ORDER TO CASH

- Order to Cash Flow
- What Is Sales Order Processing?
- What Is a Sales Order?
- What Is the Difference Between a Sales Order and a Purchase Order?
- What Is the Difference Between an Invoice and a Sales Order?
- What Is a Sales Order Acknowledgement?
- Key Terms and Roles in Sales Order Processing
- The Evolution of Sales Order Processing
- What Is Sales Order Management?
- The Fundamentals of Sales Order Management
- What is Omni Channel?
- How Omni-Channel Shopping Changes Sales Order Processing
- The Benefits of Automated Sales Order Processing
- The Sales Order Processing Workflow
- Common Problems in Sales Order Processing
- Do You Need an Automated Sales Order Processing System?
- How to Choose a Sales Order Processing System
- How big is the Market?
- What is Direct and Marketplace?

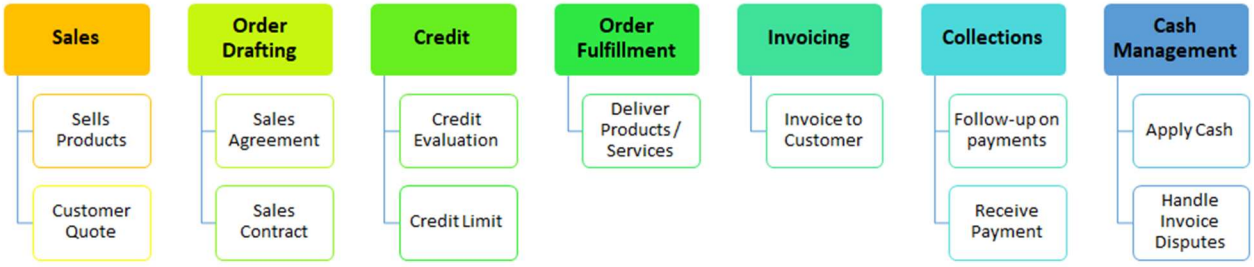
- **Self Assessment of your current Order to Cash Process**

- **Success Critical Factors - Order to Cash Process**

- **EDI Implementation**

ORDER TO CASH FLOW

Order To Cash (OTC) is the timeline used to process orders in your system. The longer it takes to fulfill orders, the less cash flow you have in your business. Shorten your OTC process to cut costs and drive efficiency through the roof. Our Order To Cash solution allows you to receive orders from customers in the blink of an eye.



Old-fashioned OTC processes have issues that cost big bucks. They often lack detailed inventory information, delay invoices, or don't integrate with other important systems. These small inefficiencies prevent you from growing your business.

Reduce the time spent on redundant or incorrect information. Improve your client satisfaction and increase your cash flow with our OTC specialists. One client saw their average order processing time go from 43 minutes to a mere 11 seconds after consulting with our OTC experts.

What is Sales Order Processing?

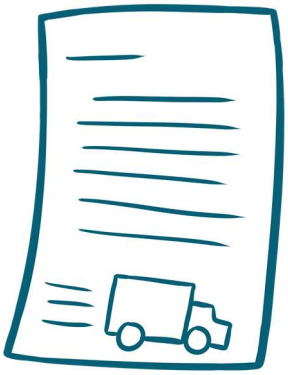
Sales order processing is a series of actions that a business uses to fulfill a customer purchase. Today, sales order processing is often supported by technology, which warrants each contact on the seller's side (from billing to production and logistics) has the needed information to accomplish a customer order efficiently.

Clicking "buy" on a website or calling in an order initiates a complex chain of interactions that involves different departments. Despite the complexity of the process and bulk of orders that a seller handles, customers expect their purchases to be delivered fast.

To thoroughly understand sales order processing, we need to look at the sales order itself, its purpose, and its relationship to other order documents**.**

What is a Sales Order?

A sales order is an explicit agreement between seller and buyer concerning the delivery of items or the supply of services.



Having a timely delivered sales order makes you reliable in the market. It is your primary responsibility to customers to deliver orders on time. Also, the delivery process should be trouble-free, making it an overwhelming experience for customers doing business again with you.

The *sales order validates* the terms of a business between a buyer and a seller. The seller produces the request, in response to a purchase order. The seller may send this document to the customer or use it only for internal use. The sales order covers the quantity, price, delivery time frame, and more.

What Is the Difference Between a Sales Order and a Purchase Order?

The seller creates a sales order upon getting a purchase order from the customer. These two differ in terms of who generates them and their purpose.

- Purchase Order: The buyer gives a purchase order to the seller and includes type, quantity, and other details of the goods or services. It is also known as a customer order.
- Sales Order: The seller gives the sales order and validates the sale after the buyer accepts the seller's price quotation.

When a Purchase Order is received, it becomes a binding agreement between a buyer and seller. And when the sales order is accepted, it confirms the sale.

Purchase Order helps the buyer place an order while Sales order helps the buyer know the date, time, and mode of delivery.

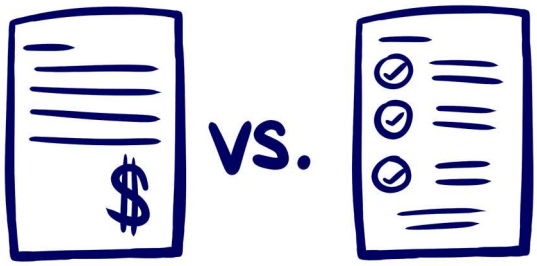
What Is the Difference Between an Invoice and a Sales Order?

The sales order validates the specifications of the customer's purchase, while the invoice serves as a bill, stipulating payment due and terms. Once both sales order and purchase order is confirmed, both parties agree to a deal. An invoice comes next.

The buyer settles the invoice in one of many ways depending on the agreed terms; before the seller sends the order, upon receipt, or within a certain period after delivery.
Sales orders and invoices need to be monitored and make sure they reconcile. Some use sales orders to keep an eye on stock.

The invoice also works as the customer's proof of purchase. It may be needed to record expenses for tax purposes, as a warranty or claim if there is an issue with the purchased product.

Sales order and invoice are both business documents that list the purchased products and seller, purchaser information. Their difference is that the sales order is processed when a customer places an order. An invoice is a payment request by the seller for the product ordered. Once the seller produces an invoice, the buyer must pay.



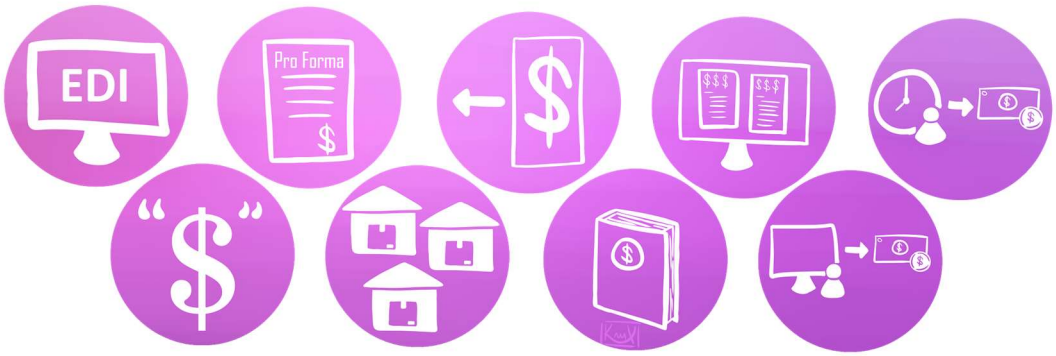
What Is a Sales Order Acknowledgement?

A sales order acknowledgment is also called sales confirmation. This form relays to a buyer that the seller has received an order. The seller promptly triggers an email once they enter the order in the system and confirms to the buyer that everything is good to go.

The sales order acknowledgment also works as a reminder to the buyer of what they purchased, and buyers see errors in an initial check of the order confirmation. Upon analyzing this document, the buyer may recognize that he has ordered the wrong size, so having an order acknowledgment helps detect errors early in the sales order process.

If you want to design your form, it must include various information. Like the seller's and buyer's names and addresses, order number, customer ID, date of order receipt, shipping details, payment information, an itemized list of the items they are purchasing, the total amount due, and any other terms of the order. There should also be a digital signature for authenticity.

Key Terms and Roles in Sales Order Processing



Remarkable key language and roles:

- Electronic Data Interchange (EDI): This is a process for computer systems to exchange data in a standardized arrangement. It allows businesses sales orders and other documents exchange electronically.
- Quotations: A *sales/price quote* is pricing that you show to a buyer, so they can estimate whether the purchase will satisfy their needs. Creating and giving sales quotes are sales teams responsibility, but because accepted price quotes become purchase orders, sales processing teams need to know them.
- Pro Forma Invoice: This invoice is preparatory. The seller gives the invoice before they ship the order.
- Stock Allocation: This is the method by which you determine how you distribute your inventory among your warehouses or other locations.
- Sales Returns: A *sales return* is stock that a customer returned due to an error or defect. The finance department reports this as a debit to the sales returns account and as a credit to accounts receivable.
- Price Book: P*rice books* are sets of different prices for the same products. The costs may differ based on quantity purchased, retail vs. wholesale, shipment region, and promos.
- Sales Document Workspaces: In sales processing, *sales document workspaces* are sections where you display data related to view your sales order, quotes, and invoices.
- Order-to-Cash Cycle: This is relevant to the time it takes from the moment a buyer places an order to when the seller accepts payment.
- Procure-to-Pay Cycle: This is similar to the order-to-cash cycle process. It refers to the time it takes from when a buyer establishes a procurement order to when the buyer closes the purchase by paying.

