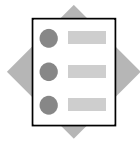
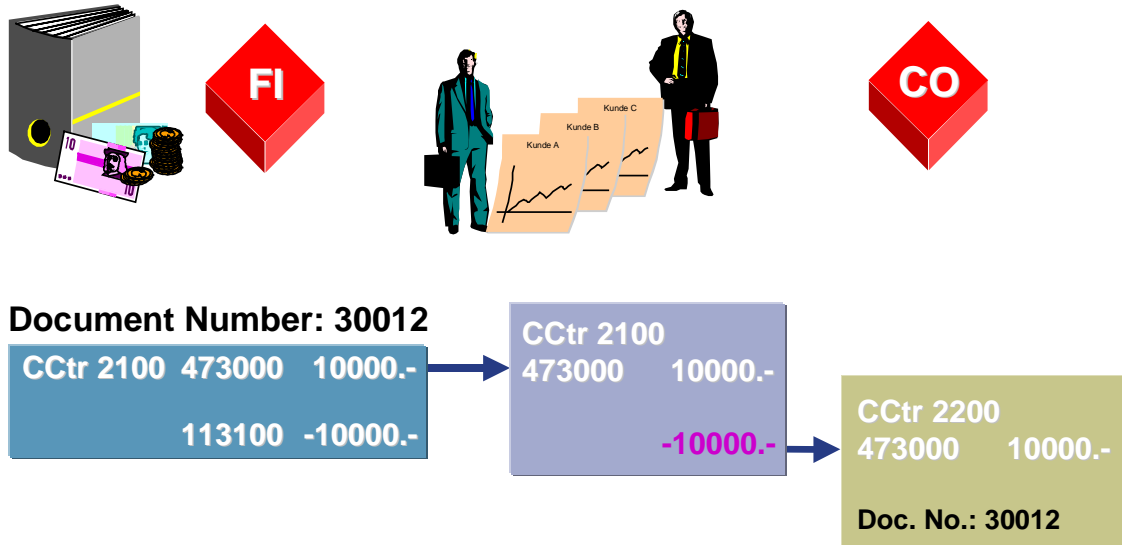


- **Transactions related to Overhead Cost Controlling**
- **Transactions related to Cost Object Controlling**
- **Transactions related to Profitability Management**



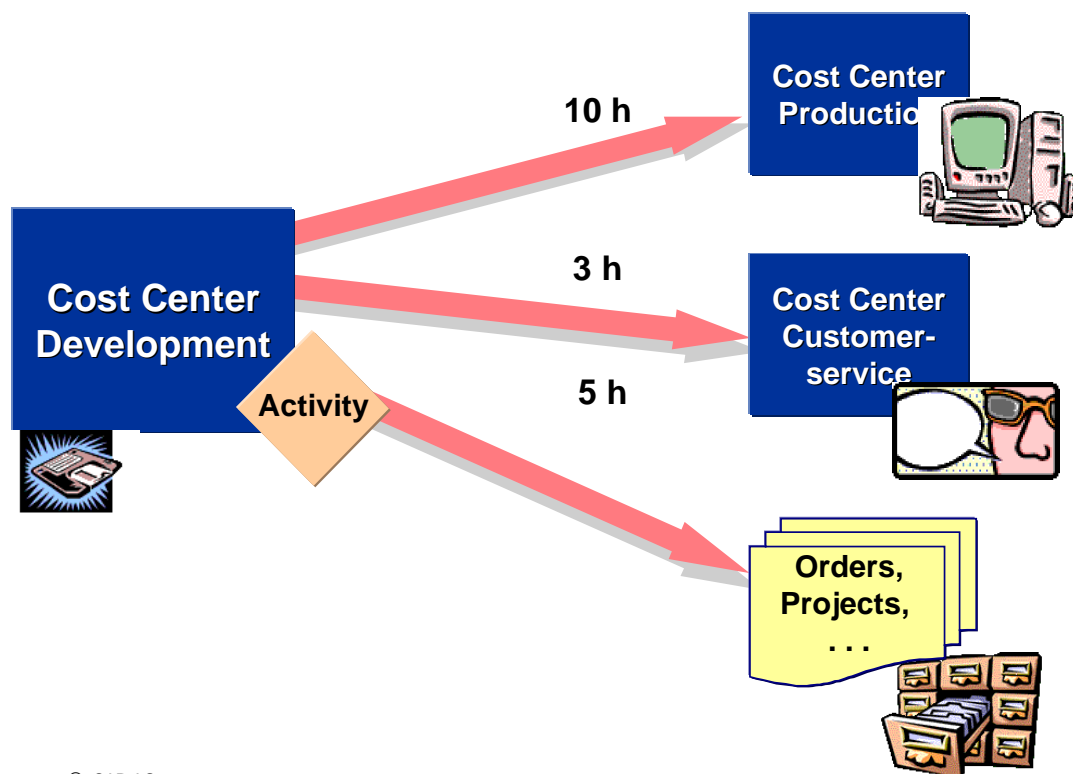
**At the conclusion of this UNIT,
you will be able to:**

