

Controlling Case Study Product Costing (CO-PC)

This case study explains an integrated product costing process in details and thus fosters a thorough understanding of each process step and underlying SAP functionality.

Product

S/4HANA 1809 Global Bike

Fiori 2.0

Level

Undergraduate Graduate Beginner

Focus

Product Costing

Author

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Version

3.3

Last Update

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MOTIVATION

The data entry requirements in the controlling exercises (CO 1 through CO 3) were minimized because most of the data was stored in the SAP system. This stored data, known as master data, simplifies the processing of business transactions.

In this case study, we create a variant of an existing product in order to calculate associated costs. The cost estimate for this new bike version was initiated by the sales department, which plans on running a sales campaign with a special edition of this bike. After the new material is created in the system, existing bills of materials and routings need to be copied and modified.

After the material has been created the product cost estimate is calculated.

PREREQUISITES

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

In order to work successfully through this case study, it is not necessary to have finished the CO exercises (CO 1 through CO 3). Anyway, it is recommended.

NOTES

This case study uses the Global Bike (GB) data set, which has exclusively been created for SAP UA global curricula.



Process Overview

Learning Objective Understand and perform a product costing process.

Time 55 min

Scenario In order to perform a product costing process you will take on different roles within the GBI company, e.g. production data administrator, cost accountant or chief accountant. Overall, you will work in the Production Planning (PP) and the Controlling (CO) departments.

Employees involved Jermain Kumins (Production Data Administrator)

Jamie Shamblin (Cost Accountant)

Shuyuan Chen (Chief Accountant)

You start the product costing process by creating a slightly changed version of your top-selling Deluxe Touring bike. As you plan to manufacture and sell a white color in the future, you create new finished goods and necessary raw materials. The bill of material and routing are changed accordingly. Prices are calculated for the new frame and then released.

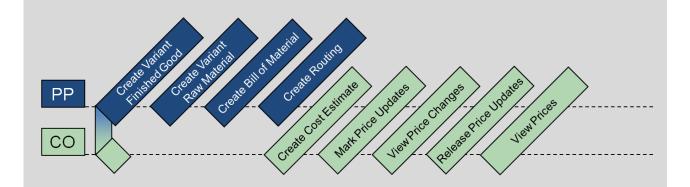


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Step 1: Create Variant Finished Good for Product Costing

Task Create a variant of the Deluxe Touring Bike (black).

Time 10 min

Short Description Create a variant of the Deluxe Touring Bike (black) for product costing. In order to do so, you should create a new product while copying the data from your Deluxe Touring Bike (black).

Name (Position) Jermain Kumins (Production Data Administrator)

To create a product, use the app Create Material.



Fiori App

Create material **DXTR4**### (replace ### with your assigned number), choose Industry sector **Mechanical engineering**, Material type **Finished Product** and

enter **DXTR1**### under Copy from. Click on Continue or press Enter now.

DXTR4### Mechanical engineering, Finished Product, DXTR1###

On the next screen, select the following views by clicking on the square in front of the respective rows:

Basic Data 1
 Accounting 1
 Costing 1
 Basic Data 2
 Accounting 2
 Costing 2

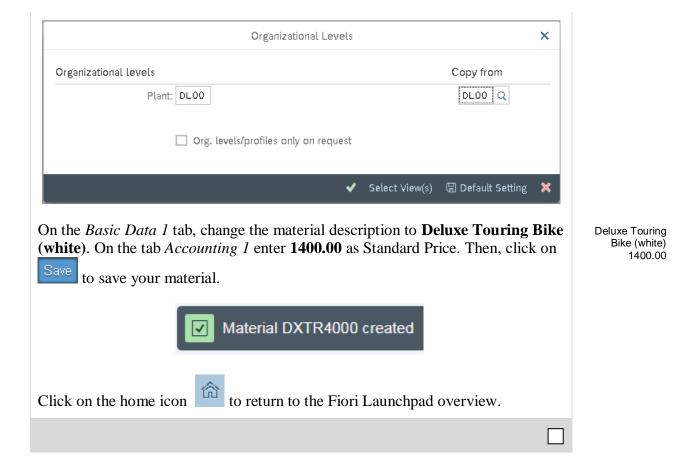
Basic Data 1
Basic Data 2
Accounting 1
Accounting 2
Costing 1
Costing 2

Also, select **Create views selected**. Then, click on .

