INTRODUCTION

This self study guide has been created for use by:

Outside Client Reps
Inside Client Reps
Global Services Consultants
Global Services Practitioners
Marketing People

It is intended to give an overview of a wholesale distributors' business by providing a "walk through" of each of the key processes. Key functions, key roles and key metrics are presented for each of the key processes.

There are questions in each section that relate to each process. The same questions appear again in the appendix by job title/position. After you have read all of the information, refer back to those questions when you are making a call or a site visit.

If you get stuck, visit the Indian River Consulting Group web site at http://www.ircg.com/. Once there, you can download information or ask any one of our Practice Managers a question and we will be happy to reply.

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Executive Management

Executive Management has responsibility for the direction and results of the organization. Because of the size and structure of most distributors, executive management plays an active role in decision-making and short-term as well as long-term decisions, especially those involved with capital expenditures.

1.0 KEY FUNCTIONS

Business Strategy

The key role of executive management is to establish and execute company strategy. The single most important determinant of an organization's long-term success is an appropriate strategy that is well communicated. Every employee should be able to understand the strategy. If you asked a warehouse employee what the company's strategy is, he should be able to tell you. But chances are he won't, so ask first at the executive level. The roles of the employees should reflect that strategy. The compensation and incentive plans should also reflect the strategy. Everyone should be working toward the same goals.

Questions to ask:

How would you define your business strategy?

How do you communicate that strategy to your employees?

Competitive environment

Distributors add value by carrying an inventory of stock items that their target customers require. If you ask what their competitive advantages are, they will usually respond "quality products and excellent service." True competitive advantage can only come from unique differences that the customers value and are difficult for competitors to duplicate. Value is decided from the customer's perspective.

Questions to ask:

Why do your largest customers buy from you?

How would you define your company's competitive advantages?

What strategic initiatives are you considering?

What's new in the external environment on which you can capitalize?

Recent trends involving changes in supply chain practices have had an impact in every industry. Consolidations, buying groups, vendor managed inventory, integrated supply and e-commerce have affected the competitive environment of distribution. Margin and price pressures have become intense. Operating margins of 25-40% have been reduced to 20% in most and even as low as 9% in a few highly competitive industries.

Questions to ask:

What changes have had a significant impact on your business?

- **Manufacturers selling direct?**
- **Electronic commerce?**
- **Reducing duplicate inventories?**
- **Automating replenishment sales activities?**

What opportunities do you have for creating strategic alliances for integrated supply?

Of your total customers, what percentage is served via integrated supply contracts?

Distributors have to keep a watchful eye on their competition. Traditional competitors are not the only ones a distributor needs to monitor. Distribution is changing from a buy-hold-sell business to a sell-source-service business. Competition is coming from several new sources:

- Logistics providers
- Replenishment Rep Firms
- Portals, on-line auctions and ".com" companies

Questions to ask:

What keeps you from being the most efficient and effective source of supply for your products and services?

What competitive advantages do your competitors have?

What are competitors offering that your company does not?

What is changing with your competitors that could give you opportunities; i.e. a merger or acquisition?

What are your methods for gathering competitive intelligence?

1.2 KEY METRICS

Performance against organizational goals and objectives:

Revenue goals

Forecasting is critical to long-range planning and cash flow management.

Questions to ask:

How have sales to your top customers changed?

What volume do the top 10% of your customers represent?

How many of your customers represent 80% of your revenue? How has this changed over time?

Growth goals can be defined in terms of revenue or profit but the only one that ultimately matters is profit.

Questions to ask:

What new products and services will you offer to provide new growth opportunities? To existing customers? To new customers?

How are account retention and growth measured?

What percentage of your customers considers you to be their number one supplier?

Profit goals

ROI, or, Return on Investments, is the traditional profit measurement tool. Since inventory and receivables represent such a significant portion of the assets of a wholesale distributor, ROA, or, Return on Assets, is a better indicator for the distributor. To calculate ROA:

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

Activity Based costing allows the distributor to evaluate profitability by customer. Other profit measures include average line items per invoice, average revenue per invoice and the lifetime value of a customer.

Questions to ask:

How has your average sale per invoice increased or decreased over time?

What are the characteristics of your most profitable customers?

Customer service goals

Customer satisfaction is a strong indicator of future business expectations. Customer satisfaction is difficult to measure objectively. A lack of complaints is not an indication of satisfaction so much as an indication of a lack of an easy method of gathering or obtaining customer satisfaction information.

Questions to ask:

How do you record and monitor customer complaints?

What type of a customer complaint database do you maintain to track patterns and identify recurring problems?

How do you use this information to improve performance and increase customer satisfaction?

1.3 BEST PRACTICES

Few companies are effectively doing these things but those who are fall into a high ROTA (Return on Total Assets) group:

- Have a written, long-range strategic plan.

Strategic goals should guide:

- Performance measurements, especially for senior executives
- Operating budgets-detailed budget or forecast of P/L activity down to net income
- Capital spending-allocating cash resources towards efforts to increase long-term company value
- Use activity-based budgeting and costing to link costs to key drivers
- Create measures to address Cost, Quality, and Time across organization, processes and people

Every industry has key drivers that determine profitability. The key drivers may determine how a company makes money e.g. distributors need to buy right to keep turn high and excess inventory low. Or a key driver might demonstrate how a company prevents losing money e.g. in construction, doing it right the first time is significant because of the high cost of reworking or changes.

Questions to ask:

What single thing has the greatest impact on your company's profitability?

What keeps you from being more profitable than you are today?

How does your company compare to your industry PAR reports?

What metrics or industry surveys are available from your trade association?

1.4 KEY ROLES

President & CEO

The scope of the President's accountabilities include the following critical dimensions:

- Revenue plan
- P&L and Balance Sheet responsibility
- Provide functional leadership over Sales, Marketing, Operations, and Financial Activities

The President is responsible for and will be measured by the following key activities:

- Formulating and implementing the Strategic Goals and Objectives of the business
- Development of an Annual Operating Plan to guide the business
- Being the primary corporate relationship builder and visionary
- Overseeing the implementation of policies, procedures and financial controls essential to effectively leading the business as well as managing the company's human resources

Position Measures:

- Business meets annual plan
- Business Strategy in place for all operating groups
- Develop Management Team to support projected growth

- Develop Technology Support capabilities to reduce costs of operations and allow projected growth

1.5 STAR BURSTING

Executive management has access to every other department. The best introduction you can get into any department is from executive management.

Questions to ask:

Which departments are a competitive strength and which a competitive weakness?

What initiatives do you have to improve "highest delivered value" – includes value-added services and all aspects of the customer relationship?

What initiatives do you have to improve "lowest total delivered cost" – product price plus all costs of delivery?

1.6 CHAPTER 1 QUIZ

1. Who has the responsibility for determining, carrying out and monitoring corporate strategy?
    a. Sales Manager
    b. Operations Manager
    c. Executive Management
    d. IS Manager

2. Who determines a wholesaler's value?
    a. President
    b. Customers
    c. Lending Institution
    d. Salespeople

3. True or False? Wholesale distributors' margins have increased in recent years and are expected to continue to increase in the future.

4. Which of the following can be considered competition for a wholesale distributor?
    a. Other distributors of similar items
    b. Logistics providers
    c. Replenishment Rep Firms
    d. Portals, on-line auctions, and ".com" companies
    e. All of the above

5. Why is ROA a better indicator of profitability for a distributor than ROI?
    a. Because of cash flow
    b. Because of fixed expenses
    c. Because of the impact of sales
    d. Because of the impact of inventory and accounts receivable

6. What are "Best Practices"?
    a. Almost every company is doing it
    b. Only a few companies are doing it and the most profitable companies are doing it
    c. Too hard for anyone to do
    d. Generally accepted Accounting Principles

7. True or False? Strategic goals should guide senior executive performance measurements.

8. Which is a key driver of profitability for a wholesale distributor?
    a. Buying right to keep inventory turn high and excess inventory low.
    b. A well lighted product display area
    c. Persuasive salespeople
    d. An excellent phone system

Sales Order Process

The Sales Order Process is the heart of any successful distributor. Labor costs invested in this effort frequently equal 25% of the distributors' total gross margin dollars. It is both complex and subjective because it deals with all customer relationship management activities.

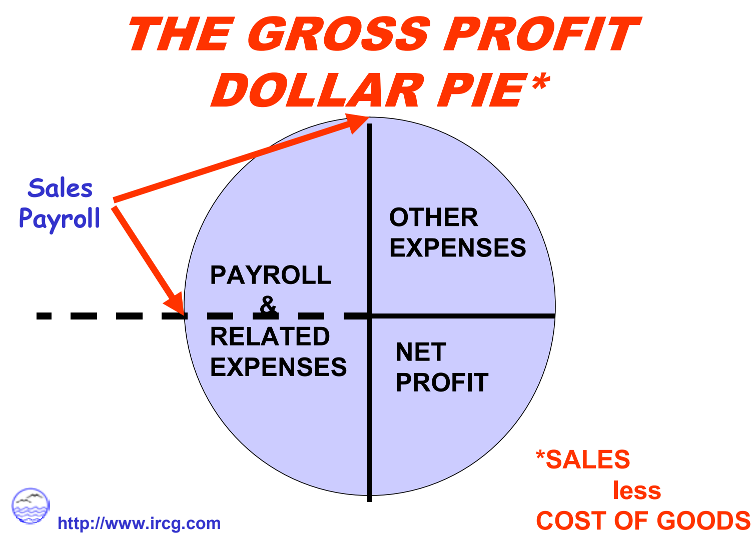


Figure 1.1 Payroll and expenses as a percentage of gross profit

2.1 KEY FUNCTIONS

Sales and Order Generation

The Sales Order Process includes all activities involved with generating orders. A wholesale distributor can receive orders through many channels: face-to-face with the salesperson and buyer, fax, e-mail, web based transactions or EDI. Once the order is received, depending on the format, it usually will have to be entered into the distributor's legacy system for a specific ship date to be recognized as an order. Distributors have widely different sales cycles ranging from multiple deliveries of orders placed same day, to orders placed years in advance with guaranteed pricing and product specifications. Orders can be placed against existing inventory "real time" or they can be accepted based on the ability to source products in the future. One of the challenges in wholesale distribution is communicating available inventory, on hand and in the future to the sales force. Customers want to know when they can expect their order to be filled.

The core of any distributor technology platform is the ability to execute a transaction. When an order is entered the QOH (Quantity On Hand) stays the same but the ATS (Available To Sell) Quantity is reduced by the order amount. When the order is actually picked and shipped in the warehouse the QOH is reduced and an invoice is generated. Imagine that product is sitting in a warehouse and many sales reps, in perhaps many locations, are trying to sell the same widget. These core transaction design features are required to keep from having multiple sales reps sell the same product and then not having enough to meet the customer commitment.

