Chapter 1

Sales Order Processing System

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1.0 OBJECTIVES

After studying this chapter you should be able be :

1. Understand Sales Enquiry and preparation of Quotation
2. Order acceptance, Dispatch and Invoicing
3. Sales Analysis and Sales Invoice

1.1 INTRODUCTION

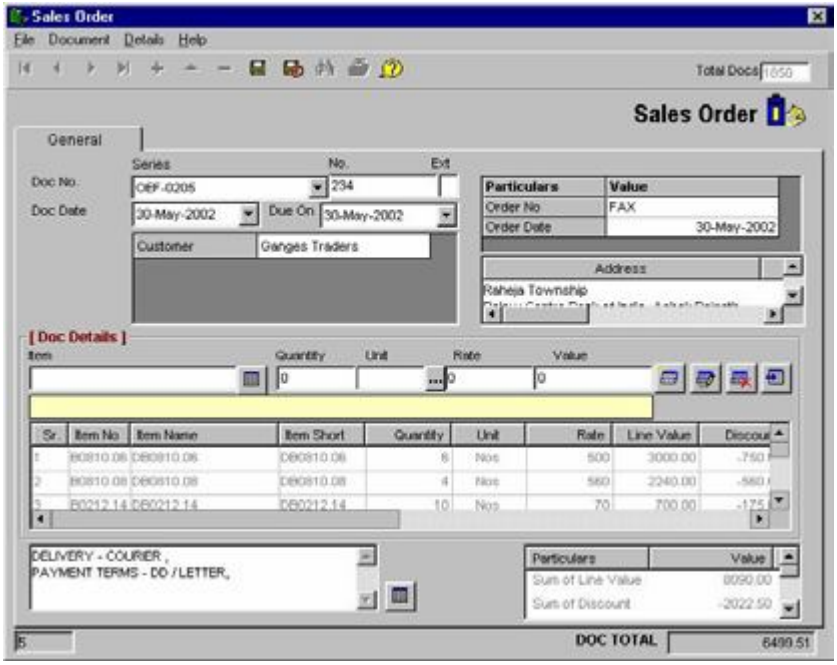
Companies often use a set of processes to complete the tasks and activities that occur in their business every day. Order processing also known as order fulfillment in the business environment is one of these activities. This process is often a system of steps repeated to fill customer orders.

Historically, order processing detailed the activities a company completed for customer mail orders. Fulfillment is now more common with the advent of Internet websites, which customers use to purchase all sorts of products without ever stepping foot in a store.

Order processing systems feature tasks that often include the picking, packing and shipping of products to consumers. A company typically completes these activities in its warehouse or a similar setting. This system can also include handling customer questions, returns or other issues.

Sales order processing is considered as an important function in any business organization. Every organization is interested in important function in any business organization. A very wide variety of sales order processing systems are in use in a number of business organization. The objective and scope of the sales order processing system are governed by the type of organization, the market environment as well as the nature of the product and marketing organization. The sales order processing system for a heavy engineering organization would be different as compared with the system that is used for consumer nondurable products.

Sales order processing system has considerable interfaces with many other application systems. Sales order processing system has interface with financial accounting system or accounts receivables system in respect of credit control.



1.2 SALES ENQUIRY AND PREPARATION OF QUOTATION

Selling is a wonderful profession when approached ethically, constructively and helpfully. Happily much sales development theory takes this positive direction. The origins of the word 'sell' provide a useful reminder of its purest meaning.

Selling is a wide subject, covering many selling methods, sales theories, models and sales training methods.

The sales techniques and selling ideas here have all been effective at some stage. Many are still widely used. Think about what you are selling, the market that you're selling into, the people you meet in the selling process, and use what will help you sell better. If you are managing sales people, the best results generally come if you allow sales people to work to their strengths; in a way that is natural to them.

Enquiry

Preliminary response from prospective customers, generally following an advertisement or sales promotion campaign. Number of inquiries (and their conversion into sales revenue) is a measure of the effectiveness of a firm's marketing efforts. Also spelled as enquiry.

What do you mean by "Sales Enquiry"?

Typically, you would record the functional requirements (the user needs to be able to do step 1, step 2, etcetera). Then you would look at the functionality that is already available, and analyze where this does not meet the requirement, and if it doesn't, how you are going to address this gap in functionality, which is what is called the design. To come up with a good design, first you will need to have a clear definition of the requirement.

Request for information about a product or service. An inquiry from a prospective customer may be unsolicited, but many advertising dollars are spent attempting to generate inquiries as well as purchases. Inquiry promotions identify individuals with an interest in the product or service, provide leads for follow-up sales calls or promotions, and measure both the effectiveness of various advertisements and also the demand for a product or service. It is important to answer all inquiries with a follow-up letter or sales call to convert the inquirer to a buyer. In some cases, the marketer must follow up with questions that qualify (*see* qualified leads) the prospect, determining if he is ready, willing, and able to buy. For example, if the inquiry concerns computer equipment, the seller can ask about the computing requirements of the inquirer and determine whether the need is imminent. *See also* inquiry and follow-up.

PREPARATION OF QUOTATIONS:

Quotations shall be submitted on the forms provided and must be signed by the Offeror or the Offeror's authorized representative. The person signing the Quotation shall initial any corrections to entries made on the Quotation forms. Offerors must quote on all items appearing on the Quotation forms unless specific directions in the advertisement, on the Quotation form or in the special provisions allowed for partial Quotations.

Failure to quote on all items may disqualify the Quotation. 9When Quotations on all items are not required, Offerors shall insert the words "no Quotation" where appropriate. Alternative Quotations will be considered, unless otherwise stated, only if the alternate is: (1) Described completely, including, but not limited to, sample(s), if requested, and specifications sufficient so that a comparison to the request can be made; and (2) Submitted as part of the base Quotation response, i.e. it shall not be a separate document which could be construed as a second Quotation.

Unless otherwise stated in the Request for Quotation (RFQ), the Offeror agrees that the Quotation shall be deemed open for acceptance for Sixty (60) calendar days subsequent to submittal to the City of Concord. Any questions or inquiries must be submitted in writing, and must be received by the Purchasing Agent no later than seven (7) calendar days before the Request for Quotations due date to be considered. Any changes to the Request for Quotations will be provided to all Offerors of record.

The Offeror shall not divulge, discuss or compare this Quotation with other Offerors and shall not collude with any other Offeror or parties to a Quotation whatever. (Note: No premiums, rebates or gratuities permitted either with, prior to, or after any delivery materials are allowed.
Any such violation will result in the cancellation and/or return of materials, as applicable, and the removal from Quotation List).

The name of manufacturer, trade name, or catalog number mentioned in this Request for quotation is for the purpose of designating a minimum standard of quality and type. Such references are not intended to be restrictive, although specified color, type of material and pecified measurements may be mandatory. Quotations will be considered for any brand which meets or exceeds the quality of the specifications listed. On all such Quotations, the Offer or shall specify the product they are proposing and shall supply sufficient data to enable a comparison to be made with the particular brand or manufacturer specified.

Failure to submit the above may be sufficient grounds for rejection of the Quotation. When samples are required, they must be submitted free of cost and will be returned unless otherwise specified.

Items left for demonstration purposes shall be delivered and installed free of charge and shall be removed by the vendor at no cost to the City. Said demonstration units shall not be offered to the City as new equipment unless mutually agreed to. The vendor may be required to supply proof of compliance with Quotation specifications. When requested, the vendor must immediately supply the City with certified test results or certificates of compliance. Where none are available, the City may require independent laboratory testing.

All costs for such testing, certified test results or certificates of compliance, shall be the responsibility of the vendor. Unless otherwise stated, all prices are F.O.B.: Destination. No charge for packing or drayage will be allowed. All deliveries are to be pre-paid, C.O.D.'s will not be accepted. Each shipment shall be identified by Purchase Order and/or RFQ number, commodity description and packing list. All items, packages, etc. shall have clearly identifiable external markings or tags for ease of identification.

SUBMISSION OF QUOTATIONS:

Quotations must be submitted as directed in the Request for Quotations, and on the form sprovided unless otherwise specified. Quotations must be typewritten or printed in ink. Quotations must be mailed or delivered in person. Quotations that are faxed or e-mailed will not be accepted.

WITHDRAWAL OF QUOTATIONS:

Quotations may be withdrawn prior to the opening date and time upon written, faxed, e-mailed or telegraphic request of the Offeror to the Purchasing Agent. Negligence on the part of the Offeror in preparing this Quotation shall not constitute a right to withdraw a Quotation subsequent to the Quotation opening. Quotations may not be withdrawn for a period of sixty (60) days after the date of opening indicated herein or as modified by addenda.

PROPOSERS INTERESTED IN MORE THAN ONE QUOTATION:

If more than one Quotation is offered by any one party, or by any person or persons representing a party, all such Quotations shall be rejected. A party who has quoted prices to a Offeror is not thereby disqualified from quoting prices to other Offerors or from submitting a direct Quotation in its own behalf.

RECEIPT AND OPENING OF QUOTATIONS:

Quotations shall be submitted prior to the time fixed in the Request for Quotations. Quotations received after the time so indicated shall be returned unopened.

QUOTATION RESULTS:

All Quotations received shall be considered confidential and not available for public review until after a vendor has been selected. All quotations shall be subject to negotiations prior to the award of a contract.

NO TELEPHONE REQUESTS FOR RESULTS WILL BE ACCEPTED OR GIVEN TIE QUOTATIONS:

When identical Quotations are received, with respect to price, delivery, financial resources, experience, ability to perform and quality, award may be made by a toss of coin, with the following exception: When a tie Quotation exists between a local (a business establishment within City limits) Offeror and an out-of-town Offeror, preference will be given to the local Offeror. Any Offeror having a local agent who is a bona fide resident of the City is considered a local Offeror. If a tie Quotation exists between two local Offerors, or two out-of-town Offerors, the decision may be made by a toss of coin.

LIMITATIONS:

This Request for Quotation (RFQ) does not commit the City to award a contract, to pay any costs incurred in the preparation of a response to this request, or to procure or contract for services or supplies. The City reserves the right to accept or reject any or all Quotations received as a result of this request, or to cancel in part or in its entirety this RFQ, if it is in the best interest of the City to do so.

QUOTATION EVALUATION:

In an attempt to determine if a Offeror is responsible, the City, at its discretion, may obtain technical support from outside sources. Each Offeror will agree to fully cooperate with the personnel of such organizations**.**

1.3 ORDER ACCEPTANCE

An order acceptance procedure, which includes an accept, review, reject process. There should be no doubt about which orders can be filled immediately and which should be reviewed. You could include some or all of the following:

- establish the criteria for which orders you will accept - for example, orders below £15 where both Address Verification and Card Security Code match
- establish the criteria for which orders should be reviewed – for example, all orders over £75, and all orders with either Address Verification or Card Security Code mismatch
- establish the criteria for which orders should be rejected – for example, all orders over £75 where both Address Verification and Card Security Code mismatch and the delivery address differs from the billing address.

Capture delay can be used to provide additional time for you to check orders before capturing the payment.

Order Acceptance Notice

Attention	Date

We are submitting this notice to verify our acceptance of the following goods:

Date	P.O. $	Invoice #	Packing Slip #

We find these goods to be acceptable, in good condition, free of damage or defect, and in accordance to our order.

We accept this shipment of goods.

Thank you,

Sincerely,

_____
(Signature)

_____
(Title)

Seller's Confirmation of Receipt & Acceptance of Order

To:
_____
_____
_____

Date: _____, 20__, No._____

We hereby confirm your order for the following goods:

Item: _____
Terms of Shipment: _____
Delivery Date: _____
Delivery Point: _____
Terms of Payment: _____

All prices herein are exclusive of sales, use, and other excise taxes. All such taxes, and any other taxes measured, in whole or part, by gross receipts applicable to this transaction are to be borne by the purchaser. All export, import and other duties, tariffs and customs shall be paid by the purchaser. If exemption is claimed by the purchaser from any of the foregoing, the purchaser shall furnish satisfactory proof of such tax exemption.

_____
SELLER

Date: _____

Seller's Confirmation of Receipt & Acceptance of Order Review List

This review list is provided to inform you about this document in question and assist you in its preparation. This document can be modified to reflect nonconforming elements about your customer's order, unacceptable payment terms, and the like. This is a well care document designed to let your customers know you have received their order and how you plan to proceed. It also serves to cut down on incoming calls, faxes, emails, and letters because you have acted promptly in letting them know what's what.

1. Make multiple copies. If possible, fax one to the customer. Keep a copy in the transaction file.

1.4 DISPATCH AND INVOICING

Dispatch

When businesses purchase goods from a company and the goods are shipped to them, the business receives them and that is receipt. Dispatch of goods is when that company ships out those goods purchased from them by the businesses.

Dispatching is the part of production control that translates the paper work into actual production in accordance with the details worked out under routing and scheduling functions. Dispatching deals with setting the production activities in motion through the release of orders and instructions in accordance with previously planned timings as embodied in production schedules.

James L. Landy has defined Dispatching as "The dispatching function involves the actual granting of permission to proceed according to plans already laid down. This is similar, in the casde of traveler to his employer finally approving his vacation leave."

According to Spriegal and Lansburg, "Dispatching involves the meeting of schedules by proper utilization of machines, work-places, materials and workers, as designed by the routing. The dispatching unit of the planning department thus includes all persons whose duty is to see that orders are issued to the shop that materials are at the work place that tools are provided, that job cards are issued and, in general all necessary steps are taken to ensure that the schedules will be properly carried out."

Dispatching is a function of Production controlling. It ensures the timely movement of semi finished items from one machins to another machine .Ultimately the target set at the stage of production planning are achieved with the the help of this diapatching function , because it deals with the movement of semi finished items from one machine to another within a specified time frame. We have to follow this time constraints if we want to achieve efficiency in our plant.Thus in a nut shell dispatching is just like a steering of a BUS so that it can reach at its destination at scheduled time and safely.

Invoicing

Invoice is a statement which contains the under mentioned details compulsorily.
1. Invoice Number
2. Invoice date
3. Name and address of the person making the invoice (Seller of goods and service)
4. Name and address of the person to whom invoice is made. (Buyer of goods and service)
5. Description of goods / services involved
6. Applicable rates and taxes with percentages
7. Rate of the goods / services
8. Quantity of the goods and services
9. Quality or any other specifications
10. Price / Value of the goods and services
11. Invoice must be signed by the person making it
12. Terms and conditions of making the payment

An invoice or bill is a commercial document issued by a seller to the buyer, indicating the products, quantities, and agreed prices for products or services the seller has provided the buyer. An invoice indicates the buyer must pay the seller, according to the payment terms.

In the rental industry, an invoice must include a specific reference to the duration

of the time being billed, so rather than quantity, price and discount the invoicing amount is based on quantity, price, discount and duration. Generally speaking each line of a rental invoice will refer to the actual hours, days, weeks, months etc being billed.

From the point of view of a seller, an invoice is a sales invoice. From the point of view of a buyer, an invoice is a purchase invoice. The document indicates the buyer and seller, but the term invoice indicates money is owed or owing. In English, the context of the term invoice is usually used to clarify its meaning, such as "We sent them an invoice" (they owe us money) or "We received an invoice from them" (we owe them money).

SAMP - MEN'S GARAGE v.o.f

REPARATIE VOOR ALLE MERKEN AUTO'S(K'Sika)

Client Name:	Kanchan	**Invoice Date:**	11/05/2009
Car Brand:	Swift	**Billing Time:**	2:21:42PM

Services	Quantity	Price Per Unit	Total Unit Price
Motorblok lift / Engine lifter	3	€ 7.00	€ 21.00
Ground & Jack / Krik / Groundjack	2	€ 5.50	€ 11.00
Booster	1	€ 3.00	€ 3.00
		Total Amount:	€ 35.00
		19% VAT:	€ 6.65
		Total Inc 19% VAT:	€ 41.65

Invoice processing involves the handling of incoming invoices from arrival to post. Invoices have many variations and types. In general, invoices are grouped into two types: 1. Invoices associated with a request 2. Invoices that do not have an associated request.

Most organizations have clear instructions regarding processing incoming invoices. Different sets of instructions are commonly found in most organizations regarding the handling of purchase order invoices or non-purchase order invoices. The main department that processes invoices is known as accounts payable department. The process involving a supplier invoice is also known as purchase-to-pay.

Typical process

A typical process involving paying a supplier invoice begins at the arrival of invoice at the door of the organization regardless of the methods of arrival such as via email, snail-mail, faxes, etc. Once the invoice arrives, the accounts payable clerk must ensure that the document is indeed an invoice. Then the clerk classifies and sorts the invoice into various categories. The definition of various categories is not always the same across different organizations but is normally defined by each organization.

Once its category defined, the invoice is forwarded to the responsible person for that particular invoice. This is normally the person who has placed that order. If there has been a purchase order involved when placing that order, the invoice must then be matched against the purchase order to ensure that the amount invoiced is correctly stated on the invoice. If the amount is right and the goods have arrived, the responsible person will have to approve the invoice by signing off on it. If the amount invoiced exceeds a certain amount that is limited by the organization, the superior of that person may have to approve the invoice as well. This, of course, differs from organization to organization.

Once the invoice has been approved and there have been no variances, the invoice is posted into the accounting system. A manual invoice process can sometimes exceeds 15 steps before the final posting is done.

Automatic process

Technology has long enabled the automation of invoice processing from arrival to post. This means that at arrival of the invoice, the same accounts payable clerk will only need to scan the invoice into an automation software. The automation software then converts the invoice's scanned image into a text searchable document. The different fields on an invoice can also be defined into the software so that it remembers which fields that it should capture and register into the ERP systems, for instance, the amount purchase, the quantity, the supplier name, the supplier code, and so on. Most automation software today integrates into common organizational ERP systems such as those offered by SAP, Microsoft and Oracle.

Once the data is extracted or captured from the invoice, the data is sent into the system for automatic matching against the purchase order. This is done automatically. The responsible person will then receive an email alert so that he or she can approve the invoice. If there are other people involved in the approval work flow, email alerts to them will also be automatically generated.

Automation software

PayStream Advisors, an industry analyst, has defined accounts payable automation as the solutions and services which automate the people and paper-based processing invoices for approval and posting into the accounting system. More information about automating invoice processing with technology can be obtained from the common vendors' websites. According to the Document Imaging Report, issue no. 8-17-07, there are around 3757 invoice processing applications in the world.

In the 2008 report, "Optical Character Recognition: Invoice Imaging and Data Capture for Accounts Payable," PayStream advisors writes:

Intelligent Data Capture (IDC) or learning systems enable end users to extract content from invoices without the system having to learn the layout of the invoice. Some intelligent engines are able to correctly sort batches on the fly, locate data fields such as invoice and PO number, as well as line item information, and then extract the desired content from those data fields. Intelligent solutions do not require the coding of rules or design form templates. Rather the system learns by reviewing a relatively small number of invoice samples. This helps the system scale to large invoice volumes and widely varying document layouts without requiring a human operator to specify a template for each one, or explicitly create and tune an extensive library of keywords.

Check your Progress -1

1. Define Sales Order Processing

   ……...

   ……...

2. What is enquiry.

   ……...

   ……...

3. What is invoice

   ……...

   ……...

1.5 SALES ANALYSIS

(BASED ON PRODUCTS, CUSTOMERS)

Determination of the extent to which a sales force has met its sales objectives within the specified timeframe.

The essence of business analysis is to enable management to have accurate information on sales in an effort to improve company profit margins. Analysis helps a business come up with a sales strategy by identifying customers through demographics, for instance. Sales analysis also helps a business know which products are selling and which are not.

