SD Case Study

This case study explains an integrated sales and distribution process in detail and thus fosters a thorough understanding of each process step and underlying SAP functionality.

MOTIVATION
The data entry requirements in the sales & distribution exercises (SD 1 through SD 7) were minimized because much of the data was stored in the SAP system. This stored data, known as master data, simplifies the processing of business transactions. In the sales order process, we used master data about customers, materials (the products we sold) and pricing to simplify the sales order process.

In this case study, we will create the master data for a new customer.

PREREQUISITES
Before you use this case study, you should be familiar with navigation in the SAP system.

In order to successfully work through this case study, it is not necessary to have finished the SD exercises (SD 1 through SD 7). However, it is recommended.

NOTES
This case study uses the Global Bike Inc. (G.B.I.) data set, which has been created exclusively for SAP UA global curricula.
Create New Customer

**Task** Create a new customer.  
**Time** 10 min

**Short Description** Use the SAP Easy Access Menu to create a new customer.

In this case study, we will create the master data for a new customer. Two types of customer data are stored about a customer – sales data and accounting data. The customer master data is created in three groups, or views – general, accounting, and sales. Customers can be created centrally, meaning that all views are generated concurrently, or responsibility can be distributed so that different personnel in the accounting and sales areas are responsible for creating and maintaining the data in their respective views. For this exercise, central creation will be used to enter all of the needed data to define a new customer.

To create a new customer, follow the menu path:

**Menu path**

- **Logistics** ➤ **Sales and Distribution** ➤ **Master Data** ➤ **Business Partner** ➤ **Customer** ➤ **Create** ➤ **Complete**

This will produce the following screen.
Select **Sold-to Party** for the account group. Enter **###A1** for Company code, **###A1** for Sales Organization, **WH** for Distribution Channel, and **01** for Division. After clicking on , the following screen will appear.

Enter **The Bike Zone** for Name, **##** for Search term 1, **97204** for Postal Code, **Portland** for City, **US** for Country, and **OR** for Region. Then click on the expand icon to access additional street address fields.

Scroll down and click on the search icon next to the Transportation Zone field. This will produce the following pop-up window.
Double-click on Region West to select it.

Clicking on Company Code Data will produce the following screen.

Enter 1101## for Recon. account (reconciliation account), 001 for Sort key. Then click on the Payment Transactions tab.
After entering 0001 for Terms of payment and clicking on the **Sales Area Data** icon, the following screen will appear.

Make sure **USD** is entered for Currency and 1 is entered for Cust.pric.proc. Enter 1 for Cust.Stats.Grp, then click on the **Shipping** tab. Fill in the following data.

Enter 02 (normal) for Delivery Priority, 01 (standard) for Shipping Conditions, ##A2 for Delivering Plan, and 3 for Max. partial deliveries. Then click on the Billing Documents tab and fill in the following data.
Enter **FOB** and **Origin Shipping Dock** for Incoterms, 0001 for Terms of payment, 01 for Acct.assgmt group and 0 for Tax classification for all three categories. Then click on the save icon. The SAP system will create the master record for the new customer and assign the customer a unique customer number.

![Customer 00000000306 has been created for company code 00A1 sales area 00A1 WH 01](image)

Click on the cancel icon to return to the SAP Easy Access screen.
Create Contact Person for Customer

**Task** Create a contact person for a customer.  
**Time** 5 min

**Short Description** Use the SAP Easy Access Menu to create a contact person.

Now that we have created the master data for our new customer, The Bike Zone, we can create the master data for a contact person. A contact person is a subordinate of the new customer's company. The contact person defines a specific person to communicate with when dealing with The Bike Zone.

To create a contact person, follow the menu path:

**Menu path**

Logistics ► Sales and Distribution ► Master Data ► Business Partner ► Contact Person ► Create

This will produce the following screen.

If your customer number is not entered by default, then search for your customer using the Customers (by company code) tab. Then click on which will produce the following screen.
Enter 1 for VIP (management), 0002 for Department (purchasing), 02 for Function (head of purchasing), and 0002 for call frequency (weekly). Enter whatever name you wish, and fill in any other data you like, then click on . Your contact person will be given a unique number.