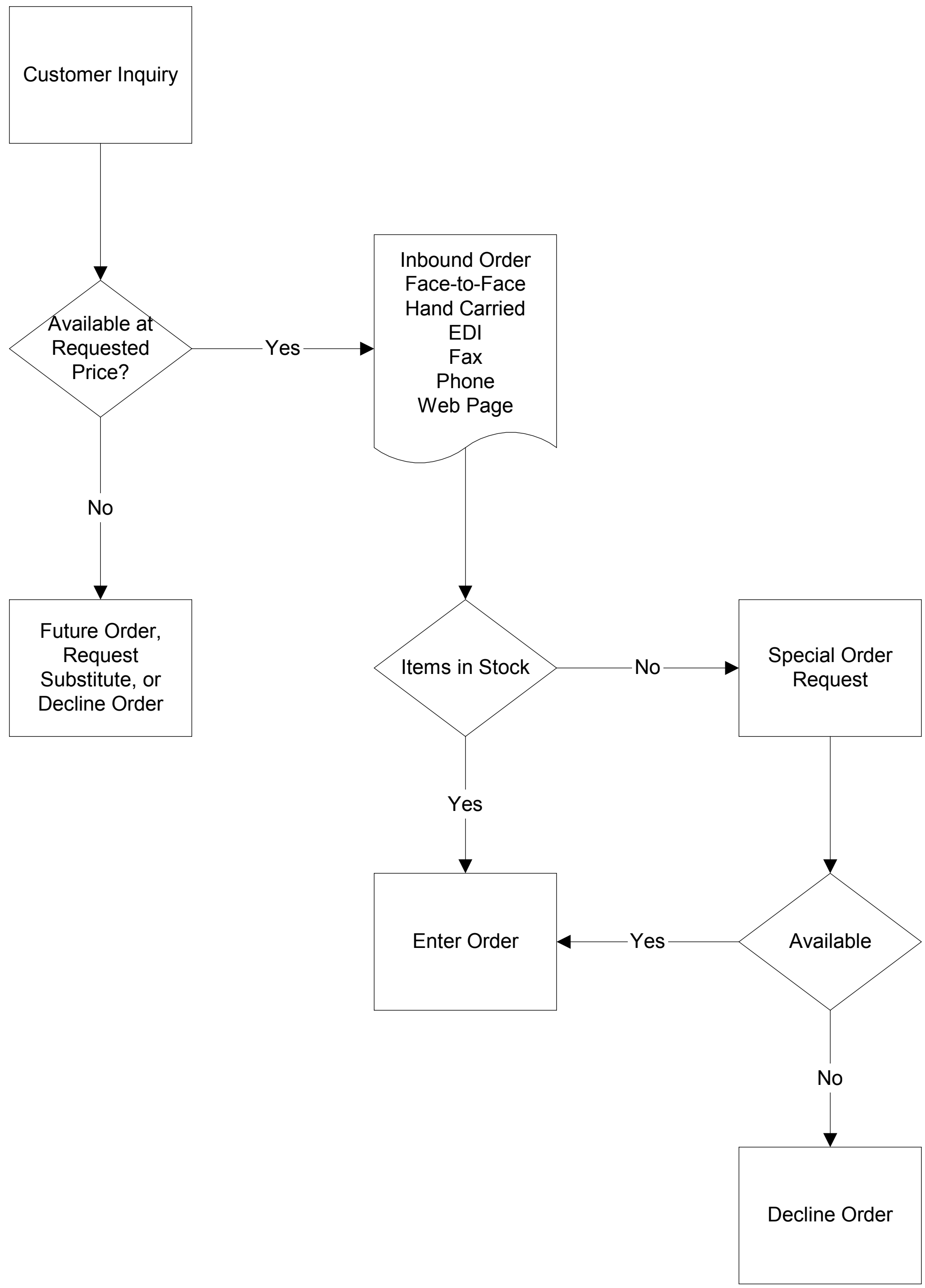


Figure 1.2 Order Receiving Process

Customer Service

Distributors look at this core process as the key to achieving customer service.

Questions to ask:

What would it take for your selling and customer service process to achieve seamless customer service?

How do outside sales, inside sales, telemarketing and customer service work together to facilitate the customer order process?

What investments have you made in Sales Force automation?

Selling cycle

Selling cycles can be as short as a few hours or as long as a few years depending on the products being sold. Regardless of the length of the selling cycle of the product, a long-term customer development cycle also exists. Salespeople usually tend to focus on the product selling cycle but the greater determinant of future sales success is the customer development cycle.

Most distributors lack real measures on selling cycles, they simply measure sales and gross margin by location, sales representative and specific product. Many have numerical goals set for these measures and compare actual results against their goals to decide if things are "good or bad".

The typical distributor has outside sales representatives and inside sales representatives, as well as sales managers to guide the group activities. Typical Job Descriptions are included at the end of this section. Some distributors also have product specialists or application engineers. In large distributors, marketing program development may be separated into a different department.

Questions to ask:

How do Sales Reps spend their time (as a percent of their total time)?

- **Selling new products or new programs to fill the additional needs of existing clients?**
- **Assessing opportunities with each customer?**
- **Selling programs that will get them long-term sales growth?**
- **On daily transactions?**
- **Inventory maintenance activities?**

What percentage of your customers have a written plan outlining the working relationship between you and your client spelling out the expectations of each party?

How often do you plan a formal business review involving the management teams to compare expectations with actual performance?

How do you include customers in joint planning of growth objectives?

How are you helping your customers to be more profitable?

How do you prove you are able to make improvements in speed, cost, or quality?

What plan is in place to offer Prime Accounts extremely high levels of service?

How do you rate or rank your customers on average costs, average selling prices or average gross profit?

How much does it cost to lose a customer relationship?

How do customers typically reach their sales rep? Cellular phone, beeper, email, paging off of web site?

Customer Facing Activities-Replenishment orders

Replenishment orders are those orders that are repeat purchases of a "stocked" item. These are usually commodity products because of the routine nature of buying basic stock items. Replenishment orders are usually reordered based on existing stock levels. These orders are the most easily automated from POS (Point of Sale) data or inventory counts. Replenishment orders can be generated automatically based on minimum inventory levels and established reorder quantities. This reordering activity is covered in the Inventory Management section.

This replenishment activity consumes the majority (over 95%) of a distributor's selling time and selling costs. This activity is actually defined as demand fulfillment. Most distributors belong to trade associations who publish industry-wide surveys of performance in this area. These are typically called annual PAR Reports for Performance Analysis Reports. Well managed distributors typically pay a great deal of attention to how they stack up against their peers in measures of sales per employee, average transaction size, number of line items per invoice and gross profit performance.

Questions to ask:

How would you compare your selling activities to others in your industry?

What comparisons have you made to industry PAR Reports?

How does your sales team use technology tools to enhance margin performance and customer service?

What would your sales team describe as the key obstacles that limit their ability to do more business?

What additional support could be added to reduce the administrative or routine tasks of the sales reps?

Customer Facing Activities-Demand Creation

For a wholesale distributor, getting more business from existing customers should be the primary focus for the sales team. An established distributor also needs to be prospecting to expand market share, regain lost customers, and begin selling new, "start up" companies. The real world of most distributors is that little selling time is spent in this area. This is an area that is typically not measured or managed but is of high interest to executive management.

Questions to ask:

What is your company's current position in the market place?

How do you measure growth and expansion?

How are you measuring increased or decreased market share?

How do you know if a customer is current and active or departing?

How do you measure sales to new customers?

Most distributor executives will not have strong positive answers to these questions. They lack the measurement tools and technology to bring these questions into a sharp operating focus.

Order Processing

Sales orders typically come from the customer to the Outside Salesperson, Inside Salesperson or Customer Service Representative, either in person, by phone, fax, email, web page or EDI. In most cases the order has to be "processed" by entering it into the computer system against available or future inventory. Information that needs to be verified includes ship date against product availability, price and product specifications against previous quotes to customer, minimum quantities, adequate lead-time, minimum fabrication amounts, etc. This information check would then prompt potential activities such as requesting a corrected PO from the customer, expediting an order from the Purchasing Department or Drafting a "Hold for Release" letter to protect against ordering special product for a customer for which the customer has not yet given an order.

Types of Orders

Orders can be for a single delivery or multiple deliveries. A blanket Purchase order would cover a specific quantity to be ordered during a specific time frame. Blanket orders are important for commitments that require a distributor to purchase special order items or minimum quantity items. The customer may not agree to take the entire order all at once but must agree to take the entire order over a specific period of time.

Purchase orders can be used to lock in a price against future shipments. Often before a price increase, a distributor will accept purchase orders against current inventory at the current price. The commitment to ship at a future date is locked in at current prices.

Reorders or replenishment purchases are the purchase orders most likely to be automated or transmitted electronically. Drop shipments are set up to ship directly from the manufacturer to the customer. The distributor will bill the customer but will not be involved in the shipping of the product.

Advertised specials or promotional orders are ways of "pushing" more product into, and, hopefully through, the channel. Often discounts are offered for taking larger volume. Promotional orders do not build the business and facilitate sales unless the customer does additional marketing efforts. Buying more of an item that is not sold only adds to the level of inventory in the channel and decreases additional sales of that item in the short term.

2.2 KEY METRICS

- Target Customer growth rates
- Gross Margin dollar goals
- Market Share
- Customer Satisfaction
- Lead to close ratio

- Forecasting accuracy
- Sales calls per month
- Supporting aligned suppliers
- Preventing obsolete inventory
- Quote closing ratio- Analyze number of quotes to number of orders to get closing ratio.

2.3 BEST PRACTICES

Few companies are effectively doing these things but those who are fall into a high ROTA (Return on Total Assets) group:
Reduce the amount of time the outside sales force spends on replenishment purchases. The team, including inside sales and customer service, and the system, should do taking and processing orders and servicing the customer. The field sales representative will spend more time in a consultative selling role, growing the business and developing new markets.

- Making it easy for customers to do business with you through practices such as: creating special access for key customers
- Using a simple, easy to understand pricing structure
- Providing a central point of contact that understands each customer's industry or business and is trained to respond to all types of inquiries without the need to call back

Automating and measuring customer satisfaction metrics, including the type of information requested and the ease of delivering it are critical to account retention and customer loyalty.

Questions to ask:

How are customer satisfaction and customer feedback information incorporated in the performance review and incentive system?

How are phone system metrics used to:

- ***Measure Inside Salesperson/Customer Service performance?***
- ***Analyze customer-calling behavior?***
- ***Measure time on hold and hang ups to analyze call abandonment?***

What are your FAQ (frequently asked questions) and how do you handle them?

2.4 KEY ROLES

Sales Management can take on the form of Director of Sales, VP Sales or Sales Manager.

Vice President of Sales

The V.P. of Sales is responsible for all customer interface for the company, developing strong customer relationships, developing programs to continually improve sales capabilities through ‘Best Practices” methods, training and employee development. Responsibilities include creating and implementing a business sales plan to improve market share and profitability in markets served and achieve sales growth with anchor and other stocking vendors.

Performance Measures

- Business Meets Annual Plan Sales Objectives
- Development of Highly Effective and Motivated Sales Force

Customer Relationships

Relationships at all levels of the customer organization are critical for account development and retention. Without many customer supporters, a distributor is vulnerable to losing an account because of the loss of a “champion” in the customer management team. Sales and sales management needs to assign and coordinate relationships with all departments and all levels within the customer and distributor organization. Key relationships are designated for each position to “cover.”

Outside Sales – also called Field Sales, District Managers

Sales reps should be spending time growing customers’ business, prospecting and developing the customer relationship. If sales reps are spending time on maintenance activities, replenishment purchases, counting stock levels or taking orders, this is a “red flag” for cost saving potential.

Questions to ask:

How does the role of your Field Sales Representatives fit into your business strategy?

How does the field sales force maximize account penetration and retention?

What would it take to reduce the amount of time the outside salesperson spends on taking and processing orders?

Outside Sales Representative

Performs assigned and assumed duties relating to selling products and services to customers. These duties will consist of calling on the appropriate decision-makers, presenting products and services for consideration of purchase, reviewing customer contract pricing, resolution of accounts receivable problems and generally representing company and suppliers to the customer in a professional manner. Responsibilities include developing a wide influence base within the customers' organization, keeping up-to-date records on customer decision-makers, influencers and other personnel in the business process and prospecting new customers.

Performance Measures

- GP results to plan
- Sales results to plan

Inside Sales Representative

Responsibilities range from true selling and account penetration to order taking and problem solving. Inbound calls are typically the extent of the inside salesperson's responsibility. Unless inside sales reps are making outbound calls they are not impacting account penetration.

Questions to ask:

How does the role of your Inside Sales Representatives fit into your business strategy?

How do your inside sales or customer service groups help further existing account penetration?

How often (what percentage) does an Inside Sales Representative have to call a customer back because they do not have the training, available information or autonomy to make decisions and resolve the customer's inquiry?

