute
6	DueDate	date					Dd/mm/yy	Attribute
7	Weight1st	int			Y			Attribute
8	Weight2nd	int			Y			Attribute
9	Weight3rd	int			Y			Attribute
10	Weight4th	int			Y			Attribute
11	Weight5th	int			Y			Attribute
12	MachineRun	int			Y		Metres	Attribute
13	Matched	Yes/No					Yes/No	Attribute
14	Planned	Yes/No					Yes/No	Attribute
15	Completed	Yes/No					Yes/No	Attribute
16	DeleteM	Yes/No					Yes/No	Attribute
17	Delete	Yes/No					Yes/No	Attribute
18	User	Varchar(8)						Attribute

Table A-6   LogIn Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	User	varchar (8)	Y	Y		Many		Primary Key
2	Password	varchar (8)	Y					Attribute
3	Author	Yes/No					Yes/No	Attribute
4	Log	Yes/No					Yes/No	Attribute

Table A-7   Match Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	JobID	integer	Y			Many		Foreign Key
2	KgNo	integer	Y				1-5	Foreign Key
3	RawID	integer	Y					Foreign Key
4	Run	integer						Attribute
5	Complete	Yes/No					Yes/No	Attribute

Table A-8   Order Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	OrderID	integer	Y	Y		Job		Primary Key
2	CustomerID	integer	Y					Foreign Key
3	CreDit	Option			Y		7days,15days	Attribute
4	Total	Currency						Attribute
5	Vat	Currency						Attribute
6	Net	Currency						Attribute
7	OrderDate	Date	Y				Dd/mm/yy	Attribute
8	Complete	Yes/No					Yes/No	Attribute
9	Delete	Yes/No					Yes/No	Attribute
10	Delete Date	Date	Y				Dd/mm/yy	Attribute
11	User	Varchar(8)						Attribute
12	User Delete	Varchar(8)						Attribute

Table A-9   Order Change Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ID	integer	Y	Y				Primary Key
2	OrderID	integer	Y					Foreign Key
3	Total	Currency						Attribute
4	Vat	Currency						Attribute
5	Net .	Currency						Attribute
6	Edit Date	Date	Y				Dd/mm/yy	Attribute
7	User	Varchar(8)						Attribute

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Table A-10   Product Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ProductID	varchar (14)	Y	Y		Job		Primary Key
2	Grade1	varchar (1)	Y		Y		A,I,K,M	Foreign Key
3	Gram1	Varchar(3)			Y		107,125 etc.	Attribute
4	Grade2	varchar (1)	Y		Y		A,I,K,M	Foreign Key
5	Gram2	Varchar(3)			Y		107,125 etc.	Attribute
6	Grade3	varchar (1)	Y		Y		A,I,K,M	Foreign Key
7	Gram3	Varchar(3)			Y		107,125 etc.	Attribute
8	Grade4	varchar (1)	Y		Y		A,I,K,M	Foreign Key
9	Gram4	Varchar(3)			Y		107,125 etc.	Attribute
10	Grade5	varchar (1)	Y		Y		A,I,K,M	Foreign Key
11	Gram5	Varchar(3)			Y		107,125 etc.	Attribute
12	Width	int(2)					Even 36 to 70	Attribute
13	Length	Int(2)						Attribute
14	Quantity	int			Y			Attribute
15	UnitPrice	single						Attribute

Table A-11   Product Change Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ID	int	Y	Y				Primary Key
2	ProductID	varchar (14)	Y				A,I,K,M	Foreign Key
3	From	int			Y			Attribute
4	To	int			Y			Attribute
5	User	Varchar(8)						Attribute
6	Edit Date	Date	Y				Dd/mm/yy	Attribute

Table A-12   Raw Material Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	RawID	int	Y	Y		Job		Primary Key
2	Grade	varchar (1)	Y				A,I,K,M	Foreign Key
3	Gram	Varchar(3)			Y		107,125 etc.	Attribute
4	Width	int(2)					Even 36 to 70	Attribute
5	Weight	int						Attribute
6	SupplierID	int	Y					Foreign Key
7	Cost	single						Attribute
8	TotalCost	double						Attribute
9	Installdate	date					Dd/mm/yy	Attribute
10	Weight In	int						Attribute
11	PO No.	Varchar(6)	Y					Attribute
12	Rqt ID.	int	y	y				Foreign Key
13	Select	Yes/No					Yes/No	Attribute
14	User	Varchar(8)						Attribute

