# FIT5101 Enterprise Systems



### Lecture 05

- Sales & Distribution (Sell)
- CRM

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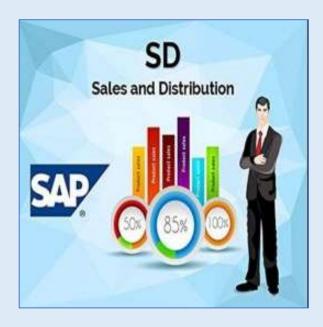
# Unit Topics (Subject to change)

Week	Date (W/C)	Lecture	Tutorial		Assessment
1	1/3	Introduction	Introduction		
2	8/3	Business Functions & Processes	Business Functions		
3	15/3	ERP Structures	SAP Introduction		Ass 1 Rel
4	22/3	Materials Management & Procurement	Matchais Management	S A	
5	29/3	Sales & Distribution		P	
	5/4	BREAK		W	
6	12/4	Production Planning	Sales & Distribution	O R	Ass 1 Due 16/4
7	19/4	Financials	Droduction Dlonning	K S	
8	26/4	Process Integration & Modelling	Financials	H O	
9	3/5	ERP Implementation	ETOCESS MODELLIO	P S	Ass 2 Due 7/5
10	10/5	Current Technologies	Work on Assignment		
11	17/5	Future Trends	Sample eExam / Review		
12	24/5	Review	??		Ass 3 Due 28/5



## **Objectives**

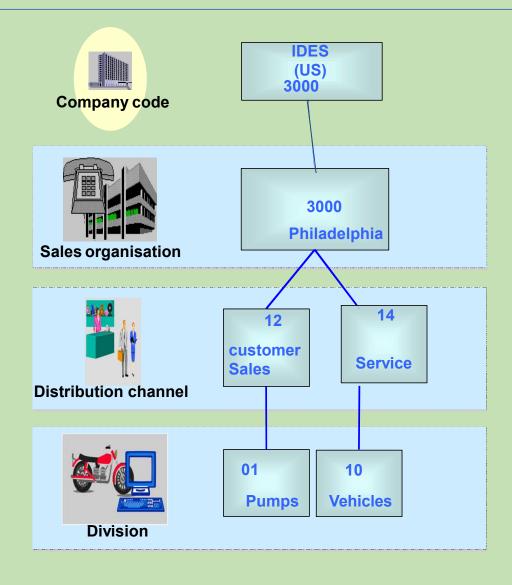
- Discuss sales and distribution in the SAP ERP system.
- Describe how SAP ERP processes a standard sales order



 Describe the benefits of customer relationship management (CRM) software



# SD Organisational Structure





## SAP – SD Organisational Structure

#### Client

An independent environment in the system

#### Company Code

- Smallest org unit for which you can maintain a legal set of books
- Can have more than one sales organization

#### Sales Organisation

- An organisational unit responsible for the sale of certain products or services.
- The responsibility of a sales organisation may include legal liability for products and customer claims
- A sales organisation is uniquely assigned to a company code.

#### Distribution Channel

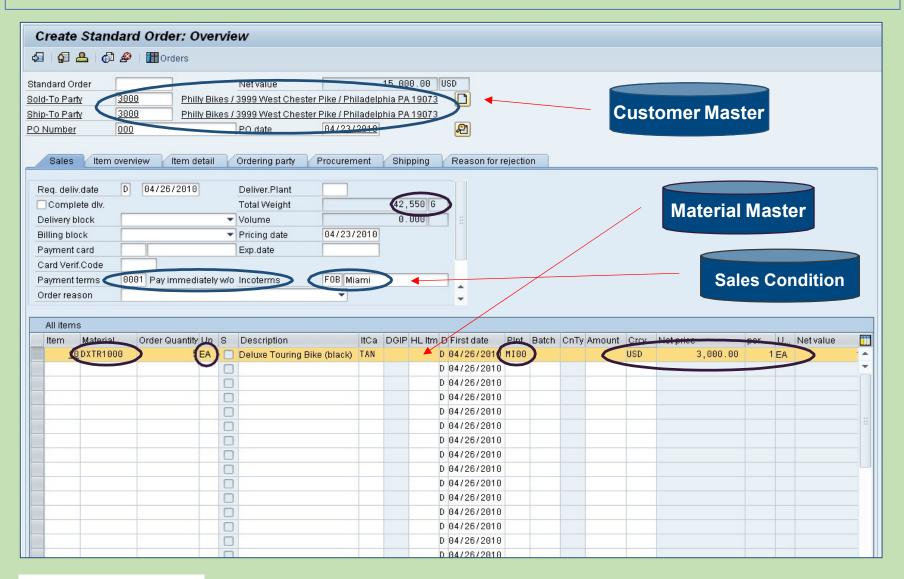
- The way in which products or services reach the customer
- Typical examples of distribution channels are wholesale, retail, or direct sales

#### Division

-- A way of grouping materials, products, or services



### **SD Master Data**





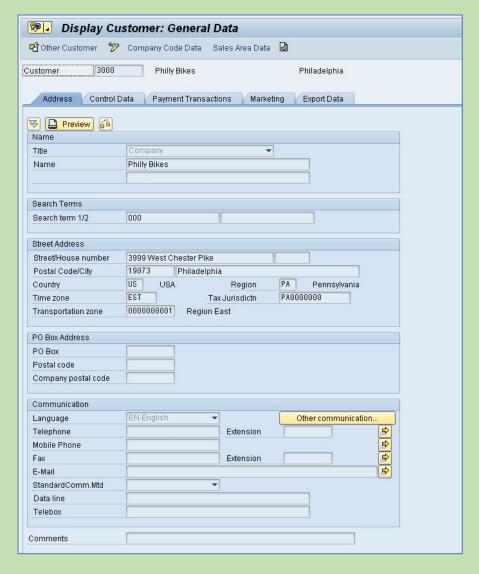
# Data entry fields in Order Entry Screen