Customer Service/Customer Care – may answer to Sales Management, when selling products or Operations Management, when selling services.

Customer Care Representative

Customer Care Representatives must communicate with customers and sales support to insure compliance with customer contract requirements as well as further promote the company-marketing strategy in the area of specific product line promotion. Responsibilities include processing orders received by phone, mail, fax and EDI and proactively selling-up and add on, being the point of contact for phone inquiries from customers for purchase or quotation of merchandise, interfacing with customers to resolve problems and providing solutions to customer complaints as needed as well as collaborating with outside sales staff for account penetration and analysis of current established accounts.

Performance Measures

- # of lines entered
- # of calls taken
- Length of time per call
- Customer compliments/complaints
- Gross profit
- Quantity/key punch errors
- Stock vs. non-stock entry errors

Team Selling

By creating a team, overall costs to serve can be lowered. Outside Sales reps can spend their time growing the business. Inside Sales reps are responsible for the sales transaction, processing the orders. Customer service can research problems, answer customer inquiries and handle credits and complaints. Inside Sales and Customer Service are often not assigned to specific customers or specific outside sales reps. The outside sales reps have an assigned territory and the inside reps take calls as they come in. With this type of inbound calls, all customers get the same level of service. Key customers deserve higher levels of service and should have specific assigned inside reps with a level of knowledge regarding their business.

Questions to ask:

How is information shared between each inside sales or customer service and the outside sales representative?

How do you work as a team with outside sales representatives to maximize account penetration and increase sales?

2.5 STARBURSTING

Sales order affects every other department in the company and you can easily starburst to your target area or establish the potential "opportunity areas" by asking:

Questions to ask:
How are the support departments in your company perceived by customers?

Which departments are a competitive strength and which a competitive weakness?

What areas of weakness do you feel your company has in providing the basic services well?

Starbursting to Order fulfillment:

The number one problem between sales and operations revolves around product availability and the communication to the customer of how fast an order can be turned around from inventory or date of receipt until the time the customer receives it.

Chapter 2 Quiz

1. Sales payroll typically represents what percentage of the distributors' total gross margin dollars?
    a. 10%
    b. 15%
    c. 25%
    d. 40%
    e. 50%

2. Why is communicating product availability challenging?
    a. Product may be in transit, ordered but not received
    b. Product may be on the dock, in house but not received
    c. An order may be for a future date with adequate lead time to place an order
    d. Delivery times are different for different customers
    e. All of the above

3. How would you define a replenishment order?
    a. special order
    b. repeat purchase
    c. first time purchase of on item previously bought from a competitor
    d. any order from an existing customer

4. True or False? Demand creation takes up more of a typical distributors selling time and selling costs than demand fulfillment.

5. Match up the terms with the definitions:

a. Future purchase order	1. Total quantity within time frame
b. Reorder	2. Ships direct from manufacturer
c. Blanket Order	3. Volume Discounts
d. Promotional Order	4. Locked in price
e. Drop Shipment	5. Replenishment Order

6. Which of these is **not** a Best Practice for sales?
    a. Reduce the amount of time the outside sales force spends on replenishment purchases.
    b. The team, including inside sales and customer service, and the system, should do taking and processing orders and servicing the customer.
    c. Using a complex pricing structure
    d. Creating special access for key customers

7. How many relationship pairs should a company have with a key customer?
    a. Relationships at all levels and with all departments of the customer organization
    b. One customer “champion”
    c. Relationships with the customer management team only
    d. You can not trust them enough to have a customer relationship

8. True or False? Inside Sales is usually responsible for order taking and problem solving.

Order Fulfillment Process

One of the ways a distributor adds value is by stocking inventory and providing reliable, on time and accurate order fulfillment. The order fulfillment process involves all of the activities associated with pulling, labeling and shipping a customer's order.

3.1 KEY FUNCTIONS

Order Flow

The flow of orders into the warehouse and the scheduling of the picking of those orders is a key area to look at in determining efficiencies. Orders may flow to the warehouse as they are received or they can be held and batched on demand based on warehouse control to correspond to truck, airline or overnight carrier schedules. The orders can be organized for picking based on product type to facilitate easy picking, by carrier to meet time deadlines or by warehouse floor plan to facilitate the pulling of complex, multiple line item orders.

Questions to ask:

What is the critical constraint of the warehouse facility and order pulling process?

What is their biggest single frustration?

When do order crunch times occur?

What does the majority of the pick tickets have, more items or more units per item?

How is the warehouse organized and laid out to facilitate the pulling of orders?

What is different from the sequence of items as they appear on the pick ticket and the flow of the warehouse floor plan?

How are the orders checked and confirmed? Reading and matching? Electronically through a bar coding system? As they are pulled? Before they are loaded?

Planning and Preparation for Order Pulling

Distributors receive orders for shipping on a specific date or shipping as soon as product is received into inventory. Staffing issues revolve around peak order pulling times based on order flow for same day orders and expected shipment receipts for back orders and future orders.

Reports are usually generated comparing inventory on hand to requested orders. Exceptions can be reported to the sales department for communication to the customer and to purchasing for vendor management, sourcing and expediting.

Order Pulling

The order picker is responsible for selecting the correct items on the order. The picking document can be hand written or computer generated including a corresponding set of labels. Orders are typically picked based on one of three methods or picking sequences:

> **Zone Picking** involves dividing the warehouse into separately defined areas. The defined areas or zones may be physical locations, for different types of materials or for different methods of handling, e.g. repack items, full case items or full pallet items. The number of zones should be kept at a minimum to minimize waiting time as an order is processed. An order can be split and picked simultaneously by different pickers in each zone. Zone picking is used to provide better use of equipment and manpower e.g. full pallet items requiring a fork lift would be separate from small parts requiring repacking.
>
> **Batch picking** involves selecting total quantities for a batch of orders. Typically order pick carts should be used and items labeled and addressed as they are picked. A good order picker can pull 30 to 50 individual lines on as many as 10 different orders. Batch picking can be done in a specific zone or over the entire warehouse.
>
> **Pick-Pack** is used when packing "broken cases." The order is picked and pre-packed. The responsibility for the entire order is given to one order picker. The order picker picks directly into the shipping carton. Pick–packing allows multiple orders to be batched picked into individual shipping cartons.

Orders are usually prepared for picking and pulling based on either carrier schedules, customer delivery requirements, order cut off times or staging and loading at the dock based on delivery requirements and equipment or truck availability.

Orders are scheduled based on priority and picking method. Orders can be checked during the picking process or as they are loading. The paperwork that rides with a shipment contains the shipping manifest and the customer invoice. Sign off sheets, manual or electronic can be used to track an order through the pulling and loading process.

Questions to ask:

How did you select your current method of order pulling?

What different size products, packaging, box sizes, shipments do you make?

What time constraints are you working under?

What cut off times have to be imposed? On sales? On customers?

Labeling

Labeling of outbound shipments serves three purposes:

- Provides receiving information for the customer
- Provides shipping information for the carrier
- Provides tracking and verification information for the distributor

Customers often request information to be included on their shipments that will be labor saving for them in their receiving, sorting, pulling and routing process. Common requests are:

- Location codes for multiple receiving locations
- Bar codes with product information, item codes, or ship dates
- Item code information in numeric form
- Labels detailing the contents for cases containing multiple products

Bar Codes

Bar codes are the most widely used form of product identification. Bar codes communicate product information, vendor identification, product age and other product specific information necessary to manage that inventory within the distribution system. Bar codes are scanned by a “gun” and transmitted into the distributors’ on-line inventory.

Question to ask:

How are your labels generated?

What information are you including on your outbound labels?

The carrier typically provides a unique label to be filled out with consignee and delivery information.

Question to ask:

How are you communicating shipments with major carriers? Electronically?

The distributor captures a variety of information through their labeling information, especially if they use a bar code system. They use the information for shipment tracking. Tracking information can be by invoice number, pallet number or loaded by truck number.

Reconciling inventory based on a confirmed shipped out item is another benefit of bar code labels tied to a real time inventory. This type of verification can be used to track fill rates and order pulling accuracy as well.

Receiving

Includes all activities involved with receiving inventory. A wholesale distributor receives product by truck, air, overnight carrier, or a multitude of other carriers including international ocean freighters, and railcars.

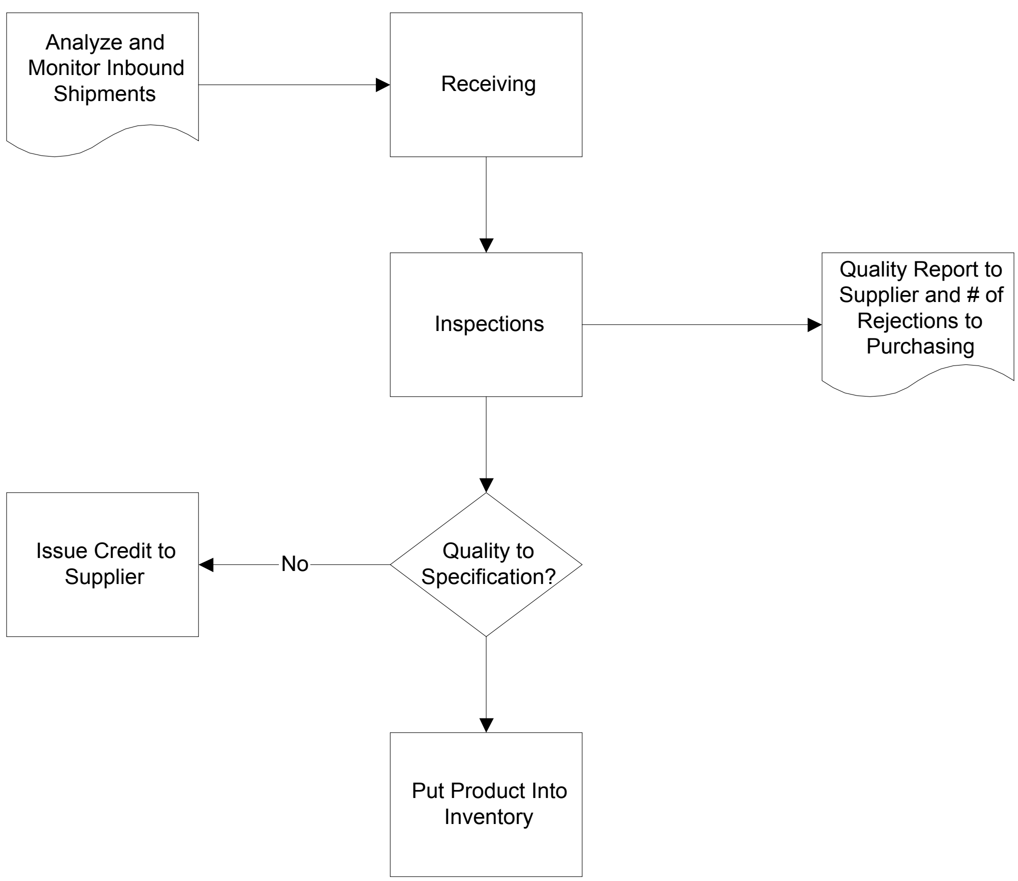


Figure 3.1 Receiving Process demonstrating the need for quality inspections upon arrival.

Dispatch

The receiving department is generally made aware of expected incoming shipments from the purchasing, sales or marketing departments.

Quality Control

Quality inspections typically have to be done by a “qualified” inspector and products must meet a potentially stringent list of criteria. The criterion is different for every industry. For perishables, i.e., fruits, vegetables, flowers, it might be a Plant Pathologist. For the automotive industry, it is according to ISO and QS specifications.

Questions to ask:

What quality requirements do your customers impose on you?

What quality requirements do you have of your suppliers?