Table A-13   Raw Material Change Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ID	int	Y	Y				Primary Key
2	RawID	int	Y					Foreign Key
3	SupplierID	int	Y					Foreign Key
4	Cost	single						Attribute
5	TotalCost	double						Attribute
6	Weight	int						Attribute
7	PO No.	Varchar(6)	Y					Attribute
8	User	Varchar(8)						Attribute
9	Edit Date	Date	Y				Dd/mm/yy	Attribute

Table A-14   Request Order Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	Rqt. ID.	int	Y	Y		Raw mat.		Primary Key
2	Grade	varchar (1)	Y				A,I,K,M	Foreign Key
3	Gram	Varchar(3)			Y		107,125 etc.	Attribute
4	Width	int(2)					Even 36 to 70	Attribute
5	Weight	int					.	Attribute
6	Rqt. Date	Date	Y				Dd/mm/yy	Attribute
7	OnHand	Yes/No					Yes/No	Attribute
8	User	Varchar(8)						Attribute

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Table A-15   Schedule Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ScheduleID	varchar (10)	Y	Y		ProSchDetail		Primary Key
2	TotalRun	int					Meters	Attribute
3	Schedule Date	Date	Y				Dd/mm/yy	Attribute
4	Complete	Yes/No					Yes/No	Attribute
5	Work	Yes/No					Yes/No	Attribute

Table A-16   Schedule Detail (ProSchDetail)Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ScheduleID	varchar (10)	Y	Y				Foreign Key
2	JobID	varchar (10)	Y					Foreign Key

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Table A-17   Supplier Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	SupplierID	int	Y	Y		Raw,Cost		Primary Key
2	Company	varchar (50)	Y					Attribute
3	Address	varchar (80)						Attribute
4	Telephone	int (9)					<area code, 7 digits>	Attribute
5	Fax	int (9)					<area code, 7 digits>	Attribute
6	ContactPerson	varchar (50)						Attribute
7	CostA	single						Attribute
8	CostI	single						Attribute
9	CostK	single						Attribute
10	CostM	single						Attribute

Table A-18   Supplier Table

No.	Field Name	Field Type	Index	Unique	Nullable	Foreign Key	Check	Key Type
1	ID.	int						
2	Supplier ID.	int	Y					Foreign Key
3	Company	varchar (50)	Y					Attribute
4	Address	varchar (80)						Attribute
5	Telephone	int (9)					\<area code, 7 digits\>	Attribute
6	Fax	int (9)					\<area code, 7 digits\>	Attribute
7	ContactPerson	varchar (50)						Attribute
8	CostA	single						Attribute
9	CostI	single						Attribute
10	CostK	single						Attribute
11	CostM	single						Attribute
12	User	Varchar(8)						Attribute
13	Edit Date	Date	Y				Dd/mm/yy	Attribute