Critical partners in sales order processing include customer service reps and an order team. Sales team, sales order leaders, sales order management, and order fulfillment also sustain the process. They make sure that the company manages order inquiries accurately, that pricing and product on stock are updated, and that employees fill orders correctly. Sales accounting is an area of expertise, and the Association of Accounting Technicians, administer sales order processing exercise as part of the certification process.

The Evolution of Sales Order Processing

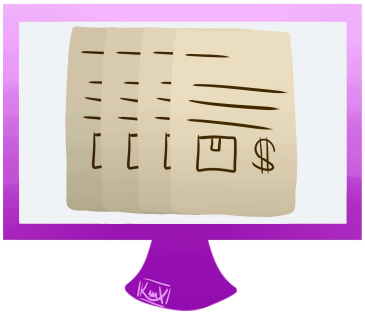
Sales order processing is the system behind the vendor's goal for the smooth implementation of a customer purchase.

Sales order processing was a manual operation that uses a lot of paper. As businesses advanced to digital, automating sales order processing often delayed other operations, noticeably among business-to-business (B2B) sellers. Like online retailers, consumer-focused sellers have been at the forefront of using automated sales order processing to deliver more excellent performance. More are now adopting these procedures, although orders for costly and custom products with exact specifications may still be done manually.

Automated order processing solutions first used optical character recognition (OCR) to take out data from paper forms and modify to electronic data. Sales order processing applications automatically process EDI orders, switch them into a human-readable format, and report anything that needs to be reviewed by a service rep.

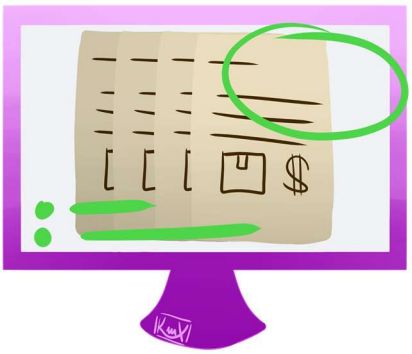
Cloud computing accelerated the growth of fully automated sales order processing programs that integrate with other business solutions, such as ERP and CRM platforms.

What Is Sales Order Management



Automated sales order processing made it achievable for businesses to optimize sales order administration. It has given growth sales order management, which broadly refers to the management of orders from the foundation to execution using one system.

The Fundamentals of Sales Order Management



Using automation to make order processing more effective, managers can see every step of the order cycle and trace key performance indicators (KPIs).

Sales order management became more valuable as businesses have obtained an awareness of this information and began to see order processing costs as a controllable variable. Before, businesses would just put up with these costs with overhead.

Order management collects different internal data from product details and the ability to order processing status and expected delivery dates to provide a comprehensive monitoring system for sales orders. The increase in sales channels makes order management more important. Furthermore, customers are becoming established to have visibility in their order fulfillment progress, and sellers can only provide this visibility if they use integrated sales order processing and management systems.

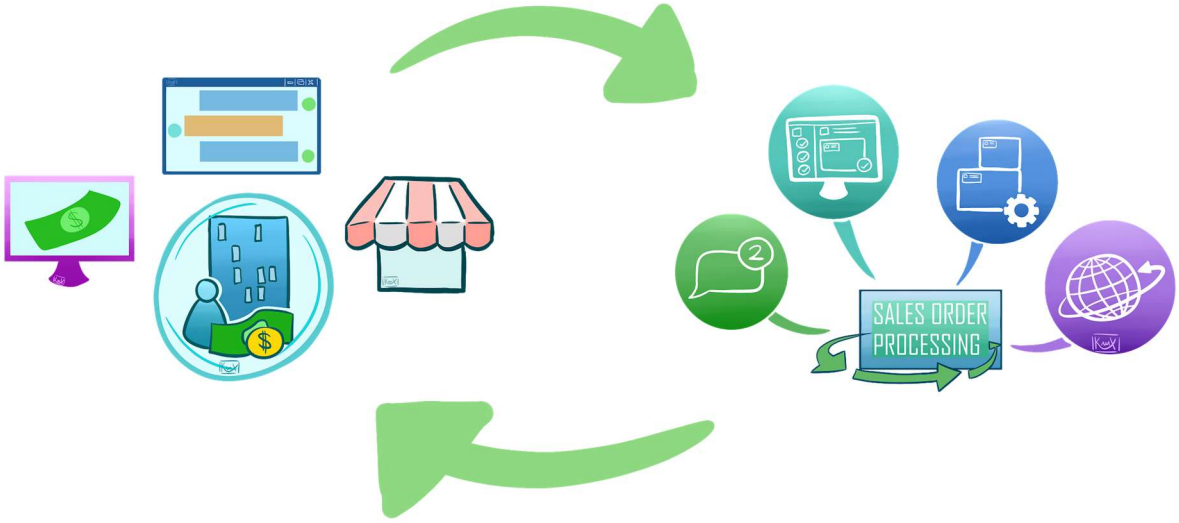
Centralized order management comes with increased efficiency of order control, monitoring, and modification in multiple sales channels. Order management empowers an organization's capacity to manage variations in demand, economic cycles, and differences in buyer tastes.

What is Omni Channel?

Omnichannel is being used simply as a buzzword for cross-channel diplomacy. What is omnichannel? Omnichannel is the progression of your experience. It is grasping and comprehending all things. Moreover, the most suitable way for a customer to understand everything is to let them own their data and experience, then grant them the ability to use it to control the creation and meaning of every future experience.

Omni-channel signifies a tactic businesses are practicing to connect the multiple, divided sales channels they may have and combine them into a unified and consistent experience over the brand to meet the expectations shoppers demand.

How Omni-Channel Shopping Changes Sales Order Processing?



A modern trend introduced with sales order processing. The significant change to e-commerce and shopping on mobile devices, particularly for business-to-consumer (B2C) selling, makes sales order processing extra complicated, thus needing better solutions.

Orders may be in person, by phone, or via B2B, EDI systems, email, mail, fax, or online. Also, there are multiple ways to pick up and return products. For sellers, this event needs an omnichannel strategy. This means making the customer's experience seamless and comfortable, no matter how they buy. However, it makes sense that sellers want all buyer communications to be consistent and coherent. This trend has sometimes demanded extensive changes for sellers.

Generally, they have to turn e-commerce solutions on legacy fulfillment processes for physical stores or catalogs and need to revise systems to adapt them. To embrace omnichannel shopping, sellers have to optimize fulfillment equally for all channels.

In B2B transactions, omnichannel means that buyers do not want to take extra steps with sellers' systems. If the buyer generates a sales order, they do not want to spend additional time keying it on a seller's website. With that said, sellers need to make sure that their systems can accept orders in all the forms, no matter how the buyers want to send them.

Having more ordering options gives customers more convenience and can lead to a more significant customer base and more orders. However, with orders coming in different forms, sales order processing becomes much more complicated — and more prone to error. The various order forms build challenges to performing customer purchases on time, in sequence, and accurately.

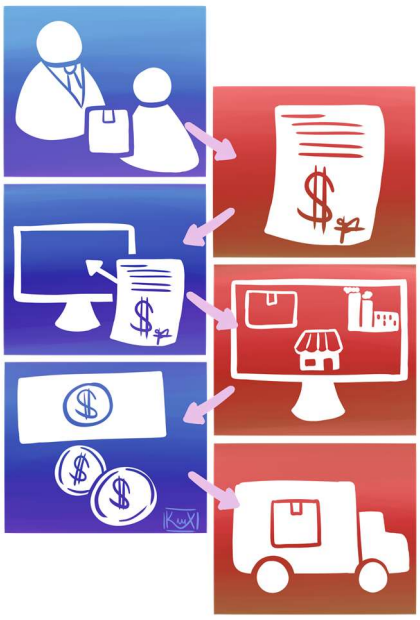
The Benefits of Automated Sales Order Processing

If customer happiness is your top one priority, efficiency and accuracy of sales processes are two things you depend on. But when your order processing is paper-based, you are at risk of an inaccurate data record and a slow sales cycle. Sales order processing systems execute to manage orders from receipt to completion using a single platform. This corresponds to orders from all channels: online, direct, and major accounts. Compared to paper-based sales order processing, automation presents numerous key benefits:

- Faster Transaction: With not using paperwork and coordination, you can expedite order processing. Customer service representatives and sales reps are to benefit the most. Some sellers said that automation service makes reps save up to 95 percent of time, and businesses can lessen the overall time consumed on order processing by 90 percent. With this said, automation relieves them to focus on customer service aspects that demand human impact. This will make staff tasks more engaging and allot more time to jobs with great importance. Sales order processing applications can produce essential data from email, paper, and faxed sales orders and enter it into your system.
- Reduce Costs: when you save time, come cost reduction since automation drops a lot of meticulous manual operation and duplication of work. With the order-to-cash cycle, fees come in instantly, making more capital possible to the business.
- Progressed Accuracy: Reducing or dismissing human touch in sales order processing ends in greater accuracy. Automation decreases the possible errors from incorrectly typing of SKUs to shipping details. This implies excellent customer satisfaction and less to no returns. Stopping system failure, your reps will never miss an order. Some sales order processing systems automatically produce details of purchase orders and create sales orders without manual processing. Smart systems use keyword detection to prioritize critical or essential orders. The system only needs to encode customer data once, because it can pull data as needed.
- Inventory Management: With automated sales order processing will promptly allot stock to satisfy an order. Having the ability to see global inventory in real-time permits a seller to send orders from the nearest point, reducing both transportation time and shipping charges. The system can detect product flaws quicker, lessening returns, and order recalls. Additional upstream, both the quality and security of the supply chain benefit from real-time visibility. You also get awareness to develop your suppliers and make emergency plans for any obstructions.
- Greater Liveliness: Sales order processing automation provides sellers more visibility into the whole sales cycle. You can watch order fulfillment cycle time and gauge performance using different data points. Partners from sales to the C-suite have solid, timely data for better decision making, such as checking inventory levels with demand. Managers can be more agile and understanding to changing circumstances. Technology also permits sellers to produce personalized discounts for specific customers, which gives a fierce advantage. You can effortlessly change or alter an order, and real-time access to order status cuts the time needed to answer customer queries.