Create views selected

On the Organizational Levels screen, enter plant **DL00** (Dallas) and **DL00** under Copy From. Compare with the screen shown below. Then, click on

DL00, DL00





Step 2: Create Variant Raw Material for Product Costing

Task Create a new raw material for your variant bike.

Time 5 min

Short Description Create a white frame as a new material. It will be used later in the BOM of your new Deluxe Touring Bike (white)

Name (Position) Jermain Kumins (Production Data Administrator)

To create a new raw material, use the app Create Material.

Create Material

Fiori App



Create raw material TRFR4###, choose Industry sector Mechanical Engineering, Raw materials as Material type and enter TRFR1### under

Copy from. Click on



or press Enter now.

TRFR4### Mechanical Engineering, Raw materials TRFR1###

On the next screen, select the following views by clicking on the square in front of the respective rows:

- Basic Data 1

- Basic Data 2

- Accounting 1

- Accounting 2

- Costing 1

- Costing 2

Basic Data 1 Basic Data 2

Accounting 1

Accounting 2

Costing 1

Costing 2

Also, select **Create views selected**. Then, click on

On the Organizational Levels screen, enter plant **Dallas** (**DL00**) and **DL00** under Copy From. Then, click on

DL00, DL00

On the Basic Data 1 tab, change the material description to **Touring Frame-**White. On the tab *Accounting 1* enter **200.00** as Per. unit price:

Touring Frame-White 200.00

Create views selected

Then, click on Save to save your material.

Click on the home icon



to return to the Fiori Launchpad overview.

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Step 3: Create Bill of Material for Product Costing

Task Create a new BOM for your Deluxe Touring Bike (white).

Time 5 min

Short Description Create a new BOM for your Deluxe Touring Bike (white) to be used in the product costing process.

Name (Position) Jermain Kumins (Production Data Administrator)

To create a bill of material, use the app Create Bill of Material.

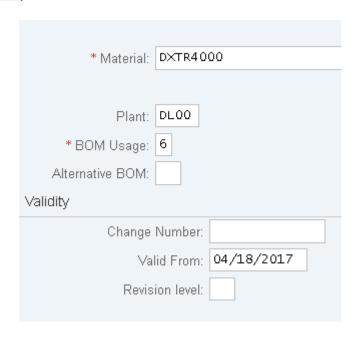


Fiori App

Note: Bill of Material (BOM) contains the components, which are to be included in the production of a material. BOMs are used in MRP, production, procurement, and for product costing.

Enter material **DXTR4**###, plant **Dallas** (**DL00**) and select **Costing** (**6**) as BOM usage. Compare with the screen shown below. Then, click on Copy From ...

DXTR4##, DL00



On the Copy From screen, enter material **DXTR1###**, **DL00** as plant and **1** as BOM Usage.

DXTR1###, DL00, 1

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| | | | | | | Сор | y From | | | × |
|------|----------|--------|---------|--------|-------------------|-----------|----------------|--------------------------------------------|----------|--------|
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| | ~ | 0020 | | М | TRFR1000 | | | Touring Frame-Bl | | |
| | ~ | 0030 | | М | DGAM1000 | | | Derailleur Gear A | | |
| | | 0040 | | М | | | | Touring Seat Kit | 1 | |
| | ~ | 0050 | | | TRHB1000 | | | Touring Handle Bar | | |
| | ~ | 0060 | | М | PEDL1000 | | | Pedal Assembly | 1 | |
| | | 0070 | L | М | CHAN1000 | | | Chain | 1 | |
| | ~ | 0080 | L | М | BRKT1000 | | | Brake Kit | 1 | |
| | ~ | 0090 | | М | WDOC1000 | | | Warranty Docum | | |
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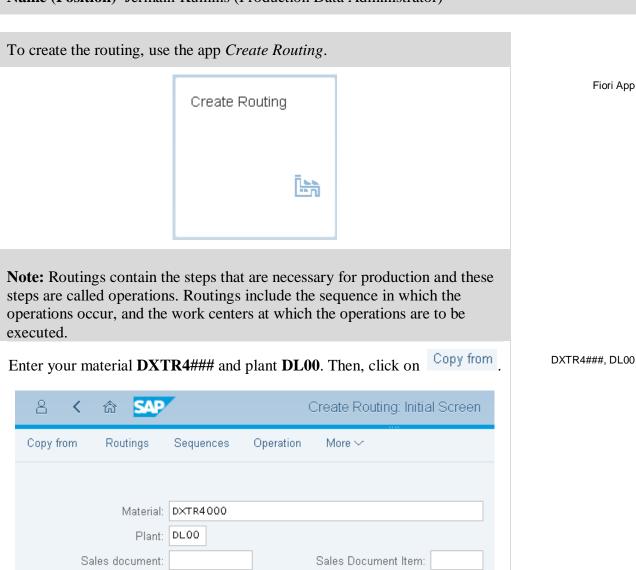
Step 4: Create Routing for Product Costing