APPENDIX B
INTERFACE DESIGN

Figure B-1   Main Menu Form
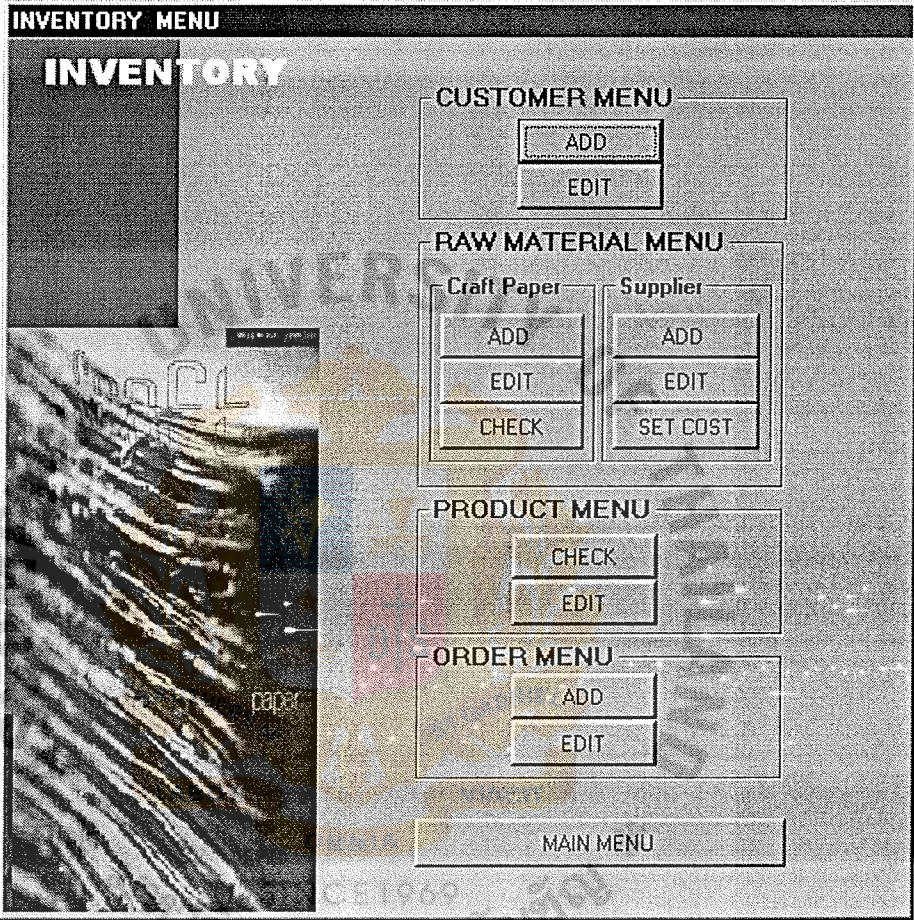
Figure B-2   Inventory Menu Form

Figure B-3   Add new Customer Form

EDIT CUSTOMER RECORD

Cus. ID	Company	Address	Telephone No.	Fax	Ccontact Person	Bad Credit	Credit Type
1	MaMa Ltd.	23 Pechburee Rd. Pratoon	022347676	022667567	Mr. Satang J.	No	7days
2	ProJect Com Ltd.	21 Jangwatana Bangpud F	025032751	029840619	Mr. Arm S.	No	7days
3	Siamsport Syndicate	44 Ladpao Rd. Soi 48 La	027652345	027658976	Mr. BoR Bhooh	Yes	Pay on Purchase
4	Sony Co. Ltd.	33 Software Park Janwatt	029877656	023443546	Mr. Dhitsapong L.	No	15days
5	Yahoo	Yahoo Queen New York U	025678654	023458769	Mr. Falco D.	No	Pay on Purchase
6	LG Co.	12 LG Building Selom Ban	024766767	028765412	Mr. Haan Yong Juk	No	7days
7	Narong Co.	28 huahin Chonburee 122	026376444	026334535	Mr. Rangtong K.	No	15days
8	Loal Doctor Ltd.	29/155 Muangtongtanee E	025032752	029840619	Mr. Alip S.	No	15days

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Figure B-4   Edit Customer Record Form