Data entry field	Explanation
Sold-To Party	Identification number assigned to customer
PO Number	The number assigned by the customer to the sales transaction; this is different from the sales order number assigned by the seller (using SAP ERP) to the sales transaction. In a paper process, the purchase order number is usually a sequential number preprinted on the purchase order form
Req. deliv. date	The delivery date for the order requested by the customer; the SAP ERP system will evaluate the ability to meet this date and suggest alternatives, if necessary
Material	The identification number assigned in the SAP ERP system to the item requested by the customer
Order Quantity	The number of units of the material the customer is requesting



#### **Customer Master Data**

- Customer Master
  - Contains all of the information necessary for processing orders, deliveries, invoices and customer payment
  - Every customer MUST have a master record
- The customer master information is divided into 3 areas:
  - General Data
  - Company Code Data
  - Sales Area Data

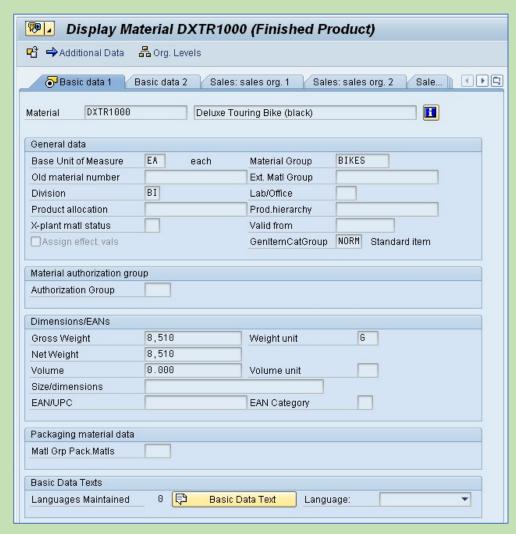




#### **Material Master Data**

#### Material Master

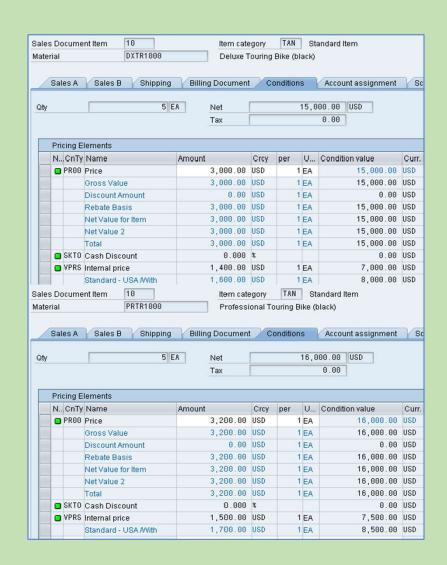
- Contains all the information a company needs to manage about a material
- It is used by most components within the SAP system
  - Sales and Distribution
  - · Materials Management
  - Production
  - Plant Maintenance
  - Accounting/Controlling
  - Quality Management
- Material master data is stored in functional segments called Views





# Condition Master Data (Pricing)

- Condition master data includes:
  - Prices
  - Surcharges
  - Discounts
  - Freights
  - Taxes
- You can define the condition master to be dependent on various data:
  - Material specific
  - Customer specific



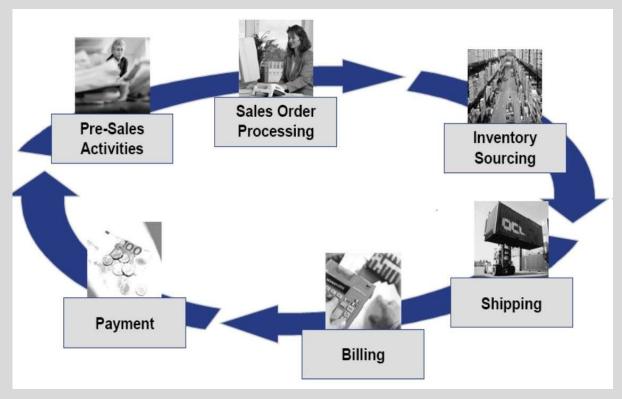




### Sales and Distribution in ERP

SAP ERP Sales and Distribution module treats the sales order process as a cycle of events:

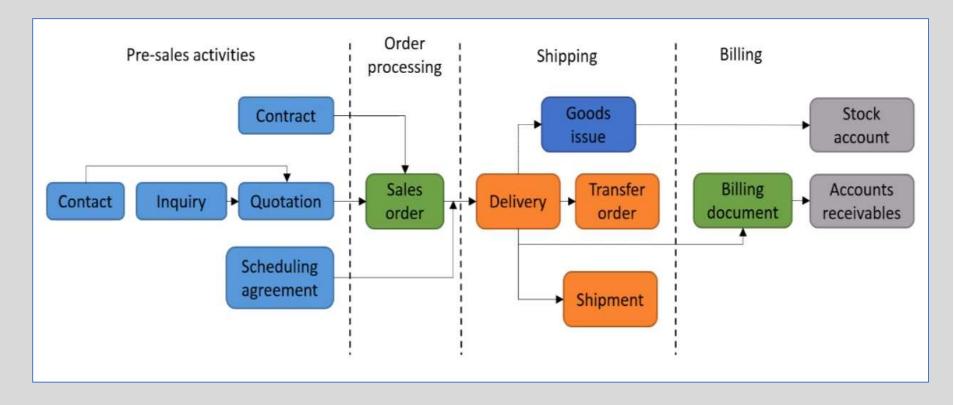
- Pre-sales activities
- Sales order processing
- Inventory sourcing
- Shipping (Delivery)
- Billing
- Payment



YouTube Video: <a href="https://youtu.be/kP-X4KDAgQc">https://youtu.be/kP-X4KDAgQc</a>



### SAP Order-to-Cash Process



https://youtu.be/msjRb3BYdf8



### **Pre-Sales Activities**

Sales Support is a component of SD that assists in the sales, distribution, and marketing of a companies products and services to its customers. It contains the following functionality:

- Creating and tracking customer contacts and communications (sales activity)
  - Phone call records
  - On-site meeting
  - Letters
  - Campaign communication
- Implementing and tracking direct mailing, internet, and trade fair campaigns based on customer attributes.