Customer Returns

Returns from customers typically are either “returned to stock,” received back into inventory or “returned to vendor”, shipped back to the supplier. Often goods to be returned to the manufacturer are accumulated and returned in a single shipment. This small percentage of product, in many industries as low as 1% but in some as high as 25%, causes tremendous headaches for the wholesale distributor because of the variation of reasons for the return and the “reversing of steps” that must be made from the normal flow of goods.

Questions to ask:

What is your percentage of customer returns?

What are the typical reasons for returns?

What are your methods for processing returns? Returned to supplier? Credit taken against your supplier?

How does the percentage and handling of returns affect your purchases with suppliers?

Value Added Services

Typically performed under the Operations function, value added services include any service beyond carrying inventory and order fulfillment. Value added services usually require changing the product in some way that is different from its original form or providing a level of services that extends beyond the product. Value added services are often customer specific, unique for individual or groups of customers.

Re-Manufacturing

Distributors are often asked to modify product to customer requirements. Re-manufacturing involves an additional manufacturing operation done at the Distributor's facility because of the timing or custom nature of customer requests. An example involves custom molding and trim work in the lumber industry. Standard trim is re-manufactured into custom designs on a per order basis.

Questions to ask:

How are costs calculated? By the process or the specific job?

If by the process, how do individual jobs vary?

What are the criteria for assessing those costs to customers?

Fabrication

Preparing products for installation, such as cutting and fitting in countertops or rust preventive coatings in fasteners is another time and location sensitive service that is often performed by the Distributor.

JIT/Bin Fill/Cam Ban

Managing a product category for a manufacturer, such as managing the Fastener Deck for an Air Conditioner Manufacturer.

3.2 KEY METRICS

- Orders or items picked/pulled per warehouse employee
- Order pulling accuracy
- Meeting carrier deadlines
- Rotating and pulling stock to meet inventory aging goals e.g. FIFO
- Achieve receiving processing within specified goal time frame
- Order cycle time goals
- Maintain inventory accuracy with a limited number of physical inventory counts

- Reduce distribution unit processing costs per year.
- Meet profitability objectives for each contract.

3.3 BEST PRACTICES

Using temporary workers to even out the peak periods is a best practice that can back fire if the order pulling process is complex, if systems are not in place and adhered to, or if training is not adequate.

Scheduling inbound shipments from suppliers facilitates the utilization of warehouse truck bays and prevents outbound delays due to loading dock bottlenecks.

Using technology to improve tracking and pulling accuracy:

- bar code scanning
- automated picking equipment
- automated sort systems
- ASRS-automated storage and retrieval systems
- Load planning software for truck loading
- Automated truck routing software to schedule deliveries

Questions to ask:

How well does operations exceed customer expectations?

What type of performance metrics are you maintaining?

What are you doing to monitor and eliminate waste in operating costs, such as the high cost of errors?

3.4 KEY ROLES

Operations Management can take on the form of VP Operations, Director of Operations, Warehouse Manager or Distribution Center Manager.

Director of Operations

The Director of Operations is responsible for the operation of company warehouses to include the timely receipt, stocking, order filling, packaging and shipping of products. Responsibilities include preparing operating budgets for distribution operations, recommending cost reduction actions and implementing systematic programs to improve levels of performance while reducing operating costs and processing times.

Make recommendations regarding bar codes, fast pick methodologies and software changes to distribution processes and implement system upgrades to enhance operating efficiency.

Maintains knowledge of less than truckload rate structures and is able to determine freight flow requirements and negotiate freight rates with carriers. Maintains carrier performance profiles, collects data and swiftly reports to supervisor regarding carrier performance.

Performance Measures

- Attains one day processing for all receipts, stocking, and order filling with dollar inventory accuracy above 99%.
- Order fills 100% of orders received by 5:00 p.m. each day, with next day delivery to customers, logistics sites, and integrated supply.
- Reduce distribution unit processing costs by minimum of 6% per year.

Customer Relationships

Relationships with key operations people within prime accounts are critical to achieving efficiencies and cost reductions that will benefit both organizations. Operations are typically responsible for monitoring all contracts to meet stated objectives for conformance.

Warehouse Associate

Cross-trained to pull orders, load outbound shipments, or receive new inventory, the warehouse associate has to be flexible to shipment priorities and deadlines. Idle workers are a sign of inefficiency, poor scheduling and poor management.

Question to ask:

What metrics do you use to measure warehouse employee productivity?

3.5 STARBURSTING

Order fulfillment is the final process before the customer sees the order. Customer satisfaction is based on not just what is done in the order fulfillment process but all of the processes that came before it. Starbursting is easy back to sales for order flow or back to purchasing for expected receipts, stock levels and inventory management regarding fill rates.

Question to ask:

What problems are blamed on the warehouse but actually caused by other departments?

Sales has an interest in order status and order exceptions. They need to know if orders are being filled on time and if any delays are anticipated.

Questions to ask:

What information are you constantly being asked to provide to other departments?

Are the salespeople following procedures and guidelines regarding ship dates, cut offs times, and rush orders?

Chapter 3 Quiz

1. Which of these would **not** typically determine order flow to the warehouse?
    a. The order in which they are received
    b. Based on truck, airline, or overnight carrier schedules
    c. To be picked by product type
    d. Smaller orders first
    e. Arranged by product according to the warehouse floor plan

2. True or False? The order flow to the warehouse is usually constant at a routine level with few differences over time.

3. Match up the picking methods with the definitions:

a. Pick-Pack	1. Pulling individual items for a group of orders
b. Zone Picking	2. Used in packing broken cases
c. Batch picking	3. Dividing the warehouse into defined areas

4. True or False? A well-designed label or bar code can provide valuable information to the distributor, their customer, and the carrier.

5. Why do returns from customers create problems for distributors?
    a. they represent a small percentage of transactions
    b. normal flow steps must be reversed
    c. the reason for the returns are varied
    d. all of the above

6. The definition of a value added service is:
    a. levels of service in addition to the product or to change the product
    b. carrying inventory
    c. order fulfillment
    d. on time delivery

7. True or False? Using temporary workers is a warehouse best practice because of the reduced costs of not having to staff permanently in anticipation of peak times.

8. Which of these does **not** represent an opportunity or a responsibility for warehouse customer interaction?
    a. Selling additional products or services
    b. Achieving efficiencies and cost reductions
    c. Monitoring contract objectives for conformance
    d. Communicating with customer warehouse or plant personnel

Inventory Management

A distributor's Inventory Management impacts the purchasing decisions of their customers more than any other factor, even price. With the rapid evolution of sales channels forcing distributors to increasingly focus on customer service, Inventory Management is rapidly ascending in importance. Recent research has indicated that providing a dependable supply of desired products is more important to customers than:

- Price
- Quality
- Sales force competence
- Frequency and speed of delivery

This is not to say that those factors are not important but, in terms of profitability, nothing will lose a distributor's primary provider status faster than not having needed products on-hand.

The distributors Inventory Management process revolves around optimizing customer service by having the products customers expect available while minimizing the significant costs associated with acquiring and holding inventory. This chapter examines the significant role that a distributor's Inventory Management function serves. Its responsibilities, effects, constraints and the measures used in judging its performance.

4.1 KEY FUNCTIONS

The key functions of Inventory Management can be broken down into three distinct inquiries:

- What items do I stock?
- When should I buy?
- How much should I buy?

What items do I stock?

Selecting the products that a distributor will stock is the process least determined by a distributor's Inventory Management function. This decision is made at the Executive level using information from the sales function and the finance function. At a tactical level, it is generally the responsibility of the Inventory Management function to source the products selected notwithstanding alliances that have been formed with key suppliers.

When should I buy?

Not running out of products that customers desire is the primary key to customer service. Determining when to re-order a product is a crucial element in the Inventory Management process. Another way of looking at the 'when to buy' question is to ask, at what level do I need to reorder more of a given product?" This answer is predicated on a distributor's "net available."

Net available = number of a given product on hand (in the warehouse) + number of a product incoming (already ordered) – number committed (already ordered but not shipped).

It is important that all components of net available are used when determining when to order. When net available reaches a defined point called an "order point" or "min," it is time to reorder.

The answers to the following three questions provide the information necessary to calculate the "min" or order point.

- **What is the current usage?** – Current usage is used to determine future demand, as past usage is the best indicator of future demand. For example, if a distributor usually sells ten of a given product a week, it is a good assumption that they need to have ten of these products available for the upcoming weeks.
- **What is the lead-time on this product?** – Lead times reflect the duration it will take for a product to be delivered once it has been ordered. Some lead times are a matter of hours, while some can be months, all depending on a supplier or manufacturer's production schedule and the complexity of a product. More complex products and those that are made in small amounts, generally have a longer lead-time.
- **What is my safety stock?** – Safety stock is a level of stock kept in reserve to account for the variance of product usage. Even though a distributor knows it sells an average of ten a week, it may sell five one week and fifteen the next. Most distributors will pad their order point to account for this variance and to ensure that the chance of being out of stock is minimized.

Putting these three pieces of information together provides the formula for the "min" or "order point," which is:

Min = [usage (in days) * lead time (in days)] + Safety stock

Thus, when net available equals "min," it is time to reorder a product.

How much do I buy?

Now that it has been determined when orders should be made, the next obvious question is, "how much do I buy?" The answer to this question is based on three major expense drivers, inventory carrying costs, costs to purchase and freight, and is generally stated in days supply. Significant explanation of these expense drivers occurs later in this chapter in the “Key Constraints” section.

Inventory carrying costs, those costs that are associated with stocking or carrying inventory, can be used to determine an upper boundary for this amount. Most inventory managers will say that it does not make sense to have more than a 90-day supply of any product. Any amount more than this will adversely affect profitability due to the cost to carry.

The costs associated with purchasing inventory can be used to establish a lower boundary. It is generally accepted that ordering more than once a week will adversely affect profitability because of the cost to purchase.

The last driver is freight. Many suppliers will provide a freight minimum. This means that for orders above a set dollar value, the supplier will pay the freight which will eliminate a large expense that otherwise would be incurred by the distributor.

Taking these three expense drivers into consideration, it is safe to deduce that the correct order amount is the amount necessary to meet the freight minimum but never less than seven days supply and never more than ninety. By analyzing usage a distributor will be able to determine what the appropriate amount of times between orders is and this is called the “order cycle.”