Click on the exit icon to return to the SAP Easy Access screen.
CASE STUDY

Change Customer

**Task** Change a customer.  

**Short Description** Use the SAP Easy Access Menu to change a customer.

The contact person created for The Bike Zone needs to be assigned as a business partner within the customer master.

To change the customer master data, follow the menu path:

**Menu path**

**Logistics ► Sales and Distribution ► Master Data ► Business Partner ► Customer ► Change ► Sales and Distribution**

This will produce the following screen.

If the customer number is not entered by default, search for it using the search tab **Customers (by company code)**. Make sure that following values are entered: 

**##A1** for Sales Organization, 
**WH** is entered for Distribution Channel, and 
**01** for Division. Then click on 

and the following screen will appear.
Click on the Partner Functions tab, then enter CP for PF (partner function). Then click on the number field and click on the search icon, which will bring up the following search window.

Your customer number is entered automatically. Click on the enter icon to begin the search and find your newly created contact person.

Double-click on the partner to enter the partner number. Click on to save.
Click on the cancel icon ✗ to return to the SAP Easy Access screen.
CASE STUDY

Create Customer Inquiry

**Task** Create a customer inquiry.  
**Time** 10 min

**Short Description** Use the SAP Easy Access Menu to create a customer inquiry.

Now we will enter an inquiry from our new customer, The Bike Zone. An inquiry is a customer’s request to be provided with a quotation or sales information without obligation. An inquiry can relate to materials or services, conditions, and if necessary delivery dates.

To create an inquiry, follow the menu path:

**Logistics** ► **Sales and Distribution** ► **Sales** ► **Inquiry** ► **Create**

This will produce the following screen.

![Customer Change: Initial Screen](image)

Enter the following information: **In** for inquiry, **#A1** for Sales Organization, **WH** for Distribution Channel, **01** for Division. Then click on ✅. This will produce the following screen.

![Following screen](image)
Click on the **Sold-to party** field, then click on the search icon, which will bring up the following search screen.

Because we have defined a search term when we created our new customer, we can now use it to find The Bike Zone.

Click on the **Customers (general)** tab, enter **##** for search term, then click on the enter icon. This will produce the new customer.
Double-click on **The Bike Zone** to select it.

Enter any number for PO Number, today’s date for the PO date (use F4/F2), today’s date for the Valid from date (use F4/F2) and a date one month from today for the Valid to date (use F4, then select the date).

The Bike Zone wants a quote on two products – the Mekena and the Star Lady Bike 28”. To find these products, we need to use the search function. Click on the material field, then click on the search icon 📦.

Clicking on the search icon will produce the following search window.
Select the tab Sales material by description, enter Sales Organization ##A1 and Distribution Channel WH, then click on 🔄 to get the list of bicycles.

Double-click on the Mekena bike to select it and enter a quantity of 10 pieces.
Repeat the process to enter a quantity of 5 of the **Star Lady Bike 28**. Click on the enter icon to determine the price for this order.

The total price for these 15 bikes to The Bike Zone is 3,195.00, which is given by the net value. The Expect.ord.val (958.00) is a calculated value which takes the net value of the order and multiplies it by the probability of having an inquiry from this customer turn into an actual order. Use the scroll icon to get to the Order probability column.
The order probability of 30% is the default value that was set for GBI for inquiry documents. The expected order value is then 0.30 \times 3,195.00 = 958.50. We can change the order probability for an inquiry, which makes sense as different customer inquiries would have different probabilities of becoming an actual sales order.

Change the order probabilities to 75%, then click on the enter icon to update the inquiry and note the new Expect.ord.val of 2,396.25.

Click on to save the inquiry. The SAP system will assign a unique number to the inquiry.

Click on the exit icon to return to the SAP Easy Access screen.
Create Customer Quotation

**Task** Create a customer quotation.  
**Time** 10 min

**Short Description** Use the SAP Easy Access Menu to create a customer quotation.

An inquiry presents the terms (price, delivery schedule) to a customer considering a purchase. A quotation is similar, except that it is a legally binding offer for delivering the requested product or services.

The Bike Zone would like a firm quote for the items in the inquiry created before. We can do this easily by copying the details from the inquiry into the new quotation. To do this, follow the menu path:

**Logistics ► Sales and Distribution ► Sales ► Quotation ► Create**

This will produce the following screen.