CHECK RAW MATERIAL ON HAND

Raw Mat.ID	Grade	Gram	Width	Weight	Sup. ID	Supplier Company	Cost/Kg	Weight Install	Total cost Install	Install Date	PO No.
1	A	107	36	550	1	Paper Ltd.	฿22.15	550	฿12,182.50	25-Nov-02	000001
2	A	107	36	450	1	Paper Ltd.	฿22.15	450	฿9,967.50	25-Nov-02	000001
4	M	125	36	1018	2	Tar Piak Co. Ltd.	฿14.00	1200	฿16,800.00	25-Nov-02	000002
5	M	125	36	963	2	Tar Piak Co. Ltd.	฿14.00	1000	฿14,000.00	25-Nov-02	000002
6	SW	150	36	62	4	Westley Co.	฿28.88	500	฿14,440.00	25-Nov-02	000003
7	SW	185	40	700	4	Westley Co.	฿28.88	700	฿20,216.00	25-Nov-02	000003
8	SW	150	44	1000	4	Westley Co.	฿28.88	1000	฿28,880.00	25-Nov-02	000003
9	SW	150	36	750	4	Westley Co.	฿28.88	750	฿21,660.00	25-Nov-02	000003
10	A	107	36	1200	3	PPP&P Co.	฿22.13	1200	฿26,556.00	25-Nov-02	000004
11	A	107	44	50	3	PPP&P Co.	฿22.13	500	฿11,065.00	25-Nov-02	000004
12	A	107	44	500	3	PPP&P Co.	฿22.13	500	฿11,065.00	25-Nov-02	000004
13	A	107	44	700	3	PPP&P Co.	฿22.13	700	฿15,491.00	25-Nov-02	000004
14	A	107	36	600	3	PPP&P Co.	฿22.13	600	฿13,278.00	25-Nov-02	000004
15	I	185	42	720	2	Tar Piak Co. Ltd.	฿19.00	720	฿13,680.00	25-Nov-02	000005
16	I	150	48	800	2	Tar Piak Co. Ltd.	฿19.00	800	฿15,200.00	25-Nov-02	000005
17	M	125	40	865	2	Tar Piak Co. Ltd.	฿14.05	1000	฿14,050.00	25-Nov-02	000005
18	M	125	44	120	2	Tar Piak Co. Ltd.	฿14.05	660	฿9,273.00	26-Nov-02	000005
19	M	107	44	500	1	Paper Ltd.	฿13.98	500	฿6,990.00	26-Nov-02	000006
20	M	107	44	480	1	Paper Ltd.	฿13.98	480	฿6,710.40	26-Nov-02	000006
21	I	107	44	50	3	PPP&P Co.	฿18.95	500	฿9,475.00	26-Nov-02	000007
22	I	107	44	600	3	PPP&P Co.	฿18.98	600	฿11,388.00	26-Nov-02	000007
23	A	107	44	500	4	Westley Co.	฿21.55	500	฿10,775.00	26-Nov-02	000008
24	A	125	44	216	4	Westley Co.	฿21.55	300	฿6,465.00	26-Nov-02	000008
25	A	125	44	88	4	Westley Co.	฿21.55	530	฿11,421.50	26-Nov-02	000008
27	I	107	40	413	6	Kolla Co.	฿14.15	490	฿6,933.50	26-Nov-02	000010

Searching for Raw material

Grade : [A ▼] Gram : [107 ▼] Width : [88 ▼] [Search] [View All]

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Figure B-5   Check Raw Material On hand Form

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Figure B-6   Add Raw Material Form

Raw Mat.ID	Grade	Gram	Width	Weight	Sup. ID	Supplier Company	Cost/Kg	Weight Install	Total cost Install	Install Date	PO No.
1	A	107	36	550	1	Paper Ltd.	฿22.15	550	฿12,182.50	25-Nov-02	000001
2	A	107	36	450	1	Paper Ltd.	฿22.15	450	฿9,967.50	25-Nov-02	000001
3	M	125	36	0	2	Tar Piak Co. Ltd.	฿14.00	670	฿9,380.00	25-Nov-02	000002
4	M	125	36	1018	2	Tar Piak Co. Ltd.	฿14.00	1200	฿16,800.00	25-Nov-02	000002
5	M	125	36	963	2	Tar Piak Co. Ltd.	฿14.00	1000	฿14,000.00	25-Nov-02	000002
6	SW	150	36	62	4	Westley Co.	฿28.88	500	฿14,440.00	25-Nov-02	000003
7	SW	185	40	700	4	Westley Co.	฿28.88	700	฿20,216.00	25-Nov-02	000003
8	SW	150	44	1000	4	Westley Co.	฿28.88	1000	฿28,880.00	25-Nov-02	000003
9	SW	150	36	750	4	Westley Co.	฿28.88	750	฿21,660.00	25-Nov-02	000003
10	A	107	36	1200	3	PPP&P Co.	฿22.13	1200	฿26,556.00	25-Nov-02	000004
11	A	107	44	50	3	PPP&P Co.	฿22.13	500	฿11,065.00	25-Nov-02	000004
12	A	107	44	500	3	PPP&P Co.	฿22.13	500	฿11,065.00	25-Nov-02	000004
13	A	107	44	700	3	PPP&P Co.	฿22.13	700	฿15,491.00	25-Nov-02	000004
14	A	107	36	600	3	PPP&P Co.	฿22.13	600	฿13,278.00	25-Nov-02	000004
15	I	185	42	720	2	Tar Piak Co. Ltd.	฿19.00	720	฿13,680.00	25-Nov-02	000005
16	I	150	48	800	2	Tar Piak Co. Ltd.	฿19.00	800	฿15,200.00	25-Nov-02	000005
17	M	125	40	865	2	Tar Piak Co. Ltd.	฿14.05	1000	฿14,050.00	25-Nov-02	000005
18	M	125	44	120	2	Tar Piak Co. Ltd.	฿14.05	660	฿9,273.00	26-Nov-02	000005
19	M	107	44	500	1	Paper Ltd.	฿13.98	500	฿6,990.00	26-Nov-02	000006
20	M	107	44	480	1	Paper Ltd.	฿13.98	480	฿6,710.40	26-Nov-02	000006
21	I	107	44	50	3	PPP&P Co.	฿18.95	500	฿9,475.00	26-Nov-02	000007
22	I	107	44	600	3	PPP&P Co.	฿18.98	600	฿11,388.00	26-Nov-02	000007
23	A	107	44	500	4	Westley Co.	฿21.55	500	฿10,775.00	26-Nov-02	000008
24	A	125	44	216	4	Westley Co.	฿21.55	300	฿6,465.00	26-Nov-02	000008
25	A	125	44	88	4	Westley Co.	฿21.55	530	฿11,421.50	26-Nov-02	000008