Once the order cycle is calculated and the “min” or “order point” is known, it is possible to determine exactly how much of a product should be ordered by using the following formula:

Order quantity = min + [usage per day * order cycle days] – net available

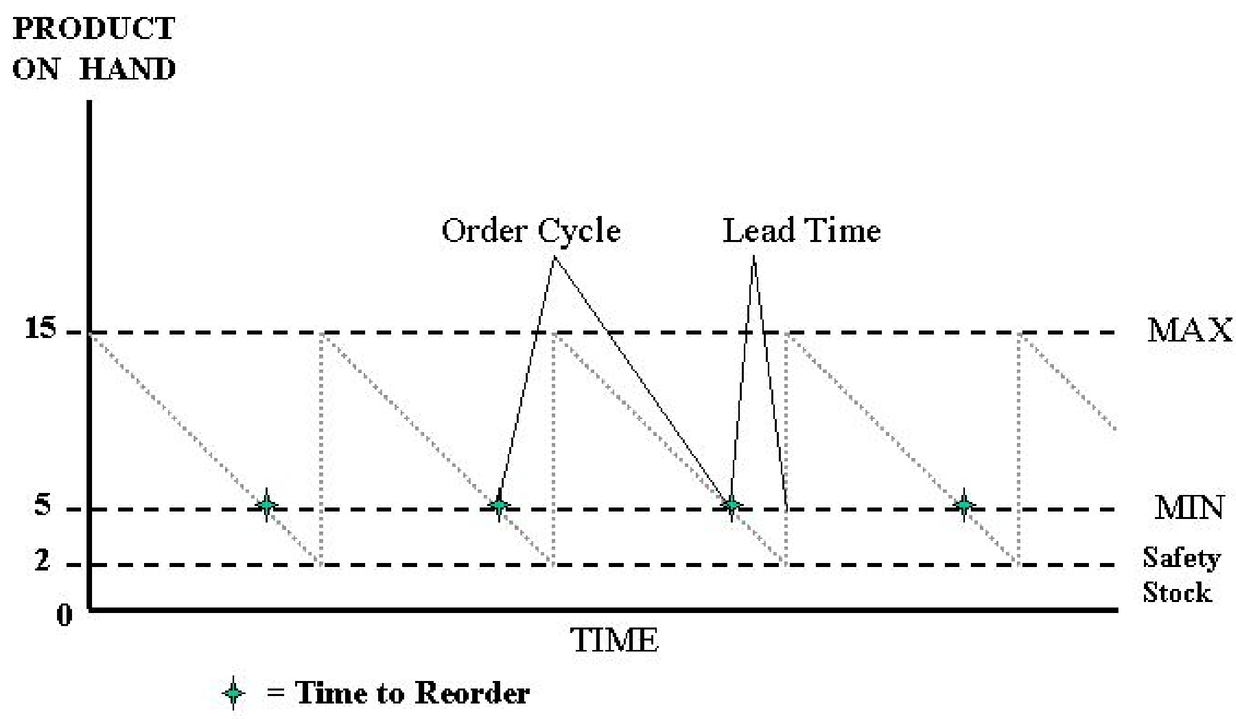
Another way of looking at this is:

Order quantity = max – net available

“Max” or “line point” is a term used to represent the maximum amount of net available. The formula used to determine “max” is:

Max = min + [usage per day * order cycle days]

FIGURE 4.1 – Order Cycle
This figure displays the key concepts of MIN, MAX, Safety stock, Lead-time and Order cycle. The light dashed line represents the on-hand product level over time.



Questions to ask:

When the on-hand product level reaches the MIN, in the above graph, how much product should be ordered?

What process do your buyers use when weighing freight plus other costs to purchase and customer service?

How would you best describe your ordering process, intuitive or process driven?

How accurate are previous usage levels when forecasting demand?

4.2 KEY CONSTRAINTS

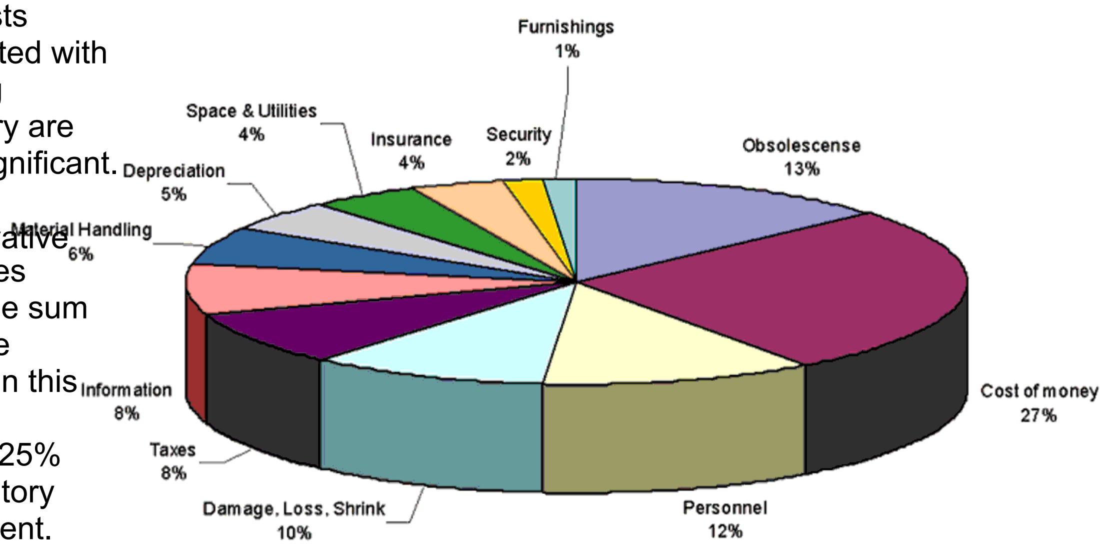
Going back to the Core Process Description, the primary function of Inventory Management is to optimize customer service. Theoretically, this could best be accomplished by having an abundant supply of products precluding the occurrence of any “out of stock” situations. In reality, the quantity of inventory that a distributor can carry is bounded by profit robbing expenses that fall into two main categories:

- Inventory carrying costs
- Costs to purchase inventory

The costs associated with having inventory in a warehouse make up inventory carrying costs. If a distributor has inventory sitting on their shelves, they will need to: insure it, count it, have space to put it and shelves or bins to put it on or in. Depending on location, they may also need to pay taxes on it. Additionally, the longer inventory sits in a warehouse the more likely the possibility that it will be damaged, stolen or made obsolete. The most sizeable component of inventory carrying cost is that associated with the opportunity cost of capital. A distributor’s business model is centered on generating a profit by buying and reselling products. The more sales a distributor can make with the least amount of inventory, the more profitable they generally are. Carrying too much inventory ties up the distributor’s valuable capital, an unprofitable situation, and inhibits him from maximizing profits or investing this capital elsewhere. Conservative estimates of inventory carrying costs are around 25% of the average inventory investment.

FIGURE 4.2 – Inventory Carrying Costs

The costs associated with carrying inventory are quite significant. Most conservative estimates place the sum of all the factors in this chart at around 25% of inventory investment.



While the first key constraint with purchasing involved buying too much, the second key constraint involves buying too often, commonly referred to as "transaction costs." Just as there are costs associated with carrying inventory there are also costs associated with buying inventory. The number one cost associated with procuring products is freight cost or the cost incurred in transporting products from a supplier to a distributor. The other costs are primarily labor costs. For every purchase order, someone needs to create it, send it, receive it, stock it and write a check for it. Estimates of these costs run from $5 a line for distributor's with minimum automated processes to 13¢ a line for distributor's using true EDI. (The effects of EDI and other technology will be examined later in the 'best practices' section.) Also intertwined in buying costs are volume discounts that represent price decreases for buying in larger volumes.

Questions to ask:

How has your company reconciled inventory levels and profitability?

Has your company looked at costs to order? What has it discovered?

4.3 EFFECTS OF POOR INVENTORY MANAGEMENT

Poor Inventory Management results from all or any of three separate factors:

- Poor line points
- Poor order points
- Poor net available

Based on the above explanations of line points and order points, it is easy to understand how they could negatively affect Inventory Management. A line point or order point too high will adversely affect a distributor by having too much inventory on-hand. A line point or order point too low will adversely affect the distributor by not having enough inventory on-hand. For this reason, many distributors spend great amounts of time and money in determining line points and order points.

Regrettably, having good line points and order points is not enough for a distributor to have a successful Inventory Management function. Incorrect net available amounts are the most common cause for poor inventory management. Incorrect net available amounts will generate poor order timing and wrong order quantities.

Errors in any of the three components that determine net available, product on-hand, product committed, and product incoming, will generate an incorrect net available level. Unfortunately, these errors are most often made outside of the Inventory Management function such as, when products are received and stocked incorrectly, when purchase orders or invoicing errors are made, and when certain stock is set aside for a specific customer.

Poor Inventory Management has three major effects:

- **Poor customer service** – Anytime a distributor is out of stock on a product the result is poor customer service.
- **Wasted time** – Poor Inventory Management means sales personnel will check stock before they promise or take an order, and too much time will be spent expediting orders that were placed in an emergency. Most distributors with less than adequate inventory management will generally spend significantly more time counting inventory.
- **Wasted money** – If too much inventory is on-hand, inventory-carrying costs will eat into profits. If too little inventory is on-hand, the cost to purchase will eat into profitability.

Questions to ask:

Are salespeople allowed in the warehouse? Why?

In your opinion, what is the biggest reason behind "out of stock" situations?

How much time is spent expediting orders because of poor net available amounts?

4.4 KEY TERMS

Up to this point we have addressed the key processes of a distributor's Inventory Management function. No discussion of Inventory Management would be complete though, without addressing the following four additional essential concepts.

- **Turns** – A simple definition of turns is, the number of times the same dollar is used to buy inventory over a period of time, generally one year. At the macro level, the following formula is used to determine the number of turns a distributor realizes on their entire inventory during a year:

  Inventory turns = Annual COGS from inventory ÷ Average Inventory

  This metric can also be used at the product or supplier level.
- **Product classifications** – Distributors will classify inventory based on the volume by which it turns. The number of classifications will vary by distributor but there are essentially three types of inventory, fast moving products "A items," slow moving products "B items," and inventory that is not moving "Dead items."
- **Stock goods** – These are products that a distributor will carry in his warehouse. Distributors will sell other products but these will need to be "back ordered." These products are called non-stock.
- **Direct Shipments –** These are customer orders that are shipped directly from a supplier to a customer, also known as "Drop Shipments."
- **Fill rates –** This is the most common measure of the customer service component of Inventory Management. This value reflects the percent of purchase order line items from a distributor's stock that are filled and shipped by the promise date as a percent of all line items ordered from stock. Note that only stocked products are considered. Companies that include non-stocks, direct shipments, and planned future orders when calculating a customer service level tend to overstate how well they are serving their customers' day-to-day needs. Most distributors aim for a fill rate upwards of 95%.
- **Total Procurement Cost –** Is a way of looking at all the costs associated with selecting a supplier. Initially, one may think that the lowest cost to a distributor is a direct reflection of a supplier's pricing. This is not the case, other costs exist such as freight minimums, costs associated with inferior quality, return policies and what can best be described as a general hassle factor which comprises qualitative items such as ease of communication and reliability.

4.5 INVENTORY MANAGEMENT 'BEST PRACTICES'

There are many activities and policies that are indicators of a distributor's Inventory Management sophistication. The following select list highlights some of the newer practices being used in Inventory Management as well as some traditional common sense practices that are not universally adopted. Discussing these topics with a distributor will provide insight into the level of sophistication or amount of room for improvement that exists with their Inventory Management processes.

EDI (Electronic Data Interchange)

EDI has been in use in the automotive and electronics industry since the 1980's and is now being adopted by other distribution segments. EDI is the process of electronically sending and receiving common transactions documents such as purchase orders, shipping notifications and invoices. For those distributors that have adopted this technology, the cost to purchase has dramatically decreased, as the labor necessary to create and process all these transactions has been nearly eliminated. For this reason, one can expect distributors using EDI to have higher inventory turns.

Questions to ask:

Are you currently using EDI or any sort of business-to-business e-commerce?

If so, what forms are you sending electronically?

What was your primary purpose for adopting this technology?

Cycle Counting

Cycle counting is a method used to ensure the integrity of inventory levels. It consists of regularly counting inventory and ensuring inventory levels are accurate. The previous technique used to audit inventory levels was called a physical inventory. This process was generally undertaken annually. There are two sizeable inefficiencies with doing a physical inventory, labor costs associated with performing it and the infrequency with which it is performed. Cycle counting most often consists of auditing fast moving products regularly, slow moving items less regularly and dead inventory annually. The benefits associated with cycle counting are that is does not incur a sizeable cost, similar to the overtime costs generally related to physical inventories, and it improves fill rates as inventory level integrity or net available, is kept more accurate by being audited frequently.

Questions to ask:

What is your company's justification for company still performing physical inventories?

How has cycle counting affected your fill rates?

Adoption of bar coding technology

Bar coding has many benefits to a distributor. The primary benefit to a distributor's Inventory Management function is that it minimizes data entry errors. Inventory levels can be entered once into a bar code scanner and do not need to be re-keyed into a distributor's legacy system.