Enter **QT** for Quotation Type, then click on **Create with Reference**. This will produce the following screen.

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**Note:** The images provided are placeholders for the actual screen captures. The text describes the process of creating a customer quotation using the SAP Easy Access Menu.
Make sure the **Inquiry** tab is selected, click on the **Inquiry** field, then on the search icon 📦. This will produce the following search window.

Enter ##A1 for Sales Organization, then click on the enter icon ✔️. This will produce a list with the inquiry for The Bike Zone.

Double-click on the inquiry to select it, and the inquiry number will be copied in the **Create with Reference** window.
Click on the copy icon to copy information from the inquiry into the quotation screen.

Enter a **PO number** of your choice, today’s date for the **PO date** (F4/F2), a date one month from today for the **Valid to** date, and a date one month from today for the **Req. deliv. date**. Then click on the enter icon, which will produce the following warning.

> The default date is not copied into existing schedule lines

Click on the enter icon to acknowledge the warning. This will produce an information message.
Click on the enter icon 🔄 to acknowledge this information.

To encourage The Bike Zone to become a loyal customer, you have been authorized to give a $5.00 discount on each Mekena bike, as well as a 5% discount on the entire order.

To add the $5.00 to the Mekena bike, select the Mekena line in the order, then click on the Item conditions icon 🔄. You will get a screen that shows the pricing details for the Mekena bike.

In SAP, pricing is done using conditions. The pricing procedure defines which condition types are to be used to calculate the final price. Condition type PR00 is a gross price condition. To add a discount, we can add condition type K004 (material discount) with a value of 5 to the pricing procedure.
After clicking on the enter icon, a new price for the 10 Mekena bikes will be calculated.

Note that the discount is now applied to the order. Click on the back icon to return to the main quotation screen.

To apply a 5% discount to the entire order, follow the pull-down menu path:

**Goto ▶ Header ▶ Conditions**

This will produce the following screen.
To apply the 5% discount, enter CnTy (condition type) RA00 (Net Discount) with a value of 5, then click on ✔. Note that the price does not yet include the 5% discount.
To include the 5% discount, click on the activate icon.

The 5% discount is now applied. Note that it is applied to the price after the $5 discount per Mekena bike. As a final detail, it is good practice to document the reason that these discounts are being given. To do this, click on the Texts tab. This produces a screen where notes can be attached to the quotation.

After entering the note to support the discounts, click on to save the new quotation.

Click on the exit icon to return to the SAP Easy Access screen.
Create Sales Order Referencing a Quotation

Task Create a sales order with reference to a quotation.

Short Description Use the SAP Easy Access Menu to create a sales order.

The Bike Zone has agreed to the terms and conditions in the quotation, and wants to order the bikes in the quotation. As a result, we can simplify the order creation process by copying the quotation into a sales order.

To create a sales order, follow the menu path:

**Logistics ► Sales and Distribution ► Sales ► Order ► Create**

This will produce the following screen.

Enter Order Type OR, then click on the **Create with Reference** icon. This will produce the following pop-up search window.
Make sure that the Quotation tab is selected, click on the Quotation field, then on the search icon. This will produce the following search window.

Make sure you select the Sales documents by customer tab, enter ##A1 for Sales organization, then click on the enter icon.

After double-clicking on the quotation, the number for the quotation will be entered into the Create with Reference window.
With the Quotation number entered, click on the copy icon to copy the information from the quotation into the sales order screen. You will get the following message.

The note that was entered in the header area of the quotation document is displayed as an information message. Click on the enter icon, and the sales order screen will appear.

Enter a PO number and today’s date (F4/F2) for the PO date. Note that the Req.deliv.date is copied from the quotation. Click on to save the sales order. The SAP system will assign a sales order number.

Click on the exit icon to return to the SAP Easy Access screen.
Check Stock Status

Task Check the inventory.  
Short Description Use the SAP Easy Access Menu to check the stock status.

We can check on the inventory level of the bikes in the sales order for The Bike Zone. To do this, follow the menu path:

**Logistics ➤ Materials Management ➤ Inventory Management ➤ Environment ➤ Stock ➤ Stock Overview**

This will produce the following screen.

To find the material number for your bikes, click on the Material field, then click on the search icon. This will produce the following search screen.