Task Create a new routing for your Deluxe Touring Bike (white).

Time 5 min

Short Description Create a new routing for your Deluxe Touring Bike (white) to be used later in the product costing process.

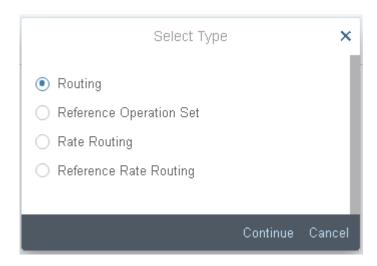
Name (Position) Jermain Kumins (Production Data Administrator)



Make sure that **Routing** is selected on the Select Type pop up and click on Continue

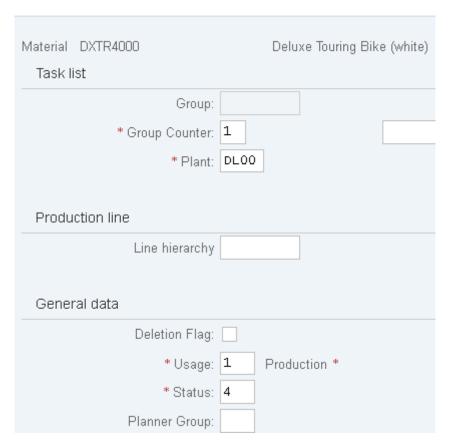
WBS Element:

Routing



On the following screen enter the material number of your black Deluxe Touring Bike (**DXTR1**###). Plant **DL00** should already show up, if not enter it.

Again, click on Continue. This will produce the following screen.



DXTR1###, DL00

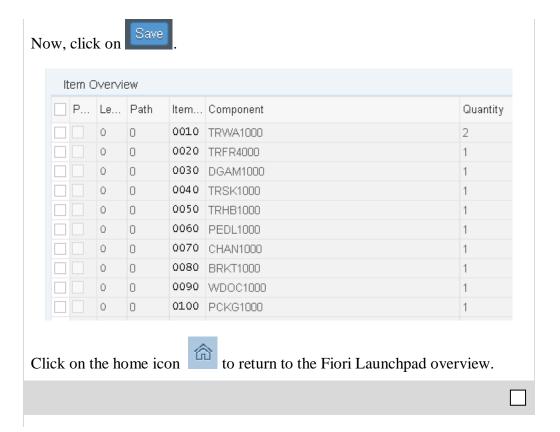
Set the status to **Released** (general) and press Enter.

You can see all the operations necessary to assemble your bike. Make sure the changed BOM is already in effect by selecting operation 10 and clicking

More → Allocation). The white frame previously created should be listed as item number 20.

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Step 5: Create Cost Estimate

Task Create a cost estimate for your bike.

Time 10 min

Short Description Create a cost estimate for your white Deluxe Touring Bike and review the cost components.

Name (Position) Jamie Shamblin (Cost Accountant)

Product costing calculates the cost of goods manufactured and the cost of goods sold per product unit. Products are costed automatically using bills of materials and routings from Production Planning.

To estimate costs, use the app Create Material Cost Estimates.