# Inquiry

- An inquiry is a customer's request to a company for information or quotation in respect to their products or services without obligation to purchase.
  - How much will it cost
  - Material/Service availability
  - May contain specific quantities and dates
- The inquiry is maintained in the system and a quotation is created to address questions for the potential customer.

Company The Bike Zone 2105 N Lewis Ave Portland OR 97227

#### Inquiry

Number/Date 10000002 / 04/21/2010 Reference no./Date 000 /04/21/2010 Delivery date Day 04/21/2010 Cust. no. 1301 Validity period 04/21/2010 bis 05/21/2010

We deliver according to the following conditions: Currency USD Terms of payment Payable immediately without deduction

Terms of delivery FOB San Diego

Weights (gross/net) - Volume - Mark

Gross weight 57,170 G Net weight 57,170 G

Please see our promotional offer enclosed. Delivery as long as stocks last.

ltem	Material		Description	
35000000		Qty	Price Price unit	Valu
000010	DXTR1000		Deluxe Touring Bike (black)	
		5 EA	3,000.00 USD 1 EA	15,000.00
000020	PRTR1000		Professional Touring Bike (black)	
		2 EA	3,200.00 USD 1 EA	6,400.00
Final a	amount			21,400.00



### Quotation

The quotation presents the customer with a legally binding offer to deliver specific products or a selection of a certain amount of products in a specified timeframe at a predefined price.

Company The Bike Zone 2105 N Lewis Ave Portland OR 97227 Quotation

Number/Date 20000000 / 04/21/2010 Reference no./Date 000 /04/21/2010 Delivery date Day 04/21/2010 Cust. no. 1301 Validity period 04/21/2010 bis 05/21/2010

We deliver according to the following conditions:

Currency USD

Terms of payment Payable immediately without deduction

Terms of delivery FOB San Diego

Weights (gross/net) - Volume - Mark

oss weight 57,170 G Net weight

57,170 G

Please see our promotional offer enclosed. Delivery as long as stocks

Item	Material	Description		
5-23.008	Qty	Price Price unit	Value	
000010	DXTR1000	Deluxe Touring Bike (black)		
	5 EA	3,000.00 USD 1 EA	15,000.00	
	Material	50.00- USD 1 EA	250.00-	
	% Discount from N	5.000- %	737.50-	
	Net Value for Ite	2,802.50 USD 1 EA	14,012.50	
000020	PRTR1000	Professional Touring Bike (black)		
	2 EA	3,200.00 USD 1 EA	6,400.00	
	% Discount from N	5.000- %	320.00-	
	Net Value for Ite	3,040.00 USD 1 EA	6,080.00	
Final a	amount		20,092.50	



# Sales Order Processing

- Sales order processing: series of activities that must take place to record a sales order.
- Sales order can start from a quotation or inquiry generated in the presales step or just a call-in from customers.

Information collected from the customer to support the quotation is

immediately included in sales order.

- Critical steps in sales order processing:
- Recording the items to be purchased
- Determining the selling price
- Recording the order quantities





### Sales Order

The sales document is made up of three primary areas:

#### Header

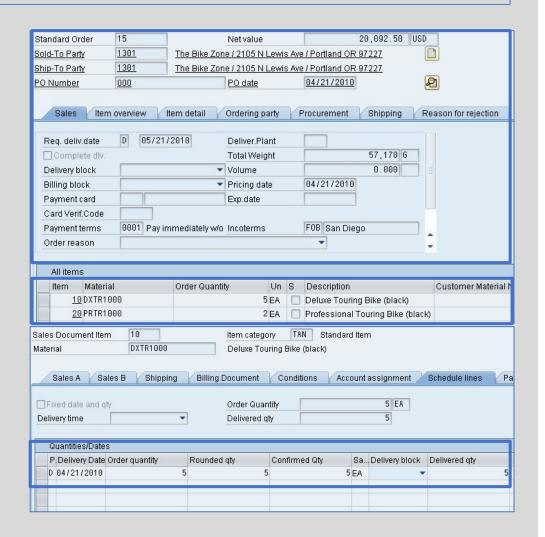
Data relevant for the entire sales order: Ex: customer data, total cost of the order

#### Line Item(s)

Information about the specific product: Ex: material and quantity, cost of an individual line

#### Schedule Line(s)

Uniquely belongs to a Line Item, contains delivery quantities and dates for partial deliveries