Use the far-right icon to select the tab Sales material by description. Enter ##A1 for Sales Organization, WH for Distribution Channel. Then click the enter icon to find the list of materials.
Double-click on the Mekena bike to select it.

With the material number entered from the search list, enter `##A2` to `##A3` for Plant then click on the execute icon to look at the stock level.
This report gives stock levels for both the San Diego distribution center (from which Bike Zone's order will be sent) and the second DC for GBI, Miami.

We can get more detail on the stock of Mekena bikes. Select the San Diego DC, then click on the Detailed Display icon. This will give you very specific information about the inventory of Mekena bikes.

Note the 10 bikes that are part of the sales order. Click on the enter icon to close the Detailed Display window, then click on the back icon to return to the main screen.
Use the search function to enter the material number for the Star Lady Bike 28. Click on the execute icon and review the stock level for this bike.

Click on the exit icon to return to the SAP Easy Access screen.
### Display Sales Order

**Task** Display a sales order.  
**Time** 10 min

**Short Description** Use the SAP Easy Access Menu to display a sales order.

With relatively little user input, the sales order for The Bike Zone has been created. The Display Sales Order transaction provides the opportunity to review the order in detail.

To display a sales order, follow the menu path:

**Menu path**

Logistics ➤ Sales and Distribution ➤ Sales ➤ Order ➤ Display

This will produce the following screen.

![Display Sales Order: Initial Screen](image)

To make sure we have the correct sales order number, we will use the search function to find it. Click on the order field, then click on the search icon. This will bring up the search pop-up window.
After entering your sales organization (A1), click on the enter icon to get a list of sales orders.

You can sort the search results list by any of the columns merely by clicking on the column heading. As sales order numbers are assigned sequentially, the most recent sales order can be easily found by sorting by document number and selecting the last one on the list.

After sorting the list (Document heading) and double-clicking on the most recent sales order number, click on to display the sales order. This will produce the following sales order items.
Select the Star Lady Bike 28, then click on the display availability icon to explore the stock for this item in detail.

This screen shows that, in this case, there are actually 495 bikes in stock, but because a safety stock of 100 is desired, we ideally have 395 available to sell, and the order we are displaying will use 5 of these.

Note: your numbers may be different.

Clicking on the Display Scope of check icon will produce the following pop-up window.

This screen displays the elements considered when performing the availability check. For example, Incl. purchase orders is selected, which means that a purchase order will be considered as available stock from its receipt date onward.

Click on the cancel icon to close the pop-up window, then click on the back icon to return to the overview screen.
After selecting the Mekena bike and clicking on the item conditions icon, the following screen will be displayed.

The details of the price calculation for the Mekena bike are displayed. Clicking on the Analysis icon produces the following screen.
This screen shows the pricing procedure, which is the sequence of steps used to calculate the price. The procedure looks for a number of conditions that may apply to this item purchased by this customer. Conditions are prices, discounts, surcharges, etc.

Condition PR00 is a price condition, and establishes the base price for the bike. Expand on this condition to see the details of the pricing procedure’s search for a price.

The pricing procedure specifies a search for the price starting with the most specific pricing to the most generic. It looks first for a Customer/material price, which is a price for a particular customer for a particular material. It then looks for a price list, which might have a price for the material for a customer group (wholesale, retail, etc.) or currency. Finally, it looks for a price for the material itself.

In our case, there is no special pricing for this bike with this customer, so the material price of 185.00 is used.

Click on the back icon twice to return to the overview screen.
Two discounts were manually applied to The Bike Zone’s order. We justified these discounts with a note in the quotation. This note was copied from the quotation into the sales order, which we can confirm by clicking on the header details icon.

Click on the **Texts** tab to view the note.

Note that the note has been copied.

Click on the exit icon to return to the SAP Easy Access screen.
**CASE STUDY**

### Start Delivery Process

**Task** Start the delivery process.  
**Time** 5 min

**Short Description** Use the SAP Easy Access Menu to start the delivery process.

To start the process that will fulfill The Bike Zone’s order, we need to create a deliver document. To do this, follow the menu path:

**Logistics ► Sales and Distribution ► Shipping and Transportation ► Outbound Delivery ► Create ► Single Document ► With Reference to Sales Order**

This will produce the following screen.