Measuring inventory profitability

Inventory profitability is commonly measured by one of two ratios:

- Gross Margin Return on Inventory (GMROI)

GMROI = GP on warehouse sales ÷ Average inventory

- Turns and Earns

Turns & Earn = [COGS from warehouse sales ÷ Average inventory] * [GP on warehouse sales ÷ Sales from inventory]
These two metrics are most certainly not new but applying them to individual products and suppliers is. The previous practice of many distributors was simply measuring the profitability of total inventory. Measuring profitability at a more micro level allows better resource allocation decisions to be made.

Questions to ask:

What turns are you getting from your "A products"?

When measuring profitability by supplier have you made any unexpected discoveries?

Implementation of an on-going dead inventory identification and control program

Dead inventory is a fact of life for distributors. Whether it is suppliers updating a product, making products on the shelves obsolete, a purchasing error, or a customer finding new sources for a product, excess or dead inventory is unavoidable. Historically, attempts to decrease dead inventory were sporadic and usually occurred near the end of a distributors fiscal year. The problem with this approach is two-fold. The first problem involves the identification of dead inventory and the second is the infrequency of emphasizing its elimination. Allowing a product to realize no movement for twelve months before it is identified as dead, the textbook definition of dead inventory, results in very little chance to profitably sell these products, the window has closed. 'Best practice' distributors will run exception reports when sales of a given product change dramatically, this will allow measures to be taken to sell these products while a market for them may still exist.

Questions to ask:

What measures have been taken to reduce dead inventory accumulation?

Are incentives provided to sales representatives for the sale of items considered dead on an on-going basis? How so?

Formal Supplier Evaluations

When sourcing suppliers for a given product, many criteria are considered, price, reputation, etc. Unfortunately, outside of pricing considerations, many distributors do not evaluate suppliers formally, once they have been selected as acceptable sources. The truth is that supplier performance impacts distributors in several ways besides costs of goods sold. Fill-rates, on time delivery, order accuracy, and quality all factor into the level of customer service a distributor can provide and therefore, it profitability. Sophisticated distributors will have a formal system incorporating a supplier's cost as well as service when measuring performance.

Questions to ask:

Besides price, how are suppliers evaluated?

Is there a formula your company uses that weights different criteria when evaluating suppliers? What is it?

4.11 PERSONNEL AND KEY METRICS

Personnel

Inventory Manager

This position is responsible for developing and maintaining the overall inventory management process. He or she will be responsible for ensuring that level integrities are correct and that min and max points remain appropriate. Many larger distributors may have this function elevated to a Vice President or Director level. Some of the smaller distributors will have these responsibilities intermingled with the top operations position.
Key performance measures

- Fill rates
- Turns & Earns / GMROI
- Excess inventory percentage

Buyers

This is a tactical position, responsible for sourcing and executing purchase orders on specific products. This position is also responsible for expediting orders as necessary and eliminating dead and surplus inventory.
Key performance measures

- Inventory per buyer

- Turns per buyer
- Fill rates per buyer
- Excess inventory per buyer

4.12 STARBURSTING

Operations

Operations plays a crucial role in the inventory management process, as they are the function that stocks inventory. Stocking products in incorrect locations will cause corrupt or inaccurate on-hand amounts. Additionally, most distributors have their warehouse personnel perform cycle counts. If these are inaccurate, it will also lead to corruption of the inventory management process. This function is ultimately responsible for net available.

Questions to ask:

Do you feel that operation's is aware of the importance of net available?

What leads you to think that?
What attempts has your company made in improving net-available accuracy levels?

Sales

Sales plays a central role in demand forecasting. As they are the customer-facing function they have significant influence on what products to stock and in what quantity. Because they are the primary function responsible for addressing customer service problems, they have a vested interest in ensuring that adequate inventory levels are sustained. "Hoarding Inventory" is a common practice where a sales representative will have a certain amount of products set aside for one of his or her particular customers. This reduces the ability to turn inventory and will adversely affect return on inventory. It is also very important that sales captures demand for products that are either not stocked or out-of-stock. This information is very valuable when determining order quantities necessary to satisfy demand.

Questions to ask:

How has it been communicated to sales that overstocking one product inevitably means under stocking another?

What makes you believe that sales understands or doesn't understand the importance of properly capturing demand for all products?

What processes does your company have for gaining changing customer demand feedback from the sales department?

Finance/Accounting

If the sales function can be accused of trying to sustain too much inventory, the finance/accounting function can be accused of trying to sustain too little. This function looks at inventory as an expense and thusly, as other expenses, the smaller the better. Finance/accounting is primarily focused on short-term objectives whereas Inventory Management is focused on the long-term and ultimately more profitable objective of retaining customers.

Questions to ask:

What is your perception of the accounting department's understanding of the importance of customer retention?

Do you feel that the accounting department puts undue pressure on the Inventory Management function to maximize turns at the expense of customer service? What makes you think this?

Does your accounting department understand the transaction costs associated with too high an inventory turn rate? What leads you to this opinion?

Chapter 4 Quiz

1. Inventory Carrying costs include all the following except?
    a. Freight
    b. Insurance
    c. Taxes
    d. Obsolescence

2. A/B/C product classification refers to which of the following?
    a. Weight
    b. Supplier
    c. Turns
    d. Customers

3. True or False? Safety stock refers to the amount of First aid supplies a distributor has in their warehouse.

4. Which of the following is not a factor in determining "net-available?"
    a. Product on-hand
    b. Product incoming
    c. Product committed
    d. Product demand

5. Which of the following decisions does a distributor's Inventory Management function have the least responsibility for?
    a. Which items to stock
    b. When to buy
    c. How much to buy

6. True or False. Return on Assets is the best way to measure the performance of a distributor's Inventory Management Function?

Accounting/Financial Management

If you were to compare a distribution company to an automobile, the sales function would be the engine, operations would be the transmission, executive management would be the driver and the accounting/financial management function would be the dashboard and navigation system. A dashboard provides all the specific information necessary to evaluate the operation of an automobile, how fast it's going, how much gas is left and how hot the engine is running, among others. The accounting function serves this role for a distributor. It is their responsibility to compile and provide information. An automobile's navigation system is responsible for analyzing the information displayed on the dashboard and to give it meaning, e.g. "how fast can we be going to reach our destination without running out of gas or blowing out our engine." The navigation role of a distributor is held by the financial management function. It is their responsibility to analyze the information provided by accounting and give it contextual meaning to the business.

5.1 KEY FUNCTIONS

Accounting

The accounting function of a distributor is very similar to that of other types of businesses. The primary responsibilities for this function revolve around recording cash flows, primarily cash received and cash paid as well as generating accurate and timely reports for the purposes of analysis by the finance function.

Transaction processing

The function associated with payments received is accounts receivable (A/R). At the end of the sales order process, when a product is shipped to a customer, an invoice is generated. As a result of most purchases from a distributor being credit sales, an invoice will contain not only the amount owed to the distributor, but also the payment terms. Payment terms are the number of days until the payment from the customer is due. Common payment terms are thirty days, or "net 30." It is at the time that this invoice is created that accounts receivables' responsibilities begin. These responsibilities can be divided into four primary activities.

- Processing cash receipts
- Processing credit memos
- Collecting outstanding accounts
- End of period processing / posting to General Ledger

The function involved with making payments to suppliers is called accounts payable (A/P). Although accounts payable is not responsible for the purchasing of products, it is their responsibility to remit payment for such goods. The following chart illustrates the accounts payable function.

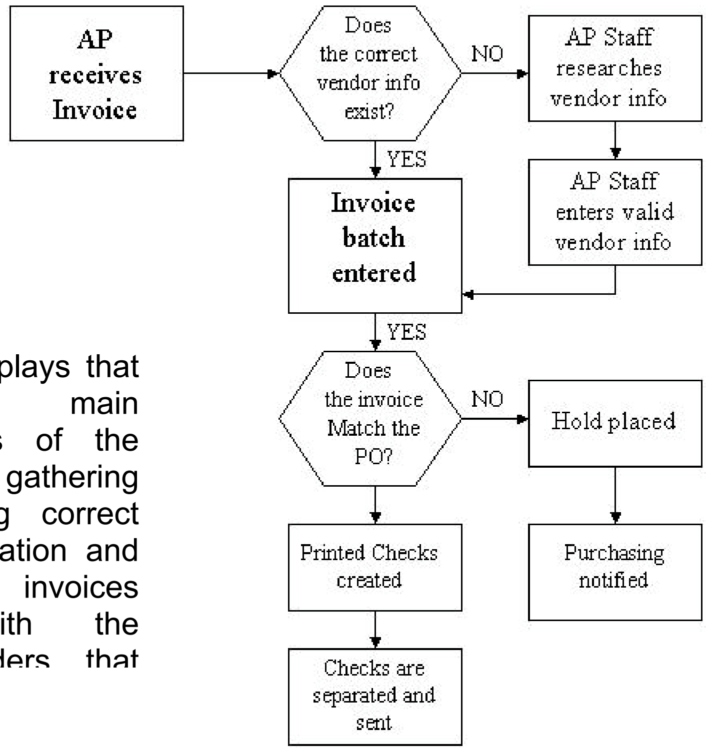


FIGURE 5.1

This chart displays that the two main responsibilities of the AP function is gathering and recording correct vendor information and reconciling invoices received with the purchase orders that

Other administrative functions of the accounting department include, establishing customer credit, tax preparation and in many cases payroll administration.

Report Generation

The second primary responsibility of the accounting function is generating reports. It is generally stated that, “businesses are run by the numbers.” The most significant of these numbers are found in two reports that every distributor will have, the balance sheet and income statement.

Balance Sheet

A balance sheet is a snapshot of a business’ financial condition at a specific moment in time, usually at the close of an accounting period. A balance sheet is made up of three major components, assets, liabilities and owners’ or shareholders’ equity.

- **Assets** – these are anything owned by a distributor that has economic value. In other words, anything that can be converted to cash. The most common assets for a distributor are cash, accounts receivable, inventory, land, buildings and vehicles. Assets are usually broken down into two categories, current assets and long-term assets. Current assets are those that will be liquidated into cash within a twelve-month period. Long-term assets such as land and trucks are those assets that will not be converted to cash within twelve months.

- **Liabilities** – these are anything that represents claims against assets, such as loans and accounts payable. These are also generally divided into current and long-term categories under these same criteria used for assets.
- **Owners' or Shareholders' equity** – this amount represents the difference between assets and liabilities and is also known as net worth. The reason that it is found on the liabilities side of the ledger is due to the fact that assets can be financed one of two ways, either through debt or capital owned by the company.

FIGURE 5.2 – SAMPLE BALANCE SHEET

Assets			**Liabilities**		
Current Assets			**Current Liabilities**		
Cash	$123,000		Accounts Payable	$400,000	
Accounts Receivable	$400,000		Notes Payable	$150,000	
Inventories	$600,000		Accrued Expenses	$50,000	
Total Current Assets		**$1,123,000**	**Total Current Liabilities**		**$600,000**
Long – Term Assets			**Long – Term Liabilities**		
Buildings (less depreciation)	$300,000		Long – Term Debt	$400,000	
Land	$250,000		**Total Long-Term Liabilities**		**$400,000**
Total Long - Term Assets		**$550,000**			
			Total Liabilities		**$1,000,000**
Total Assets		**$1,673,000**			
			Owners Equity		**$673,000**
			Total Liabilities & Equity		**$1,673,000**

Income Statement

An income statement, otherwise known as a profit and loss statement, is a summary of a company's profit or loss during any one given period of time, such as a month, a quarter, or a year. The income statement displays all revenues for a business during this given period, as well as expenses. The key components of the Income Statement are, sales, costs of goods sold (COGS), gross profit, selling/general/administrative expenses (SG&A), operating income, interest expense, taxable income and net profit.