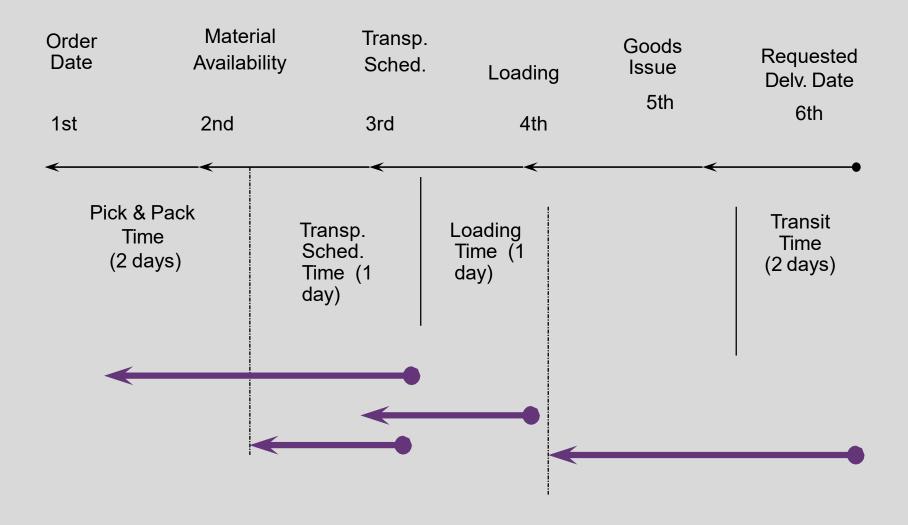


## **Delivery Scheduling**

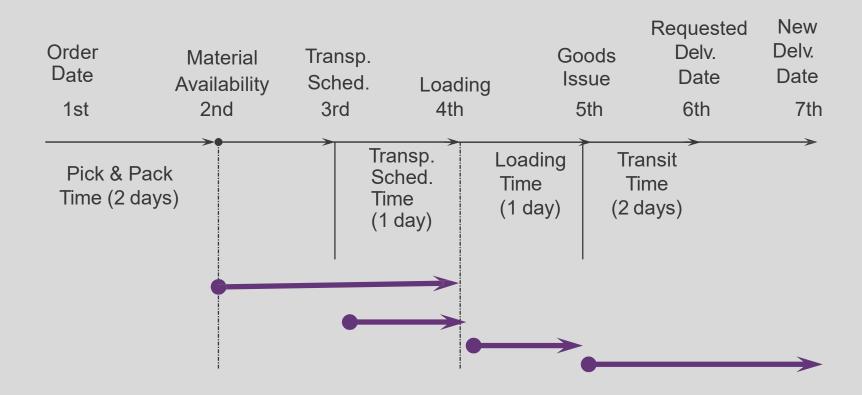
- When an order is created you must enter a requested delivery date for the order or each line item.
- The system will then determine a delivery timeline, this will be used when determining our material availability, or ATP (Availability to Promise) date.
- The system will determine this date using forward and backward scheduling rules you have defined.



# **Backward Scheduling**



# Forward Scheduling





## **Shipping & Route Determination**

- During the creation of the sales order the system must determine the shipping point from which the material will be shipped and the route the material will take to get from your warehouse to your customers location.
- A shipping point is determined for each line item within the order.
- The route determination is used to define the transit time of the material that we used in scheduling.



# **Inventory Sourcing**

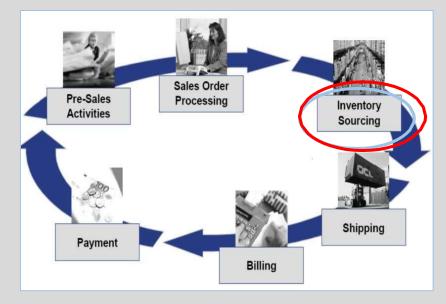
- Available-to-Promise (ATP) check
  - SAP ERP system checks company's inventory records and production planning records to see whether:
    - Requested material is available

Requested material can be delivered on the date the

customer desires

 Includes expected shipping time

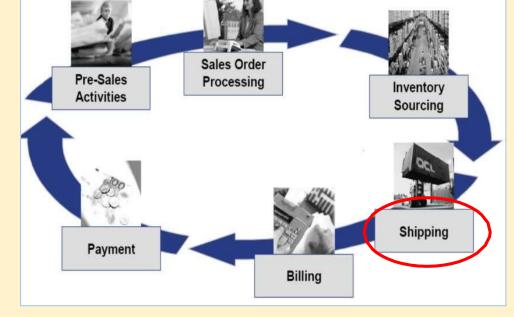
 System can recommend an increase in planned production if a shortfall is expected





# Delivery (Shipping)

- The shipping process begins when the delivery document for the sales order is created. This document controls, supports, and monitors numerous sub-processes for shipping processing:
  - Picking
  - Packing
  - Post Goods Issue

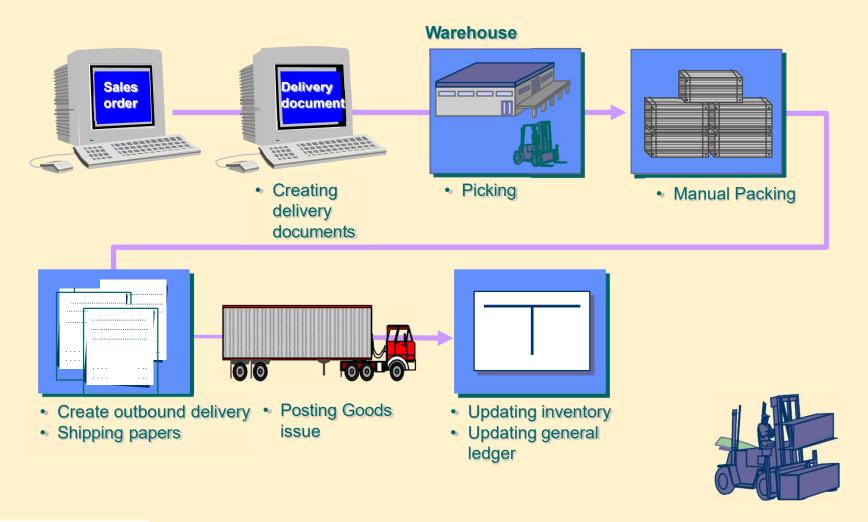


- Integrate with the Material Management (MM) and Finance (FI)
  modules
- Delivery process allows deliveries to be created so that the warehouse and shipping activities are carried out efficiently