- Improve Customer Service: Sales order processing automation provides real-time information so that you can present customers with updates on their order's progress. Faster order processing and personalized discounts also enhance customer happiness, and many proposals have the potential for customer self-service. Buyers value transparency. Less mistakes mean less returns. In short, effective and responsive order processing makes for a more enjoyable customer experience.

The Sales Order Processing Workflow



Automated sales order processing presents a workflow that drives customer purchases through each step, from receipt to fulfillment, with limited manual process. This process works except when you want to create inspections for consent or monitoring. These systems concentrate and digitalize data, reducing the production and administration of paper documents. The workflow guarantees that each area advances seamlessly through their part of the process.

Here are the steps in the workflow:

1. The life cycle of a sales order starts when a business receives a purchase order from a buyer. The purchase order specifies what the buyer wants and the amount they were quoted. This form also has their billing address and their delivery address. The purchase order includes the expected time of delivery and any other details relevant to the transaction.
2. The purchase order then becomes a sales order. The sales order is produced either after manual input by digital tools (EDI, email, or faxes) or by an automated sales order management system. The process will combine with systems that check on stock availability at the warehouse and check pricing to make sure the sale is beneficial for the seller. The sales order works as a document of transaction and include what the customer paid for. This document allows the seller to deliver correctly and presents an auditable path as it goes to the sales team.
3. You can import to the Finance or ERP system the transaction file representing the sales order. Meantime, the system saves the order electronically so that it can drive that order to the shipping system. There are times when a sales manager may need to approve the sales order. If so, the system will produce a notification requesting authorization. At this point, if the system allows the order, the customer may get an order confirmation. They may also receive further information as the order passes through the fulfillment area.
4. From here, the system assigns the sales order to one of three areas: to production (which manufactures goods), to the warehouse (where the system claims and ships goods), or to

operations (which carry out a service). The sales order record presents all the data these departments want without them needing to create added paperwork.

5. The finance department manages billing, calculates taxes, guarantees the company collects payment, and permanently saves the transaction. This process may combine with the company's ERP system. About documents such as warranties, the system either electronically gives them to the buyer or prints them. In these departments, the system can promote data from the centralized sales order file into simple purposes like printing delivery labels and invoices.
6. The system packs and confirms the order and process shipping. The customer expects scheduled delivery. Once the company fulfills the order, including any fitting at the customer's site, if suitable, the process is complete.

Common Problems in Sales Order Processing

Errors are unavoidable, and effective sales order processing aims to lessen them. Here are the most typical roots of error:

- Customers - They may make typos when encoding information, they may choose the incorrect item, put the mistaken quantity, a wrong address, or inaccurate billing information.
- Order Inquiry - a miscommunication may happen when contacting customers or a customer service rep about product questions. More often than not, customers do not communicate their needs. And at times, wrong questions were asked by the sellers/reps; a reason may be a lack of adequate product knowledge. In any of the scenes mentioned above, the buyer/customer ends up with the incorrect product.
- Order Entry - Errors can quickly rise when reps have to convert purchase orders into sales orders manually. When reps lose purchase orders and forget to encode them as sales orders. Also, data entry errors like misspelled names, typo error with addresses, and wrong product codes. According to an estimate, the cost of correcting one missed-shipment is $42, so errors instantly become costly.
- Product Data Irregularity: If your sales channels, product descriptions, classifications, hierarchies, and identifiers are not entirely integrated, it can be irregular on your website, catalog, and warehouse. A reliable sales order processing system creates a central master safe that maintains a single consistent data source.
- Fulfillment - The order fulfillment center can make a mistake even if the sales order is done correctly. In bulk physical goods stores, orders are "picked and packed." They find items in a warehouse, pick them from the racks, arrange them, and then pack for shipping. Picking dilemmas include choosing the incorrect product or a product with the same code but different specs. Packing issues include missing items, half-done orders, and poor packing, which can ruin products during transportation. Additional obstacles occur when staff are allowed to enter orders even when an item is not in stock. To avoid this problem, have real-time inventory updates and low-stock warnings at the point of order processing.

- Shipping - Some flaws, like delay or damaged shipments, may be the fault of the couriers — sadly, these merchants fill the stage of order fulfillment, which sellers have minimal control over. But other mistakes happen before items leave your office like picking the incorrect method of shipping or speed. These mishaps can cause problems such as poor quality handling that result in damage, delayed shipment, or high cost.
- Quality- There are many forms of why there is a product problem. Quality problems cover products that do not operate as advertised, specs, and products that break quickly. Both factors result in returns and warrants a complete design and quality control check. Seldom does a product perform as promised, but fail to solve the customer's problem the way they expected. Furthermore, inconsistent production results in defective items creating more challenges.
- Weak Systems - These arise from relying on manual processes or low-cost automated systems. With an inadequate system in place, agents may miss messages, purchase orders, or delay adjusting customer changes with orders already in progress. To address these problems, you have to make sure a sales order processing system has fulfillment visibility and gives immediate warnings when low inventory prompt delays.
- Finance Issues - Merchant billing and payments are common origin of problems. An outcome of these concerns is overcharge or invoice done twice, but a sales order processing system can manage the validation that puts a stop to these mishaps.

Do You Need an Automated Sales Order Processing System?

New technology is a significant investment, and we need to examine whether it's worthwhile. These are the reasons why automating sales order processing will be beneficial to you:

- ### It Will Develop Your Customer Service

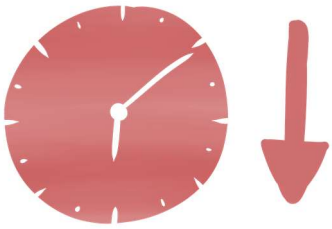
Order processing automation software concentrates on the simple reality that your business' customer service will improve. Your order processing software integrates with the production-associated system; your sales agents have instant access to all vital account information. It will eliminate the need to make phone calls to the office team. Instead of wasting time looking through a pile of paperwork, your salespeople can focus on giving quality customer service with all the data concerning their accounts in an instant.

Build a Sense of Ownership for Your Customers

Calling sales agents or customer service hotlines for vital services is old school now that we have the order processing automation software. Waiting on hold and long wait time on the queue and eating up valuable time is no longer a thing. Customers wanted an update about their orders in real-time. Sometimes, there is a need to make changes with the order, and they wanted to do it with ease.

Other sales order automation provides processing portals for their customers. They may place their orders, check inventory, verify the status of their orders, and get notification about the state of their account, and all these will not need them to call the hotline for help. Automating your ordering process permits customers to control their accounts.

- **Reduce Manual Entry Time**

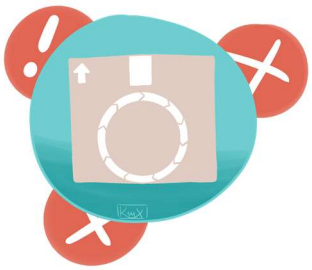


It is very time-consuming for both sides (seller and buyer) to work on numerous paperwork to close a sale and provide quality customer service.

Sales order automation manages customers orders, confirms they are correct, and encode them straight to your ERP system. This limits the need to re-enter information, like contact info continually. With sales order automation, you drop the need to enter data into various sections of your internal software and your warehouse management system.

With order processing software, you take the painstaking, repeated work of data entry off of your busy customer service department. This leaves them extra time to use on more relevant, engaging duties, which brings more value to your company.

- **Reduce Errors in Order Processing**



Orders processed manually have a higher margin of error, especially if multiple orders come from different channels.

With the sales order automation system, you have firsthand access to inventory and warehouses. This eliminates errors, loss of data, and drop data security breach, since there is less manual processing.

- **Lessen Your Accounting Costs**

Manual process uses a lot of time, and we all know that "Time is money!" It costs a lot to pay your representatives to transfer data manually from sales sheets/order forms into your warehouse management software.

With order processing software, you can decrease your accounting costs. Quality order processing software lessens the time and the costs with manual entry. Your business now feels the added benefit of a lessened need for management to change manual data entry due to increased accuracy.

Cost Reductions Through Order Accuracy
Advanced order efficiency leads to significant expense savings. These savings direct to our sales order automation software paying for itself in a few months of use, notably when it comes to diminishing costs related to wrong or delayed orders.

- **Enhance Your Data Control**

Mistakes will happen if your sales reps are physically entering and holding order forms until they hand them into your office.

Misunderstanding happens when the customer/buyer is following up or inquiring, and information needs to be handed over to the accounting system before they can get an answer.
With automatic integration between order processing software and your business accounting and warehouse management systems, you gain vital control of your data!

You diminish the possibility of data errors, data loss, and data security breaches with automation instead of processed by many hands. Having a customer portal for tracking and checking orders online, you lessen the chance for misunderstandings between you and your customers.

- **Pricing Validation**

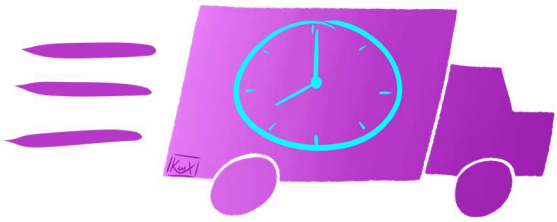
Using sales order automation software, you can regularly compare the purchase order price to the actual price, and address differences.