Sales Analysis

Through sales analysis, a business will become familiar with emerging trends in the marketplace. When sales fluctuate, it implies new trends manifesting that a company needs to master to keep sales on par with those of the competition. A company needs to know which products competitors are selling more of to draw its own strategy. Sales analysis helps the company know it is meeting its sales objectives in a given timeframe.

Demographics

Understanding demographics and their needs is part of sales analysis. You cannot flood a store with iPhones, for example, in an area predominantly inhabited by retiring babyboomers. Such gudgets are usually synonymous with the younger generations. Understanding your market helps a business draw an effective sales strategy. A good sales analyst has to understand marketplace trends. It is always good to know which product is selling at a particular time and where. In that sense, a business is able to identify which market segment is booming and bringing in more revenue.

Technology

Software to help a business keep track of sales is available. Most such technology will help the business owner know whether at least minimum profit is being realized on each product. The whole purpose of analysis is to derive an accurate picture of the performance of a business using available data. Syspro is one of the most commonly used programs in sales analysis. It integrates all the data required to assess sales.

Scorecards

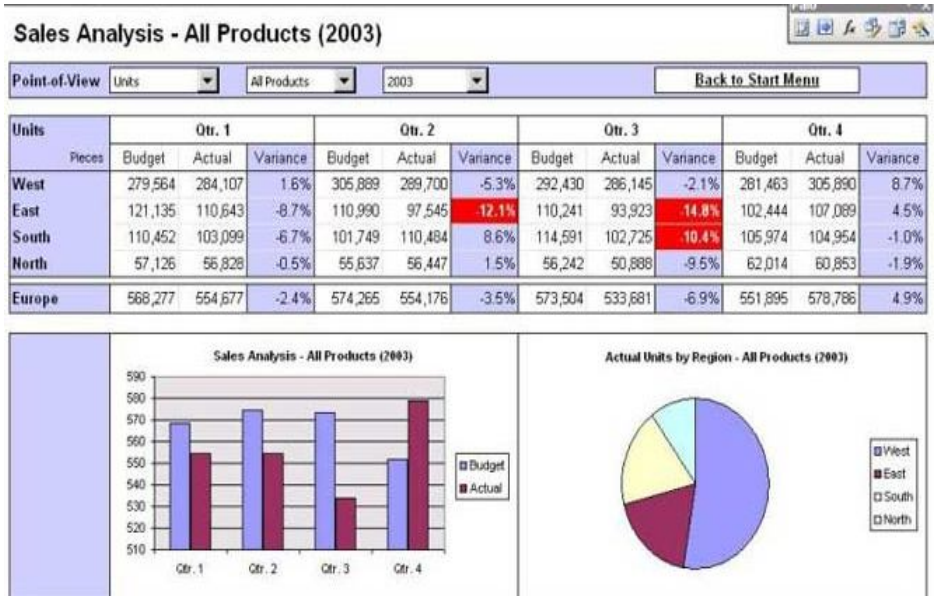
To analyze sales, a scorecard, also known as The Balanced Scorecard (BSC) is needed. A BSC is a business performance yardstick which was developed by Robert S. Kaplan and David P. Norton and is used to provide a balanced measurement of financial performance, non-financial operations and innovations, among other things. Precisely, it looks at the key performance measures of the company to provide accurate information that can be used to assess how a company is performing overall.

Sales Forescasting

The available technology helps a business detect trends. It is imperative to know which trends are declining and which ones are on the rise. Such analysis allows a business to forecast its sales in every given market segment at a given time.

Reporting

After all these measures are put in place to analyze sales, a company needs a report called The Sales Analysis Report. It looks at gross profits or losses. The report also includes details such as sales done by each individual sales representative, for instance. Without sales analysis, it is difficult to know whether a business is doing well or not. Most businesses collapse because they did not do a good job analyzing their sales and company performance



Sales Analysis - All Products (2003)

Point-of-View: Units | All Products | 2003 | Back to Start Menu

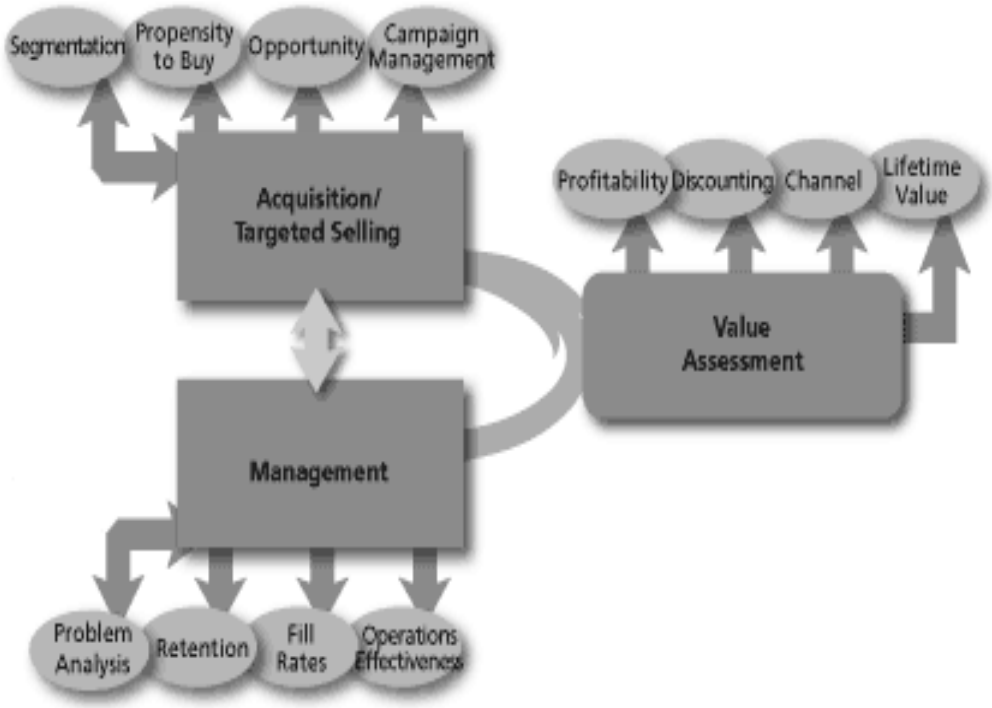
Units	Qtr. 1			Qtr. 2			Qtr. 3			Qtr. 4		
Pieces	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
West	279,564	284,107	1.6%	305,889	289,700	-5.3%	292,430	286,145	-2.1%	281,463	305,890	8.7%
East	121,135	110,643	-8.7%	110,990	97,545	-12.1%	110,241	93,923	-14.8%	102,444	107,089	4.5%
South	110,452	103,099	-6.7%	101,749	110,484	8.6%	114,591	102,725	-10.4%	105,974	104,954	-1.0%
North	57,126	56,828	-0.5%	55,637	56,447	1.5%	56,242	50,888	-9.5%	62,014	60,853	-1.9%
Europe	568,277	554,677	-2.4%	574,265	554,176	-3.5%	573,504	533,681	-6.9%	551,895	578,786	4.9%

Sales Analysis based on Products

Product-related functions and processes are dependent upon a firm's R&D (Research & development) and manufacturing/purchasing capabilities.

1. The **R&D** function generates proprietary technologies that can be applied to the development and production of new products. In the electronics industry, access to basic components, like hard disk drives and floppy disk drives and high precision production equipment are fundamental to making smaller, lighter, higher quality products. Each generation of smaller products, like palm corders, stimulates market growth for the company that is first to the market. Each generation of smaller products also reduce packaging and shipping costs, reduce power consumption, extend battery life, and are more convenient to carry.
2. The **time-to-market** process is required to integrate new technology into a firm's products and services. Today, competitive advantage is often related to the speed with which a firm can introduce the next generation of technologies into the market through new product and process developments. Once the product is developed, production capacity often becomes the limiting factor of market growth.
3. The **manufacturing** function transforms a set of purchased components and software into a firm's products. Having acceptable products available in a timely manner for customers is central to making sales. The ability to provide the highest quality products in the most efficient allows companies to gain market share by offering competitive prices and ready availability. Experience curve effects from high volumes can lead to lower costs.
4. The **integrated-supply-chain** process coordinates purchasing of components for assembly, product outsourcing, otherwise making sure products are available to meet customer order requirements. Outsourcing and alliances increase a firm's ability to offer a wider range of products or to introduce new products more rapidly. Increased flexibility provides competitive advantage in responding to rapid market changes.

Sales Analysis based on Customers



Customer Value Assessment

Determine lifetime sales by customer and customer type to identify your most loyal customers and largest market opportunities. Identify and rank customers who are considered "high value" based on discount level and gross margin, and uncover areas where discounting is cutting into profits. Evaluate how sales revenues and gross profits are trending by customer and channel to anticipate future sales and profits and to focus retention efforts on customers whose purchases have decreased.

Perform activity-based management analysis with the Profitability Performance Management module of Stratum to determine true net profitability by customer. Measure the impact of average selling price and cost of goods sold on gross profits to determine if prices or costs are eating away your profitability. Isolate the effect of freight and handling costs on customer profitability and discover low profit customers that may require more cost effective shipping methods. Assess year to date sales revenue performance relative to budgets, forecasts and last year's performance, to determine variance to plan.

Customer Acquisition / Targeted Selling

Segment customers by a Propensity to Buy (PTB) score to determine those customers most likely to purchase new products or more existing products. (The PTB metric is customized to accommodate those factors most relevant to your business model, and may incorporate previous sales volume, seasonal trends, regional sales, business type, etc.) Rank customers based on the recency of their purchases, frequency of their orders and the value of their purchases and then segment them into groups and design promotions and sales efforts to target each group with up sell and cross sell promotions. Isolate customers into "opportunity groups" based on purchasing behavior, such as customers that bought from you last year but did not buy this year.

Utilizing the Marketing Performance Management module, create plans by group to estimate the expected incremental sales, gross margin and costs associated with generating new sales. Compare actual to expected results by campaign to measure campaign effectiveness and associated costs, and refine programs for future campaigns. Import campaign or sales transactions from your contact management system, if you are currently using one, to track results and measure sales revenue generated

Customer management

Identify customer and product return patterns over time to uncover potential problem areas and measure the impact of returns on revenue. Explore product quality issues with the manufacturing performance management module. Compare order fill rates and order line fill rates this year versus last to determine if company goals are being met and what is causing any variances to plan.

Improve customer service by analyzing what products are causing backorders and the duration of backorders, so that problems can be remedied and customer expectations met. Rank and measure the severity and type of customer complaints, as well as how effectively customer service representatives are responding to these complaints, to increase customer service levels. Review year-to-date sales revenue and problems reported by customers to identify any correlation and understand how customer service issues are impacting profits.

1.6 SALES INVOICE

The sales invoice is perhaps the most common document in the business world. It is an important record for both the seller and the client, and it's an essential element in the management and bookkeeping of any business.

Definition

An invoice is a business document issued any time a sale takes place. Doctors issue invoices after a patient's appointment. Office-supply companies issue invoices when a client places an order.

Information Contained Within

Invoices serve as a permanent reminder of what was purchased, when it was purchased, how much it cost, who sold it, who bought it and how to reach them. Using the example of the doctor's office visit, an invoice would include the name, address and telephone number of the doctor's office; and the name, address and telephone number of a patient and the services the doctor performed (and charges for each).

The Time Invoice

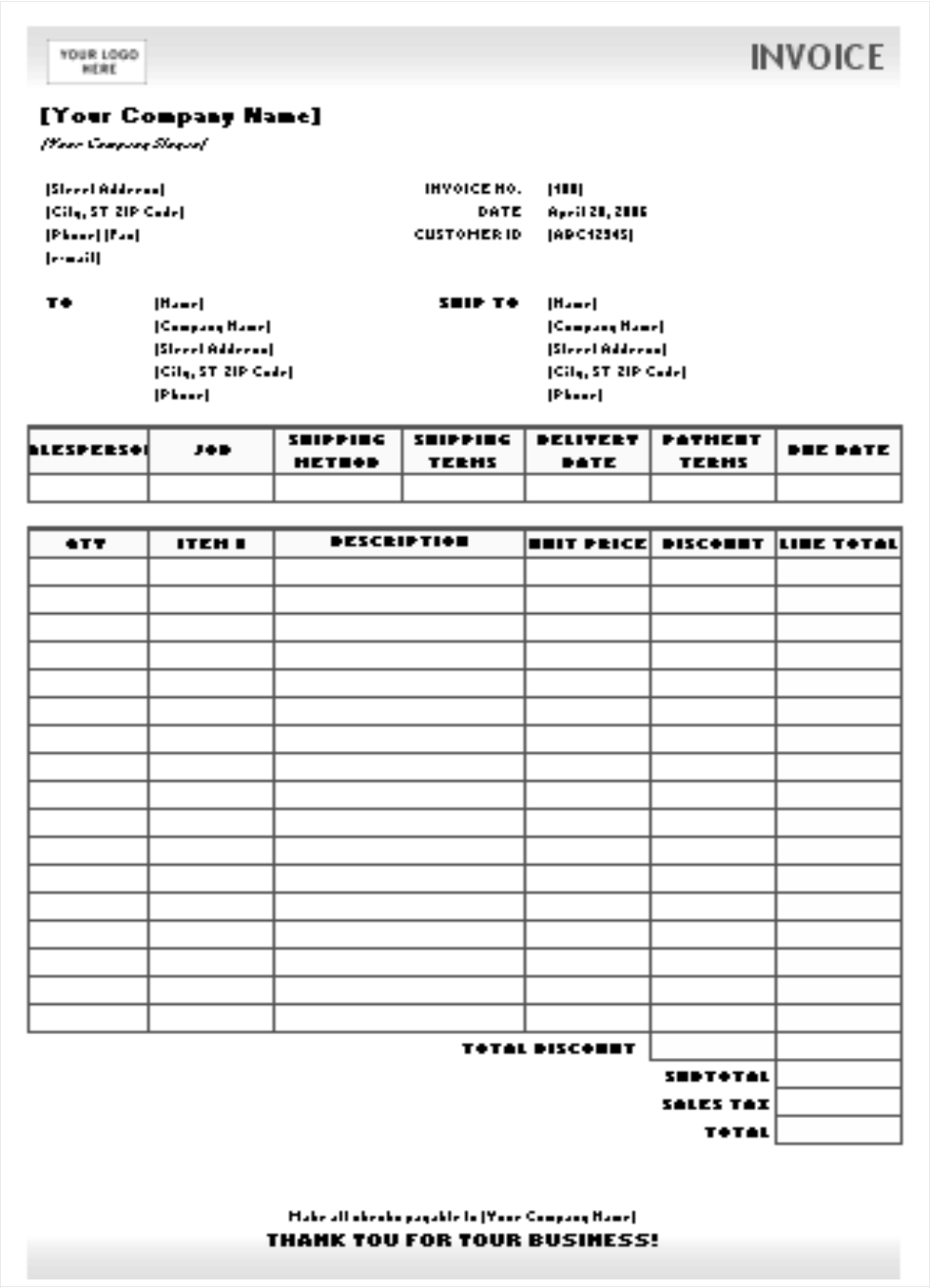
Certain businesses deal in time, not in volume. Recording studios, for example, often charge by the hour. So an invoice from a studio would most likely include the number of hours the artist spent recording or working with previously recorded material.

Uses

The uses of an invoice are implied in the information they contain. They are a bill calling for payment from the buyer, a proof of purchase for both parties and can be a means of protection for the consumer in that they carry detailed pricing information about the items purchased (making it easier for the buyer to understand the transaction and charges involved).

Modern Changes

Traditionally, invoices were sent in the mail or, when the technology became available, via fax. Today, as businesses gravitate toward paperless operations, they are commonly sent via email and filed away on a computer.



YOUR LOGO HERE

INVOICE

[Your Company Name]

[Your Company Slogan]

[Street Address]
[City, ST ZIP Code]
[Phone] [Fax]
[e-mail]

INVOICE NO. [100]
DATE April 28, 2006
CUSTOMER ID [ABC12345]

TO [Name]
[Company Name]
[Street Address]
[City, ST ZIP Code]
[Phone]

SHIP TO [Name]
[Company Name]
[Street Address]
[City, ST ZIP Code]
[Phone]

SALESPERSON	JOB	SHIPPING METHOD	SHIPPING TERMS	DELIVERY DATE	PAYMENT TERMS	DUE DATE

QTY	ITEM #	DESCRIPTION	UNIT PRICE	DISCOUNT	LINE TOTAL
			TOTAL DISCOUNT		
				SUBTOTAL	
				SALES TAX	
				TOTAL	

Make all checks payable to [Your Company Name]

THANK YOU FOR YOUR BUSINESS!

Sales Invoice System

This is a database project.It is very user friendly Once user has entered the information about the product ,there prices and supplier of the product all these fields will be automatically filled up in the invoice and purchase order form.

As the name suggest Invoice means detailed list with price of goods supplied. Our software is vary reliable, easy to use ∓ the user interface is to good that a user who does not know any thing can also use this software by simply clicking the mouse button and can feed the information about customer as well as supplier. Our software contains two field mainly forms and report.

By using this software Invoice Statements can be made very quickly Just by few mouse clicks.