# Sales & Distribution – Shipping

Shipping process begins when an outbound delivery document (transaction) is created





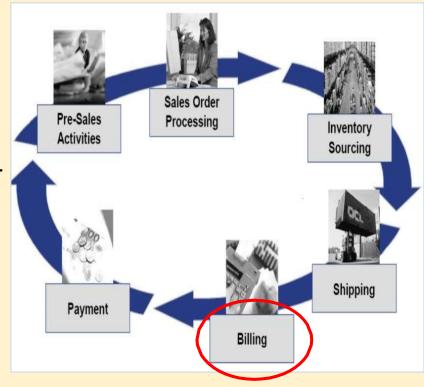
#### Goods Issue

- Event that indicates the legal change in ownership of the products
- Reduces inventory and enters Cost of Goods Sold
- Automatically updates the General Ledger (G/L) accounts
- Ends the shipping process and updates the status of the shipping documents



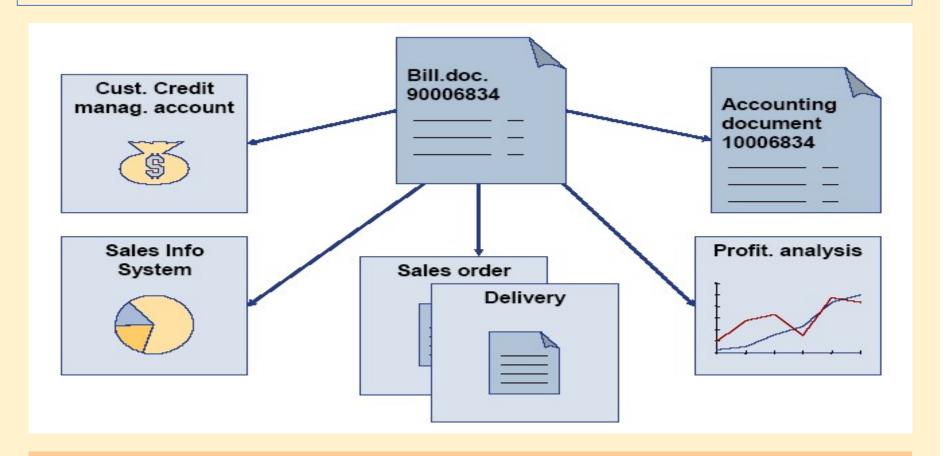
## Billing

- The billing document is created by copying data from:
  - The sales order (Order-based billing), and/or
  - The delivery document (Delivery-based billing)
- The billing process is used to generate customer invoice which can be mailed, faxed, or transmitted electronically to the customer
- It will update the customer's credit status.
- The billing document will automatically create a debit posting to your customer sub-ledger account and credit your revenue account.
- At this point that the sales process is passed over to Financial Accounting to await payment.





# Effects of a Billing Document



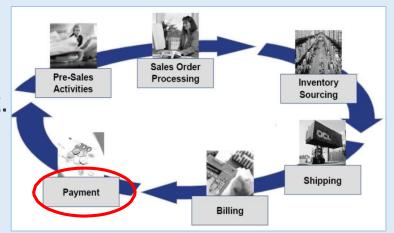
When you save the billing document, the system automatically generates all the required documents for accounting.

In accounting, the system carries out a debit posting on the customer receivables account and a credit posting on the revenue account.



# Payment (Receipt)

- Payment is the final step in the sales order process, this step is managed by the Financial Accounting department.
- Final payment includes:
  - Posting payments against invoices.
  - Reconciling differences between payment and invoice.
- Payment will create a posting clearing the liability in the A/R account and increases your bank account.
  - Debits cash (Bank Account) and credits (reduces) customer's account (Accounts Receivable)
- Timely recording of this transaction has an effect on the timeliness and accuracy of any subsequent credit checks for the customer

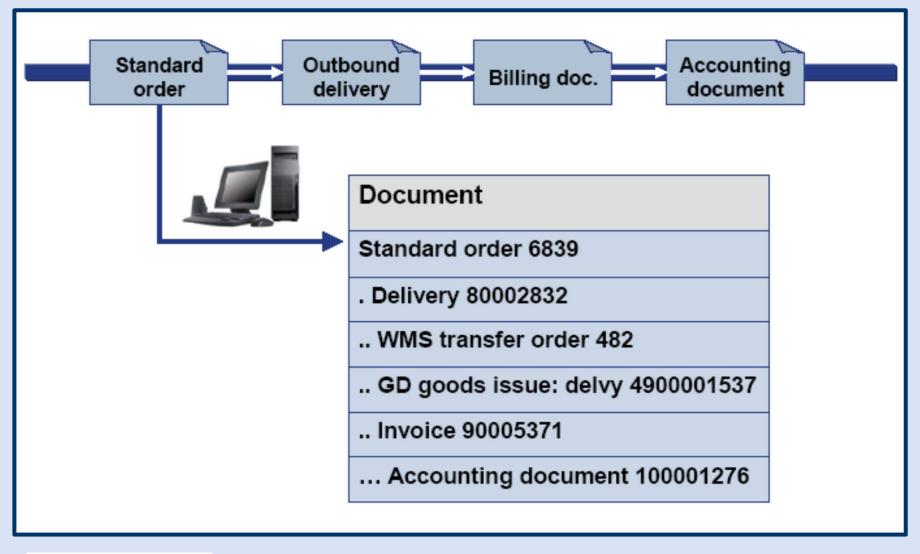


### **Document Flow**

- When a sales order is saved, SAP ERP system assigns a document number to the sales order transaction.
- SAP ERP system keeps track of the document numbers for the Sales Order.
- Employees can track status of an order while it is in process or research it after shipping.
- Document flow in SAP ERP: linked set of document numbers related to an order.
- The document flow and order status feature allows you to find the status of an order at any point in time. SAP updates the order status every time a change is made to any document created in the customer order management cycle (Order-to-Cash).