Like when an order is made via fax, paper, email. Your automation software for sale processing automatically reads the image and all its order data received like supplies, quantity, customer details, etc. It will automatically be matched to the data found within your system and verified for errors before moving forward. This lets you see differences soon as the order comes to avoid blockage down the line and have your order processing as efficient as possible.

- **Faster Shipping**

Order processing automation software utilized by your business can send orders directly to your warehouse without needing to re-enter the order. This added competence helps you lower warehouse costs, lessen errors, and improve order-to-ship time.

Additional benefit apart from a quicker shipping is that both customers and sales reps can see shipping confirmations and track it in real-time.



- **Process Orders from Anywhere**

Sales order automation software allows your business to process orders from anywhere. With online order processing, your selling location is limited to two main factors: product shipping range and the shipping fee customers are willing to pay to receive their orders.

- **Increase the Happiness of Your Department**

Your employees make up your department to help you grow your business and help it succeed.

By decreasing the time spent on tiresome data entry, more time and energy will be spent on work with a more significant ROI for your business.

With accuracy, your reps will have fewer complaints, which will also enhance the confidence of your customer service department.

Use sales order automation to remove your department's most common troubles—one of the most manageable and efficient ways to win their support.

How to Choose a Sales Order Processing System

In deciding to upgrade to an automated sales order processing system, you need to assess your needs carefully, and possible solutions as any change will affect your business income generation.

Sales order processing solution is for handling sales orders, yet most systems will automate various business processes and enable inter-department participation on a single platform. You may also need a solution that connects to your sales technology.

In addition to the regular approval of sales orders, an automated system may permit you to assign a source of supply, change labor support for service items, and build projects out of work you sell to customers straight from their sales orders. Sales order applications combine with the accounting modules of finance and ERP systems.

An excellent solution will also integrate with current business applications — such as ERP systems — at small or no extra cost. Still, it's absolute that your sales order processing system keeps a clear web-based workflow that is accessible remotely, so duties like approving sales orders will not be delayed if a sales manager is out of the office. With these reasons, cloud or web-based sales order processing solutions are increasing in popularity.

Some of the other points a sales processing system might include:

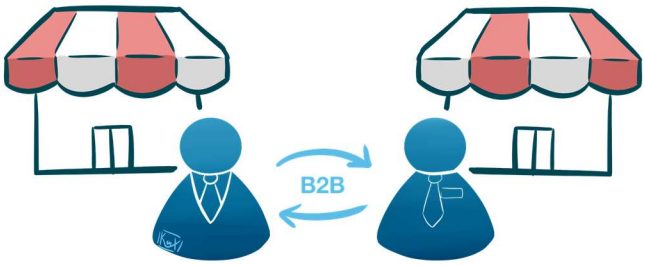
- Point-of-Sale System (POS) with Order Management Features: This feature enables you to reference products more efficiently by obtaining real-time inventory visibility.
- Integration with CRM: This provides the order management system to get order history and buyer details and even perform tickets in priority order.
- Integration with Project Portfolio Management (PPM) Systems: This feature allows you to handle product delivery like a project.
- Integration with Supply Chain Management (SCM) Systems: This type of integration makes it feasible to regulate supply upstream with customer demand.
- Other Third-Party Integrations with Applications Your Staff Already Uses: This ability decreases the learning curve.
- Artificial Intelligence (AI): AI permits solutions to learn from your order flows. Like when differences to your standard processes occur. These applications will start to use your remedies automatically, reducing the need for manual operation.

How big is the Market?

In Forrester reports, B2B eCommerce will reach $1.8 trillion, accounting for 17% of all B2B sales in the US by 2023. Right now, you may be planning already to incorporate a B2B eCommerce channel into your business' sales approach.

Providing retail buyers the capability to place orders online through a B2B platform at their preference is now an industry model. Next is to choose which B2B platforms you will execute, which means choosing between a Direct or Marketplace B2B platform model.

What is Direct and Marketplace?



A Marketplace B2B platform is precisely as it sounds: brands sell their goods wholesale in an online Marketplace right beside their competitors. Basic Marketplace B2B platforms include Alibaba, DHgate, eWorldTrade and TradeKey.
Marketplace B2B platforms have greater visibility, also they invite improved competition and more limited flexibility.

The Direct B2B platform type, includes a brand creating a B2B eCommerce portal restricted only to their products. Top Direct B2B platform providers like Handshake, Apttus, and Magento, to name a few.
Direct B2B platforms demand lots of effort from the wholesaler service wise, and offer total control over the customer experience.

Assessment:

Alternate Delivery Address	**Do you ship goods to multiple delivery addresses at your customer sites?**
	Do you maintain these delivery addresses in your system?
	Can you easily transfer alternate delivery addresses to your sales orders?
	Do you duplicate your customer records to handle shipments to alternate addresses?
	Do you sometimes ship goods to the wrong address?
Header Misc. Charges	**Do you have freight, installation, handling, or other miscellaneous charges applied on a sales order?**
	Can you itemize and track these miscellaneous charges?
	Do you need a variety of fixed or percentage based miscellaneous charges?
	Do you apply these miscellaneous charges to the sales orders automatically?
	Do you have problems identifying and tracking miscellaneous charges with your customers?
	Do you incorrectly charge miscellaneous fees because you can't track or automatically apply them to sales orders?
	Do you spend excessive time tracking and financially reporting your miscellaneous charges?
Header Notes	**Do you put external shipping notes on your sales documentation?**
	Do you have internal shipping notes?
	Are these external and internal shipping notes maintained in a separate system?
	Do you have shipment errors due to miscommunications on handling requirements?
	Do you need to handwrite or use a separate system to put special noted on a delivery?
	Do you spend excessive time accessing the correct sales documentation for a given sales order?
Sales Order Copy	**Are your sales orders similar in nature?**
	Do your customers often repeat orders?
	Do you copy your existing sales orders to create new ones?

	Do you have sales order entry errors for complex orders with multiple sales order lines?
	Do you spend excessive time entering similar sales orders manually?
Sales Order Quantities	**Do you have guidelines for minimum, multiple, or maximum sales order quantities?**
	Are most orders taken forn aitem of the same quantity?
	Do you define minimum, multiple, maximum, and standard sales quantities at item level?
	Can your system automatically check and correct the sales order quantities during order capture?
	Do you take sales orders that do not meet your desired minimum, multiple, and maximum order quantities?
	Do irregular sales order quantities cause inefficiencies in your internal operations?
	Do you spend excessive time correcting the sales order quantity problems?
Sales Order UoM	**Do you stock and sell items in different units of measure?**
	Do you have a different unit of measure conversion factor for different sold items? For example, Item A (1 Box = 10 pcs), Item B (1 Box = 15 pcs)
	Do you use different units of measure for different sales orders for the same item? For example, feet vs. yards
	Can your system automatically convert the unit sales price based on sales unit of measure?
	Do you capture sales orders that have an incorrect sales unit of measure or price?
	Do you create duplicate units of measure records to model item level conversions?
	Do you spend excessive time converting to different units of measure during order capture?
Sales Price & Discounts	**Do your sales prices change for different customer or group of customers?**
	Do you have sales price agreements with your customers for certain items?
	Do your sales price agreements change by date, sales volume, or currency?

	Can your system automatically apply the right sales price based on sales price agreements during order capture?
	Do you offer different discount levels for different customer groups?
	Do you have discount agreements with your customers for certain sold items?
	Do your sales discount agreements change by date, sales volume, and currency?
	Can your system automatically apply the right discounts based on sales discount agreements during order capture?
	Do you sometimes charge your customers an incorrect sales price?
	Do you sometimes offer the wrong sales discounts on your sales orders?
	Do you spend excessive time organizing your sales price and discount agreements with your customers?
	Do you spend excessive time making sure the sales prices and discounts are correctly applied on your sales orders?
Manual Price & Discounts	**Do you offer special pricing to your customers per sales order?**
	Do you offer special sales discounts to your customer per sales order?
	Does your system let you override the sales price and discounts during order capture?
	Can you track all the special sales pricing for your customers per sales order?
	Can you track all the special discounts you offered with your sales order?
Credit Limit	**Do you maintain credit limits for your customers?**
	Do you check your customers' credit limits during sales order entry?
	Can your system automatically warn you when a customer is above its credit limit during sales order entry?
	Do you have any risks in shipping goods to customers that are above their credit limits?
	Do you spend excessive time maintaining and performing credit checks on customers?
Line Delivery Date	**Do you have multiple delivery dates on a given sales order?**
	Do you create sales order lines with different delivery dates for the same item in the same sales order?