- **Net sales** – these are revenues received less returns for a given period, or in other words total revenues brought in.
- **Costs of goods sold** – this line represents what was paid out to acquire materials to make sales.
- **Gross profit** – this is the difference between net sales and costs of goods sold. This amount represents the amount of funds available to pay expenses, taxes, and provide a profit.
- **Sales, general and administrative expenses** – these represent the costs incurred with generating revenues, excluding the direct cost of purchased materials interest and taxes. Many income statements will have this section expanded to relate specific costs with specific expense centers. Common examples of these costs are rent and payroll.
- **Operating income** – this amount reflects the residual revenue left after material costs and SG&A expenses are paid. This amount is considered the ‘profit’ from operations.
- **Interest expense** – this is the expense paid for interest on monies borrowed. It is not included with other expenses above the operating profit level because it would skew the operating profit results for companies that chose to finance investments through debt rather than owners’ equity.
- **Taxable Income** – this is the amount of profit on which taxes are paid.
- **Taxes** – this is the tax expense incurred by a distributor.
- **Net income** – “the bottom line,” this is the profit (or loss) of a distributor over a given period of time.

FIGURE 5.3 – SAMPLE INCOME STATEMENT

Net Sales	$540,000
Cost of Goods Sold	< $319,680>
Gross Profit	$220,320
Selling, General & Administrative Expenses	< $132,300>
Operating Income	$88,020
Interest Expense	< $10,356>
Taxable Income	$77,664
Taxes	< $35,726>
Net Income	**$41,938**

Using these two reports, as well as comparing them with those of previous periods, will provide a distributor with nearly all the financial information necessary to make informed business decisions.

Finance

The primary function of a distributor's financial management function is analyzing operational performance especially in regard to budgets. A distributor will generally have many budgets. They will have sales budgets by product, sale rep and by month. They will have expense budgets by expense category and they will also have a total business budget, usually called a "business plan." It is the responsibility of the financial management function to constantly monitor actual results, called "actuals" and review them to the amounts that are budgeted.

When actuals versus budget begin to show variances, actions need to be taken. The sooner these variances can be identified, the more lead time a distributor will have to make adjustments. Thus, strong financial management is vital to the success of any distributor.

Aside from comparing actuals to budget, distributors look at an abundance of other ratios in determining their financial health. Many of these ratios are presented in the "Key Ratios" section of this chapter. By comparing ratios to those of competitors, primarily through association Performance Analysis Reports (PAR), a distributor can gain valuable knowledge into the health and competitiveness of their company.

5.2 KEY METRICS

The following is an explanation of some of the key distribution performance ratios used to measure a distributorships operations and profitability.

Gross profit margin = Gross profit ÷ Sales

This percentage indicates what percent of sales are left to pay operating expense and generate profits. Many employees of distributorships especially those in sales, consider this to be the primary ratio in determining profitability, as they are unaware of the impacts of GS&A expenses as well as other costs of doing business.

Operating profit margin = Operating Income ÷ Sales

This percentage indicates what percent of sales are left for profits and to pay taxes.

Net profit margin (Return on Sales) = Net Profit ÷ Sales

This percentage indicates what percent of sales are retained as profits. Also known as "The bottom line."

Return on Assets (ROA) = Net Profit ÷ Total Assets

This percentage measures the efficiency of a distributor in generating profits with the assets employed. This ratio used with the net profit % will give an excellent view of a distributor's profitability.

Return on Current Assets = Net Profit ÷ Current Assets

This is another efficiency measure that is used in shorter timeframes than return on total assets, because it only considers those assets that can be liquidated within a year. Many managers of distribution firms have their bonuses tied to this ratio.

EBITDA (Earnings Before Interest, Taxes, Depreciation & Amortization) = Operating Profit + Depreciation + Amortization

This is a modified Operating Income. Currently, many distributors believe this is the best metric to use when measuring the efficiency of the company as it only includes revenues generated from sales and expenses not tied to accounting tax structures.

Days Sales Outstanding (DSO) = Accounts Receivable ÷ (sales ÷ 365)

The quotient produced by this formula is in days. This value displays the number of days worth of sales that are tied up in accounts receivable.

Cash Cycle Time

The length of time between the purchase of products and the collection of accounts receivable. The shorter the cash cycle time, the less cash is required to finance the business.

5.3 PERSONNEL

Vice President Finance/CFO

This is the top position of the Financial Management function, reporting directly to the CEO or President. One can expect to find someone with one of these titles within all larger distributorships. In smaller distributorships, the President, CEO, or one or more of the Vice Presidents will hold the responsibilities of this position. This position is responsible for directing all financial affairs of a distributorship, including:

- Overseeing the development of all budgets.
- Developing all processes within the Financial Management function.
- Guiding company directors or ownership in analyzing financial information.

Key Performance Measures:

- Budget vs. Actual performance
- Cash flow
- Return on Assets

Controller/Accounting Manager

This position is considered the head of the accounting function. This role's primary function is ensuring the accuracy and timeliness of financial reports and that proper procedures are being followed.

This position is responsible for overseeing all administrative accounting personnel and their activities, including:

- Overseeing all management reports.
- Preparing financial reports.
- Maintaining budgeting and expense controls.

Key Performance Measures:

- Accuracy of General Ledger versus bank statements
- Timeliness of internal reports
- Timeliness of external reports (taxes, regulatory, etc.)

Accounting clerk/A/R clerk/A/P clerk/Bookkeeper

These are administrative positions.

These positions are responsible for the following activities:

- Compiling and sorting documents such as invoices and checks.
- Verifying, allocating and posting details of business transactions to subsidiary accounts or journals.

Key Performance Measures:

- Number of transactions processed per a given time period
- Days Sales Outstanding (A/R Clerk)
- Minimization of vendors placing company on credit hold (A/P Clerk)

5.4 STARBURSTING

Because the accounting and finance functions of a distributor rely heavily on data submitted by other functional areas, there is strong interrelation between finance/ accounting and other functional areas.

Sales

The sales department's main function is making sales, e.g. selling products. Capturing the correct information when making a sale is very important to the accounting function. Incorrect information on the parties to whom sales are made will delay the invoicing and payment process. The Sales department also needs to be up on customers' credit situation. It is the accounting department's responsibility to monitor credit given to customers and when, according to company policies, their bills are not paid, they will be put on credit hold. Poor customer service will inevitably result when orders are taken from customers on credit hold and their goods never arrive.

Questions to ask:

How much time does accounts receivable spend researching customer contact information? On what do you base this conclusion?

What is your company's system for communicating credit holds to the sale's staff?

Inventory Management

Inventory Management has a significant impact on the accounts payable function of a distributor. When A/P receives an invoice from a supplier, their first task is to match it with the purchase order generated by purchasing. Any discrepancy between the two will force accounts payable to delay the payment process while they track down the correct information. In many distributorships, the Inventory Management and Finance functions are in a constant state of disagreement as they have different charters. Finance is very aware of the costs associated with buying and carrying inventory and nothing will eat into profits faster than carrying too much inventory or not 'turning' inventory fast enough. The Inventory Management function is focused on customer service and they have a tendency to err on the side of carrying too much inventory.

Questions to ask:

Do you feel that the purchasing department provides timely and reliable information or do you feel that A/P spends too much time tracking down information to reconcile supplier invoices? Why?

What are the issues your company faces in regard to dead inventory?

How prevalent are 'back orders' in your company and do you feel that this is a problem in receiving prompt payment from customers?

Operations

Ensuring that the correct products are shipped and in the correct quantity is essential for the receipt of prompt payment from customers. If mistakes are made in shipping products, it will delay the receipt of payment from customers.

Question to ask:

How prevalent are 'returns' and do you feel that this poses a problem when it comes to receiving payment from customers?

Chapter 5 Quiz

1. Which of the following is not found on a Balance Sheet?
    a. Assets
    b. Sales
    c. Inventory
    d. Liabilities

2. Which of the following is not found on an Income Statement?
    a. Costs of Goods Sold
    b. Net Profit
    c. Owner's Equity
    d. Interest Expense

3. True or False? Cash Cycle Time refers to the amount of time until a distributor goes bankrupt.

4. Which of the following represents Sales minus Costs of Goods Sold?
    a. Assets
    b. Accounts receivable
    c. Gross Profit
    d. Net Profit

5. True or False? Salaries are considered a component of Costs of Goods Sold.

6. True or False? When Liabilities are greater than Assets, Owner's Equity is negative.

APPENDIX-QUESTIONS BY JOB TITLE OR POSITION

PRESIDENT

How would you define your business strategy?

How do you communicate that strategy to your employees?

Why do your largest customers buy from you?

How would you define your company's competitive advantages?

What strategic initiatives are you considering?

What's new in the external environment on which you can capitalize?

What changes have had a significant impact on your business?

- **Manufacturers selling direct?**
- **Electronic commerce?**
- **Reducing duplicate inventories?**
- **Automating replenishment sales activities?**

What opportunities do you have for creating strategic alliances for integrated supply?

Of your total customers, what percentage is served via integrated supply contracts?

What keeps you from being the most efficient and effective source of supply for your products and services?

What competitive advantages do your competitors have?

What are competitors offering that your company does not?

What is changing with your competitors that could give you opportunities; i.e. a merger or acquisition?

What are your methods for gathering competitive intelligence?

How have sales to your top customers changed?

What volume do the top 10% of your customers represent?

How many of your customers represent 80% of your revenue? How has this changed over time?

What new products and services will you offer to provide new growth opportunities? To existing customers? To new customers?

How are account retention and growth measured?

What percentage of your customers consider you to be their number one supplier?

How has your average sale per invoice increased or decreased over time?

What are the characteristics of your most profitable customers?

How do you record and monitor customer complaints?

What type of a customer complaint database do you maintain to track patterns and identify recurring problems?

How do you use this information to improve performance and increase customer satisfaction?

What single thing has the greatest impact on your company's profitability?

What keeps you from being more profitable than you are today?

How does your company compare to your industry PAR reports?

What metrics or industry surveys are available from your trade association?

Which departments are a competitive strength and which a competitive weakness?

What initiatives do you have to improve "highest delivered value" – includes value-added services and all aspects of the customer relationship?

What initiatives do you have to improve "lowest total delivered cost" – product price plus all costs of delivery?

SALES MANAGEMENT

What would it take for your selling and customer service process to achieve seamless customer service?

How do outside sales, inside sales, telemarketing, and customer service work together to facilitate the customer order process?

What investments have you made in Sales Force automation?

How do Sales Reps spend their time (as a percent of their total time)?

- **selling new products or new programs to fill the additional needs of existing clients?**
- **assessing opportunities with each customer?**
- **selling programs that will get them long term sales growth?**
- **spent on daily transactions?**
- **inventory maintenance activities?**

What percentage of your customers have a written plan outlining the working relationship between you and your client spelling out the expectations of each party?

How often do you plan a formal business review involving the management teams to compare expectations with actual performance?

How do you include customers in joint planning of growth objectives?

How are you helping your customers to be more profitable?

How do you prove you are able to make improvements in speed, cost, or quality?

What plan is in place to offer Prime Accounts extremely high levels of service?

How do you rate or rank your customers on average costs, average selling prices, or average gross profit?

How much does it cost to lose a customer relationship?

How do customers typically reach their sales rep? Cellular phone, beeper, email, paging off of web site?

How would you compare your selling activities to others in your industry? What comparisons have you made to industry PAR Reports?

How does your sales team use technology tools to enhance margin performance and customer service?

What would your sales team describe as the key obstacles that limit their ability to do more business?

What additional support could be added to reduce the administrative or routine tasks of the sales reps?

What is your company's current position in the market place?

How do you measure growth and expansion?

How are you measuring increased or decreased market share?

How do you know if a customer is current and active or departing?

How do you measure sales to new customers?

How are customer satisfaction and customer feedback information incorporated in the performance review and incentive system?

How are phone system metrics used to:

- **Measure Inside Salesperson/Customer Service performance?**
- **Analyze customer-calling behavior?**
- **Measure time on hold and hang ups to analyze call abandonment?**

What are your FAQ, frequently asked questions and how do you handle them?