Searching for Raw material

Raw Material ID: [ ] [Search]

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Figure B-7 Edit Raw Material Record Form

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Figure B-8   Add Supplier Form

Sup. ID	Company	Address	Telephone No.	Fax	Contact Person
1	Paper Ltd.	123 Soi Lalaiysup Seelom Ba	026678989	023455656	Mr. Weera H.
2	Tai Piak Co. Ltd.	56 Bahn Bangkuwad Pratum	029765149	029865149	Mr. Supap Buaprang
3	PPP&P Co.	Sun Tower Jangwattana Bar	027683465	029556722	Ms. Jieng Ji Huan
4	Westley Co.	26 Pra RAMA9 Rd. Huamark	024327687	023156786	Mrs. Sunee K.
5	UBC Paper Co. Ltd.	UBC Tower Vipawadeerung	022717171	022717172	Mr. Korakoch J.
6	Kolla Co.	12/312 Hanfa Bangkok 1112	025021365	027655958	Ms. Lanna K.
7	Saunshee Ltd.	146 Bangkuwad BangHoo P	029873465	029987879	Mrs. Somyoch L.
8	Thai Balm Co.	24 Surawong Village Chok C	023914566	029987644	Mrs. Sopin S.
9	Thai Cart Co.	46 Sahnsainoi Sunsai Chieng	053491206	053765543	Mr. Narong S.

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Figure B-9   Edit Supplier Record Form

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	Grade	Supplier ID	Supplier Company	Telephone	Fax	Contact Person	Cost/kg	Price/kg
▶	A	4	Westley Co.	024327687	023156786	Mrs. Sunee K.	฿20.22	฿22.24
	I	9	Thai Cart Co.	053491206	053765543	Mr. Narong S.	฿18.22	฿20.04
	M	8	Thai Balm Co.	023914566	029987644	Mrs. Sopin S.	฿13.35	฿14.69
	SW	9	Thai Cart Co.	053491206	053765543	Mr. Narong S.	฿27.99	฿30.79

Figure B-10 Set Cost&price Form

CHECK & ADD PRODUCT

Product ID	Grade1	Gram1	Grade2	Gram2	Grade3	Gram3	Grade4	Gram4	Grade5	Gram5	Width	Length	Quantity	Price/unit
A1M2I1M2A24450	A	107	M	125	I	107	M	125	A	125	44	50	0	฿18.45
I1M2I1N0N04048	I	107	M	125	I	107					40	48	0	฿8.73
S3M2N0N0N03638	SW	150	M	125							36	38	10	฿6.51
S4M2I1M2S43638	SW	185	M	125	I	107	M	125	SW	185	36	38	0	฿16.98
I1M2N0N0N05053	I	107	M	125							50	53	0	฿8.38
A1A1A1A1A13638	A	107	A	107	A	107	A	107	A	107	36	38	15	฿12.82
A1M2M2M2A15054	A	107	M	125	M	125	M	125	A	107	50	54	0	฿21.41
A1M2I4M2A15255	A	107	M	125	I	185	M	125	A	107	52	55	0	฿26.13
S2M2S2N0N04044	SW	125	M	125	SW	125					40	44	0	฿11.87
A4M2A4N0N04848	A	185	M	125	A	185					48	48	0	฿16.33
S1M2N0N0N03839	SW	107	M	125							38	39	0	฿5.78
S2M2A1M2S26065	SW	125	M	125	A	107	M	125	SW	125	60	65	50	฿39.69