Key Features :

1) Searching options in all forms

2) Security options are Provided

a) Administrator Login(Full Authorities

b) General User (Limited Options)

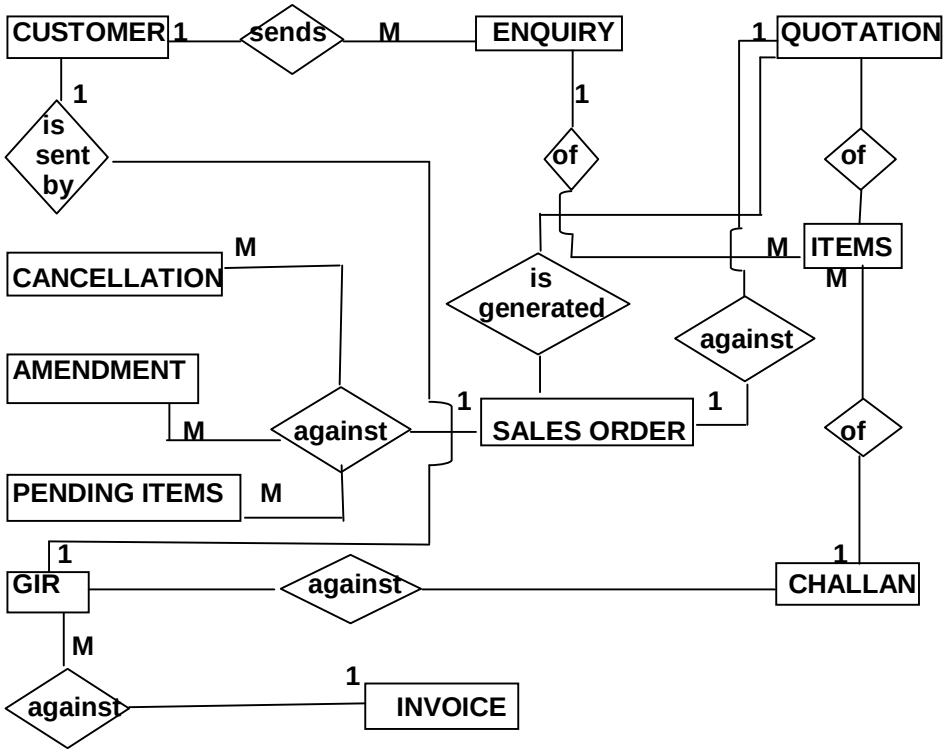
3) Backup Facility (Create compressed backup of database)

4) Option for compacting the database

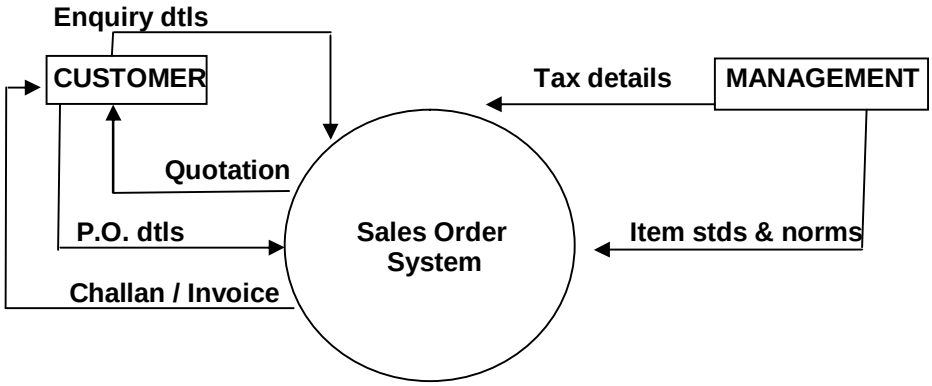
5) Automatic generation of Reports(For taking hard-copy of data)

6) Online help and Context Sensitive Help

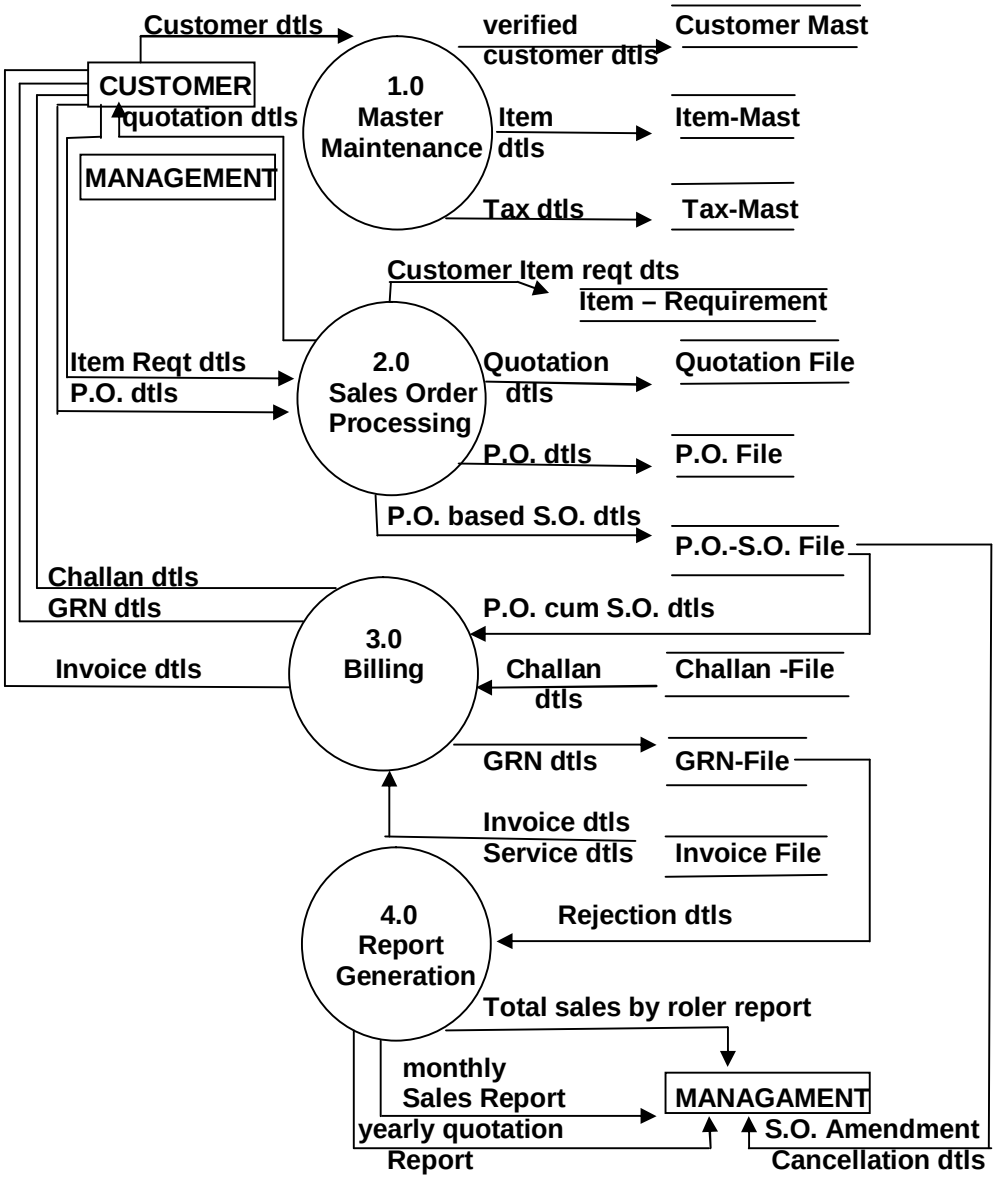
ERD: Entity Relationship Diagram of Sales Order System.



CLD: Context Level Diagram for Sales Order System



DFD:
Data Flow Diagram for Sales Order System.



Check your Progress – 2

Fill in the blanks

1. ……. is a database project
2. ……. It is an important record for both the seller and the client, and it's an essential element in the management and bookkeeping of any business.
3. ……. is Determination of the extent to which a sales force has met its sales objectives within the specified timeframe.
4. The ……. process is required to integrate new technology into a firm's products and services.
5. Certain businesses deal in time, not in …….

1.7 SUMMARY

The sales techniques and selling ideas here have all been effective at some stage. Many are still widely used. Think about what you are selling, the market that you're selling into, the people you meet in the selling process, and use what will help you sell better. If you are managing sales people, the best results generally come if you allow sales people to work to their strengths; in a way that is natural to them.

Enquiry

Preliminary response from prospective customers, generally following an advertisement or sales promotion campaign. Number of inquiries (and their conversion into sales revenue) is a measure of the effectiveness of a firm's marketing efforts. Also spelled as enquiry.

Preparation of quotations:

Quotations shall be submitted on the forms provided and must be signed by the Offeror or the Offeror's authorized representative. The person signing the Quotation shall initial any corrections to entries made on the Quotation forms. Offerors must quote on all items appearing on the Quotation forms unless specific directions in the advertisement, on the Quotation form or in the special provisions allowed for partial Quotations.

Order acceptance

Adopt an order acceptance procedure, which includes an accept, review, reject process. There should be no doubt about which orders can be filled immediately and which should be reviewed.

Dispatch

James L. Landy has defined Dispatching as "The dispatching function involves the actual granting of permission to proceed according to plans already laid down. This is similar, in the casde of traveler to his employer finally approving his vacation leave."

Invoice

An invoice or bill is a commercial document issued by a seller to the buyer, indicating the products, quantities, and agreed prices for products or services the seller has provided the buyer. An invoice indicates the buyer must pay the seller, according to the payment terms.

Sales analysis

Determination of the extent to which a sales force has met its sales objectives within the specified timeframe.

The essence of business analysis is to enable management to have accurate information on sales in an effort to improve company profit margins. Analysis helps a

business come up with a sales strategy by identifying customers through demographics, for instance. Sales analysis also helps a business know which products are selling and which are not.

Sales Analysis based on Customers

Customer Value Assessment

Customer Acquisition / Targeted Selling

Customer management

Sales Analysis based on Products

1) The **R&D** function generates proprietary technologies that can be applied to the development and production of new products
2) The **time-to-market** process is required to integrate new technology into a firm's products and services.
3) The manufacturing function transforms a set of purchased components and software into a firm's products.
4) The integrated-supply-chain process coordinates purchasing of components for assembly, product outsourcing, otherwise making sure products are available to meet customer order requirements.

Sales Invoice

The sales invoice is perhaps the most common document in the business world. It is an important record for both the seller and the client, and it's an essential element in the management and bookkeeping of any business.

Definition

An invoice is a business document issued any time a sale takes place. Doctors issue invoices after a patient's appointment. Office-supply companies issue invoices when a client places an order.

Sales Invoice System

This is a database project.It is very user friendly Once user has entered the information about the product ,there prices and supplier of the product all these fields will be automatically filled up in the invoice and purchase order form.

Source : *www.answers.com(Link)*

1.8 CHECK YOUR PROGRESS - ANSWERS

1:

1. Order processing also known as order fulfillment in the business environment is one of these activities. This process is often a system of steps repeated to fill customer orders.

2. Preliminary response from prospective customers, generally following an advertisement or sales promotion campaign. Number of inquiries (and their conversion into sales revenue) is a measure of the effectiveness of a firm's marketing efforts. Also spelled as enquiry.

3. An invoice or bill is a commercial document issued by a seller to the buyer, indicating the products, quantities, and agreed prices for products or services the seller has provided the buyer. An invoice indicates the buyer must pay the seller, according to the payment terms.

2 :

1. Sales invoice System
2. Sales Invoice
3. Sales Analysis
4. time-to-market
5. Volume

1.9 QUESTIONS FOR SELF - STUDY

1. Explain Sales Invoice
2. Explain Sales Analysis.
3. What is Invoicing
3. Short Notes : a) Dispatch
   b) Order Acceptance

1.10 SUGGESTED READINGS

Production and Operations Management - *Mayer*

Modern Production Management - *R V Badi*

❁❁❁

NOTES

NOTES

Chapter 2

Purchase Order Processing System

2.0 Objectives
2.1 Introduction
2.2 Enquiry & receive of Quotation
2.3 Vendor Selection (Vendor Analysis)
2.4 Order preparation (with delivery schedule)
2.5 Order amendment
2.6 Receipt of material (goods Inward/GRN)
2.7 Supplier's bill passing
2.8 Follow up of pending purchase order
2.9 Summary
2.10 Check your Progress – *Answers*
2.11 Questions for Self – Study
2.12 Suggested Readings

2.0 OBJECTIVES

After studying this chapter you should be able be :

1. Understand Enquiry and receive of Quotation
2. Vendor Selection (Vendor Analysis)
3. Order preparation with delivery schedule, order amendment
4. Receipt of material (goods Inward/GRN)
5. Suppliers bill passing, followup of pending purchase orders

2.1 INTRODUCTION

Purchase order processing system is example of transaction processing system. Purchase order processing system acquires importance in a business organization, as reaw materials constitute a major component of the total cost. It is common to fine the raw material costs to be in region 40 to 60 per cent of the total annual turnover of the organization. Different versions of purchase accounting system are used on a variety of hardware platforms. The scope and content of the purchase order processing system varies according to the type of product, the transaction volumes and the degree of integration with other transaction processing systems with the organization.12

Purchase order processing systems have interfaces with other transaction processing systems such as materials accounting systems. Production planning and control applications, manufacturing resource planning, financial accounting. In a number of organizations, the purchase order processing system is integratied with other application systems. The degree and complexity of such integration depends on a number of factors such as the extent of computer usage, complexity in terms of number of products, production processes, business functions and organizational policies.

PO's allow buyers to clearly and explicitly communicate their intentions to sellers, and sellers are protected in case of a buyer's refusal to pay for goods or services. POs also help a purchasing agent manage incoming orders and pending orders. Purchase orders also are an economical choice for a business because they streamline the purchasing process to a standard procedure.

A Purchase Order Form should be used to request products and services from suppliers. Rather than calling them to request your purchase, send them a Purchase Order Form. On the Purchase Order you describe what it is that you require, when you

want it and how much you expect to pay for it. By using this Purchase Order Template, you can ensure you receive exactly what you have ordered, at the right time and the right price.

Use of XML message format for electronic Purchase Order have occurred since the inception of XML in 1998. OAGIS has included a Purchase Order since its inception in 1996. Implementations of Purchase Orders based on OAGIS are common, including support by major enterprise business software vendors, as well as implementations by many of the worlds Fortune 500 companies.

OAGi has a working relationship with UN/CEFACT where OAGi and its members participate in defining many of the Technology and Methodology specifications. OAGi also includes support for these Technology and Methodology specifications within OAGIS.

While providing a Cross Industry representation of Purchase Order, OAGIS specifies industry specific requirements for the Industries that work with OAGi to identify these requirements. More information about OAGi, its members, Use Cases, access to OAGIS and more can be found on the OAGi Website

2.2 ENQUIRY AND RECEIVE OF QUOTATION

An enquiry is any process that has the aim of augmenting knowledge, resolving doubt, or solving a problem. A theory of inquiry is an account of the various types of inquiry and a treatment of the ways that each type of inquiry achieves its aim.

Quotation :

Formal statement of promise (submitted usually in response to a request for quotation) by potential supplier to supply the goods or services required by a buyer, at specified prices, and within a specified period. It may also contain terms of sale and payment, and warranties. Acceptance of quotation by the buyer constitutes an agreement binding on both parties.

2. Trading: Bid and asked price cited for the sale or purchase of a commodity or security.

The following is a "must have" in SFDC: - Quotes - Purchase Order from clients - Sales Order (with delivery date) - Invoice Sales Order (SO) can be created once the quote is accepted by your prospective customer (Prospect) AND a Purchase Order (PO)is received from your Prospect for further processing. After receiving the PO, some of the customers may request SOs to know the EXACT DATE OF DELIVERY of the goods/services. Also the inventory/production department looks at the list of SOs to see what needs to be shipped out (and WHEN). After the order is shipped and delivered to the customer an invoice is generated from the sales order for billing purposes. Precisely Sales Order is a confirmation document sent to the customers before delivering the goods/services. In general SO contains the SO number, date, line items (products) including the quantities and prices based on PO, Billing address, Shipping address, Terms & Conditions and others. Invoice could alson be issued once a delivery note (with list of goods) have been signed/receive from Customer.

A request for quotation (RFQ)

A request for quotation (RFQ) is a standard business process whose purpose is to invite suppliers into a bidding process to bid on specific products or services. RFQ generally means the same thing as IFB (Invitation For Bid)

An RFQ typically involves more than the price per item. Information like payment terms, quality level per item or contract length are possible to be requested during the bidding process.

To receive correct quotes, RFQs often include the specifications of the items/services to make sure all the suppliers are bidding on the same item/service. Logically, the more detailed the specifications, the more accurate the quote will be and comparable to the other suppliers. Another reason for being detailed in sending out an RFQ is that the specifications could be used as legal binding documentation for the suppliers.

The suppliers have to return the bidding by a set date and time to be considered for an award. Discussions may be held on the bids (often to clarify technical capabilities or to note errors in a proposal). The bid does not have to mean the end of the bidding. Multiple rounds can follow or even a Reverse auction can follow to generate the best market price.

RFQ's are best suited to products and services that are as standardised and as commoditised as possible, as this makes each suppliers' quotes comparable. In practice, many businesses use a RFQ where an RFT or RFI would be more appropriate

An RFQ allows different contractors to provide a quotation, among which the best will be selected. It also makes the potential for competitive bidding a lot higher, since the suppliers could be quite certain that they are not the only ones bidding for the products.

Requests for quotations are most commonly used in the business environment but can also be found being applied to domestic markets.

2.4 VENDOR SELECTION (VENDOR ANALYSIS)

A supply chain is a network of four -departments, which is involved in various activities like product procurement to distribution of final product. The purchasing has gained importance in supply chain management due to the factors like globalization and technological changes. In this paper the supplier selection for the leading glass product manufacturing industry is taken. Here, a versatile technique namely "Analytical Hierarchy Process" has been used to select the best vendor. When any vendor for a particular item make changes for the parameters like price, quality and performance improvement to deliver better quality product to customer, the whole hierarchy process for arriving at developing ranking of vendors is to be performed again for finding out the best vendor. So, a suitable standard programming logic was developed to meet current requirement. The package can be executed seven number of times with changing input parameters values thus serving the purpose.

Traditionally organizations have been divided in operative functions such as Marketing, planning, production, purchasing, finance, etc. Supply chain is a strategy that integrates these functions creating a general plan for the organization, which Satisfies the service policy, maintaining the lowest possible cost level due to the incredible competition environment that they are exposed to retailers. There has been an evolution in the role and structure of the purchasing function through the nineties.

The purchasing function has gained great importance in the supply chain management due to factors such as globalization, increased value added in supply, and accelerated technological change. Purchasing involves buying the raw materials, supplies, and components
for the organization. The activities associated with it include selecting and
qualifying suppliers, rating supplier performance, negotiating contracts, comparing price, quality and service, sourcing goods and service, timing
purchases, selling terms of sale, evaluating the value received, predicting price, service, and sometimes demand changes.

. Finally, identify the suitability of the Analytical Hierarchical Process (AHP) to assist in decision making to resolve the supplier selection problem. The major objective is to evaluate the best vendor in a corporate environment using AHP (Analytical Hierarchy Process) and to develop software. Using oracle database which will accept the input values as input parameters such as price, performance, quality, delivery and returns the output values through output parameter, overall development priority ranking of different vendors and the maximum overall development ranking value can be picked, which will enable us to identify the most effective vendor.

According to Simchi - Levi et.al, (2000) Supply Chain Management can be defined as "Supply Chain Management is a set of approaches utilized to efficiently integrate suppliers, manufactures, warehouses and stores, so that merchandise is produced and distributed at the right time, to the right location, in order to minimize system wide costs whole satisfying customer level requirements."

Johnson (1995) has quoted that Supply Chain Management is the process of strategically managing the movement and storage of materials, parts, and finished goods inventory from suppliers through the firm and to the customer.

Beamon (1999) defines Supply Chain as "An integrated process when in a

number of business entities (i.e. Suppliers, Manufacturer Distributors and Retailers) work together in an effort to acquire raw materials, convert these raw materials into specified final products and then deliver these final products to retailers."

Supplier Selection Process

Experts agree that no best way exists to evaluate and select suppliers, and thus organizations use a variety of approaches. The overall objective of the supplier evaluation process is to reduce risk and maximize overall value to the purchaser. An organization must select suppliers it can do business with over an extended period of time.

Step 1: Identify key supplier evaluation categories

One of the first steps when developing a supplier survey is for the purchaser to decide which performance categories to include. The primary criteria are cost/price, quality and delivery, which are generally the most obvious and most critical areas that affect the buyer. For many items, these three performance areas would be enough, however for critical items needing an in-depth analysis of the supplier's capabilities, a more detailed supplier evaluation study is required.

Step 2: Weight each evaluation category

The performance categories usually receive a weight that reflects the relative importance of the category. The total of each weight must equal 1.0. An important characteristic of an effective evaluation is flexibility. One way that management achieves this flexibility is by assigning different weights or adding or deleting performance categories as required.

Step 3: Identify and weight sub categories

This process requires identifying any performance subcategories, if they exist, within each broader performance category. The sum of the subcategory weight must equal the total weight of the performance category.

Step 4: Define scoring system for categories and subcategories

A clearly defined scoring system takes criteria that may be highly subjective and develops a quantitative scale for measurement. Scoring metrics are effective if different individuals interpret and score the same performance categories under review.