How does the role of your Field Sales Representatives fit into your business strategy?

How does the field sales force maximize account penetration and retention?

What would it take to reduce the amount of time the outside salesperson spends on taking and processing orders?

How does the role of your Inside Sales Representatives fit into your business strategy?

How does your inside sales or customer service groups help further existing account penetration?

What percentage of the time does an Inside Sales Representatives have call a customer back because they do not have the training, available information or autonomy to make decisions and resolve the customer's inquiry?

How is information shared between each inside sales or customer service and the outside sales representative?

How do you work as a team with outside sales representatives to maximize account penetration and increase sales?

How are the support departments in your company perceived by customers?

Which departments are a competitive strength and which a competitive weakness?

What areas of weakness do you feel your company has in providing the basic services well?

OPERATIONS MANAGEMENT

What is the critical constraint of the warehouse facility and order pulling process?

What is their biggest single frustration?

When do order crunch times occur?

What does the majority of the pick tickets have, more items or more units per item?

How is the warehouse organized and laid out to facilitate the pulling of orders?

What is different from the sequence of items as they appear on the pick ticket and the flow of the warehouse floor plan?

How are the orders checked and confirmed? Reading and matching? Electronically through a bar coding system? As they are pulled? Before they are loaded?

How did you select your current method of order pulling?

What different size products, packaging, box sizes, shipments do you make?

What time constraints are you working under?

What cut off times have to be imposed? On sales? On customers?

How are your labels generated?

What information are you including on your outbound labels?

How are you communicating shipments with major carriers? Electronically?

What quality requirements do your customers impose on you?

What quality requirements do you have of your suppliers?

What is your percentage of customer returns?

What are the typical reasons for returns?

What are your methods for processing returns? Returned to supplier? Credit taken against your supplier?

How does the percentage and handling of returns affect your purchases with suppliers?

How are costs calculated? By the process or the specific job?

If by the process, how do individual jobs vary?

What is the criteria for assessing those costs to customers?

How well does operations exceed customer expectations?

What type of performance metrics are you maintaining?

What are you doing to monitor and eliminate waste in operating costs, such as the high cost of errors?

What metrics do you use to measure warehouse employee productivity?

What problems are blamed on the warehouse but actually caused by other departments?

What information are you constantly being asked to provide to other departments?

Are the salespeople following procedures and guidelines regarding ship dates, cut offs times, and rush orders?

INVENTORY MANAGEMENT

When the on-hand product level reaches the MIN, in the above graph, how much product should be ordered?

What process do your buyers use when weighing freight plus other costs to purchase, and customer service?

How would you best describe your ordering process, intuitive or process driven?

How accurate are previous usage levels when forecasting demand?

How has your company reconciled inventory levels and profitability?

Has your company looked at costs to order? What has it discovered?

Are salespeople allowed in the warehouse? Why?

In your opinion, what is the biggest reason behind "out of stock" situations?

How much time is spent expediting orders because of poor net available amounts?

Are you currently using EDI or any sort of business-to-business e-commerce?

If so, what forms are you sending electronically?

What was your primary purpose for adopting this technology?

What is your company's justification for company still performing physical inventories?

How has cycle counting affected your fill rates?

What turns are you getting from your "A products"?

When measuring profitability by supplier have you made any unexpected discoveries?

What measures have been taken to reduce dead inventory accumulation?

Are incentives provided to sales representatives for the sale of items considered dead on an on-going basis? How so?

Besides price, how are suppliers evaluated?

Is there a formula your company uses that weights different criteria when evaluating suppliers? What is it?

Do you feel that operation's is aware of the importance of net available? What leads you to think that?

What attempts has your company made in improving net-available accuracy levels?

How has it been communicated to sales that overstocking one product inevitably means under stocking another?

What makes you believe that sales understands or doesn't understand the importance of properly capturing demand for all products?

What processes does your company have for gaining changing customer demand feedback from the sales department?

What is your perception of the accounting department's understanding of the importance of customer retention?

Do you feel that the accounting department puts undue pressure on the Inventory Management function to maximize turns at the expense of customer service? What makes you think this?

Does your accounting department understand the transaction costs associated with too high an inventory turn rate? What leads you to this opinion?

ACCOUNTING/FINANCIAL MANAGEMENT

How much time does accounts receivable spend researching customer contact information? On what do you base this conclusion?

What is your company's system for communicating credit holds to the sale's staff?

Do you feel that the purchasing department provides timely and reliable information or do you feel that A/P spends too much time tracking down information to reconcile supplier invoices? Why?

What are the issues your company faces in regards to dead inventory?

How prevalent are 'back orders' in your company and do you feel that this is a problem in receiving prompt payment from customers?

How prevalent are 'returns' and do you feel that this poses a problem when it comes to receiving payment from customers?

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GLOSSARY

24 x 7 - 24 hours a day, seven days a week

.com Companies - A company that uses an internet web site as the primary method of doing business.

Activity Based Costing – A method of accounting for costs by product or service. All costs associated with that product or service are considered in assessing profitability.

Advertised Specials or Promotional Orders - discounts offered for taking larger volume.

Application Engineers - Specially trained individuals assisting in the sale of technical products.

Assets – A balance sheet component representing anything owned by a distributor that has economic value.

Balance Sheet – A snapshot of a business' financial condition at a specific moment in time, usually at the close of an accounting period. A balance sheet is made up of three major components, assets, liabilities, and owners' or shareholders' equity.

Blanket Purchase Order - covers a specific quantity to be ordered during a specific time frame.

Buying Groups - Independent companies joining together to make combined purchasing decisions. (See also Marketing Groups)

Cash Cycle Time – The length of time between the purchase of products and the collection of accounts receivable.

Closing Ratio - Percentage of sales made against quotes or inquiries made.

Consolidation - Merging of companies for the purpose of eliminating redundancies.

Continuous replenishment - Creating a system for reordering basic stock items.

Cost of Goods Sold (COGS) – An Income Statement component representing what was paid out to acquire materials to make sales.

CRM - Customer relationship management - The process of developing a customer

Current Assets – assets that will be liquidated into cash within a twelve-month period.

Current Liabilities – Liabilities that will become due within a twelve-month period.

Cycle Counting – A method used to ensure the integrity of inventory levels. It consists of regularly counting inventory and ensuring inventory levels are accurate.

Days Sales Outstanding (DSO) – represents the number of days worth of sales that are tied up in accounts receivable. It is calculated using the following formula:

Accounts Receivable ÷ (sales ÷ 365)

Demand Fulfillment - Providing product for repeat purchases.

Drop shipments - orders set up to ship directly from the manufacturer to the customer. The distributor will bill the customer but will not be involved in the shipping of the product.

EBITDA (Earnings before Interest, Taxes, Depreciation & Amortization) – A modified Operating Income. Currently, many distributors believe this is the best metric to use when measuring the efficiency of the company as it only includes revenues generated from sales and expenses not tied to accounting tax structures.

E-Commerce - Customer communication and interaction using the internet, usually from a company's web site.

EDI - Electronic Data Interchange - Exchange of information between electronic devices, usually computers.

FAQ - Frequently Asked Questions - Information to handle these questions should be readily available to customer service, sales, on the web site for customer access 24 x 7.

FIFO - First In, First Out method accounting for inventory

Fill Rates – The percent of purchase order line items from a distributor's stock that are filled and shipped by the promise date as a percent of all line items ordered from stock.

Flow through distribution - System for automatic orders based on sales transaction data.

GMROI (Gross Margin Return on Inventory) – A metric used to measure the profitability of inventory. It is calculated using the following formula:

GP on warehouse sales ÷ Average inventory

Gross Profit – The difference between net sales and costs of goods sold.

Gross profit margin – A financial metric representing Gross profit ÷ Sales.

Income Statement – A summary of a company's profit or loss during any one given period of time, such as a month, a quarter, or a year.

Integrated Supply - An arrangement with a supplier to provide the total purchasing needs of a buyer in order to minimize ordering expense.

Inventory Classification – A method of categorizing inventory based on the volume by which it turns.

ISO - International Standards Organization - A rigid set of guidelines and measurements for demonstrating quality products or services. (See also QS)

Legacy System - a distributor's main computer system.

Liabilities – A balance sheet component representing anything that represent claims against assets, such as loans and accounts payable.

Line Point – A term used to represent the maximum amount of net available. It is calculated using the following formula:

min + [usage per day * order cycle days]

Logistics providers - A company that specializes in routing and deliveries at the lowest potential cost.

Marketing Groups - Buying Groups-Independent companies joining together to make combined purchasing decisions.

MAX – SEE LINE POINT

MIN – SEE ORDER POINT

NAW - National Association of Wholesale Distributors

Net Available – Number of a given product on hand (in the warehouse) + number of a product incoming (already ordered) – number committed (already ordered but not shipped).

Net Income – "The bottom line," this is the profit (or loss) of a distributor over a given period of time.

Net profit margin – A financial metric representing Net Profit ÷ Sales.

On-line auctions - Internet sites that offer products at fluctuating prices.

Operating Profit (Operating Income) – The residual revenue left after material costs and SG&A expenses are paid.

Operating profit margin – A financial metric representing Operating Income ÷ Sales.

Order Cycle – The appropriate amount of times between orders or a given product.

Order Point – The point at which more of a given product should be reordered. It is calculated using the following formula:

[usage (in days) * lead time (in days)] + Safety stock

Owner's Equity – The difference between assets and liabilities and is also known as net worth.

PAR Reports - Trade associations publish industry wide surveys of performance; called annual PAR Reports for Performance Analysis Reports.

Pick ticket - The document that accompanies an order through the order pulling process that contains all of the information necessary to pick or pull that order.

Portals - Internet information sites for a specific group of users.

Product Specialist - A salesperson with specific product knowledge or industry experience.

QS - Quality Standards - A rigid set of guidelines and measurements for demonstrating quality products or services (See also ISO)

Replenishment Rep Firms - Companies that specialize in monitoring inventory levels for the purpose of reordering stock items.

Return on Assets (ROA) – A financial metric representing Net Profit ÷ Assets.

Return on Current Assets – A financial metric representing Net Profit ÷ Current Assets.

Return on Sales (ROS) – See Net profit margin

Safety Stock – Level of stock kept in reserve to account for the variance of product usage.

Sales Force Automation - Electronically enhancing and duplicating the sales process.

Sales, General & Administrative Expenses (SG&A) – The costs incurred with generating revenues, excluding the direct cost of purchased materials interest and taxes.

Starbursting - Methods for networking from one department or area of a customer's company into another department or area.

Stock Goods – Products that a distributor carries in the warehouse.

Stockless - Reducing the inventory in a distribution channel to the point where no inventory is held in stock. All inventory is in transit to a specific destination.

Total Procurement Cost – A way of looking at all the costs associated with selecting a supplier.

Turn & Earn – A metric used to measure the profitability of inventory.

> [COGS from warehouse sales ÷ Average inventory] * [GP on warehouse sales ÷ Sales from inventory]

Turns – The number of times the same dollar is used to buy inventory over a period of time, generally one year.

Vendor managed inventory - A partnering arrangement with a supplier to assume responsibility for inventory, stock levels, and reorders.

WMS - Warehouse Management Systems - Technology to manage the warehouse processes.

Chapter 1 Quiz Answers

1. c
2. b
3. False
4. e
5. d
6. b
7. True
8. a

Chapter 2 Quiz Answers

1. c
2. e
3. b
4. False
5. a. 4
   b. 5
   c. 1
   d. 3
   e. 2
6. c
7. a
8. True

Chapter 3 Quiz Answers

1. d
2. False
3. a. 2
   b. 3
   c. 1
4. True
5. d
6. a
7. True
8. a

Chapter 4 Quiz Answers

1. a
2. c
3. False
4. d
5. a
6. False

Chapter 5 Quiz Answers

1. b
2. c
3. False
4. c
5. False
6. True