	Can your system capture different due dates for different sales order lines within the same sales order?
	Do you duplicate your sales orders to accommodate different delivery dates?
Line Misc. Charges	**Do you have freight, installation, handling, or other miscellaneous charges applied on a sales order line?**
	Can you itemize and track these miscellaneous charges at the sales order line level?
	Can you model fixed, percentage, or piece based miscellaneous charges at sales order line level?
	Do you apply these sales order line level miscellaneous charges automatically?
	Do you have problems tracking sales order line level miscellaneous charges?
	Can you accurately apply the right type of line level miscellaneous charges to sales order lines?
	Do you spend excessive time financially reporting your line level miscellaneous charges?
Line Notes	**Do you put external shipping notes on your sales documentation specific to sales order lines?**
	Do you have internal shipping notes specific to sales order lines?
	Can you currently access the sales order line level external and internal shipping notes in your system?
	Do you have shipment errors due to miscommunications on handling requirements at the sales order line level?
	Do you spend excessive time accessing the right sales documentation for a given sales order line?
Line Warehouse	**Do you deliver goods from multiple warehouses for a given sales order?**
	Do you create sales order lines with different warehouses for the same item in the same sales order?
	Can your system capture different delivery warehouses at the sales order line level within the same sales order?
	Do you duplicate your sales orders to accommodate different delivery warehouses?
Line Partial Shipments	**Do you have partial shipments to your customers?**

	Do you enable partial shipments at the sales order line level?
	Can your system capture different shipping modes (full/partial) at the sales order line level?
	Do you have errors caused by the incorrect handling of partial or full sales order lines shipments?
	Do you have partial shipments returned by your customer who will only accept full shipments?
	Do you spend excessive time handling partial versus full sales order line shipments?
Reservation	**Do you reserve inventory against sales orders during order capture?**
	Do you reserve incoming supply from open purchase orders against sales orders during sales order capture?
	Can you categorize your inventory in allocated/reserved versus available inventory?
	Can your system identify supply shortages and warn the sales order entry person during order capture?
	Does your customer service suffer due to lack of real-time inventory reservation during order capture?
	Do you sometimes promise against sales orders that you cannot deliver?
	Do you frequently steal incoming supply for other sales orders to satisfy the current demand?
	Do you spend excessive time allocating inventory against sales orders?
Quotations	**Do you provide quotations to your customers?**
	Do you maintain and track your quotations in your system?
	Can your system easily convert a quotation to a sales order?
	Do you create duplicate sales records to store your quotations?
	Do sales quotations ever enter the production schedule before they become real orders?
	Do you spend time manually generating a sales order from the quotation?
	Do you spend excessive time maintaining and tracking quotations?
Picking List	**Do you generate picking lists to pick goods from the warehouse for shipments?**
	Do you automatically generate picking lists based on the latest sales order update?

	Do you sometimes pick the wrong goods because your picking documents are not up to date?
	Do you spend excessive time generating and maintaining picking lists?
Packing Slip	**Do you generate packing slips to ship goods from the warehouse to customers?**
	Do you automatically generate packing slips based on the latest sales order update?
	Do you sometimes have shipping errors because your packing documents are not up to date?
	Do you get charge backs or returned goods because you shipped the wrong products to your customer?
	Do you spend excessive time generating and maintaining packing slips?
Invoice	**Do you automatically generate invoices to charge your customers for the delivered goods?**
	Are your invoices based on the latest sales order and shipping information?
	Do you generate inaccurate invoices from old or partially updated order and shipping information?
	Do you spend excessive time manually updating General Ledger accounts that your invoices posted?
	Do you spend excessive time generating and maintaining invoices?
Sales Tax	**Do you charge sales tax to your customers for the delivered goods?**
	Do you frequently report sales tax to sales tax authorities?
	Do you manuall change the sales tax based on product and delivery address?
	Do you sometimes charge the wrong sales tax to your customers?
	Do you have any problems reporting the sales tax to sales authorities?
	Do you spend excessive time manually calculating and charging sales tax?
Commission	**Do you pay commissions to your sales people?**
	Are commissions paid by sales groups?
	Do you offer special commissions by item groups?
	Do you pay commissions based on invoice amount or margin?

	Do you distribute the commission on a sales order among multiple sales people?
	Do you make mistakes in commission calculation and payments?
	Can you calculate and pay commissions in a timely manner?
	Do you spend excessive time manually calculating and managing commissions?
Payment Journal	**Do you create payment journals to process payments against the invoices?**
	Do you have inaccuracies in creating payment journals?
	Do you spend excessive time entering and managing which invoices are being paid by the customer?
Settlement	**Do you settle the invoices against payments?**
	Do you have inaccuracies in settling invoices?
	Do you spend excessive time trying to settle invoices with payments?
Collection Letters	**Do you generate collection letters to collect late payments from your customers?**
	Do you have a collection process that outlines the communication levels and associated charges?
	Can your system identify the past due payments and apply the corresponding collection documentation automatically?
	Do you have a large outstanding payment due?
	Do you have problems collecting past due payments from your customers?
	Do you keep dealing with customers with bad debts? i.e. forget to put them on credit hold.
	Do you have issues managing the collection process?
	Do you spend excessive time trying to collect past due payments from your customers?
Blanket Orders	**Do you have blanket orders (contracts) with your customers?**
	Do you track release orders (actual sales orders) against the blanket orders?
	Can your system map the delivered and invoiced quantities for release orders against the blanket order?

	Does your production system recognize the correct demand at the correct time for Blanket Sales Order releases?
	Do you make mistakes in tracking deliveries against blanket orders?
	Do you spend excessive time tracking your blanket orders and release orders against the customer commitments?
Returned Item	**Do your customers return delivered goods?**
	Do you have a returned item process with prior approval using an RMA number, return actions, fees, etc?
	Can your system map the returned item against the original sales order and create the necessary physical and financial adjustments?
	Do you have inventory and financial inaccuracies due to incorrect handling of the returned items?
	Do you have problems in executing the correct return action internally for the returned goods?
	Do you spend excessive time managing the returned item process?
Customer Item Number	**Do you use customer item numbers in your external documentation?**
	Can you map your item numbers against the customer item numbers in your system?
	Do you sometimes capture the wrong item on your sales orders due to lack of customer item number mappings?
	Do your customers complain about your paperwork since you show your item numbers rather than theirs?
	Is there confusion when communicating with the customers about products since both use different item names or codes?
Summary Update	**Do you include multiple sales orders on a summary invoice?**
	Are these orders required to have common characteristics before they can be summarized? Example: same contact person or the same method of payment.
	Does incorrect summarization of orders on an invoice increase collection times?
	Do you have a high number of orders from an individual customer resulting in excessive invoicing?
	Do customers contest invoices that are summarized or not summarized correctly?
Payment Schedule	**Do you offer payment schedules to your customers?**

	Can you set up the payment schedules in varying time periods and percentage distributions?
	Can your system maintain the payment schedules, assign them to customers and automatically default them to sales orders?
	Do you have customer service problems because you don't offer comprehensive payment schedules to your customers?
	Do you sometimes incorrectly invoice your customers due to mishandling of payment schedules?
	Do you spend time maintaining and tracking payment schedules?
Cash Discount	Do you offer cash discounts to your customers?
	Do you define multiple cash discounts and attach them to different customers?
	Can you automatically apply cash discounts to sales orders based on customers?
	Can you encourage your customers to pay early by offering cash discounts?
	Can you accurately apply the right cash discount to sales order upon timely payment?
	Do you spend time maintaining, tracking, and financially reporting cash discounts?
Over/Under Delivery	Do you frequently deliver over or under the original sales order quantity?
	Do you have any guidelines to define the over and under delivery variance?
	Do you maintain your over and under delivery tolerances in your current system?
	Do you sometimes deliver goods that are either below under delivery or above your over delivery quantities resulting in stock returns or waste?
	Do you spend time manually administering the over and under deliveries due to the lack of systemized parameters?
	Do you send excessive time maintaining the over and under delivery tolerances?

Strategic Situation	
	What are the three industry trends that are affecting you the most?

	Who are your most significant competitors? Why?
	What is the primary geographic area that is covered?
	What are your high level revenue growth objectives?
	Do you plan to meet these organically or via acquisition?
	How many customers do you have?
	How many are currently active—i.e., order once per month or more?
Inventory	
General	
	What is your current inventory level?
	What are your current days in inventory? (Number of days you can operate with your average in house inventory level and no new stock receipts)
	How many times are you turning your inventory per year?
	How many SKUs are in your database?
	How many SKUs do you actually stock?
	Do you perform physical inventories?
	How frequently?
	Who performs the counts?
	Do you do blind counts or provide quantities on hand on the count sheets?
	Do you have to shut down operations to perform physical inventories? How many hours/ days per year?
	Are you currently cycle counting? If so, explain.
	Do you measure sales per square foot of warehouse space or measure warehouse utilization in a similar manner? How has this trended over the past three years?
	Do you formally categorize your inventory (Example: ABC rankings). If so, based on what criteria? Margin? Revenue? Turns? Other?
	What criteria do you use to identify dead stock? Is there a formal set of rules that categorize stock as dead?
	How do you dispose of dead stock?
	How frequently do you methodically identify and deal with dead stock?
Forecasting	
	Do you have a formalized forecasting process in place?
	How do you decide when to bring on a new product line? Are there specific volume or profit goals that have to be met to justify adding a new product?
	Do you do any form of collaborative forecasting with your major customers?

Replenishment	
	Do you track vendor performance?
	Do you track lead times by vendor performance?
	Do you receive goods from overseas?
	If so, what percentage of your inventory comes from overseas?
	What do you currently do to balance the overseas lead times with domestic?
	Do you currently use or have a need to utilize advanced replenishment methods such as those prescribed by Jon Schreibfeder?
Order Management	
General	
	What is your order accuracy rate as defined by line item mistakes divided by total of all line items?
	Are you able to effectively track order accuracy?
	What is your overall fill rate not counting special orders?
Incoming order process	
	In what formats do you receive orders?
	Direct salesperson
	FAX
	Telephone
	Electronic (Web portal, EDI)
	What percentages of overall sales are made by each of the previous methods?
	In an ideal circumstance, what would be your ideal mode of processing orders? Why?
	How many orders per day do you average?
	Are there significant seasonal variances?
	How many line items per order on average? Per day?
Warehouse Operations	
General	
	What are your annual warehouse costs as a percentage of sales?
	How has this been trending the past three years?
	Do you have means to reuse any reclaimed warehouse space by subleasing, adding new product lines, etc?