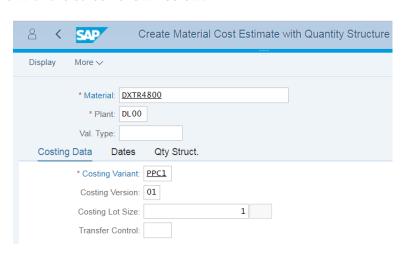


Fiori App

On the *Create Material Cost Estimate with Quantity Structure* screen, choose your bike **DXTR4**### and plant **DL00**.

On the *Costing Data tab*, choose **Standard Cost Est.** as the Costing Variant via the F4-Help, Costing Version **01** and **1** as the Costing Lot Size.

Compare with the screen shown below.



Press Enter. If a warning occurs close it and continue.

DXTR4##, DL00 Standard Cost Est.

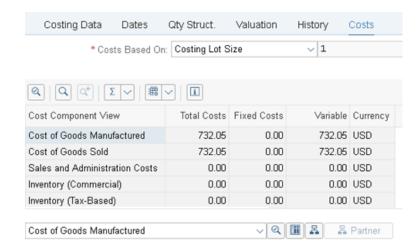
01, 1

Current date

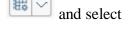
On the *Dates* tab, change the *Costing Date From* to the **current date** and press Enter to confirm all other date entries. The system now calculates the material based on the bills of material and the routings.



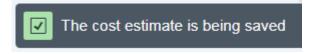
Material costs of 732.05 USD are calculated for the Deluxe Touring Bike.



To display the exact cost components, press **F5**. Select layout **1SAP03**.



Select Save to save your costing.



Click on the home icon to return

to return to the Fiori Launchpad overview.



Step 6: Mark Price Updates

Task Mark the standard cost estimate.

Time 5 min

Short Description Transfer the cost estimate to the material master record.

Name (Position) Jamie Shamblin (Cost Accountant)

The Price Update function is used to transfer the calculated product cost as a cost estimation to the material master record. The cost is transferred into two steps: Marking and release.

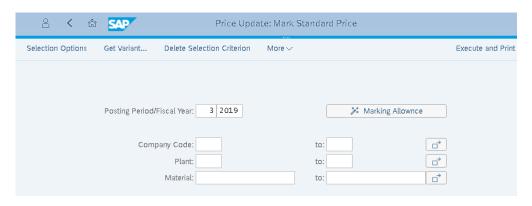
To mark prices, use the aps Release Material Cost Estimates.



Fiori App

Enter the **current period** (current month), company code **US00**, plant **DL00** and your bike **DXTR4**###.

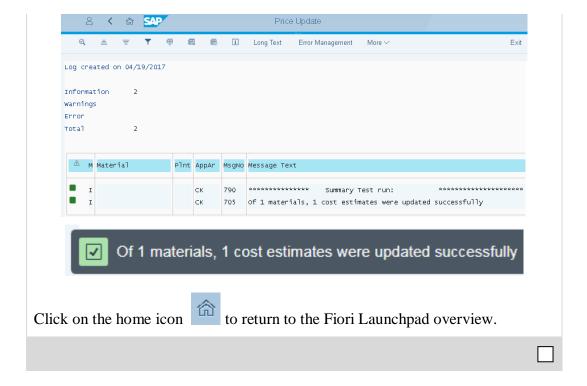




Remove the indicator from the Test Run field. Execute the marking by pressing

Test Run

The system should display the following message:





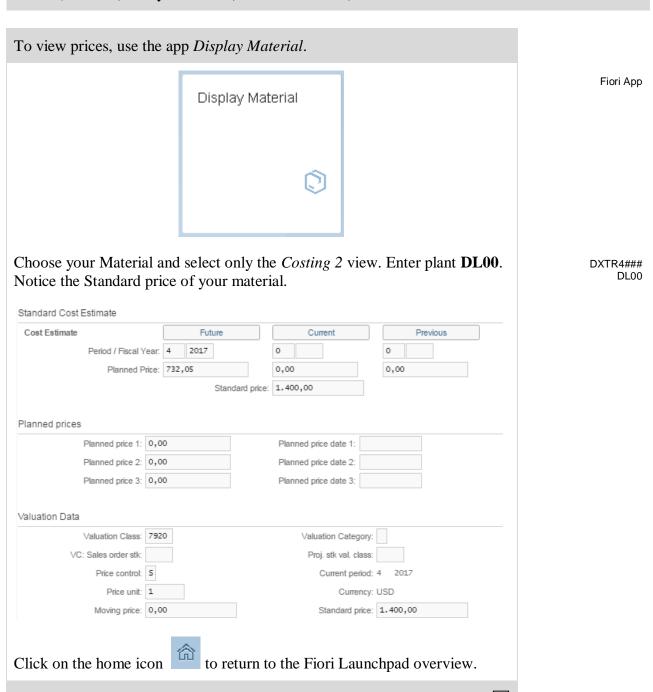
Step 7: View Prices Changes

Task View the planned price.

Time 5 min

Short Description View the planned price in the material master record of your white Deluxe Touring Bike.

Name (Position) Shuyuan Chen (Chief Accountant)





Step 8: Release Price Updates

Task Release the price updates.

Time 5 min

Short Description Release the price updates.

Name (Position) Shuyuan Chen (Chief Accountant)





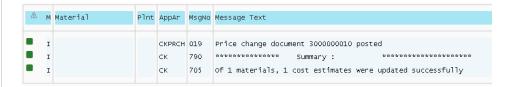
Fiori App

Select Release (or More → Release). Choose the **current period**, company code **US00**, plant **DL00** and your bike **DXTR4**###. Remove the

DL00, DXTR4### Test Run

Current period, US00

Test Run indicator and release the price by selecting with the screen below:



Click on Standard Price Screen. You should find your material in the Price Update: Release



Click on the home icon to return to the Fiori Launchpad overview.



Step 9: View Prices

Task Review the current prices. Time 5 min **Short Description** View the current prices. Name (Position) Shuyuan Chen (Chief Accountant) To view prices, use again the app Display Material. Fiori App Display Material Choose your Material and select only the Costing 2 view. Enter plant **DL00**. DXTR4### DL00 The planned price that you have released is displayed in the middle column Current as standard price for the current period. Standard Cost Estimate Cost Estimate Future Current Previous Period / Fiscal Year: 0 4 2017 0 Planned Price: 0.00 732.05 0.00 Standard price: 732.05 to return to the Fiori Launchpad overview. Click on the home icon

Learning Snacks

In order to test and consolidate your knowledge use the app Learning Snack CO. Learning Snack CO Single-Choice SAP University Alliances SAP University Alliances Snacks SAP University Alliances 56 since 23. Februar 2017 23 23 1.4k snacks created likes received snack views Navigation in SAP Hybris Marketing SD English MM English FI English S/4HANA English overview Snack

Fiori App

Learning Snack

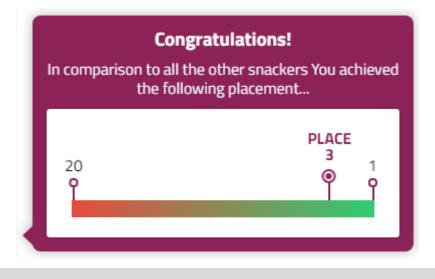
You see all the snacks for the individual case studies. Select the Snack *CO English* and answer all sixteen questions.

Hint:

If you do not see any Apps, you need to change the language on the page Learning Snacks. Therefore click on the current language right next to *change language* and choose **English**.



When you have answered all the questions you will receive a success message and your placement.



CO-PC Challenge

Learning Objective Understand and perform an integrated product costing process.

Time 45 min

Motivation After you have successfully worked through the *Product Costing* case study, you should be able to solve the following task on your own.

Scenario In the case study you have personalized the routing and the bill of material for the white Deluxe Touring Bike. Some customers have complained because of bad quality of the tires. For this reason, from next month on two touring tires and two touring tubes respectively should be additionally delivered. This will obviously change the product costing. Calculate the new price onwards so that it will be valid from next month on.

Task Information As soon as this task is based on the *Product Costing* case study, you can use it as guidance. However, it is recommended that you solve it without any help in order to test your acquired knowledge.