Step 5: Evaluate supplier directly

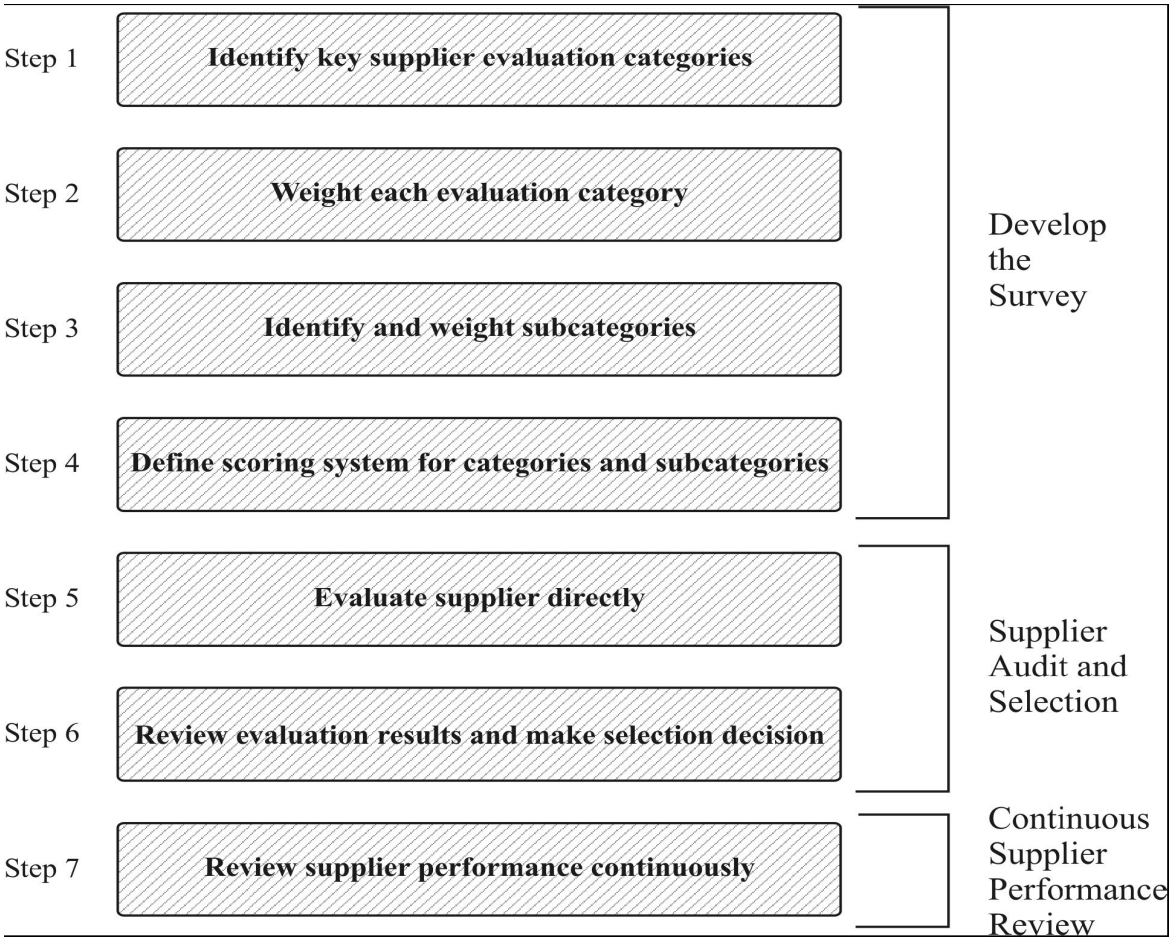
A purchaser can compare objectively the scores of different suppliers competing for the same purchase contract or select one supplier over another based on the evaluation score. It is also possible, based on the evaluation that a supplier does not qualify at this time for further purchase consideration. Purchasers should have minimum acceptable performance requirements that suppliers must satisfy before they can become part of the supply base.

Step 6: Review evaluation results and make selection decision

The primary output from this step is a recommendation about whether to accept a supplier for a business. A purchaser may evaluate several suppliers who might be competing for a purchaser contract. The purpose of the evaluation is to qualify potential suppliers for current or expected future purchase contracts.

Step 7: Review supplier performance continuously

When a purchaser decides to select a supplier, the supplier must then perform according to the purchaser's requirements. The emphasis shirts from the initial evaluation and selection of suppliers to evidence of continuous improvement by suppliers.



THE NEED FOR THE ANALYTICAL HIERARCHY PROCESS

One of the key kills required of an engineer is the ability to produce systems that satisfy user's requirements, by the correct selection, configuration, integration, operation and control of proprietary building blocks. These component parts can be physical entities such as computer and manufacturing machinery and the hard system components. However, they can also be non physical entities such as software, algorithms, control strategies and methodsthe 'soft' systems components, if the wrong components are elected then the user requirements will not be satisfied. Ifsub-optimal. Components are selected then the system solution will be sub-optimal. Clearly, selection is a critical element of the engineering process. Therefore, it is essential that it is systematic, formalized and accountable, so that it is amenable to detailed analysis for the purpose of verification and optimization. To satisfy these requirements we have to use the Analytical Hierarchy Process.

Check your Progress -1

1. What is request for quotation?

   ……...

   ……...

2. What is Purchase order processing system?

   ……...

   ……...

3. Steps in supplier selection process

   ……...

   ……...

2.5 ORDER PREPARATION (WITH DELIVERY SCHEDULE)

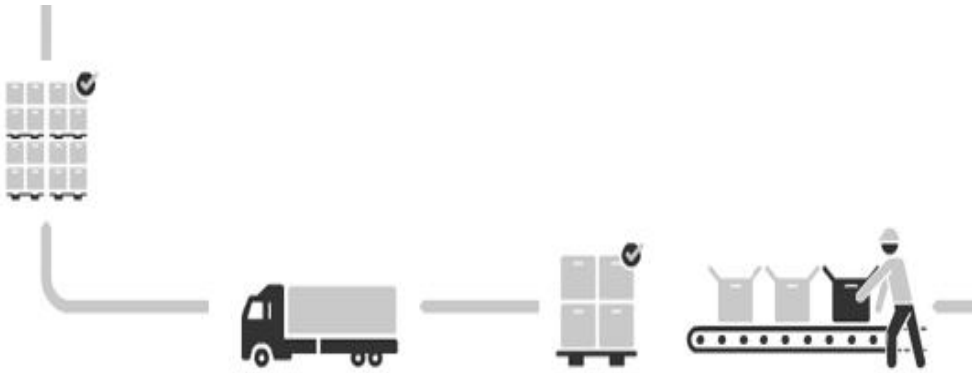
The goods are received from other booking office, the receiving office have work of preparation of delivery receipt. It holds loading, unloading and transshipment, it

have the lot of documentation preparation work in each section. Using our software, the user is simply fill the one form to automatically generates documents depends upon the each sections. Once the user enter the details of delivery, no data entry work in further documentation preparation.

Order-preparation tasks

Information flow from the order to delivery

An order forms the basis for the information flow in a logistics system. It has three principal functions - it creates a flow of information that precedes the goods, accompanies them and follows them. The tasks of order processing are divided into six phases: order transmission, preparation, routing, picking, shipment and invoicing.



The order and its impact

The transmission of the customer's order triggers the logistics processes within the company. On the information-flow level, order processing addresses the handling and monitoring of an order - from the time it is placed by the customer to the delivery of the shipment documents and invoice to the customer. The time required for order processing makes up a substantial amount of the total delivery time .

Order transmission

Order transmission can be done by mail, fax, telephone, e-mail or electronic data exchange (web-)EDI . To avoid uneven capacity use of a logistics system, the appropriate means of transmission should be selected in each case.

Preparation

Preparation adjusts the order to meet internal company requirements and integrates the order into the logistics system's planning. This includes obtaining missing information, and checking pricing conditions, delivery conditions and customer creditworthiness as well as the availability of the material in the warehouse.

Routing

Order preparation is usually followed by order routing, a process that includes order confirmation and the generation of internal job orders - manually, mechanically or electronically. For example, a delivery notification containing all related shipping documents is prepared and tells the storage point to process the shipment. As the integration of electronic data processing expands, the routing process is becoming increasingly automated, reducing paperwork associated with the information flow.

Picking

Based on prepared and processed orders, goods are picked in the warehouse. Picking is organized according to factors such as order size, urgency and orders that have to be delivered simultaneously. In this phase, order processing provides information to the warehouse and inventories that can be used for tasks such as management of storage and retrieval equipment or for inventory book keeping.

Shipment

Picking is followed by preparation of shipping documents. When options are available, this phase includes selecting the optimal means of transport and route for

delivery. This information is closely linked to transportation because both loading and movement of goods are initiated in this phase.

Invoicing

Invoicing of orders may be done at various points - either as post-invoicing after shipping has been arranged or as pre-invoicing before or while compilation and shipping are being done. The strength of post-invoicing is that an order can smoothly proceed to the warehouse. The strength of pre-invoicing is that as much paperwork as possible can be completed in one phase.

Functions of order processing

Order processing serves to plan, manage and monitor the flow of goods. This requires an information flow that precedes, accompanies and follows the flow of goods.

Advance information flow

Once the customer has placed his order, the manufacturer or retailer sends the customer an order confirmation specifying the scheduled delivery time.

All parties involved in the flow of goods also receive prompt notification about the scheduled delivery. As a result, these parties have the time they need to plan and schedule, two necessary conditions for optimally executing the flow of goods in terms of costs and services.

Accompanying information flow

The information flow that accompanies the flow of goods is designed to provide all parties with operational information needed on site to carry out transport, handling and storage activities. This information includes proper handling of hazardous goods. In addition, tracking of the flow of goods through the logistics network is to be supported.

An RFID tag, for example, can be used in the information flow accompanying the flow of goods. A special sensor monitors and documents the temperature of the shipment throughout the transport. The measured data are available at each monitoring point, a feature that enables the shipper, recipient and controller to continually check the condition of the products. This is especially important for pharmaceutical products like vaccines whose effectiveness can be harmed by temperature fluctuations outside the recommended range.

Follow-up information flow

The information flow that follows the flow of goods consists of information that is available only after the flow of goods has been completed. A case in point is an invoice that the recipient receives a few days after a delivery. However, information can also flow in the opposite direction of the flow of goods. This involves a status report on the execution of the order – including information that is reported to the dispatching point about matters such as the time when the flow of goods passed critical stations in the transport chain . These stations can include borders in international shipments. This information is also part of the follow-up information flow.

Delivery Schedule

Timing or rate of delivery as required by a buyer, or as agreed between a buyer and a seller, for goods or services purchased for a future delivery period.

GOODS DELIVERY NOTE **Section 1** *Source: IFRC/Concern Worldwide*

Delivered To: *(Give project or store location)*

Delivered From: *(Give project or store location)* **Number:** *(If not preprinted)*

Date: **Copy No:** *(If not preprinted)*

Section 2 **Section 4**

WHAT are you sending?

Goods Actually Received

Supplies Req't No.	Release Req't No.	Unit Size	No of Units	Total Quantity	Budget Code	Project Code	Cost & Currency	Expiry Date	Description	Good	Missing	Damaged	Type of Damage	Total Received

Section 3

Despatched By:	**Delivered By:**	
Storekeeper/Purchaser	*Driver to sign when vehicle is loaded*	
Print Name:	**Print Name:**	
Loading Date and Time:	**Vehicle No. Plate**	
Section 5	***Four copies to be used as follows:***	
Copies 1,2 and 3 accompany goods	**Received By:**	
Copy 1	*Signed by receiver and returned to sender*	*To be signed by receiving storeman, when goods are received and section 4 is completed noting damages/losses.*
Copy 2	*Signed by receiver and retained by them*	
Copy 3	*Signed by receiver and given to transporter*	**Print Name:**
Copy 4	*Remain in book*	**Received Date and Time:**

Please delete these instructions before emailing this form
This form is used to deliver goods from one location to another and confirm receipt
Sections 1,2 and 3 are completed at time of loading and dispatch

Delivery

Delivery is the process of transporting goods. Most goods are delivered through a transportation network. Cargo (physical goods) are primarily delivered via roads and railroads on land, shipping lanes on the sea and airline networks in the air. Certain specialized goods may be delivered via other networks, such as pipelines for liquid goods, power grids for electrical power and computer networks such as the Internet or broadcast networks for electronic information.

The general process of delivering goods is known as distribution. The study of effective processes for delivery and disposition of goods and personnel is called Logistics. Firms that specialize in delivering commercial goods from point of production or storage to point of sale are generally known as distributors, while those that specialize in the delivery of goods from point of sale to the consumer are known as delivery services. Postal, courier, and relocation services also deliver goods for commercial and private interests.

Consumer goods delivery

from a point of production (factory or farm) through one or more points of storage (warehouses) to a point of sale (retail store), where the consumer buys the good and is responsible for its transportation to point of consumption. There are many variations on this model for specific types of goods and modes of sale. Products sold via catalogue or the Internet may be delivered directly from the manufacturer or warehouse to the consumer's home, or to an automated delivery booth. Small manufacturers may deliver their products directly to retail stores without warehousing. Some manufacturers maintain factory outlets which serve as both warehouse and retail store, selling products directly to consumers at wholesale prices (although many retail stores falsely advertise as factory outlets). Building, construction, landscaping and like materials are generally delivered to the consumer by a contractor as part of another service. Some highly perishable or hazardous goods, such as radioisotopes used in medical imaging, are delivered directly from manufacturer to consumer. Home delivery is often available for fast food and other convenience products, e.g. pizza delivery. Sometimes home delivery of supermarket goods is possible. A milk float is a small battery electric vehicle (BEV), specifically designed for the delivery of fresh milk.

Delivery vehicles

Vehicles are often specialized to deliver different types of goods. On land, semi-trailers are outfitted with various trailers such as box trailers, flatbeds, car carriers, tanks and other specialized trailers, while railroad trains include similarly specialized cars. Armored cars, dump trucks and concrete mixers are examples of vehicles specialized for delivery of specific types of goods. On the sea, merchant ships come in various forms, such as cargo ships, oil tankers and fishing boats. Freight aircraft are used to deliver cargo.

Often, passenger vehicles are used for delivery of goods. These include busses, vans, pick-ups, cars (e.g., for mail or pizza delivery), motorcycles and bicycles (e.g., for newspaper delivery). A significant amount of freight is carried in the cargo holds of passenger ships and aircraft. Everyday travelers, known as a casual courier, can also be used to deliver goods.

Delivery to remote, primitive or inhospitable areas may be accomplished using small aircraft, snowmobiles, horse-drawn vehicles, dog sleds, pack animals, on foot, or by a variety of other transport methods.

Periodic deliveries

Some products are delivered to consumers on a periodic schedule. At the beginning of the 20th century, perishable farm items such as milk, eggs and ice, were delivered weekly to customers by local farms. With the advent of home refrigeration and better distribution methods, these products are today largely delivered through the same retail distribution systems as other food products. Some products, most notably heating fuels, are still delivered periodically.

2.6 ORDER AMENDMENT

Amendment

No addition, alteration or substitution of these conditions will bind Us or form part of the contract unless and until accepted in writing by Our Authorised Officer.

A purchase order can be amended under the following circumstances:

1. A purchase order can be amended to reflect cost increases before the purchase order has been mailed or faxed to the vendor.
2. Once the vendor receives a purchase order, the vendor may call the Purchasing Agent and state that the prices given on the purchase order are incorrect. The Purchasing Agent notifies the Budget Manager of the information. If the merchandise has not been shipped, the purchase order can be amended to reflect cost increases. In order for the purchase order to be amended, the Budget Manager must approve the amendment and send verification to the Purchasing Agent that there are funds available in the budget to cover the additional cost.
3. A purchase order can be amended to reflect items ordered that the vendor has stated they will not be able to provide. When the amendment is processed, the encumbrance is removed from the money so it may be used for other purposes. Purchase orders are amended down only when there is an immediate need for the funds that would be made available. Another way to remove the encumbrance is to forward the purchase order to the Accounts Payable Office for complete payment when the vendor has filled what they can of the order. When the purchase order is paid complete, any encumbered funds not paid (expended) are returned to the budget. If the purchase order is not sent for complete payment, funds will remain encumbered. To make the encumbered funds available for use, request the purchase order be amended.

To request a purchase order amendment, contact the Purchasing Agent. Purchase order amendment information is noted in the comments section of the purchase order by the Purchasing Agent

2.7 RECEIPT OF MATERIAL (GOODS INWARD/GRN)

Receipt of Material

This functionality is used to receive products from a vendor.

It should be used by the warehouse stuff at the point of receival of goods from venor.

When the material comes to warehouse from supplier. company will prepare these documents.

1. Gate inward entry (with item details like item code, received qty , supplier code based on Delivery challan)
2. Material Inward register : this document is prepared by Stores person (in this document fields are Received Qty, qty accepted , Qty rejected)
3. After the QC completed the above Material Inward register will with Qty accepted , Qty rejected.
4. Prepare GRN - Goods Confirmation Note based on the Material Inward register
5. Update stock ledger with Accepted Qty

ABC Form 9 - I
August 2001

MATERIAL RECEIPT

Date _____

PSCA No: _____ **BC No:** _____

County/City/Institution/Agency _____

Received from _____ **FEIN** _____
Vendor

Received at _____ **Date Received** _____
Location

Quantity	Unit	ARTICLE Make Full Report of any Shortage or Damage	Condition

I hereby certify that I have received and checked the articles listed above and that they are of the kind, quantity and condition noted.

Checked by _____ Received by _____
Signed Signed

Goods Receipt Note

Goods Receipt Note is a note given by Store department to Accounts/Supplier for Purchse of goods which are accepted after inspection of material. When Material comes to store ,only GIN(Goods Inward Note)is been done which is not of commercial use until GRN is made after Inspection of material

Goods Receipt Note is a document used to record the inward entry of the any goods received at the premises of the organization. The document normally consist of the details of Quantity Received, Quantity Rejected and Quantity Accepted, Supplier Name & P.O. No. The practice of preparing GRNs is important as it promotes proper inventory control and restricts the unwanted, unauthorized entry of goods in the organization. The GRN preparation is a part of effective Inventory Control Management.

Inventory Management module optimizes all purchasing processes with the workflow driven processing functions, enables automated procurement and storing with

accurate inventory management, and integrates purchase accounting as well as quality check of material at the time of receiving the same in the stores. ERP gives real-time inventory report quickly for JIT (Just-In-Time) inventory management.

In a manufacturing company that is in the early stages of their ERP project, obtaining a 95% or higher IRA (Inventory Record Accuracy) number is a tedious, but absolutely necessary task.