![Create Outbound Delivery with Order Reference](image)

Enter **###A2** for Shipping Point. Enter a selection date one week from today (you can use **F4** to call up the calendar window).

If the sales order number is not entered automatically, you can search for you sales order number using the **Sales documents by customer** tab. Enter your sales organization (**###A1**) and transaction group **0** (sales order).

Then click on the enter icon ✅.
Select the Mekena bike, then click on the details icon 🏍, which will produce the following screen.

This screen shows that the order has not yet been picked. After clicking on 🏍, a delivery document will be created with a unique document number.

Click on the exit icon 🏫 to return to the SAP Easy Access screen.
**Task** Check the inventory.  
**Time** 5 min  
**Short Description** Use the SAP Easy Access Menu to check the stock status.

To check on the inventory for the bikes in the sales order for The Bike Zone, follow the menu path:

**Logistics ► Materials Management ► Inventory Management ► Environment ► Stock ► Stock Overview**

This will produce the following screen.

Click on the **Material** field, then click on the search icon 📚. Use the **Sales material by description** tab with **##A1** for Sales Organization and **WH** for Distribution Channel. Pick the Mekena bike.

After using the search function to find the material number for the Mekena, enter **##A2** to **##A3** for plant, then click on the execute icon ⏯️. This will produce the following screen.
Select the San Diego DC, then click on the Detailed Display icon.

Note that the 10 bikes for The Bike Zone order are now showed as **Schd. for delivery**.

Click on the exit icon 🚪 to return to the SAP Easy Access screen.
**Pick Materials on Delivery Note**

**Task** Pick materials on delivery note.  
**Short Description** Use the SAP Easy Access Menu to pick materials.

To record the picking of the material, we change the delivery document. To change the delivery document, follow the menu path:

- **Logistics** ➤ **Sales and Distribution** ➤ **Shipping and Transportation**  
  ➤ **Outbound Delivery** ➤ **Change** ➤ **Single Document**

This will produce the following screen.

If the Outbound Delivery document number is not entered automatically, you can search for your delivery document using the tab **Outbound Delivery: Not Posted for Goods Issue**.

After clicking on the enter icon, you will get the following screen.

Click on the picking tab, then enter **30** for SLoc (storage location) and the appropriate quantity for the picked quantity.

Click on **to save the picking information. You should get the following message at the bottom-left corner of the screen.**
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Click on the exit icon 🚪 to return to the SAP Easy Access screen.
Post Goods Issue

**Task** Post a goods issue.  
**Time** 5 min

**Short Description** Use the SAP Easy Access Menu to post a goods issue.

To post the goods issue (change the possession of the material from GBI to The Bike Zone), follow the menu path:

**Menu path**

Logistics ► Sales and Distribution ► Shipping and Transportation ► Outbound Delivery ► Change ► Single Document

This will produce the following screen.

After confirming that you have the delivery document number (you can search for your delivery document using the tab **Outbound Delivery: Not Posted for Goods Issue**), click on the **Post Goods Issue** icon. You should get the following message at the bottom-left corner of the screen.

Click on the exit icon to return to the SAP Easy Access screen.
Check Stock Status

Task: Check the inventory.  
Time: 5 min

Short Description: Use the SAP Easy Access Menu to check the stock status.

To see the impact that the goods issue for the bikes in the sales order for The Bike Zone has had on the inventory position of GBI, follow the menu path:

**Logistics ► Materials Management ► Inventory Management ► Environment ► Stock ► Stock Overview**

This will produce the following screen.

Click on the **Material** field, then click on the search icon. Use the **Sales material by description** tab with **##A1** for Sales Organization and **WH** for Distribution Channel. Pick the Mekena bike.

After using the search function to find the material number for the Mekena, enter **##A2** to **##A3** for plant, then click on the execute icon. This will produce the following screen.
Note that the available inventory has changed. Select the San Diego DC, then click on the Detailed Display icon.

The inventory is reduced from before by the amount that used to appear as Schd. for delivery.

Click on the exit icon to return to the SAP Easy Access screen.
Create Billing for Customer

**Task** Create a billing document for a customer. **Time** 10 min

**Short Description** Use the SAP Easy Access Menu to create a customer billing document.

With the delivery complete, the customer can be invoiced. To do this, follow the menu path:

**Logistics ► Sales and Distribution ► Billing ► Billing Document ► Process Billing Due List**

This will produce the following screen.