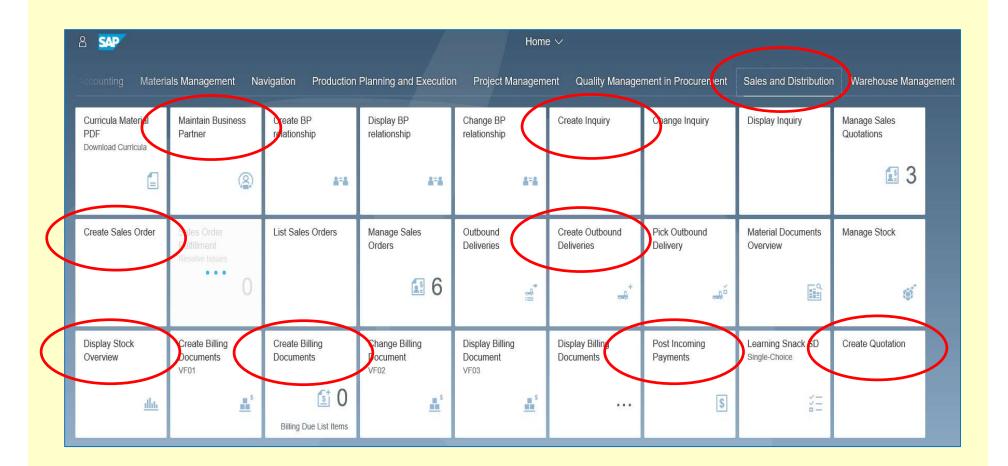
### Document flow in SAP



### **Document Flow in SAP**

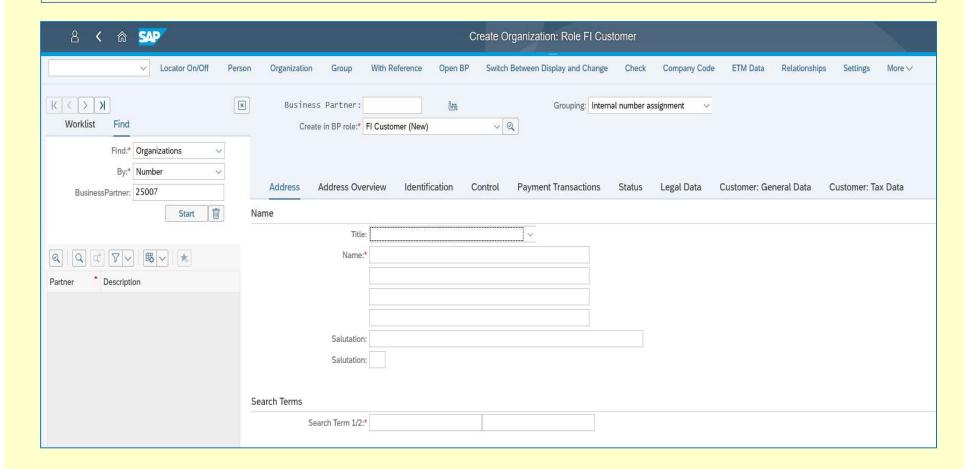






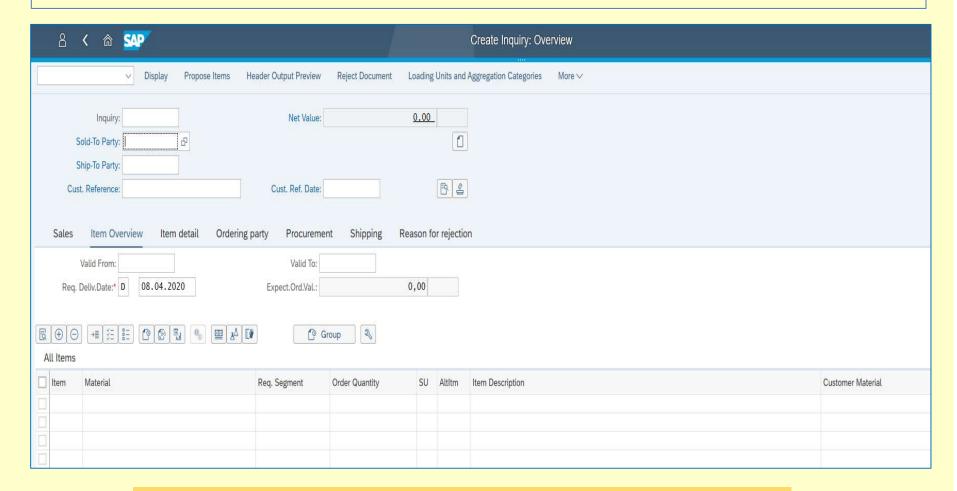
S & D Group





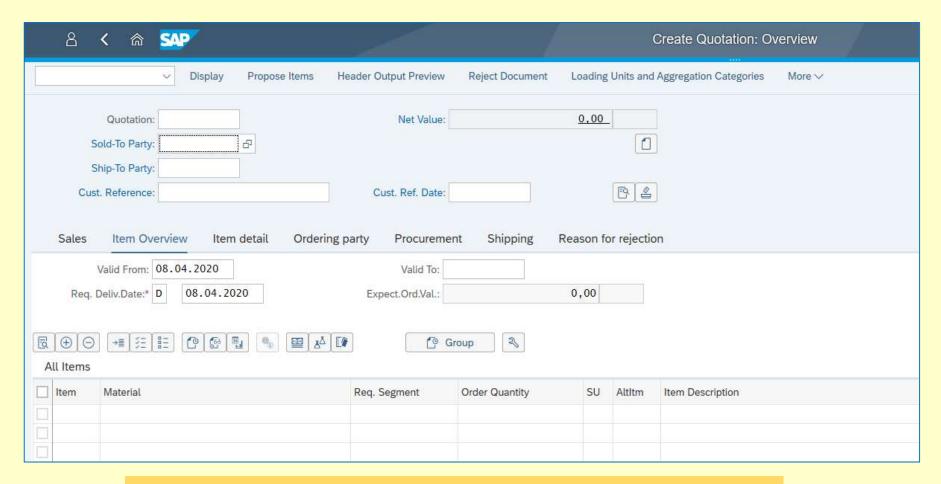
#### **Create Customer Master**





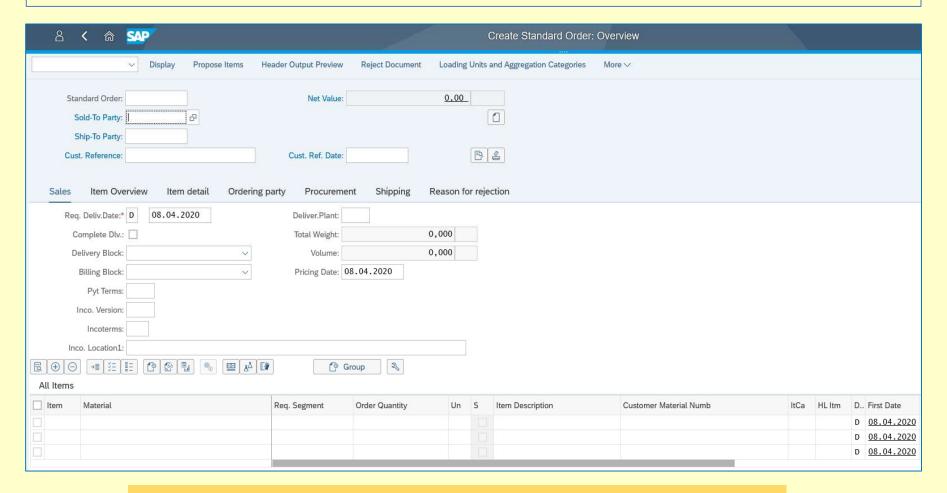
#### Create an Inquiry





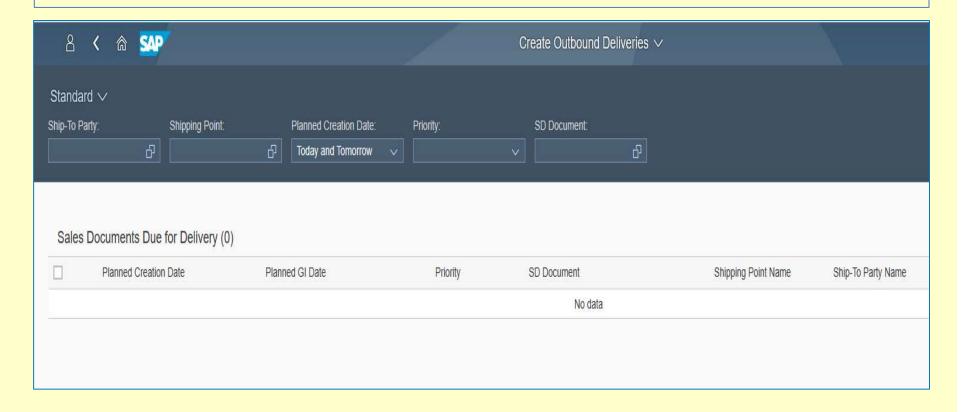
**Create a Quotation** 





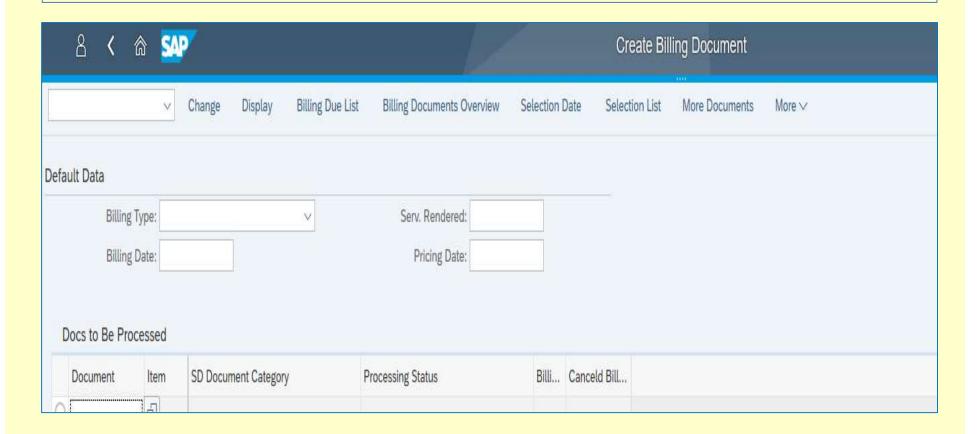
Create a Sales Order





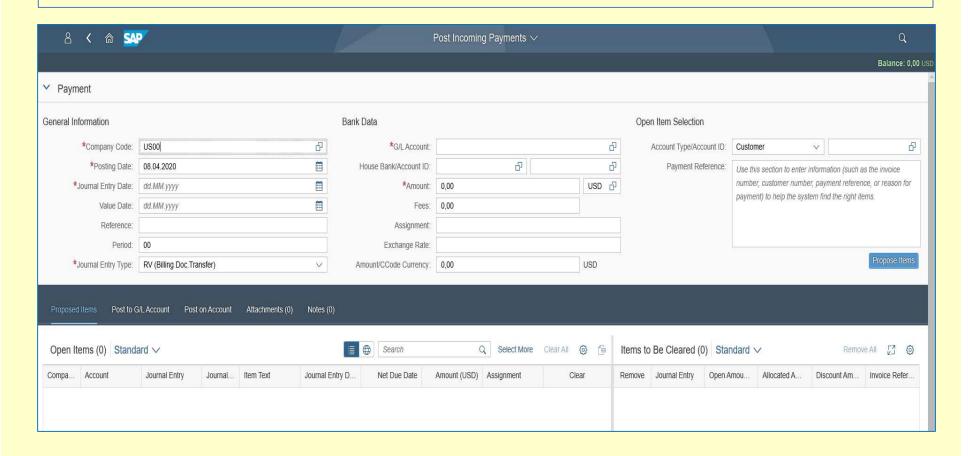
#### Start the Shipping Process





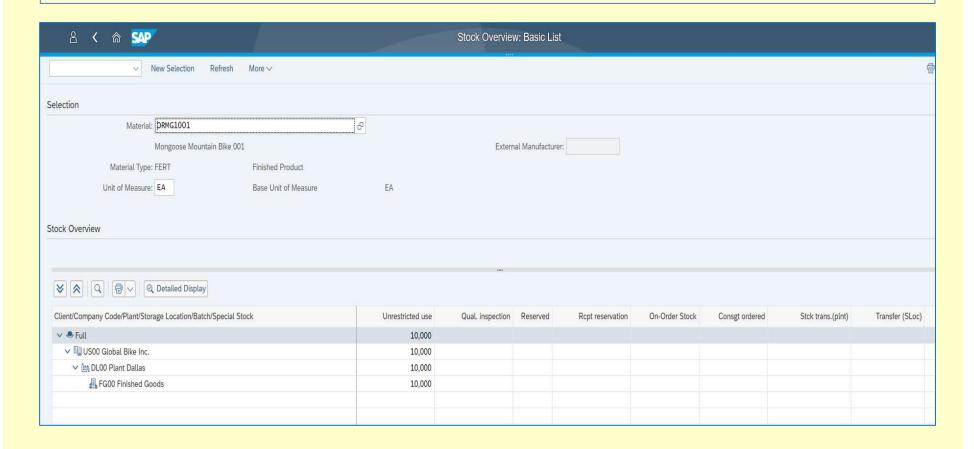
#### Create the Customer Invoice





#### **Record the Customers Payment**





#### Review the Stock Levels



## Customer Relationship Management

- Companies without a good connection between their workers and their customers run the risk of losing business.