	What is your annual cost per square foot to maintain your warehouse infrastructure?
Picking	
	Do you have any means of tracking picking accuracy?
	How do you measure picker effectiveness if at all? Explain.
	Do you have means to identify and leverage cross docking opportunities?
	Do you utilize wave picking?
	Do you use bar coding or any other automated process to streamline the picking process?
Receiving	
	How long does it take on average for a salesperson to be aware of a new shipment arrival and adjusted available to ship quantities?
	How are new receipts entered into your computer system? What is the process?
	Explain your backorder fulfillment process. How do you know when product has arrived to fill backorders?
Put-away	
	Are you using random bin assignment or fixed location? Explain.
	Do you have an automated system to recommend put-away bin locations? (directed put-away)
	How long does it take on average for a new receipt to be physically stocked and updated in the computer system?
	Do you use any automated bar coding or other technology to help streamline the putaway process?
Shipping	
	Are you utilizing any staging or load analysis software or processes?
	Do your shipping operations require containerization tracking?
Staffing	
	How many people work in your warehouse (by location if applicable)
	What is the average tenure of a warehouse worker?
	Do you have any formalized training programs for new warehouse staff?
	How long does it generally take for a new picker to become productive?
	In what position do you start new warehouse employees?
Customer Service	
CRM / sales automation	

	Do you currently use any form of CRM or Sales Automation system?
	If so, what are the primary functions?
	Sales Management and reporting?
	Marketing program management?
	Is this CRM system an integrated part of your distribution management software? If not, which system are you currently using?
	Have you been able to track quantifiable financial benefits from use of this system?
	Are you satisfied with the CRM / Sales Automation system currently in place? If not, why? What specific functions could be improved in your view?
	What are your primary objectives for using a CRM / Sales Automation system?
	Sales pipeline reporting
	Improved customer service
	Identifying cross selling opportunities
	Sharing customer and prospect information throughout the company
	Growing sales per customer
	Other? Please explain.
Service level	
	What is your overall fill rate? (Line items shipped our of line items ordered, not counting special orders)
	Do you track lost customers or net customer gain / loss per year?
	What percent of annual sales do you top 5 customers comprise?
	Compliance Issues
	Do you have large customers placing compliance demands such as EDI, ASNs, Electronic payments, etc? Explain.
	Do you have customers that demand more rudimentary demands such as custom labeling, special shipping or packaging, etc? Explain.
	Are you considering or do you have need for vendor managed inventory functionality? Could this be a competitive advantage for you if you had that capability?
Value add services	
	What types of additional services are you providing to your customers?
	Do these services require use of light assembly processes? (kitting, basic BOMs)
	Are these billable?
Sales	

General	
	Do you utilize daily or weekly sales reports? Who is privy to that information? Are average employees aware of sales trends and overall sales performance?
	What sales-related reporting information would you like to see on your desk every morning?
	What are your average annual sales per salesperson?
	What are your average annual sales per full time employee?
Direct sales	
	Describe your direct sales quota system (if applicable)
	What percentage of your sales is attributed to direct, outbound, person to person sales efforts?
	How do you see this percentage changing over the next year? Next five years?
	Are you able to track sales performance by individual? By product line? Trends over time?
Telesales	
	Describe your telemarketing department.
	What percentage of your sales is attributed to telemarketing sales efforts?
	How do you see this percentage changing over the next year? Next five years?
	How are your telesales people compensated? Flat rate? Commission? Margin based incentives? Activity based incentives? Other?
	Automated Sales
	Do you have mechanisms in place to allow customers to place orders automatically?
	Fax service?
	Online catalog?
Marketing	
General	
	Do you have dedicated marketing staff in your organization?
	If so, please describe roles and objectives
	What is your primary marketing value add message?
	Do you market specific capabilities, products, and / or services?
Metrics	
	Do you operate via an annual marketing plan?

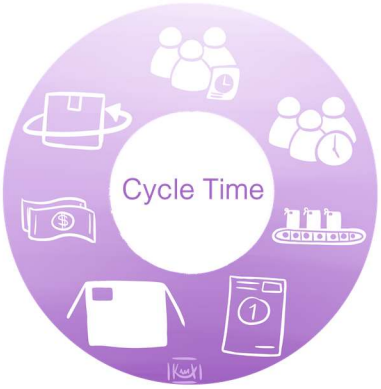
	How do you measure success of marketing efforts?
	What ratio of revenue to expenditure do you expect to attain from your marketing programs? How many revenue or margin dollars should each dollar of marketing investment yield in your ideal scenario?
Mechanics	
	What general types of marketing programs do you frequently use?
	Direct mail
	Catalogs
	Web site presence. Do you have an online catalog or ordering capability?
	Telemarketing? Please describe.
Financial	
Metrics	
	What is your primary day to day performance metric? Are there numbers you look at first thing in the morning every day? Which ones?
	Are you able to track profitability by product line? By product? By salesperson?
	Generally speaking, is your current system able to provide you with the information you need to make decisions about day to day and strategic long term operations?
	What metrics would you like to see but are not able to now?
	Do you share financial performance information with your employees? If so, what types?
Accounts Receivable	
	What are your stated or default payment terms? Do these vary by customer?
	What are your average days sales outstanding? (How many days on average does it take to collect from your customers – Average Accounts Receivable divided by average daily sales)
	Does this vary by season?
	Do you track this on a per customer basis?
	When an account is past due, who serves as the line of contact to the customers? The salesperson? A collections specialist? Other?
Accounts Payable	
	What is your average aging of payables?
	Do you utilize automatically generated cash flow tools or reports? If so, is this process integrated with your distribution management system? Excel?
	How far into the future do you forecast cash requirements?

Compensation	
	Do you have incentive plans that tie compensation to individual or company performance?
	Executives?
	Office Staff?
	Warehouse?
	Sales?
	Are warehouse workers compensated by performance in any way? Are you able to measure individual or group performance in the warehouse? Explain.
Technology	
IT Strategy	
	Do you view your IT investment as a productive asset or necessary evil?
	Do you have in-house IT staff? Do you have some form of Chief Information Officer or equivalent? Explain.
	How involved is your distribution software provider in your IT strategy at this point?
	How long has it been since your last major distribution software upgrade or implementation?
	Do you have an annual IT plan that budgets and prioritizes projects? If so, what drives investment decisions and priorities of projects that get funded?
Existing Infrastructure	
	What is your current distribution management system?
	What modules are you running?
	Are there any modules that you have purchased but not yet implemented? If so, why not?
	How much customization has been done to your primary business applications? Please explain.
	Do you have other applications?
	Warehouse management
	Budgeting
	Forecasting
	Sales Automation or CRM
	EDI
	Other?
	What platform do your applications run on (Windows, UNIX, etc.) ?

	What do your end users run in terms of hardware and software?
	Do you have remote users?
	Salespeople with remote devices (laptops, Pocket PCs, Palm Pilots, Blackberries, etc.)
	Remote employees (Home or branch offices)
	Do you have a Web site?
	If so, what is its primary purpose?
	How do you measure success of the Web site?
	Do you maintain the Web site in house or outsource Web development?

Success Critical Factors - Order to Cash Process

Cycle Time Analyses



Here are some of the many Cycle Times you may take into account for your Supply Chain. These measures should not just calculate the days (or hours) from the start and finish, but the various steps in between.

Customer Order Promised Cycle Time. The expected or agreed cycle time of a Purchase Order. The gap from the Purchase Order Creation Date and the Requested Delivery Date.
This informs you the cycle time you should expect (NOT the actual)

Customer Order Actual Cycle Time. The average time it needs actually to fill a customer's purchase order. You can catch sight of this on an Order or an Order Line level.

The measure begins when you have sent/received/entered a customer's order. This is measured with several steps of the order cycle. By credit checks, pricing, warehouse picking and shipping. The measure stops at the time of shipment or delivery to the customer (seldom tracked using an EDI #214). You should compare its "actual" cycle time to the "promised" cycle time.

Manufacturing Cycle Time. Measured from the Firm Planned Order to the final production is reported. It includes the original planned production quantity versus the actual production quantity. Example: X% of the amount planned must be completed on a production series, or the cycle time should not be regarded.

Purchase Order Cycle Time. Measured from the production of the PO to the receipt at your place (Distribution Center, Hub, etc.). Not having your RDD (Requested Delivery Date) go over the agreed lead time is one of the keys. If it does, it may temporarily raise your Lead Time.

Also, any available in-between points will add worth to the metric. Example: Production of the PO, Shipment from the Vendor, Receipt at the DC. That will tell you the manufacturing time vs. the transition time.

Inventory Replenishment Cycle Time. Measure of the Manufacturing Cycle Time plus the time involved to send the product to the right distribution center.

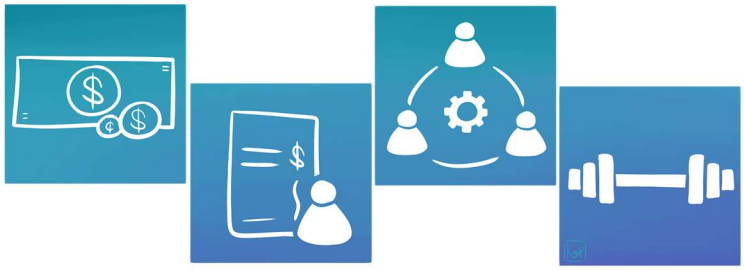
Cash to Cash Cycle Time. This is the number of days between paying for Raw Materials and receiving payment for products. It is calculated by Inventory Days of Supply plus Days of Sales Outstanding minus Average Payment Period for Material.

Supply Chain Cycle Time. The entire time it would need to please a customer order if all inventory levels were zero. This is calculated by adding up the most extended lead times in each stage of the cycle.