Inventory Master

Item Master

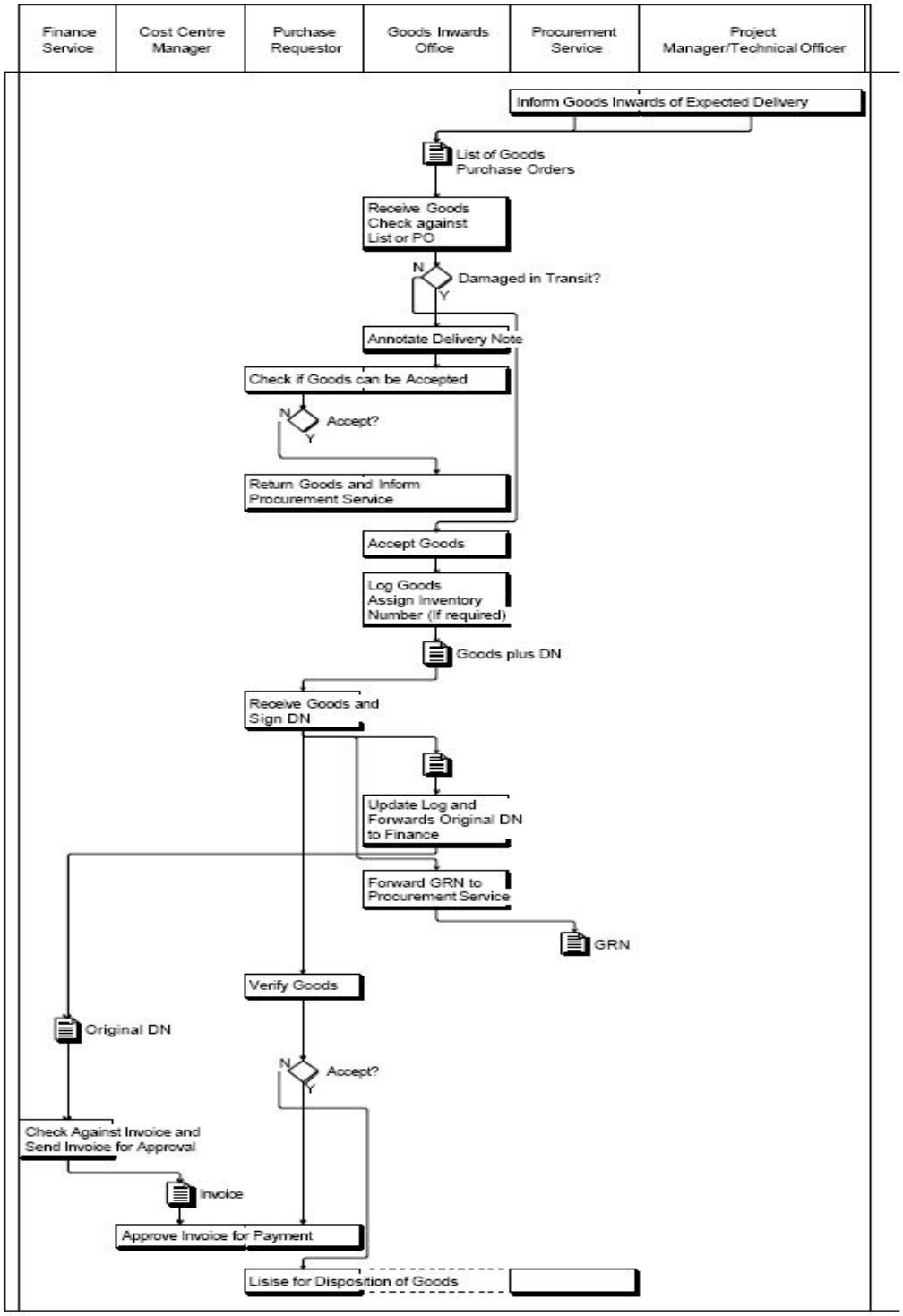
Goods Receipt Note (GRN)

Purpose: Goods Receipt Note "Purchase Voucher" is used when material is received in the stores. PO is a parent document to make a GRN. User will select vendor name. All pending PO will default automatically. User will enter Quantity information and save the GRN. This document is active document. In ERP, user does not have to enter documents twice. Excisable purchase transaction will also record excise related information.

In legacy parlance, this transaction is sometime called goods inward.

In ERP the GIN is prepared for material received from the sub-contractor "Third Party" . ERP distinguishes the material received from Vendor "Vendor" and sub-contractor, because sub-contractor material is actually our own item received in a new shape and / or size, after processing (or assembly).

Goods Receipt Note Flow Chart



Goods Receipt Note "Purchase Voucher" cum Goods Inward transactions does the following:

1. GRN will add material into stock (Hold location or material under inspection location

2. Credit the vendor

3. QC inspector / Quality Assurance can reopen GRN and enter accepted quantity – this will automatically add item into main stores and if item is rejected, add into Rejection Location.

4. Prepares short quantity debit note based on Challan quantity and received quantity.

5. Excise update button is given, here the excise person opens the document and enters the CenVAT amount, Cess amount and S. H. Cess amount and clicks the Excise update button. This will automatically update the CenVAT Credit Input register.

6. In Item level GRN there is facility to add Agents Name when user chooses the agent

7. In item level GRN facility to add Agent Bill No in GRN

8. Account passed procedure is for accountant control.

9. Short quantity debit note "Short quantity debit note" : ERP will raise a debit note (automatically generated), in case received quantity "received quantity" is less than challan quantity "challan quantity" . Debit supplier and credit the purchase account.

10. When QC person opens the GRN (or GIN) and enters the accepted quantity:

    ERP will change and print remark below QC Done "QC Done" (changed from QC pending "QC pending").

    When the material is rejected, the credit posting in the creditor ledger "creditor ledger" (vendor ledger) shows full credit as per the total bill amount. Therefore, an additional Account remark should be printed: 'Raise debit for Rs. nnnnn, against rejection'.

    This remark also will be printed in creditor ledger – particular column.

11. Account person will open this GRN again and approve the same by clicking 'Account approved' button. Until then, the GRN will be with remark 'Account Pending'

Once the accountant saves the GRN, the remark will change to 'account approved "account approved" '.

See a column in Creditor Ledger 'ACCOUNTANT'

ERP will pint 'OK' if GRN (or GIN) is approved else by default 'PENDING'

under this column.

2.8 SUPPLIER'S BILL PASSING

Purpose

The purpose of this procedure is to define a system for planning and controls of activities relating to payment to suppliers for supplies as per execution and terms and conditions of purchase order/agreement entered into with the contractors.

Application

This procedure is applicable to cover all the supply bills as per purchase order/ agreement.

Responsibility

Overall Responsibility rest with the Executive Engineer and Authority for various activities of project management is described in procedure part.

Terms and definitions

1. **Part bills or Running Account Bills:** Denotes the account with a contractor when payment for work or supplies is made to him at convenient intervals subject to final settlement of the accounts on the completion or determination of his contract.

2. **On Account payment or payment on Account:** Means a payment made on a running account, to a contractor in respect of work done or supplied made by him and duly measured. Such a payment may or may not be for the full value of work or supplied; if it is subject to the final settlement of running account on the completion of the contract for the work or supplies.

3. **Intermediate payments:** The term applied to a disbursement of any kind on a running account not being the final payment. It includes an “Advance payment”, a “Secured advance” and an “on account payment” (other than the final payment on a running account) or a combination of these.

4. **Mobilisation Advance:** Financial Assistance made to the contractor at a percentage of total contract value at an agreed rate of interest as per conditions of agreements and recoverable with interest before/ on completion of 75% of total value of contract.

5 **Detailed measurement Book:** A permanent record to record the detailed measurement of quantity of work carried out for the purpose of making payment and for recording details of payment. wherein the details of check measurements are taken by the AEE/EE as per codal provisions at certain percentage basis are recorded and forms important document for making payment.

6 **Verification -** Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled.

Procedures

This procedure is to establish a systematic procedure for effective processing of supply bills for payment. The procedure also ensures that financial and are done as envisaged and there are no deviations and all deviations are properly explained. In addition the procedure ensures that the management is updated with the financial progress made at periodical intervals.

This procedure covers all the processes of payment of supply bills. Wherever system procedures are established that provide detailed information about that process relevant procedures have been referenced. In order to facilitate easy understanding of process sequence, project-management process is divided into convenient process.

Following abbreviations and terms are used in the table;

D = Document R = Record

CMD = Chairman and Managing Director ED = Executive Director

FA = Financial Advisor

EE = Executive Engineer

AS = Account Superintendent

2.8 FOLLOW UP OF PENDING PURCHASE ORDER

Follow-up

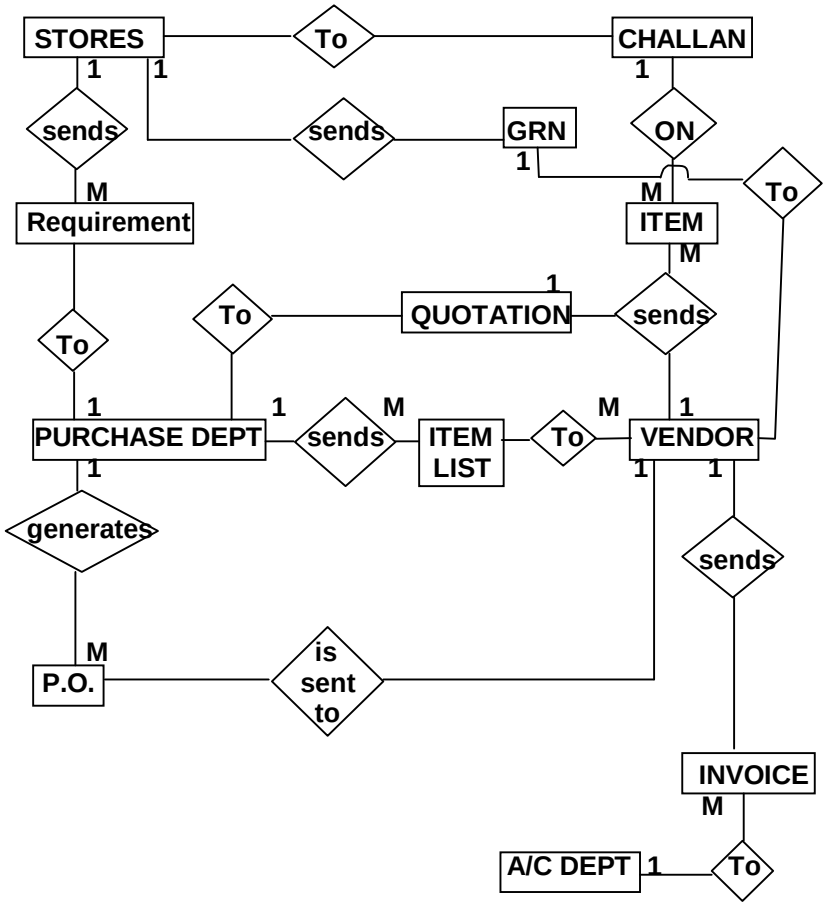
Follow-up is an effort, on the part of a qualified ordering entity, to ensure that the vendor understands that the ordering entity expects timely delivery of an order, and that the delivery schedule set forth in a purchase order will be met. By practicing follow-up, an ordering entity places vendors on notice that orders are being monitored. This usually assures prompt delivery or an unsolicited response from a vendor when delivery delays are anticipated.

Follow-up often prevents unnecessary purchase order cancellations due to communication problems between the vendor and the ordering entity. The purchasing process is complete only when the merchandise is delivered and the vendor paid. On the following page is a sample letter which may be used when following up on late shipments.

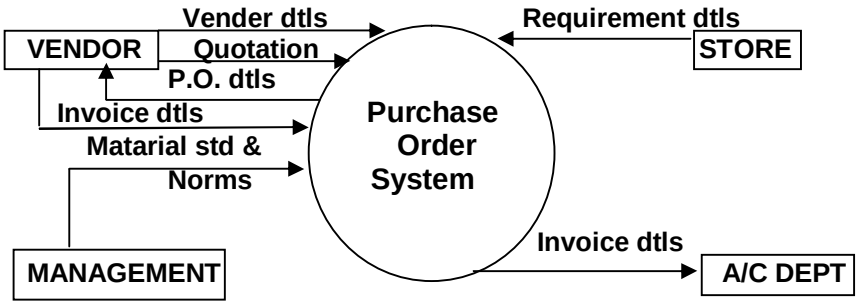
Suggestions for follow-up include:

- Develop an effective system for making timely initial contact with vendors to let them know that you are a customer who expects delivery when promised.
- Initiate the follow-up process by mail or telephone.
- For delivery promises that take an extended period to accomplish, make a second follow-up contact about half-way through the delivery period to assure it is still on track.
- Forward copies of all correspondence regarding a late delivery to the appropriate CPA purchaser.
- Request assistance from the CPA, if needed, at any time.

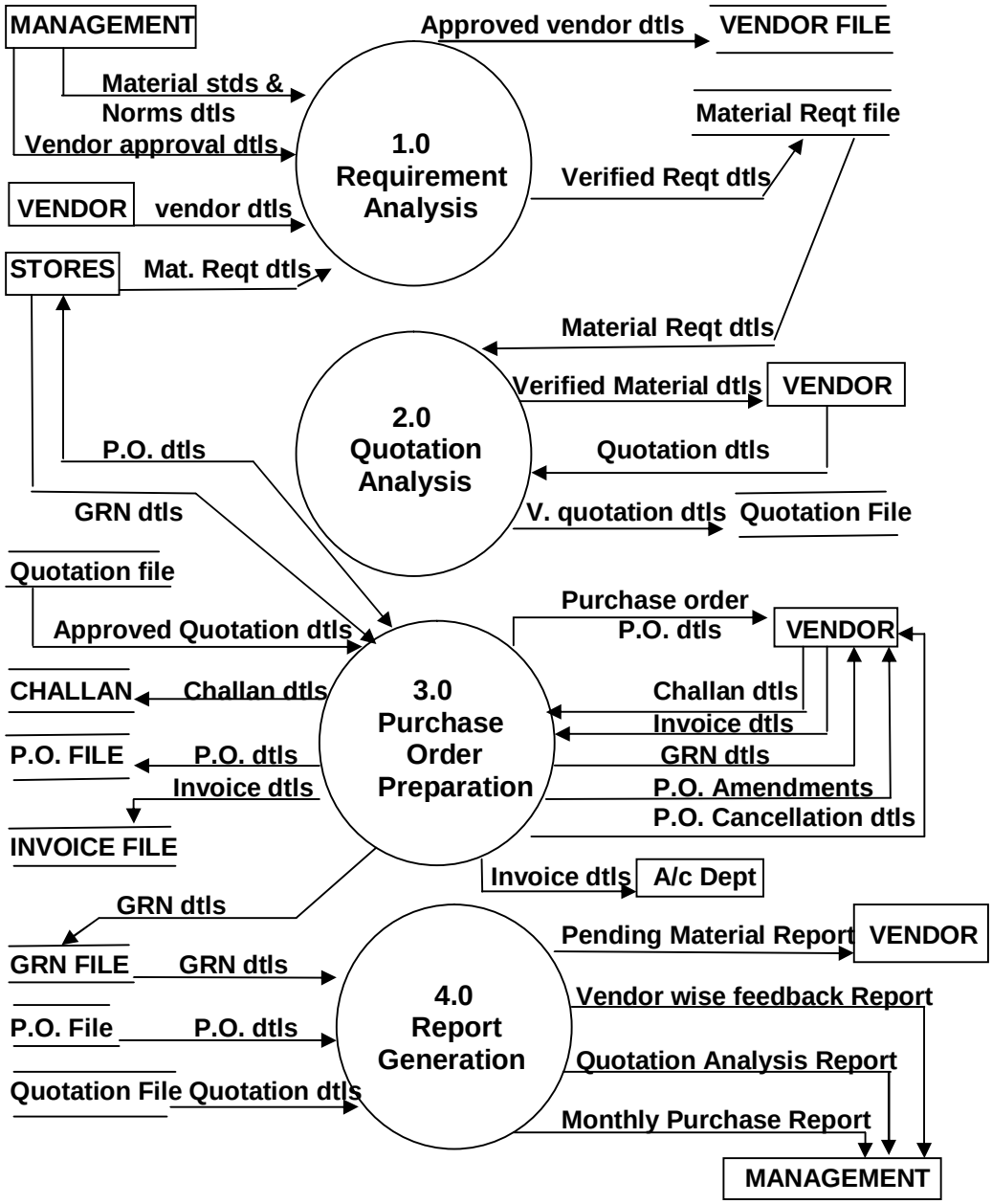
Purchase order System
ERD: Entity Relationship Diagram



Purchase Order System
CLD : Context Level Diagram



DFD: Dataflow diagram for Purchase order system.



Check your Progress – 2

Fill in the blanks

1. Follow up is an effort on the part of a ……..
2. ……..is used when material is received in the stores.
3. ……..is the process of transporting goods.

2.9 SUMMARY

Purchase order processing system is example of transaction processing system. Purchase order processing system acquires importance in a business organization, as reaw materials constitute a major component of the total cost.

Enquiry

An enquiry is any process that has the aim of augmenting knowledge, resolving doubt, or solving a problem. A theory of inquiry is an account of the various types of inquiry and a treatment of the ways that each type of inquiry achieves its aim.

Quotation :

Formal statement of promise (submitted usually in response to a request for quotation) by potential supplier to supply the goods or services required by a buyer, at specified prices, and within a specified period. It may also contain terms of sale and payment, and warranties. Acceptance of quotation by the buyer constitutes an agreement binding on both parties.

A request for quotation (RFQ) is a standard business process whose purpose is to invite suppliers into a bidding process to bid on specific products or services. RFQ generally means the same thing as IFB (Invitation For Bid)

Supplier Selection Process

Experts agree that no best way exists to evaluate and select suppliers, and thus organizations use a variety of approaches. The overall objective of the supplier evaluation process is to reduce risk and maximize overall value to the purchaser. An organization must select suppliers it can do business with over an extended period of time.

Step 1: Identify key supplier evaluation categories
Step 2: Weight each evaluation category
Step 3: Identify and weight sub categories
Step4: Define scoring system for categories and subcategories
Step 5: Evaluate supplier directly
Step 6: Review evaluation results and make selection decision
Step7: Review supplier performance continuously

Order-preparation tasks

Information flow from the order to delivery
The order and its impact
Order transmission
Preparation
Routing
Picking
Shipment
Invoicing
Functions of order processing
Advance information flow
Accompanying information flow
Fo**llow-up information flow**

DELIVERY SCHEDULE

Timing or rate of delivery as required by a buyer, or as agreed between a buyer and a seller, for goods or services purchased for a future delivery period.

Amendment

No addition, alteration or substitution of these conditions will bind Us or form part of the contract unless and until accepted in writing by Our Authorised Officer.

Receipt of Material
This functionality is used to receive products from a vendor.
It should be used by the warehouse stuff at the point of receival of goods from venor.

Suppliers bill passing

The purpose of this procedure is to define a system for planning and controls of activities relating to payment to suppliers for supplies as per execution and terms and conditions of purchase order/agreement entered into with the contractors.

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Follow-up

Follow-up is an effort, on the part of a qualified ordering entity, to ensure that the vendor understands that the ordering entity expects timely delivery of an order, and that the delivery schedule set forth in a purchase order will be met. By practicing follow-up, an ordering entity places vendors on notice that orders are being monitored. This usually assures prompt delivery or an unsolicited response from a vendor when delivery delays are anticipated.