Enter **##A1** for Sales Organization, then click on the **Display Bill List** icon. This will produce the following screen.

Click on **Individual billing document**, which will produce the following screen.
To setup printing of the invoice, follow the pull-down menu path:

**Goto ▶ Header ▶ Output**

which will call up the following screen.

Enter **RD00** (Invoice) for Output and select **Print output** for Medium, then click on the **Display Communication method** icon. This will produce the following screen.
Enter **LOCL** for Logical destination and select **Print immediately**, then click on the back icon 🔄.

Click on the **Further data** icon, which will produce the following screen.

Select **Send immediately (when saving the application)** for Dispatch time so that the invoice will print immediately, then click on the back icon 🔄.

Click on the back icon 🔄 again.
Click on the save icon to return to the Maintain Billing Due List screen.

Note that the highlight is turned off on the line, and there is a message at the bottom of the screen.

"Document 90000910 has been saved"

Click on the exit icon to return to the SAP Easy Access screen.
CASE STUDY

Display Billing Document and Customer Invoice

Task Display a billing document and a customer invoice.  

Time 5 min

Short Description Use the SAP Easy Access Menu to display a billing document/customer invoice.

The invoice that will be sent to The Bike Zone can be viewed by following the menu path:

Logistics ► Sales and Distribution ► Billing ► Billing Document ► Display

This will produce the following screen.

If the billing document number is not entered automatically, you can find it from the document flow in your sales order. Follow the pull-down menu path:

Billing document ► Issue Output To

This will produce the following pop-up window.
Make sure the invoice line is selected, then click on the **Print preview** icon. This will produce the following screen.

![Print preview](image)

After reviewing the invoice that will be printed and sent to The Bike Zone, click on the **back** icon, then close the pop-up window by clicking on the **cancel** icon.

![Back and cancel icons](image)

To review the accounting implications of this sale, click on the **Accounting** icon. This will produce the following screen.

![Accounting](image)
Review the accounting postings due to this sales order.

Click on the exit icon ☐ to return to the SAP Easy Access screen.
Post Receipt of Customer Payment

**Task** Post a customer payment receipt.  

**Short Description** Use the SAP Easy Access Menu to post a customer payment receipt.

After The Bike Zone mails its payment, it needs to be recorded. To do this, follow the menu path:

**Menu path**

**Accounting ► Financial Accounting ► Accounts Receivable ► Document Entry ► Incoming Payment**

This will produce the following screen.

![Post Incoming Payments: Header Data](image)

Use the **F4/F2** function keys to enter the current date for the document date. Enter **##A1** for Company Code, **USD** for Currency/Rate, **1001##** for Account, and **2987.75** for amount.

Then click on the account field, then the search icon ☐, to get the following search pop-up window.
As The Bike Zone was created with the data set number (###) as a search term, you can use this to find The Bike Zone. After entering ### on the Customers (general) tab, click on the enter icon 📘 and you will get the following results.

After double-clicking on Bike Zone to select it, click on the Process open items icon. You will get the following screen.
Double-click on the 2,987.75 amount to assign the payment to the accounts receivable. After assigning the payment to the invoice, click on the save icon to post the payment.

Click on the exit icon, which will produce the following pop-up window.

There is no data to be lost, so click on the Yes icon to return to the SAP Easy Access menu.
Review Document Flow

**Task** Review the document flow.  

**Short Description** Use the SAP Easy Access Menu to review the document flow.

The document flow tool links all documents that were used in The Bike Zone’s sales order. Again, there are many ways to access the document flow tool. One way is to start by displaying the sales order document.

To display the document flow, follow the menu path:

**Logistics ► Sales and Distribution ► Sales ► Order ► Display**

This will produce the following screen.

If your sales order is not displayed, you can search for your sales order number using the **Sales documents by customer** tab. Enter your sales organization (**A1**) and transaction group 0 (sales order).

To access the document flow tool, follow the pull-down menu path:

**Environment ► Display document flow**

The document flow for The Bike Zone will look like the following.
Review the documents for The Bike Zone’s order.

Click on the exit icon to return to the SAP Easy Access screen.