Backorder. An unfinished customer order. A backorder is demand (direct or past due) on an item whose current stock level is inadequate to meet demand.
This calculation may change. Some businesses count items are not settled (not allocated) and beyond the Requested Delivery Date (or Requested Ship Date). Other businesses may count those items with stock confirmed, but past due.
Backorders may be sent in "pieces," "SKU's" or in "value." Backorder calculations are tracked at different levels. Like: Customer, Division, Total Company

Aged Backorder. Reports on backorders in past-due time pour based on the Requested Delivery Date/Requested Ship Date.

Supply Chain Balanced Scorecard



The Supply Chain Balanced Scorecard tracks a restricted number of key metrics. These metrics should be aligned to the businesses strategic goals. The measurements cover 4 sections:
1. Financial - eg. The expense of manufacturing, warehousing, transportation, etc.
2. Customer - eg. Order Fill Rate, Backorder Levels, OnTime Delivery 3. Internal Business - eg. Adherence-To-Plan, Forecast Error
4. Training: eg. In house Training Hours, APICS Membership/ Certification.

While the Balanced Scorecard strategy was not solely intended for the Supply Chain, it gives a useful direction for your core measures. The main concept is to focus on key metrics that have real meaning to your business. The Balanced Scorecard strategy helps you keep your standards aligned with your objectives. These measures need to be tracked monthly with particular targets for each.

FILL RATE

Fill Rate representations and calculations may change significantly. In the most broad sense, Fill Rate calculates the service level of 2 parties. It is a measure of shipping performance formulated as a percentage of the total order.

Sample Fill Rate Metrics.

Line Count Fill Rate: The number of order lines shipped on the first shipment versus the number of lines ordered. This measure may or may not consider the demanded delivery date. E.g. Purple Mango Company orders 10 products (one order line each) on its Purchase Order #0001. The manufacturer sends out 7 line items on March 1 and another 3 items on March 10. The Fill Rate for this Order is 70%. Calculation starts once the initial shipment happens.

Calculation: Number of Order Lines Sent on the Initial Order* / Entire Number of Order Lines Ordered (7/10 = 70%)

SKU Fill Rate*:* The amount of SKU's (Stock Keeping Units) ordered and shipped is considered. On the example above, consider each Order Line to have an equal value (1). With SKU Fill Rate, we count the SKU's per Order Line.

E.g., On Line 1, the order was for 30 SKUs of product "ABCD" and line 2, they ordered 10 SKUs of item "EFGH." If Line 1 dispatched on April 1 and line 2 on April 20, the SKU Fill Rate is 60%
Calculation: Number of SKUs Shipped on the First Shipment / Entire Number of SKUs Ordered (30/40 = 75%).

Case Fill Rate: The number of cases dispatched on the first shipment versus the number of cases ordered. E.g., Purple Mango Company orders 6 goods that total 200 cases. The business sends out 140 cases on 3/1/20 and the remaining 60 on 3/10/20. The Fill Rate of this Purchase Order is 70%. It is calculated once the first shipment takes place. The number of Order Lines is not assessed in this calculation. This Fill Rate measure provides "weight" to the order lines that are sent out.

Calculation: Number of Cases Sent on the Initial Order / Entire Number of Cases Ordered. (140/200 = 70%)

Value Fill Rate: Same as above, but the order line value is used instead of cases.
Calculation: Value of Order Lines Sent on the Initial Order / Entire Value of the Order ($400/$500 = 80%)

What happens there is an order of 10 goods, but chooses to expedite out just one of them? Should the other 9 goods be scored as a Fill Rate "miss"? (1 shipped / 10 ordered = 10%). NO! You have to factor rushed lines out of your Fill Rate calculation. This is done by classifying the routing code (as in an SAP system) or by the carrier.

*NOTE: "Shipped/Sent on the Initial/first Order" - refers to the first shipment out of the warehouse, which means, if an order line ships out of an alternate shipping facility and ships out on/before the initial delivery out of the warehouse, it is considered a + to the Fill Rate.

Performance to Promise Dates: When a merchant process a Purchase Order against a Manufacturer, he has certain expectations when he will get the items ordered. His initial expectation is the OnTime Delivery Metric. But the manufacturer may give him an amended estimate when they anticipate to fill the order. The manufacturer's promise is known as the "Performance to Promise Date Metric."

E.g., Purple Mango Company orders 2 goods with Purchase Order #1234, and requested Ship Date of June 10. The initial item is sent on June 10th, and the remaining piece is on backorder. The manufacturer approximate ship date is on July 1st.

The item is produced and ships out on June 28.
The Performance to Promise Date is 100% (items ship on time or early)
*However, if the 2nd item does not ship till July 2nd, then it's late. The Performance to Promise Date is 50%.

Inventory Record Accuracy
A usual calculation is:

Stratify SKU's: (annual usage X standard cost)
A items= items are the top 80% of total dollars
B items= items is the next 15% of dollars
C items= items is the bottom 5% of dollars

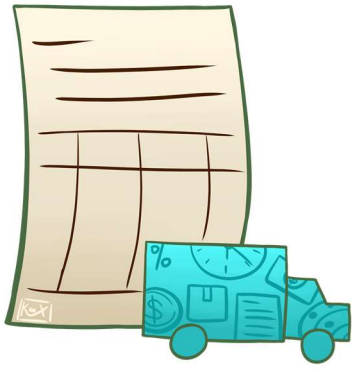
Cycle count items (daily) using any sample, within the following groupings:
A items = 4 times / year
B items = 2 times / year
C items = 1 time / year

Items considered correct if the actual on-hand quantity matches the perpetual inventory quantity, within the following permissions:
A items = + or -1% quantity variance from perpetual balance
B items = + or - 3% quantity variance from perpetual balance
C items = +or - 5% quantity variance from perpetual balance

Goal should be a minimum of 95% for MRP/DRP to function successfully; 99% for best-in-class
Note: Do NOT do a shorten Cycle Count, adding the positives and negatives, then match the sum to the total stated inventory.

Example:
Item ABCD: Stated Inventory = 100, Cycle Count = 95
Item BCDE: Stated Inventory = 100, Cycle Count =105
Adding the Stated Inventory, it equals 200. Doing the same with the Cycle Count sum equals 200 also. But this does NOT mean that your accuracy is 100%. If the items are A or B items, the actual Cycle Count Accuracy is 0% (Neither item is correct. Both are 5% off)

Transportation Metrics:



Freight cost per item shipped: Calculated by dividing total freight costs by the number of items shipped per period. Units of measure are standard in businesses (e.g., pounds). You may also calculate it by method (raft, rail, ocean, truckload, small package, air freight).

Outbound freight amount as a percentage of net sales. This is calculated by dividing outbound freight costs by net sales. Accounting systems can split "freight in" and "freight out." Percentage varies with sales mix, but is an excellent guide of the transportation financial performance.

Inbound freight amount as a percentage of purchases. This is calculated by dividing inbound freight costs by purchase dollars. It is imperative to know the underlying detail. The measurement may vary depending on how the raw materials are purchased, like if it's delivered, prepaid, or collect basis.

Transit time: This is measured by the number of days (or hours) from when a shipment departs your facility when it arrives at the customer's location. It is also measured against a standard transit time of each traffic lane quoted by the courier. Except if your system is integrated into your customers, you can rely on freight couriers to report their performance. This is an essential factor in lead time. Transit times may vary extensively, based on freight mode and courier systems.

Claims as % of freight costs: This is calculated by dividing total loss and damage claims by total freight costs, typically measured in total for each carrier. A high number usually specify packaging issues, or process concerns at the courier.

Freight bill accuracy. This is calculated by splitting the number of no error freight bills by the total number of freight bills. Errors may consist of wrong pricing, wrong weights, insufficient information, etc. It is mostly measured in total for each courier.

Supplementary as percent of total freight: This is calculated by dividing additional and surcharges by total freight spent for the period. Many freight couriers charge extra fees for trailer demurrage, re-delivery, fuel increase, and extra services. Often, these are additional costs acquired due to inefficient processes.

Percent of truckload capacity utilized: Generally used for shipments over 10,000 lbs and calculated by dividing the total pounds shipped by the theoretical maximum. For example, consider your trucks can hold 40,000 lbs. of goods. During the prior month, 675 shipments were totaling 22.95MM lbs. The percentage utilization was 85%. The 15% unused capacity is an opportunity for more competence.

Mode selection vs. optimal: This is calculated by dividing the number of shipments sent via the optimal mode by the total number of deliveries. To measure this, each traffic lane must have a designated optimal method based on freight costs and customer service requirements.

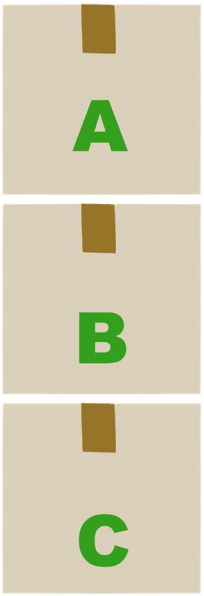
Truck turnaround time: This is calculated by measuring the average time lapsed between a truck's arrival at your facility and its departure. This is an indicator of the efficiency of your lot and dock door space, receiving processes, and shipping processes. This also directly affects freight carrier profits on your business.

Shipment visibility/traceability percentage: This is calculated by dividing the total number of shipments via couriers with order tracking systems and the total number of shipments sent. This is a sign of the relative refinement of your courier base and one measure of the non-price value available from your courier base.

Number of carriers per mode. *This is calculated* by counting the total number of freight couriers used in a given period, by method (ocean, raft, rail, intermodal, truckload, LTL, small package, etc.). This is a sign of your volume support and control over the transportation use.