Source : *success.salesforce.com(Link)*

2.10 CHECK YOUR PROGRESS - *ANSWERS*

1:

1. A request for quotation (RFQ) is a standard business process whose purpose is to invite suppliers into a bidding process to bid on specific products or services. RFQ generally means the same thing as IFB (Invitation For Bid)
2. Purchase order processing system is example of transaction processing system. Purchase order processing system acquires importance in a business organization, as reaw materials constitute a major component of the total cost.
3. Supplier Selection Process
   Step 1: Identify key supplier evaluation categories
   Step 2: Weight each evaluation category
   Step 3: Identify and weight sub categories
   Step4: Define scoring system for categories and subcategories
   Step 5: Evaluate supplier directly
   Step 6: Review evaluation results and make selection decision
   Step7: Review supplier performance continuously

2 :

1. qualified ordering entity
2. Goods Receipt Note "Purchase Voucher"
3. Delivery

2.11 QUESTIONS FOR SELF - STUDY

1. Explain Supplier selection process
3. What is Request for quotation
3. Explain Suppliers bill passing
4. Short Note a) GRN

2.12 SUGGESTED READINGS

Production and Operations Management - *Mayer*
Modern Production Management - *R V Badi*

❁❁❁

NOTES

NOTES

Chapter 3

Inventory Management System

3.0 Objectives
3.1 Introduction
3.2 Stock accounting & Control
3.3 Stores transactions (Receipts, Issues & adjustments)
3.4 Beed time
3.5 BOM processing with product configuration
3.6 Inventory levels EOQ, ABC analysis
3.7 Inventory control Reports (slow running-non moving items)
3.8 Summary
3.9 Check your Progress – *Answers*
3.10 Questions for Self – Study
3.11 Suggested Readings

3.0 OBJECTIVES

After studying this chapter you should be able be :

1. Stock accounting and control, stores transctions, beed time
2. BOM processing with product configuration
3. Inventory levels EOQ, ABC analysis, inventory control report

3.1 INTRODUCTION

Inventory management system is example of computer application that helps in planning and control functions of management. The stores accounting systems which we discussed in the previous chapter were identified as transaction processing sysems. The objectives of the stores accounting system are mainly trascation oriented, that is to provide for error free accounting of stores transcations and accurate reporting. One of the objectives of the stores accounting system was to provide information support for better inventory control. The inventory management system has a wider horizon and the scope and its objectives too are diferent

Every business organization would like to ensure that the operations are carried out with tht least blocking up of working capital in the inventory. At the same time, excessive control on inventory can have serious implications in terms of stock-outs, loss of production, delays in meeting customer order schedules and resultant loss of business. As such, the control over inventory, not only means reducing inventory levels as much as possible. This is the reason why the system is etitled Inventory management and non inventory control. The scope of the inventory management sysem is not restricted to control over inventory. The scope also covers planning for inventory. The inventory management system is expected to anticipate the materials requirements and esure that appropriated materials are made available at tht right time and at tht right place.

Inventory management is primarily about specifying the size and placement of stocked goods. Inventory management is required at different locations within a facility or within multiple locations of a supply network to protect the regular and planned course of production against the random disturbance of running out of materials or goods. The scope of inventory management also concerns the fine lines between replenishment lead time, carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods and demand forecasting. Balancing these competing requirements leads to optimal inventory levels, which is an on-going process as the business needs shift and react to the wider environment. Inventory

management involves a retailer seeking to acquire and maintain a proper merchandise assortment while ordering, shipping, handling, and related costs are kept in check. Systems and processes that identify inventory requirements, set targets, provide replenishment techniques and report actual and projected inventory status. Handles all functions related to the tracking and management of material. This would include the monitoring of material moved into and out of stockroom locations and the reconciling of the inventory balances. Also may include ABC analysis, lot tracking, cycle counting support etc. Management of the inventories, with the primary objective of determining/controlling stock levels within the physical distribution function to balance the need for product availability against the need for minimizing stock holding and handling costs

3.2 STOCK ACCOUNTING AND CONTROL

Stock

In accounting there are two common uses of the term stock. One meaning of stock refers to the goods on hand which is to be sold to customers. In that situation, stock means inventory.

The term stock is also used to mean the ownership shares of a corporation. For example, an owner of a corporation will have a stock certificate which provides evidence of his or her ownership of a corporation's common stock or preferred stock. The owner of the corporation's common or preferred stock is known as a stockholder.

Stock Accounting

The body of accounting that deals with valuing and accounting for changes in inventoried assets. Changes in value can occur for a number of reasons including depreciation, deterioration, obsolescence, change in customer taste, increased demand, decreased market supply and so on.

It is a requirement of GAAP that inventory be properly accounted for according to a very particular set of standards, so as to limit the potential of overstating profit by understating inventory value, and to limit the potential to overstate a company's value by overstating the value of inventory which has in fact materially depreciated in value.

CATEGORIES OF INVENTORY:

You have already seen that inventory for a merchandising business consists of the goods available for resale to customers. However, retailers are not the only businesses that maintain inventory. Manufacturers also have inventories related to the goods they produce. Goods completed and awaiting sale are termed "finished goods" inventory. A manufacturer may also have "work in process" inventory consisting of goods being manufactured but not yet completed. And, a third category of inventory is "raw material," consisting of goods to be used in the manufacture of products. Inventories are typically classified as current assets on the balance sheet. A substantial portion of the managerial accounting chapters of this book deal with issues relating to accounting for costs of manufactured inventory. For now, we will focus on general principles of inventory accounting that are applicable to most all enterprises.

DETERMINING WHICH GOODS TO INCLUDE IN INVENTORY:

Technically, goods in transit belong to the party holding legal ownership. Ownership depends on the F.O.B. terms. Goods sold F.O.B. destination do not belong to the purchaser until they arrive at their final destination. Goods sold F.O.B. shipping point become property of the purchaser once shipped by the seller. Therefore, when determining the amount of inventory owned at year end, goods in transit must be considered in light of the F.O.B. terms. In the case of F.O.B. shipping point, for instance, a buyer would need to include as inventory the goods that are being transported but not yet received. The diagram at right is meant to show who includes goods in transit, with ownership shifting at the F.O.B. point noted with a "flag."

Another problem area pertains to goods on consignment. Consigned goods describe products that are in the custody of one party, but belong to another. Thus, the party holding physical possession is not the legal owner. The person with physical possession is known as the consignee. The consignee is responsible for taking care of the goods and trying to sell them to an end customer. In essence, the consignee is acting as a sales agent. The consignor is the party holding legal ownership/title to the consigned goods in inventory. Because consigned goods belong to the consignor, they should be included in the inventory of the consignor -- not the consignee!

Consignments arise when the owner desires to place inventory in the hands of a sales agent, but the sales agent does not want to pay for those goods unless the agent is able to sell them to an end customer. For example, auto parts manufacturers may produce many types of parts that are very specialized and expensive, such as braking systems. A retail auto parts store may not be able to afford to stock every variety. In addition, there is the real risk of ending up with numerous obsolete units. But, the manufacturer desperately needs these units in the retail channel -- when brakes fail, customers will go to the source that can provide an immediate solution. As a result, the manufacturer may consign the units to auto parts retailers.

Conceptually, it is fairly simple to understand the accounting for consigned goods. Practically, they pose a recordkeeping challenge. When examining a company's inventory on hand, special care must be taken to identify both goods consigned out to others (which are to be included in inventory) and goods consigned in (which are not to be included in inventory). Obviously, if the consignee does sell the consigned goods to an end user, the consignee would keep a portion of the sales price, and remit the balance to the consignor. All of this activity requires a good accounting system to be able to identify which units are consigned, track their movement, and know when they are actually sold or returned.

The accounting methods for calculation for inventory calculation

- First-in, first-out (FIFO)
- Last-in, first-out (LIFO)
- Weighted-average

Each of these methods entail certain cost-flow assumptions Importantly, the assumptions bear no relation to the physical flow of goods; they are merely used to assign costs to inventory units. (Note: FIFO and LIFO are pronounced with a long "i" and long "o" vowel sound). Another method that will be discussed shortly is the specific identification method; as its name suggests, it does not depend on a cost flow assumption.

FIRST-IN, FIRST-OUT CALCULATIONS: With first in, first out the oldest cost (i.e., the first in) is matched against revenue and assigned to cost of goods sold. Conversely, the most recent purchases are assigned to units in ending inventory.

LAST-IN, FIRST-OUT CALCULATIONS: Last-in, first-out is just the reverse of FIFO; recent costs are assigned to goods sold while the oldest costs remain in inventory:

WEIGHTED-AVERAGE CALCULATIONS: The weighted-average method relies on average unit cost to calculate cost of units sold and ending inventory. Average cost is determined by dividing total cost of goods available for sale by total units available for sale.

Accounting for inventory

Each country has its own rules about accounting for inventory that fit with their financial-reporting rules.

For example, organizations in the U.S. define inventory to suit their needs within US Generally Accepted Accounting Practices (GAAP), the rules defined by the Financial Accounting Standards Board (FASB) (and others) and enforced by the U.S. Securities and Exchange Commission (SEC) and other federal and state agencies. Other countries often have similar arrangements but with their own GAAP and national agencies instead.

It is intentional that financial accounting uses standards that allow the public to compare firms' performance, cost accounting functions internally to an organization and potentially with much greater flexibility. A discussion of inventory from standard and Theory of Constraints-based (throughput) cost accounting perspective follows some examples and a discussion of inventory from a financial accounting perspective.

The internal costing/valuation of inventory can be complex. Whereas in the past most enterprises ran simple, one-process factories, such enterprises are quite probably in the minority in the 21st century. Where 'one process' factories exist, there is a market for the goods created, which establishes an independent market value for the good. Today, with multistage-process companies, there is much inventory that would once have been finished goods which is now held as 'work in process' (WIP). This needs to be valued in the accounts, but the valuation is a management decision since there is no market for the partially finished product. This somewhat arbitrary 'valuation' of WIP combined with the allocation of overheads to it has led to some unintended and undesirable results.

Financial accounting

An organization's inventory can appear a mixed blessing, since it counts as an asset on the balance sheet, but it also ties up money that could serve for other purposes and requires additional expense for its protection. Inventory may also cause significant tax expenses, depending on particular countries' laws regarding depreciation of inventory, as in Thor Power Tool Company v. Commissioner.

Inventory appears as a current asset on an organization's balance sheet because the organization can, in principle, turn it into cash by selling it. Some organizations hold larger inventories than their operations require in order to inflate their apparent asset value and their perceived profitability.

In addition to the money tied up by acquiring inventory, inventory also brings associated costs for warehouse space, for utilities, and for insurance to cover staff to handle and protect it from fire and other disasters, obsolescence, shrinkage (theft and errors), and others. Such holding costs can mount up: between a third and a half of its acquisition value per year.

Businesses that stock too little inventory cannot take advantage of large orders from customers if they cannot deliver. The conflicting objectives of cost control and customer service often pit an organization's financial and operating managers against its sales and marketing departments. Salespeople, in particular, often receive sales-commission payments, so unavailable goods may reduce their potential personal income. This conflict can be minimised by reducing production time to being near or less than customers' expected delivery time. This effort, known as "Lean production" will significantly reduce working capital tied up in inventory and reduce manufacturing costs (See the Toyota Production System).

Role of inventory accounting

By helping the organization to make better decisions, the accountants can help the public sector to change in a very positive way that delivers increased value for the taxpayer’s investment. It can also help to incentivise progress and to ensure that reforms are sustainable and effective in the long term, by ensuring that success is

appropriately recognized in both the formal and informal reward systems of the organization.

To say that they have a key role to play is an understatement. Finance is connected to most, if not all, of the key business processes within the organization. It should be steering the stewardship and accountability systems that ensure that the organization is conducting its business in an appropriate, ethical manner. It is critical that these foundations are firmly laid. So often they are the litmus test by which public confidence in the institution is either won or lost.

Finance should also be providing the information, analysis and advice to enable the organizations' service managers to operate effectively. This goes beyond the traditional preoccupation with budgets – how much have we spent so far, how much do we have left to spend? It is about helping the organization to better understand its own performance. That means making the connections and understanding the relationships between given inputs – the resources brought to bear – and the outputs and outcomes that they achieve. It is also about understanding and actively managing risks within the organization and its activities.

FIFO vs. LIFO accounting

When a merchant buys goods from inventory, the value of the inventory account is reduced by the cost of goods sold (COGS). This is simple where the CoG has not varied across those held in stock; but where it has, then an agreed method must be derived to evaluate it. For commodity items that one cannot track individually, accountants must choose a method that fits the nature of the sale. Two popular methods that normally exist are: FIFO and LIFO accounting (first in - first out, last in - first out). FIFO regards the first unit that arrived in inventory as the first one sold. LIFO considers the last unit arriving in inventory as the first one sold. Which method an accountant selects can have a significant effect on net income and book value and, in turn, on taxation. Using LIFO accounting for inventory, a company generally reports lower net income and lower book value, due to the effects of inflation. This generally results in lower taxation. Due to LIFO's potential to skew inventory value, UK GAAP and IAS have effectively banned LIFO inventory accounting.

Standard cost accounting

Standard cost accounting uses ratios called efficiencies that compare the labour and materials actually used to produce a good with those that the same goods would have required under "standard" conditions. As long as similar actual and standard conditions obtain, few problems arise. Unfortunately, standard cost accounting methods developed about 100 years ago, when labor comprised the most important cost in manufactured goods. Standard methods continue to emphasize labor efficiency even though that resource now constitutes a (very) small part of cost in most cases.

Standard cost accounting can hurt managers, workers, and firms in several ways. For example, a policy decision to increase inventory can harm a manufacturing manager's performance evaluation. Increasing inventory requires increased production, which means that processes must operate at higher rates. When (not if) something goes wrong, the process takes longer and uses more than the standard labor time. The manager appears responsible for the excess, even though s/he has no control over the production requirement or the problem.

In adverse economic times, firms use the same efficiencies to downsize, rightsize, or otherwise reduce their labor force. Workers laid off under those circumstances have even less control over excess inventory and cost efficiencies than their managers.

Many financial and cost accountants have agreed for many years on the desirability of replacing standard cost accounting. They have not, however, found a successor.

Theory of constraints cost accounting

Eliyahu M. Goldratt developed the Theory of Constraints in part to address the cost-accounting problems in what he calls the "cost world." He offers a substitute, called

throughput accounting, that uses throughput (money for goods sold to customers) in place of output (goods produced that may sell or may boost inventory) and considers labor as a fixed rather than as a variable cost. He defines inventory simply as everything the organization owns that it plans to sell, including buildings, machinery, and many other things in addition to the categories listed here. Throughput accounting recognizes only one class of variable costs: the truly variable costs, like materials and components, which vary directly with the quantity produced.

Finished goods inventories remain balance-sheet assets, but labor-efficiency ratios no longer evaluate managers and workers. Instead of an incentive to reduce labor cost, throughput accounting focuses attention on the relationships between throughput (revenue or income) on one hand and controllable operating expenses and changes in inventory on the other. Those relationships direct attention to the constraints or bottlenecks that prevent the system from producing more throughput, rather than to people - who have little or no control over their situations.

National accounts

Inventories also play an important role in national accounts and the analysis of the business cycle. Some short-term macroeconomic fluctuations are attributed to the inventory cycle.

Distressed inventory

Also known as distressed or expired stock, distressed inventory is inventory whose potential to be sold at a normal cost has passed or will soon pass. In certain industries it could also mean that the stock is or will soon be impossible to sell. Examples of distressed inventory include products that have reached their expiry date, or have reached a date in advance of expiry at which the planned market will no longer purchase them (e.g. 3 months left to expiry), clothing that is defective or out of fashion, and old newspapers or magazines. It also includes computer or consumer-electronic equipment that is obsolete or discontinued and whose manufacturer is unable to support it

Inventory credit.

Inventory credit refers to the use of stock, or inventory, as collateral to raise finance. Where banks may be reluctant to accept traditional collateral, for example in developing countries where land title may be lacking, inventory credit is a potentially important way of overcoming financing constraints. This is not a new concept; archaeological evidence suggests that it was practiced in Ancient Rome. Obtaining finance against stocks of a wide range of products held in a bonded warehouse is common in much of the world. It is, for example, used with Parmesan cheese in Italy.Inventory credit on the basis of stored agricultural produce is widely used in Latin American countries and in some Asian countries. A precondition for such credit is that banks must be confident that the stored product will be available if they need to call on the collateral; this implies the existence of a reliable network of certified warehouses. Banks also face problems in valuing the inventory. The possibility of sudden falls in commodity prices means that they are usually reluctant to lend more than about 60% of the value of the inventory at the time of the loan.

Stock Control

The materials purchased by a concern may be classified as stock items which are taken into store and held until required, or as direct deliveries to the point of consumption. The control of those materials which are stock items is known as stock control.

The function of stock control is to obtain the maximum stock turnover consistent with the maintenance of sufficient stocks to meet all requirements. Stock turnover is the ratio which the cost of the materials used per annum bears to the average stock of raw materials. Discussions with regard to the quantity of materials stocked are reached after may consideration such as:

- The availability of capital for the provisions of stocks
- The storage space available
- The cost of storage
- Risk of loss due to fall in prices, deterioration, obsolescence, theft etc.

- Economic order quantities
- Delivery delays

For effective control of materials, it is important to decide upon different levels of materials. These levels are maximum limit or level, minimum limit or level and re-order level or ordering point or ordering level. Maximum, minimum and re-order levels are not static. They must be varied to suit the changing circumstances. Thus, alteration will take place if the usage of certain materials is increased or decreased. If the re-order period changes, or if, in the light of a review of capital available, it is decided that the overall inventory must be increased or decreased.

The major objectives of accounting for inventories are the matching of appropriate costs against revenues in order to arrive at the proper determination of periodic income, and the accurate representation of inventories on hand as assets of the reporting entity as of the date of the statement of financial position. Under any system of accounting, financial statements should be fully articulated (i.e., the statement of financial position and income statement are linked together mechanically).

And, to achieve the goal, accounts would need to record every single event—related to inventory, in this case—along the inventory cycle: raw material received, raw material moved to the line of production, finished goods moved to the finished good warehouse, obsolescence, stolen, and finished goods sold out or moved to other warehouses.

So here we go with journal entries…

Raw Material Inventory

1. Receiving the raw material – When any raw material is received means the raw material inventory is increased too. So, after counting and matching the quantity with the purchase order, you would record "Receipt of Goods" entries, as follows:

[Debit]. Inventory—Raw Materials = xxx
[Credit]. Accounts Payable = xxx

(Note: xxx is amount of actual quantity received. You can replace the 'accounts payable' with 'cash' if it is a cash transaction).

2. Moving raw materials to the line of production – When any raw materials going out of the warehouse—usually to the line of production, means the raw material is decreased. On the other hand, it shifted the raw materials to a new form of inventory which will be located in the line of production, called "WIP—Work In Process Inventory". So for this event, you would make the following record:

[Debit]. WIP—Work In Process Inventory = xxx
[Credit]. Inventory—Raw Materials = xxx

3. Adjusting raw material inventory – Some materials maybe damaged/obsolete, some maybe loss (stolen) time-by-time. Such risks are inevitable. Referring to the conservatism principle, you would need to make a reserve for such risks. Reserving in this case means you are charging cost in advance. So to prepare it, you would need to make reserve account, or you may want to create some for more details report and easier way to drill down in the future. Here are journal entries you would need to make:

For obsolete raw materials:
[Debit]. Cost of Goods Sold = xxx
[Credit]. Obsolescence Raw Material Reserve = xxx

For stolen raw materials:
[Debit]. Cost of Goods Sold = xxx
[Credit]. Stolen Raw Material Reserve = xxx

OR; create a single reserve:
[Debit]. Cost of Goods Sold = xxx
[Credit]. Raw Material Reserve = xxx

So, when actual obsolescence or loss (because of it is stolen) is occurred, you would make an adjustment entry as follows:

[Debit]. Raw Material Reserve = xxx
[Credit]. Raw Material Inventory = xxx

The same case could be happened to the WIP—Work In Process Inventory. And, the same steps are required to reflect those in the book, except that you need to replace the "Raw Material" with "WIP—Work In Process".

In any manufacturing process, wastes are inevitable. And, you would need to reflect the loss in the book by making the following journal entry in the current period:

[Debit]. Cost of goods sold = xxx
[Credit]. WIP—Work In Process Inventory = xxx

Finished Goods Inventory

1. Finished Goods Inventory Received - Finished goods inventories could be come from inside the company—line of production (when it is a manufacturing company), or from outside of the company—finished good purchased (when it is a retail/trading company). Wherever it comes from, finished goods inventory is increased and need to be reflected in the book. So, you would make the following entries:

Finished Goods come from line of production:

[Debit]. Finished Goods Inventory = xxx
[Credit]. WIP—Work In Process Inventory = xxx

Finished Goods come from outside of the company (purchased finished goods):

[Debit]. Finished Goods Inventory = xxx
[Credit]. Accounts Payable = xxx

(Note: xxx is amount of actual quantity received. You can replace the 'accounts payable' with 'cash' if it is a cash transaction).