Searching for Product

Product ID: [   ] [Search] [View All]

[Back to Main Menu]

Figure B-11 Check Product Form

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Figure B-12 Update Stock Form

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Figure B-13 Add Order Form

Order ID	Order By	Credit Type	Total	Vat	Net Sale	Order Date	Add by
4		7days	฿22,626.40	฿1,583.85	฿24,210.25	26-Nov-02	onghunt
5		15days	฿20,550.00	฿1,438.50	฿21,988.50	26-Nov-02	onghunt
6		7days	฿17,040.00	฿1,192.80	฿18,232.80	26-Nov-02	namotasa
7		Pay on Purchase	฿16,675.00	฿1,167.25	฿17,842.25	28-Nov-02	onghunt
8		Pay on Purchase	฿17,395.00	฿1,217.65	฿18,612.65	29-Nov-02	onghunt
9		15days	฿17,430.00	฿1,220.10	฿18,650.10	29-Nov-02	onghunt
10		7days	฿22,000.00	฿1,540.00	฿23,540.00	29-Nov-02	onghunt
11		15days	฿3,600.00	฿252.00	฿3,852.00	29-Nov-02	onghunt
12		Pay on Purchase	฿7,200.00	฿504.00	฿7,704.00	29-Nov-02	onghunt
14		15days	฿11,785.00	฿824.95	฿12,609.95	29-Nov-02	onghunt

Back to Main Menu

Figure B-14   Edit Order Form
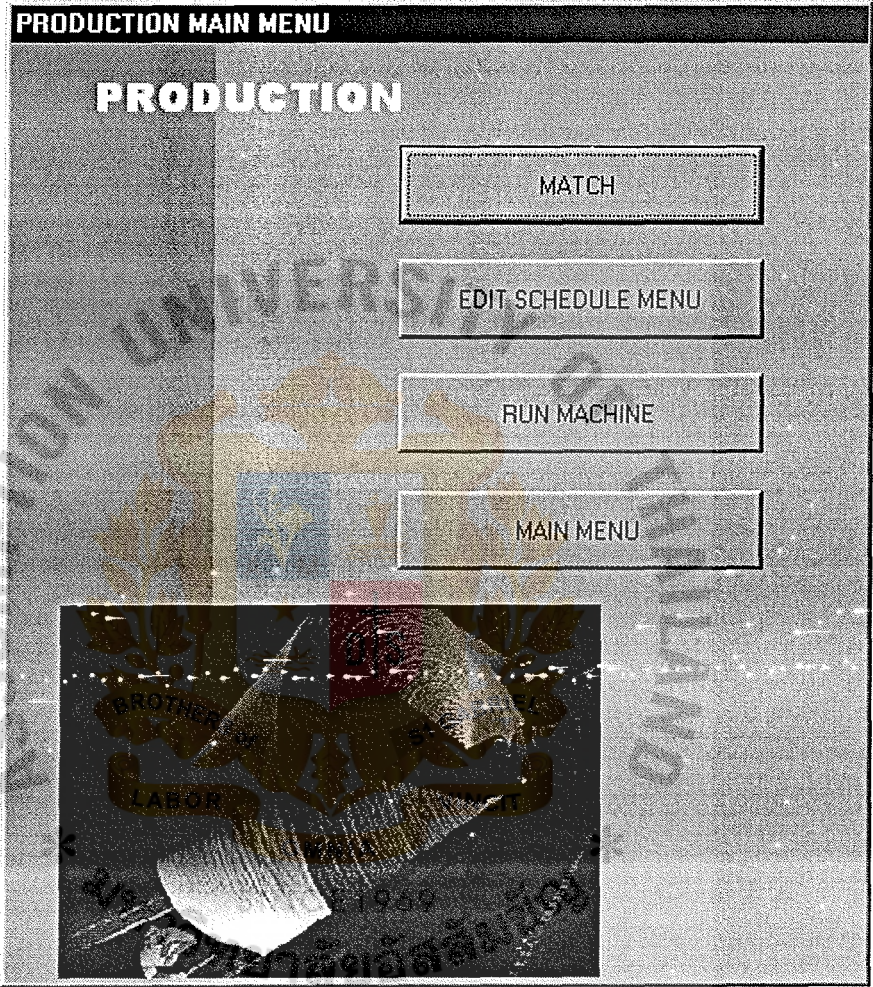
Figure B-15   Production Menu Form