On-time pickups: This is calculated by dividing the number of pick-ups made on-time (by the freight courier) by the total number of shipments. This is an indication of freight courier performance and couriers influence on your shipping operations and customer service.

Inventory ABC Classification: a way to classify your products. There are different ways to set up an ABC Ranking, such as Velocity (times sold), Quantity sold, or by the margin. But the most traditional method is the Annual Sales Volume ranking. This method will let you distinguish the small amount of products that usually account for most of your sales dollars (think 80/20 rule)



Here's one quick way for defining your ABC ranking based on Annual Sales Volume:
1. Calculate the 12-month dollar usage of all your products (volume X cost).
2. Rank the items in descending form by the dollar usage.
3. The items "A" are the top 80% of the total annual usage dollars.
4. The items "B" make up the next 15% of total annual usage.
5 The items "C" are the remaining 5% with >0 usage in the past 12 months
6. Label zero-usage items labeled as "D."

You also need to make special attention for your newer stocks. If you don't have a full year of Sales Volume to reference, you need to use a yearly forecast estimation, preferably.

Other considerations, such as "critical items" that may have low usage, need special monitoring because you can't run out of stock due to a customer agreement. So your interpretation of A items may need to be customized.

Some companies use A, B, C, C-
A = 80%, B = 15%, C = 4%, C- = 1%

Multiple Supply Chain Metrics:

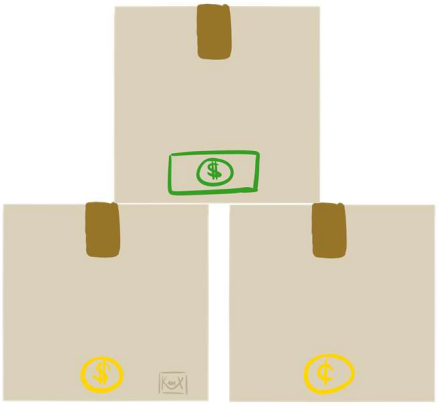
Inventory Months of Supply:
Inventory On Hand divided by Avg Monthly Usage
(the Avg Monthly Usage is the yearly forecast divided by12)

Inventory Rationalization:
An interpretation that classifies your inventory by different categories. Examples-
- Current Inventory levels of A, B, C goods
- Inventory turns of A, B, C
- Price of Slow Moving product (those products you may have more than "x" number of weeks worth)

Material Value Add.
- Retail Price minus material cost divided by material cost.

Upside Flexibility:
The capacity of a manufacturer to satisfy further demand requirements. This is compared as a percentage over the initial order. This is a security for the buyer. It permits the actual demand to be higher than the predetermined quantity.

Financial Inventory Measure



GMROI (Gross Margin Return on Inventory)

GMROI = (Unit Selling Cost of an Item - Unit Inventory Value of an Item) X Annual Demand for the item
Average Inventory Value of the product.

Notes:
Unit Inventory Value shows you the costs to make the product.
The Unit Selling Price - Unit Inventory Value shows the margin.

Inventory Carrying Rate:
The example below can best explain this:

1. Add up your annual Inventory Value:
Example:
$900k = Storage
$500k = Handling
$700k = Obsolescence
$700k = Damage
$500k = Administrative
$100k = Loss (pilferage etc)
$3,400k Total

2. Divide the Inventory Costs by the Average Inventory Value:
Example:
$3,400k / $34,000k = 10%

3. Add up your:
9% = Opportunity Cost of Capital (the return you could reasonably expect if you used the money elsewhere)
4% = Insurance
6% = Taxes
19%

4. Add your percentages: 10% + 19% = 29%
Your Inventory Carrying Rate = 29%

Inventory Carrying Costs:
Inventory Carrying Cost = Inventory Carrying Rate (see above) X Average Inventory Value
Example: $9,860,000 = 29% X $34,000,000

Inventory Turnover: The number of times that a businesses inventory cycles or turns over per year. It is one of the most generally used Supply Chain Metrics.

Calculation: A commonly used technique is to distribute the Annual Value of Sales by the Average Inventory Level.
E.g.: Amount of Sales = $36,000,000. Average Inventory = $6,000,000.
$36,000,000 / $6,000,000 = 6 Inventory Turnovers

OR

Inventory Turnover can be a moving number.
E.g.: Rolling 12 Month Amount of Sales = $16,000,000. Current Inventory = $4,000,000
$16,000,000 / $4,000,000 = 4 Inventory Turnovers

Projected Inventory Turnovers: Divide the "Total Cost of 12 Month Sales Plan" by the "Total Amount of Goal Inventory"
E.g.: The Total amount of 12 Month Sales Plan is $40,000,000. Total Amount of Goal Inventory = $8,000,000
$40,000,000 / $8,000,000 = 5 Projected Turnovers

Turnovers can be seen using Cost Value, Retail Value, or even in Units. Just make sure that you're using the same Unit of Measure in both the Numerator and the Denominator.

Although results vary by industry, typical manufacturing companies may have 6 inventory turnover per year. High volume/low margin businesses (like grocery stores) may have 12 inventory turnover per year or more.

Ask a qualified benchmarking company to assist you in setting your goal for your inventory turnovers.

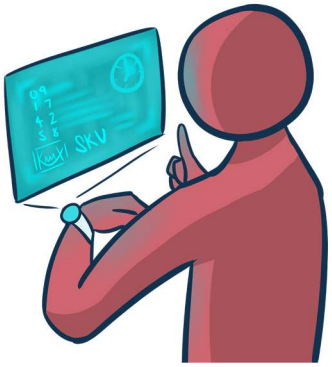
Please see the category links on the left side to view various Supply Chain definitions.

OnTime Shipping Performance is a computation of the quantity of Order Lines dispatched on or before the Requested Ship Date versus the total quantity of Order Lines.

In the following text, I refer to "shipped" on time. Yet if actual "delivery" data is available, it may be replaced and matched to the Requested Delivery Date. (such as with an EDI#214).

*OnTime: Shipped on or before the demanded ship date (except if the receiving party does not take early shipments).

Sample OnTime Measure:



OnTime Line Count: The cost of order lines shipped OnTime* versus the cost of lines ordered.

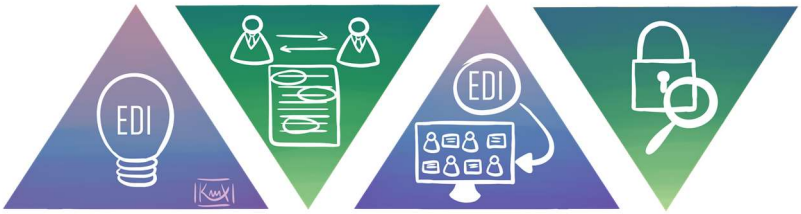
Example- Purple Mango Company orders 10 goods (one order line each) on its Purchase Order #0001. The Order Requested Ship Date is July 1. The manufacturer sent out 5 line items on June 28, 2 items on July 1, and the remaining 3 items on July 10. The OnTime LineCount for this PO is 70%. It is computed based on the Requested Ship Date or substitute actual Delivery Date vs. Requested Delivery Date.
Calculation: Quantity of Order Lines Shipped on or before the Requested Date / Total Quantity of Order Lines Ordered
(7/10 = 70%)

OnTime SKU Count: The quantity of SKU's (Stock Keeping Units) ordered and shipped is considered. Above, each Order Line has an equal value (1). Here, we calculate the SKU's per Order Line.
Example: If Line 1, the order was for 30 SKUs of goods "AB" and line 2, they ordered 10 SKUs of item "AC." The Requested Ship Date is July 1st. If Line 1 ships on June 28 and line 2 on July 20, the SKU Fill Rate is 75%
Calculation: Quantity of SKUs Shipped OnTime / Total Quantity of SKUs Ordered (30/40 = 75%).

OnTime Case Count: The number of cases shipped OnTime versus the number of cases ordered.
Example: Purple Mango Company orders 6 goods that total 200 cases, on its Purchase Order #1235. The manufacturer ships out 140 cases on July 1 and the remaining 60 instances on July 10. The Requested Ship Date is July 1. The Case OnTime Rate for this PO is 70%. The quantity of Order Lines is not regarded in this calculation. This OnTime measure provides "weight" to the order lines that are shipped out.
Calculation: Quantity of Cases Shipped OnTime / Total Quantity of Cases Ordered . (140/200 = 70%)

OnTime Value Rate: The number of values shipped OnTime versus the number of values ordered.
Calculated like: Value of Order Lines Shipped OnTime/Total Value of the Order ($400/$500 = 80%).

EDI Implementation



Quote for Price?	840 - Request for Quotation
Quote Confirmation	843 - Response to Request for Quotation
	879 - Price Information
Quote for Stock Availability?	893 - Item Information Request
Order Placed by Client	850 - Purchase Order
Order Confirmation?	855 - Purchase Order Acknowledgment
	865 - PO Change Acknowledgment/Request - Seller Initiated
	860 - Purchase Order Change Request - Buyer Initiated

Order Inquiry?	869 - Order Status Inquiry
Order Status Confirmation?	870 - Order Status Report
Shipment Date?	853 - Routing and Carrier Instruction
	862 - Shipping Schedule
Picking Slip	940 - Warehouse Shipping Order
Pack /Ship	856 - Ship Notice/Manifest
	861 - Receiving Advice/Acceptance Certificate
	857 - Shipment and Billing Notice
	858 - Shipment Information
	859 - Freight Invoice
Invoice	810 - Invoice
	812 - Credit/Debit Adjustment
Cash Receipts	820 - Payment Order/Remittance Advice