2. Finished Goods Shipped Out – There are two possibilities of reason for shipping out the finished goods inventory: sold or moved to other warehouse location. Either it is shipped out to customers (sold) or moved to other warehouse location, it will definitely decrease the finished goods inventory and should be reflected on the book. So, here are journal entries you need to make:

Finished good sold:

[Debit]. Accounts Receivable = xxxx
[Credit]. Sales = xxx
[Credit]. Sales Tax Payable = x
(Note: This is to record the sales and sales tax. 'xxxx' is amount of the sales plus sales tax, 'xxx' is amount of the sales only, 'x' is amount of the sales tax)

AND;

[Debit]. Cost of Goods Sold = xxx
[Credit]. Finished Goods Inventory = xxx

(Note: This is to record the finished goods decrease. 'xxx is amount of the cost)

3. Finished Goods Inventory Adjustment – Finished goods inventory could become obsolete or stolen, and to anticipate the risk, you would need to reserve it. To do that, you would need to make the following entry:

[Debit]. Cost of Goods Sold = xxx
[Credit]. Finished Goods Reserve = xxx

So, when actual obsolescence or loss (because of it is stolen) is occurred, you would make an adjustment entry as follows:

[Debit]. Finished Goods Reserve = xxx
[Credit]. Finished Goods Inventory = xxx

As what you do on the raw material inventory, you may want to separate the 'obsolescence' with 'stolen' too for easier control and analyses in the future time

Check your progress :

True or False

Q1. Inventory management system is example of Accounting application that helps in planning and control functions of management.

Q2. The major objectives of accounting for inventories are the matching of appropriate costs against revenues in order to arrive at the proper determination of periodic income, and the accurate representation of inventories on hand as assets of the reporting entity as of the date of the statement of financial position.

Q3. Goods sold F.O.B. shipping point become property of the purchaser once shipped by the seller.

3.3 STORES TRANSACTION

(RECEIPTS, ISSUES & ADJUSTMENTS)

An order acceptance procedure, which includes an accept, review, reject process. There should be no doubt about which orders can be filled immediately and which should be reviewed. You could include some or all of the following:

- establish the criteria for which orders you will accept - for example, orders below £15 where both Address Verification and Card Security Code match
- establish the criteria for which orders should be reviewed – for example, all orders over £75, and all orders with either Address Verification or Card Security Code mismatch
- establish the criteria for which orders should be rejected – for example, all orders over £75 where both Address Verification and Card Security Code mismatch and the delivery address differs from the billing address.

Capture delay can be used to provide additional time for you to check orders before capturing the payment.

Order Acceptance Notice

Attention	Date

We are submitting this notice to verify our acceptance of the following goods:

Date	P.O. $	Invoice #	Packing Slip #

We find these goods to be acceptable, in good condition, free of damage or defect, and in accordance to our order.
We accept this shipment of goods.
Thank you,

Sincerely,

_____
(Signature)

_____
(Title)

Seller's Confirmation of Receipt & Acceptance of Order

To:
_____
_____
_____

Date: _____, 20__, No._____

We hereby confirm your order for the following goods:

Item: _____
Terms of Shipment: _____
Delivery Date: _____
Delivery Point: _____
Terms of Payment: _____

All prices herein are exclusive of sales, use, and other excise taxes. All such taxes, and any other taxes measured, in whole or part, by gross receipts applicable to this transaction are to be borne by the purchaser. All export, import and other duties, tariffs and customs shall be paid by the purchaser. If exemption is claimed by the purchaser from any of the foregoing, the purchaser shall furnish satisfactory proof of such tax exemption.

_____
SELLER

Date: _____

Seller's Confirmation of Receipt & Acceptance of Order Review List

This review list is provided to inform you about this document in question and assist you in its preparation. This document can be modified to reflect nonconforming elements about your customer's order, unacceptable payment terms, and the like. This is a well care document designed to let your customers know you have received their order and how you plan to proceed. It also serves to cut down on incoming calls, faxes, emails, and letters because you have acted promptly in letting them know what's what.

1. Make multiple copies. If possible, fax one to the customer. Keep a copy in the transaction file.

3.4 BEED TIME

This method of inventory numbering my finished pieces is to use my three initials followed by a sequential number. The galleries here use the artist's initials in

this way, so it matches their method and relabeling is avoided. So the 1429th piece I have made would be labled IKE1429.

This has an additional feature of letting me know roughly how many pieces I have made over the years.

I also scan each piece for a spreadsheet. The categories are: IKE#, retail price, jpg, description (including materials), 60% of retail (galleries here keep 40%), date/location of piece, contact info for location, date created.

I print this in landscape mode, with 5 items per page. When a gallery chooses items, they are already labled. So I write down which item numbers they have chosen, go home, make a cut/paste sheet for them of all items chosen (updating my spreadsheets at the same time), and deliver the spreadsheet printout to the gallery the next day.

This allows them to have an 'ingredients' list available, a picture (tho small), a price (in case the tag gets removed), and a place to notate the buyer.

I have started to transfer all of this to a database to ease searching, but have made too little progress on this. I'd rather be making jewelry.

3.5 BOM PROCESSING WITH PRODUCT CONFIGURATION

As the product life cycle shortens, companies focus more on the Time-to-Market strategy to release Customer-oriented products in a timely manner. This study proposes the Enterprise-BOM (Bill of Materials).
structure which supports the integrated management of product specifications and BOM data in regard to the development, production and sales of products in the automotive industry, and reviews the feasibility of field applications thereof. The proposed Enterprise-BOM may produce unified product data and enterprise-wide sharing of this data. Ultimately, the Enterprise-BOM enables the innovation of communication and information
Sharing among processes, and accelerates business.

Keywords: Product Configuration Management, BOM, Enterprise-wide Data Integration, Enterprise BOM.

Product configuration Management:

Product specifications in the automotive industry are classified into customer specifications,design specifications, production specifications, service specifications, etc. The customer specification refers to the clearly defined customer needs. The design specification is a design feasibility review certificate regarding the customer specification.The design specifications includes parts lists, plans, assembly drawings, 3D CAD models, lists of tools, bill of material, weight,production recommendations, quality standards,and user manuals. As a result, a design BOM is created. The production specifications is the specifications where the parts to be actually produced are selected or modified to be suitable for the production anvironment via reference to the design specifications.

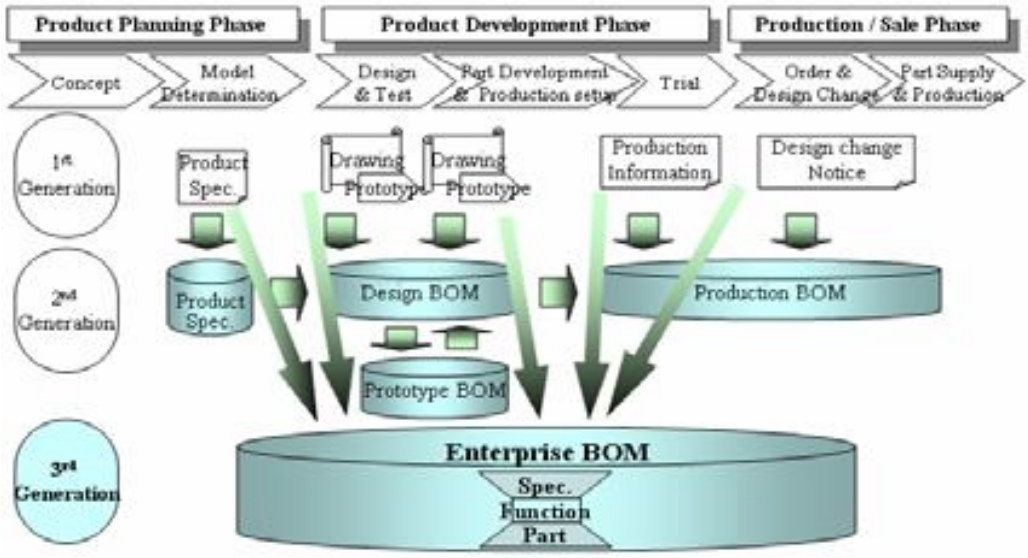


Fig.3.5 **Development Direction of an Automotive BOM**

Check your progress :
True or False

1. All export, import and other duties, tariffs and customs shall be paid by the purchaser.

2. Beed Time method of inventory numbering my finished pieces is to use my three initials followed by a sequential number.

3. BOM Stands for Bill of Materials.

3.6 INVENTORY LEVELS EOQ, ABC ANALYSIS

Economic Order Quantity (EOQ):

Definition and Explanation:

Economic order quantity (EOQ) is that size of the order which gives maximum economy in purchasing any material and ultimately contributes towards maintaining the materials at the optimum level and at the minimum cost.

In other words, the economic order quantity (EOQ) is the amount of inventory to be ordered at one time for purposes of minimizing annual inventory cost.

The quantity to order at a given time must be determined by balancing two factors: (1) the cost of possessing or carrying materials and (2) the cost of acquiring or ordering materials. Purchasing larger quantities may decrease the unit cost of acquisition, but this saving may not be more than offset by the cost of carrying materials in stock for a longer period of time.

The carrying cost of inventory may include:

- Interest on investment of working capital
- Property tax and insurance
- Storage cost, handling cost
- Deterioration and shrinkage of stocks
- Obsolescence of stocks.

Formula of Economic Order Quantity (EOQ):

The different formulas have been developed for the calculation of economic order quantity (EOQ). The following formula is usually used for the calculation of EOQ.

$$\sqrt{\frac{2 * A * Cp}{Ch}}$$

- A = Demand for the year
- Cp = Cost to place a single order
- Ch = Cost to hold one unit inventory for a year
- * = ×

Example:

Pam runs a mail-order business for gym equipment. Annual demand for the TricoFlexers is 16,000. The annual holding cost per unit is $2.50 and the cost to place an order is $50.

Calculate economic order quantity (EOQ)

Calculation:

$$\sqrt{\frac{2 * 16{,}000 * \$50}{\$2.50}} = 800 \text{ units per order}$$

Underlying Assumptions of Economic Order Quantity:

1. The ordering cost is constant.
2. The rate of demand is constant
3. The lead time is fixed
4. The purchase price of the item is constant i.e no discount is available
5. The replenishment is made instantaneously, the whole batch is delivered at once.

EOQ Model :

Annual setup cost =D/Q

Annual holding cost = Q/H

Q = Number of pieces per order

Q* = Optimal number of pieces per order (EOQ)

D = Annual demand in units for the Inventory item

S = Setup or ordering cost for each order

H = Holding or carrying cost per unit per year

Annual holding cost =(Average inventory level) x (Holding cost per unit per year)

=Order quantity/2 (Holding cost per unit per year)

= [Q/2] (H)

ABC analysis

It is a business term used to define an inventory categorization technique often used in materials management. It is also known as Selective Inventory Control.

ABC analysis provides a mechanism for identifying items that will have a significant impact on overall inventory cost, [1] while also providing a mechanism for identifying different categories of stock that will require different management and controls.[2]

When carrying out an ABC analysis, inventory items are valued (item cost multiplied by

quantity issued/consumed in period) with the results then ranked. The results are then grouped typically into three bands[3]. These bands are called ABC codes.

[edit] ABC codes

1. "A class" inventory will typically contain items that account for 80% of total value, or 20% of total items.
2. "B class" inventory will have around 15% of total value, or 30% of total items.
3. "C class" inventory will account for the remaining 5%, or 50% of total items.

ABC Analysis is similar to the Pareto principle in that the "A class" group will typically account for a large proportion of the overall value but a small percentage of the overall volume of inventory.[4]

Another recommended breakdown of ABC classes[5]:

1. "A" approximately 10% of items or 66.6% of value
2. "B" approximately 20% of items or 23.3% of value
3. "C" approximately 70% of items or 10.1% of value

3.7 INVENTORY CONTROL REPORTS

a. Inventory criteria. Dining facility inventory levels will be maintained using the following criteria:
• (1) The total dollar value of the monthly inventory (perishable and semi-perishable) will not exceed the total dollar value of dining facility earnings for a 6-day average period. The dollar value of earnings will be determined by using the previous months average daily earnings multiplied by six. If the dining facility was closed for an extended period, use the average daily earnings for last month that the facility was open.
• (2) The FPM will authorize in writing all adjustments to the inventory level policy through The Army Center of Excellence, Subsistence.

Do it over a period of time.
1. Don't start running out of food.

2. Must first establish good menu planning, ordering and inventory control procedures (Manage your way out of it!).

3. First Step: Establish a Cycle Menu
4. The Menu is the central management document around which the whole food service operation revolves.

5. A Cycle Menu is repeated after a set amount of time.

6. i.e. Accounting Period – 1 Month.
Date all food items with date received.

• Verify orders upon receipt with order you generated from AFMIS for accuracy.

• Check ration storage areas on a routine basis to determine if rations are being used in a timely manner.
1. SPV ordering sizes too big.

2. Be careful about reducing Prime Vendor Package sizes ($$$=Distribution Fees).

3. Utilize dining facility transfers for case pack items when possible.
Use the AFMIS transaction register report to track food items over a menu cycle or month's time.
1. Start tracking next month.

2. Use:

3. Monthly Inventories.

4. Weekly inventories.

5. SPV Receipts.

6. Kitchen Requisitions.

Prior to ordering rations, check:

– BOH – Stockage level report in AFMIS (currently in the DFAC), establish Par Stock Levels.

Physically check items of uncertainty.

– Due-ins - (foods already ordered and scheduled to be delivered).

– Projected Use – food items programmed for use on the production schedules for that period.

• All of the items mentioned above are on the AFMIS Order Worksheet Report and Stockage Level Report.

• Review orders before they are sent; check the units of issue and quantities.

Ordering & Inventory Control

Item	On-Hand	Due-In	Projected Use	Projected On-Hand	Order
Bacon	90 lb	40 lb	60 lb	70 lb	0
French Fries	250 lb	0	300 lb	-50 lb	50 lb
W Milk, Bulk	2 cont	2 cont	3 cont	1 cont	1 cont

Basic Formula = On-Hand plus Due-In minus Projected Use equals Projected On-Hand. If Projected On-Hand is a negative number, you have to order this item in the quantity stated.

Item	On-Hand Start date	Issue Date Item Cost	Projected Use	Projected liquidation date	Inventory Decrease amount
Cranberry Sauce	40 /#2.5 cns 01 May 07	15 Nov 06 $2.50	10cns /week	01 June 07	$100.00
Chocolate Pudding	24 /#10 cns 01 May 07	23 Jan o7 $6.70	6 cns /week	01 June 07	$160.80

Inventory Control

• Review stockage level report against production schedules for :

– Actual use vs. Projected use.

– Were your projections correct based on portions prepared?

– Adjust portions to prepare on the production schedules to the historical actual portions used.

• Conduct and track weekly/monthly inventories

– Field residuals- do not put in inventory, incorporate into menus quickly.

– Case pack meats not used completely for one meal not programmed for use in menus during the same week.

– Slow or non moving items i.e. cranberry sauce, sauerkraut incorporate into menus.

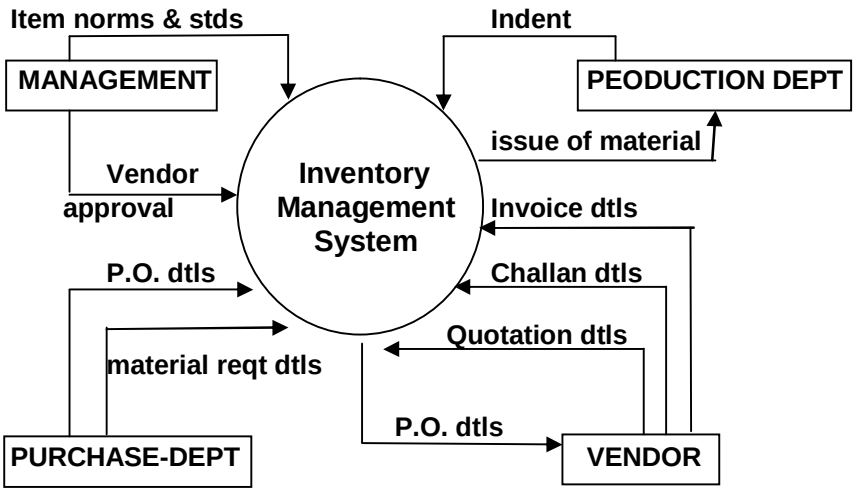
Check your progress :

Fill in the blanks :

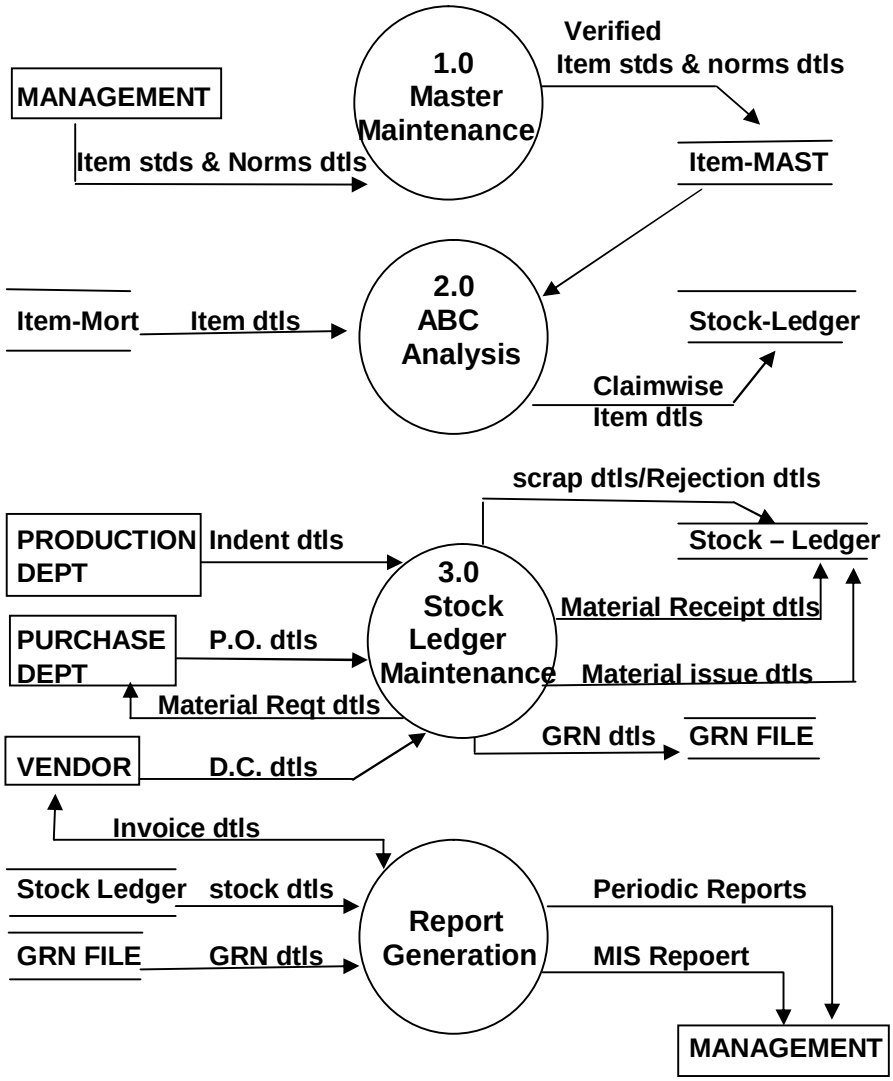
Q1. ……Analysis is similar to the Pareto principle

Q2. EOQ Stands for ……..