Figure B-16   Matching Form

Figure B-17   Matching Form

Figure B-18   Machine Form

Figure B-19   Security Menu Form

Figure B-20 Add User Form

Figure B-21   Change Preference Form

Figure B-22   Delete User Form

Figure B-23   Report Menu Form

Figure B-24   Customer Order report Form

Figure B-25   Order Change Report Form

Figure B-26   Order Deleted Report Form

Figure B-27   Customer Change Report Form

Figure B-28   Customer Transaction history report Form

Figure B-29   Request order report from Form

Figure B-30   Raw material installed report Form

Figure B-31   Raw material Change Report Form

Figure B-32   Supplier change report Form

Figure B-33   Cost Change report Form

Figure B-34   Product change report Form

APPENDIX C
REPORT DESIGN

Hiwa Interpack Co., Ltd.

CUSTOMER ORDER REPORT

FROM

25 November 2002

TO

29 November 2002

Order ID :   3   Order Date :   25/Nov/02

Customer ID :   3   Company :   Siamsport Syndicate Ltd.

Credit :   15days

Total Cost :   16200   Baht

VAT (7%) :   1134   Baht

Net Sale :   17334   Baht

Add by :   onghunt

Figure C-1   Customer Order Report

Hiwa Interpack Co., Ltd.

ORDER CHANGED REPORT

ON 29 November 2002

2   of   2

Order ID :   12   Edit Date :   29/Nov/02

Total Cost(Decrease) :   9300   Baht

VAT (7%)(Decrease):   651   Baht

Net Sale (Decrease) :   9951   Baht

Add by :   onghunt

Total Net Sale(Decrease) :   9951   Baht

Figure C-2   Order Change Report

Hiwa Interpack Co., Ltd.

ORDER DELETED REPORT

ON 29 November 2002

Order ID :	Total Cost :	VAT (7%):	Net Sale :	Delete Date :	Delete By :
	Baht	Baht	Baht		
13	10625	743.75	11368.75	29/Nov/02	onghunt

Total Net Sale :   11368.75   Baht

Figure C-3   Order Deleted Report

Hiwa Interpack Co., Ltd.

CHANGE ON CUSTOMER
REPORT

On MaMa Ltd.

Edit Date :	24/Nov/02	**Edit by :**	atips
Company :	MaMa Ltd.		
Address :	23 Pechburee Rd. Pratoonaam Bangkok 11350		
Telephone No. :	022347676		
FAX No. :	022667567		
Contact Person :	Mr. Sutee		
Bad Credit :	No	**Credit Type :**	15days

Figure C-4   Customer Change Report

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Hiwa Interpack Co., Ltd.

TRANSACTION HISTORY
REPORT

On Yahoo

Order ID :	Total Cost :	VAT (7%):	Net Sale :	Order Date :	Add By :
	Baht	Baht	Baht		
6	17040	1192.8	18232.8	26/Nov/02	namotasa
8	17395	1217.65	18612.65	29/Nov/02	onghunt
12	7200	504	7704	29/Nov/02	onghunt

Total Net Sale : 44549.45 Baht

Figure C-5   Customer Transaction Report

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Hiwa Interpack Co., Ltd.

REQUEST ORDER REPORT

ON 29 November 2002

2   of   2

Request No	Grade	Gram	Width	Weight	Request Date	Request by
43	I	107	36	380	29/Nov/02	onghunt
44	A	107	50	450	29/Nov/02	onghunt
45	A	107	50	480	29/Nov/02	onghunt
46	M	125	44	600	29/Nov/02	onghunt
47	I	185	36	700	29/Nov/02	onghunt

Figure C-6   Request order Report

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Hiwa Interpack Co., Ltd.