- Customer relationship management (CRM) software can help companies streamline their interactions with customers.



What is CRM: <a href="https://youtu.be/Hh4HnpxyEGE">https://youtu.be/Hh4HnpxyEGE</a>



### **Core CRM Activities**



- Sale Planning & Forecasting
- Accounts & Contacts Management
- Opportunity Management
- Sales Contract Management
- Sales Analytics

- Sales & Marketing for Service
- Service Contract Management
- Warrant & Claim Management
- Parts, Logistics & Finance
- Service Analytics



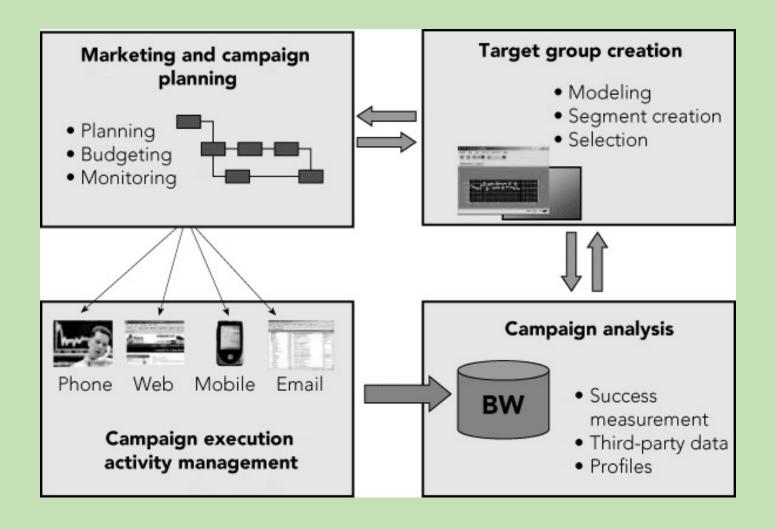
### SAP's CRM Software

- SAP ERP system processes business transactions and provides much of the raw data for CRM
- SAP's Business Warehouse: system for reporting and analysis of transactional data
- Advanced Planner and Optimizer (APO): system that supports efficient planning of the supply chain
- SAP's view of CRM is to provide a set of tools to manage the three basic task areas, or jobs:
  - Marketing, Sales, and Service





### SAP's CRM Software





### The Benefits of CRM

- Improved customer engagement
- Lower costs
- Higher revenue
- Improved strategy and performance measurement
- Data analytics & reporting.





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## Sample Exam Questions

- A. What Master Data items would be required in order to enter a Sales Order transaction?
- B. What are the six processing steps that are involved in the Sales Order cycle?



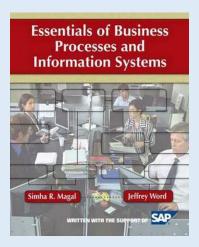
- C. Explain the difference between a Sales Inquiry and a Sales Quotation.
- D. What is the purpose of the *Document Flow* transaction in SAP?
- E. List three benefits of CRM
- F. What are the three basic task areas managed by a CRM system?



### References



Monk & Wagner Chap 3



Magal & Word Chaps 5