CLD: Context Level Diagram of Inventory Management System.



DFD: Data flow Diagram for Inventory Management System:



Source : *www.principlesofaccounting.com(Link)*

3.8 CHECK YOUR PROGRESS - ANSWERS

3.1, 3.2:	Q1. False	Q2. True	Q3. True
3.3, 3.4:	Q1. True	Q2. True	Q3. True
3.6, 3.7:	Q1. ABC	Q2. Economic Order Quantity	

3.9 QUESTIONS FOR SELF - STUDY

1. List out the categories of Inventory and explain in detail.
2. Write a short note on stores transacation and Beed time.
3. Explain the term 'ABC Analysis'.
4. Write a short note on LIFO and FIFO Accounting.

3.10 SUGGESTED READINGS

Production and Operations Management - *Mayer*
Modern Production Management - *R V Badi*

❁❁❁

NOTES

Chapter 4

Hotel Management System

4.0 Objectives
4.1 Introduction
4.2 Enquiry & Booking
4.3 Room & Services details
4.4 Check in, Stay & Check out of Customer
4.5 Billing
4.6 Summary
4.7 Check your Progress – *Answers*
4.8 Questions for Self – Study
4.9 Suggested Readings

4.0 OBJECTIVES

After studying this chapter you should be able be:

1. To study Hotel Management System.
2. Enquiry & Booking, Room & Services details.
3. Check in, Stay & Check out of Customer & Billing System

4.1 INTRODUCTION

A hotel manager or hotelier is a person who holds a management occupation within a hotel, motel, or resort establishment. Management titles and duties vary by company. In some hotels the title hotel manager or hotelier may solely be referred to the General Manager of the hotel. Small hotels may have a small management team consisting of only two or three managers while larger Hotels may often have a large management team consisting of various departments and divisions. Hotel management demands a friendly, helpful, outgoing personality, ability to take responsibility and to work well with others.

Interest in people of all backgrounds, creativity, flair, tact, a methodical approach, organizing and administrative ability, a certain amount of manual dexterity and visual imagination, physical stamina and good health to withstand irregular hours of work are equally important traits. A temperament which remains unruffled in inevitable crises, a good memory for faces (as regular guests appreciate recognition), considerable self confidence,

An eye for detail, practicality at hotels, check-in is normally required in order to obtain a room key and provide a credit card guarantee to cover potential costs such as room service for the duration of the stay.

The hotel's check-in time indicates the time from which the hotel starts charging for the day. If anybody wants to occupy the hotel room before the hotel's check-in time, the hotel charges for one additional day and considers it as previous day stay (as compared to occupying the hotel room after the check-in time). Most hotels, however, can accommodate a little buffer time request (typically 30-60 min) by the customers, without any additional charge, if one wishes to take the room before the check-in time. For the most cost-effective usage of hotel room occupancy, the customer should try to reach at about hotel's check-in time and leave or hand over the hotel room at about the hotel's check-out time, but it may not be always practical because the customer's arrival and departure time of flights may not align with the hotel check-in and check-out time and for other reasons.

The hotel industry promises a bright future for anyone who wishes to take up a career in this segment. The students opting for hotel management courses must have an affinity towards socializing and understanding the needs of the people. As Hotels falls

under service industry, the motive of hotel management course is to provide the best services to the people.

4.2 ENQUIRY & BOOKING

The hotel industry promises a bright future for anyone who wishes to take up a career in this segment. The students opting for hotel management courses must have an affinity towards socializing and understanding the needs of the people. As Hotels falls under service industry, the motive of hotel management course is to provide the best services to the people.

Booking Engine :

Website bookings -

The number of people choosing to book directly via hotel websites has increased dramatically over the last few years and this trend is set to continue. Your website is one of your most important sales tools and it is therefore imperative that your booking engine reflects the high standards of your website as well as your property. Unlike most reservation platforms, evolution offers a range of booking engine solutions to suit every hotelier, from individual hotels to large hotel groups.

Evolution offers tailor-made booking engine solutions (eBE) that integrate seamlessly with your website and provides transient visitors with the ability to make real-time bookings.

Web-only bookings take away the cost of traditional, more expensive channels and allow for far greater flexibility to manage demand and yield. This makes online reservations the most profitable and valuable option for all hotels.

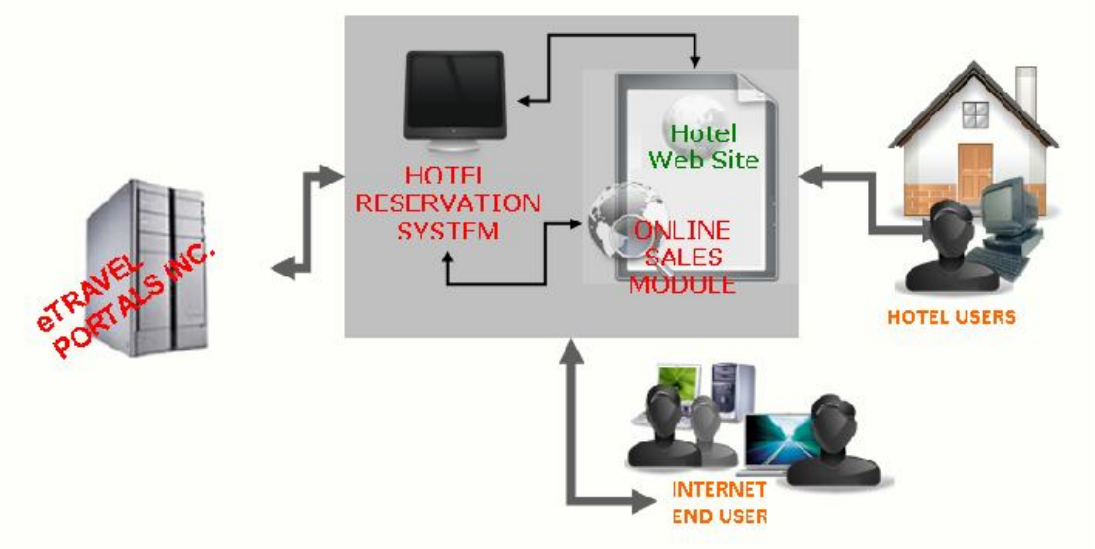
Our range of booking engines:

To make the most of the opportunities provided by the internet, hotels need cutting-edge technology. Evolution gives hotels the competitive advantage they need with software that is flexible, comprehensive and, most importantly, easy and fun to use.

Evolution's booking engine solutions have advanced functionality for the challenges faced by hotels today, making it easy to sell a unique mixture of packages, promotional offers and ancillaries online.

Evolution offers hotel chains a powerful group booking engine and independent hotels a unique one screen booking engine solution that ensures a higher look-to-book ratio to maximize overall revenue.

The evolution booking engine (eBE) is revolutionary in design, functionality and usability. The most characteristics side between eTravels Portals Hotel Management System and other system are that hotels are provided electronic system support all they need to support their operational process by eTravel Portals hotel Management System. In other words eTravel Ports Hotel Management System is wed based system that's why there is a big opportunities for hotels during their operational process to save their hardware/license, basic facilities and maintainance / Support cost. Hotel Reservation System includes back office applications too. In that applications can provide for hotels their own operations with site online sales and reservation operational support. It works integrated with online Sales Module.



Tourism industrial information experience (knowledge) with technology knowhow and support will be provided by eTravel Portals. Therefore system provides for hotels minimum cost in connection with technical investment, have own software and support and internet services. Also Hotel Reservation System provides online sale channels

via internet which are provided an opportunity for hotels to hold a place in international markets. In other words, hotels can take an opportunity more effective investments in connection with marketing and sale.

Between hotels room and bed types could be different; system has ability to describe different room and bed types by flexible and parametric defined values.

Price description (contract) for room types in time interval and this prices can be changed very easily with in connection room number will able to sell online via internet is managed by user provides. You can show your actions and last minute price (deal) in internet media easily. When hotel occupancy rate is high, online system simultaneously

Shows that hotel is fully booked and taking reservation could be stopped. According to occupancy rate within season, special prices could be set. You could book a part of your

Hotel low price before opening season (early booking actions) and/or when occupancy rate increased, you can also increase room rate. You can manage and follow up early

Reservation, quota and changes prices under quota very easily. In this way you can access

Much occupancy rate and the highest profitability rate in your current bed capacity.

Check your progress:

Solve the Fill in the blanks

Q1. A …… is a person who holds a management occupation within a hotel, motel, or resort establishment.

Q2. The …… is revolutionary in design, functionality and usability.

4.3 ROOM & SERVICES DETAILS

Room Cleaning and House Maintenance

Use HansaWorld's workflow capabilities to keep track of whether a room needs cleaning or is ready for check-in. Rooms can be brought in and out of service, and routine or adhoc maintenance tasks can be allocated to house staff, either on general to-do lists or with specific dates in their calendar. The housekeeping report in HansaWorld's hotel software gives an overview of the rooms to be prepared including sheet changes and any special instructions from the Front Desk. Interfaces are available to switchboards and web television so that cleaners can update the room status.

Today in this Free Hotel Management Training SOP we will learn the skills and knowledge required to provide Room Service in commercial accommodation establishment like hotel or resorts.

As you know when food and beverage items are served to guests in his or her room is Called Room Service. For my members in Membership Club I will provide 5 to 10 Posts on Room Service so that my members can learn everything. But for my regular readers here I would like to share some basic procedure for Hotel Room Service.

1. Take and Process Room Service Orders:

- The telephone is answered promptly and courteously accordance with enterprise procedures and customer service standards.
- The customer's name is checked and used in the interaction.
- Details of orders are clarified, repeated and checked with the guest.
- Suggestive selling techniques are used.
- Approximate time for delivery is advised to the customer.
- Orders are accurately recorded and the information is checked.
- Door knob dockets are correctly interpreted.
- Where necessary, orders are promptly transferred to the appropriate location for preparation.

2. Set Up Trays and Trolleys:

- Food and beverage items are correctly prepared for service periods.
- General room service equipment is prepared for use.
- Trays and trolleys are set up in accordance with enterprise standards for a range of meals including:
    - Breakfast
    - Lunch
    - Dinner
    - Complimentaries
    - Special requests
- Correct and sufficient service equipment is selected and checked for cleanliness, and damage.
- Trays and trolleys are set up so that they are balanced, safe and attractively presented.
- All food items and beverages are collected promptly and in the right order.
- Orders and trays are checked before leaving the kitchen and before entering the room.

3. Present Room Service Meals and Beverages:

- Rooms are approached and guests greeted in accordance with enterprise service standards.
- Customers are consulted about where trays or trolleys should be placed in room and advised of potential hazards.
- Trays and trolleys are placed safely and conveniently.
- Furniture is correctly positioned where required.
- Meals and beverages are correctly served and placed if required by the customer and in accordance with enterprise procedures.

4. Present Room Service Accounts:

- The customer’s account is checked for accuracy and presented in accordance with enterprise procedures.
- Cash payments received are presented to the cashier.
- Charge accounts are presented to the guests for signing and charged to the account.

5. Clean Room Service Area:

- Floors are checked and promptly cleared of used room service trolleys and trays.
- trays and trolleys are returned to the room service area and dismantled / cleaned in accordance with enterprise procedures.
- Equipment and food and beverage items are re-stocked in accordance with enterprise procedures.

Incoming search terms for this article:

- Room service procedures
- Room service procedure
- Hotel sop
- provide room service
- Room service sop
- Hotel room service standards
- HOTEL PROCEDURES
- Room service training
- Room service equipment
- Room service rules and regulations
- Room service checklist
- taking room service order
- Room service management
- sop hotel
- Hotel room service procedure

4.4 CHECK IN, STAY & CHECK OUT OF CUSTOMER

The hotel's check-in time indicates the time from which the hotel starts charging for the day. If anybody wants to occupy the hotel room before the hotel's check-in time, the hotel charges for one additional day and considers it as previous day stay (as compared to occupying the hotel room after the check-in time). Most hotels, however, can accommodate a little buffer time request (typically 30-60 min) by the customers, without any additional charge, if one wishes to take the room before the check-in time. For the most cost-effective usage of hotel room occupancy, the customer should try to reach at about hotel's check-in time and leave or hand over the hotel room at about the hotel's check-out time, but it may not be always practical because the customer's arrival and departure time of flights may not align with the hotel check-in and check-out time and for other reasons. At hotels, check-in is normally required in order to obtain a room key and provide a credit card guarantee to cover potential costs such as room service for the duration of the stay. If anybody wants to occupy the hotel room before the hotel's check-in time, the hotel charges for one additional day and considers it as previous day stay (as compared to occupying the hotel room after the check-in time).

4.5 BILLING

Description *Billing System*

Manage private guests and corporate accounts. You can choose to bill immediately or on account. The system supports multiple folios for each reservation allowing bills to be split. It is possible to set up unlimited tariffs which can vary by:

- guest type
- corporate account
- agency
- season

- Day of the week.

Subject to appropriate security controls, specific staff can be given authorization to override any pricing, with full traceability.

- A Call Accounting System which is compatible. The call detail record (CDR) can be programmed after installation and multiple CDR formats can be used at the same time.

- Support both Serial interface and IP interface

- Support any call charge scheme and multiple call charge schemes (one per each telephone service provider).

- Export / import interface for CDR, connector for other application to retrieve telephone charge information for other purpose.

- 58 Tel.Bills for Pabx Billing feature (depend on your particular settings, the bills displayed on screen may be less). You can short, filter, layout in many different ways or customize the header/footer of the report. You can schedule to automatically make and send bill via email.

- 14 bills for Hotels, support Hotel via Room Rack (Room is row, Date is column). Check-in/Check-out/Move can be done very easy by using the mouse to select the cells on Room Rack. One bill for guest including the room sub-bill, telephone sub-bill and other kind of service sub-bill.

- Online context-sensitive help, document in detail.

- More than 800 enterprises and hotels are using. Free for customer has less than 18 Extensions or Hotel with less than 6 Rooms.

- Soft interface to integrate with other software is provided free of charge for valued dealer.

Accounts and Management Information

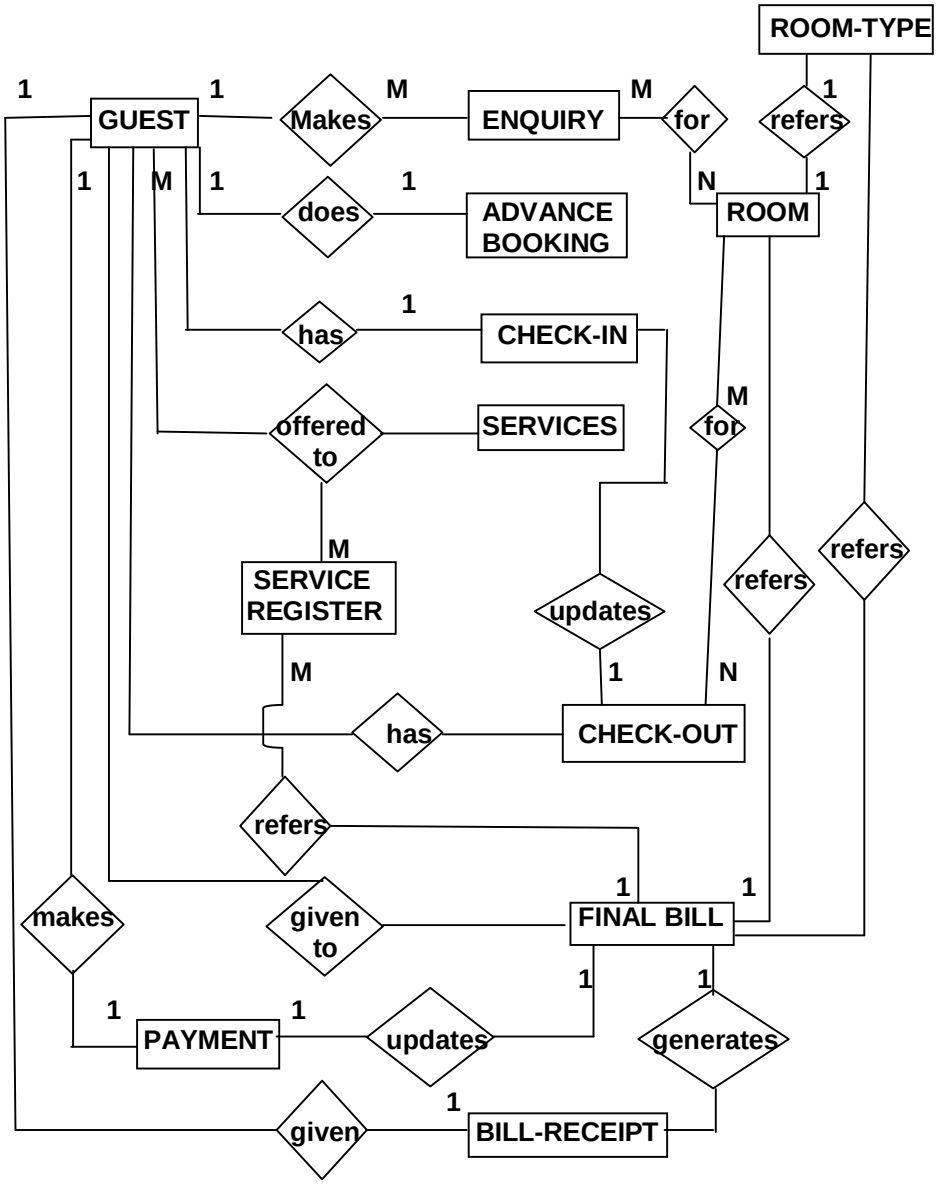
Using a fully integrated hotel reservation software package allows real time management reporting. As soon as a customer pays their bill the accounting system is updated. Detailed data analysis is possible. For example, you could look at your profitability by customer, booking source, customer type, board basis etc. Fast links allow you to view and further analyze reports in Excel.

Hotel and bar management reporting gives you access to information such as number of rooms let, spend per head and per time of day, occupancy levels, room rates, duration of stay.

Sales and Marketing and Customer- Relationship Management

HansaWorld's software for hotel management can be configured by each user to retain various elements of profiling data on guests and corporate customers. Marketing campaigns can then be quickly constructed against these profiles. For example, you may want to create a mailshot to all guests who purchased a bottle of Champaign and invite them to a wine tasting evening, or send guests who stayed in one of your hotels between certain dates an invitation to book a room for the same time the following year. Mailing lists can be built up and information sent by fax and email

ERD : Entity Relationship Diagram for Hotel Management System :



Check your progress:

True or False

Q1. Interfaces are available to switchboards and web television so that cleaners can update the room status.

Q2. Using a fully integrated hotel reservation software package allows real time management reporting.

Source : *www.docstoc.com (Link)*

4.6 CHECK YOUR PROGRESS - *ANSWERS*

4.1, 4.2
Q1. Hotel Manager
Q2. Evolution booking engine

4.3, 4.4, 4.5
Q1. True
Q2. True

4.7 QUESTIONS FOR SELF - STUDY

1. Write a brief note on Enquiry and booking in Hotel Management System.
2. Explain ‘Billing Cycle’ in Hotel Management System.
3. Explain the term evolution Booking Engine (eBE).
4. What does the term ‘Check-in’ and ‘Check-out’ means in Hotel Management System.?

4.8 SUGGESTED READINGS

Production and Operations Management - *Mayer*

Modern Production Management - *R V Badi*

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