REQUEST ORDER WAITING LIST

Request No	Grade	Gram	Width	Weight	Request Date	Request by
44	A	107	50	450	29/Nov/02	onghunt
45	A	107	50	480	29/Nov/02	onghunt
46	M	125	44	600	29/Nov/02	onghunt
47	I	185	36	700	29/Nov/02	onghunt

Figure C-7   Request order Waiting list Report

Hiwa Interpack Co., Ltd.

CRAFT PAPER ADD IN REPORT

FROM

26 November 2002

TO

29 November 2002

Raw Mat. ID.	Grade	Gram	Width	Weight Install	Total Cost	Supplier	Install Date	Add by
18	M	125	44	660	9273	Tar Piak Co. Ltd.	26-Nov-02	namotasa
19	M	107	44	500	6990	Paper Ltd.	26-Nov-02	namotasa
20	M	107	44	480	6710.4	Paper Ltd.	26-Nov-02	namotasa
21	I	107	44	500	9475	PPP&P Co.	26-Nov-02	namotasa
22	I	107	44	600	11388	PPP&P Co.	26-Nov-02	namotasa
23	A	107	44	500	10775	Westley Co.	26-Nov-02	namotasa
24	A	125	44	300	6465	Westley Co.	26-Nov-02	namotasa
25	A	125	44	530	11421.5	Westley Co.	26-Nov-02	namotasa
26	M	125	44	700	9506	UBC Paper Co. Ltd.	26-Nov-02	onghunt
27	I	107	40	490	6933.5	Kolla Co.	26-Nov-02	onghunt

Figure C-8   Raw material Report

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Hiwa Interpack Co., Ltd.

RAWMATERIAL CHANGED REPORT

On Raw Material ID. 2

Raw Mat. ID.	Weight	Supplier	Total Cost	Edit Date	Change by
2	450	Paper Ltd.	9954	25-Nov-02	atips

Figure C-9   Raw Material Change Report

Hiwa Interpack Co., Ltd.

CHANGE ON SUPPLIER
REPORT

On Paper Ltd.

Edit Date :   24/Nov/02   **Edit by :**   atips

Company :   Paper Ltd.

Address :   123 Soi Lalaiysup Seelom Bangkok 12050

Telephone No.:   026678989

FAX No.:   023455656

Contact Person :   Mr. Weera H.

Cost of Craft Paper

SW	A	I	M
28.8	21.85	19.45	13.95

Figure C-10   Supplier Change Report

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Hiwa Interpack Co., Ltd.

COST CHANGE REPORT

On Cost of Grade SW

Supplier	Cost From Supplier/Kg	Cost Charge Customer/Kg	Supplier	Editl Date	Change by
Paper Ltd.	29	31.9	Paper Ltd.	24-Nov-02	atips
PPP&P Co.	28.35	31.185	PPP&P Co.	24-Nov-02	atips
Tar Piak Co.	28.5	31.35	Tar Piak Co.	24-Nov-02	atips
PPP&P Co.	28.35	31.185	PPP&P Co.	26-Nov-02	onghunt
Tar Piak Co.	28.5	31.35	Tar Piak Co.	26-Nov-02	onghunt
PPP&P Co.	28.35	31.185	PPP&P Co.	28-Nov-02	onghunt
Tar Piak Co.	28.5	31.35	Tar Piak Co.	28-Nov-02	onghunt
UBC Paper Co.	28.82	31.702	UBC Paper	29-Nov-02	onghunt

Figure C-11   Cost Change Report

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Hiwa Interpack Co., Ltd.

CHANGE ON PRODUCT REPORT

On A1M2M2M2A15054

Editl Date	From	To	Changed by
28-Nov-02	0	2	onghunt

Figure C-12   Product change Report

Hiwa Interpack Co., Ltd.

JOB COMPLETED

ON

29 November 2002

| Job ID.	Order ID.	Product ID.	Asking Price	Quantity Order
2	1	S3M2N0N0N03638	7	150
4	3	S3M2N0N0N03638	6.7	1000
5	3	A1M2I1M2A24450	19	500
6	4	A1M2I1M2A24450	19	990
8	5	I1M2I1N0N04048	9	200
11	6	S4M2I1M2S43638	17.4	750

Figure C-13   Job Complete Report

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