- **Post CO Reposting documents.**
- **Post a direct Activity Allocation.**
- **Establish a budget on an overhead order and post a transaction to the order.**
- **Create different types of orders and post various transactions involving them.**



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- You can repost primary costs from one controlling object to another using transaction-based transfers; the original cost element is always retained. This function is designed to correct posting errors. Posting errors should preferably be corrected in the application component where they occurred, so that external and internal accounting (FI and CO) are always reconciled. Posting errors involving assignment to a controlling object (cost center or internal order) can, however, be corrected using a transaction-based reposting in CO.
- There are two types of reposting transactions: reposting costs (or revenues), and reposting line items.
- The reposting costs transaction is a simple transfer of cost from one controlling object to another. This reposting does not preserve a direct link between the amount transferred and the transaction that originally posted the costs to CO.
- Alternatively, you can repost line items from CO documents. To do this, the CO reposting document must reference the original FI document that posted the costs to CO. This enables you to track the movement of cost within CO, and still preserve the link with the originating FI document.
- You can enter multiple receiver objects for a line item reposting. The full amount of the original line item must be reposted.



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- Direct activity allocation deals with the measurement and allocation of a quantity of activity type units produced by a cost center.
- To enter a direct activity allocation, you record the cost center providing the service (sender cost center), the object receiving the service (receiver), the type of service performed (activity type), and the quantity of service provided (number of units of the activity type consumed). Note that only a cost center can be the sender in an activity allocation. The receiver can be any real controlling object, such as a cost center, order, project, and so on.
- Direct activity allocation credits the sender cost center and debits the receiver object. Debits and credits use a secondary cost element (category = 43). This cost element is maintained in the activity type master record. The allocation is valued by multiplying the quantity of activity produced by the planned activity price.
- A direct activity allocation is documented by creating line items from the perspectives of both sender and receiver.

Order: 400010

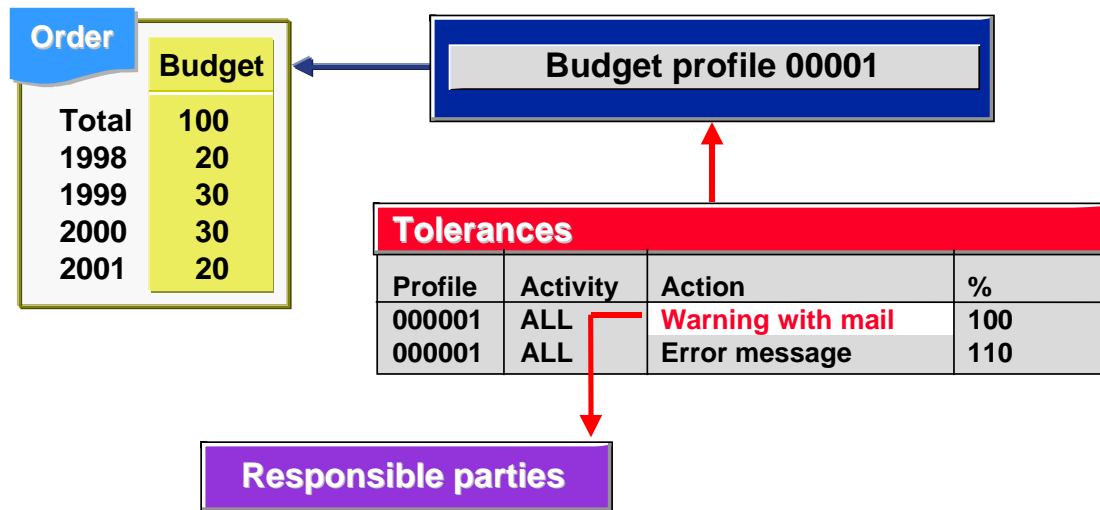
	Original Budget	Current Budget
Overall	40,000	50,000
1998	20,000	25,000
1999	15,000	18,000
2000	2,000	3,000
2001	3,000	4,000

Budget Line Items

Order 400010 Chicago Trade Fair				
Document	Year	Activity	Amount	...
030000001	1998	Original	20,000	
030000200	1998	Supplement	7,000	
030000306	1998	Return	2,000-	
Total	1998		25,000	

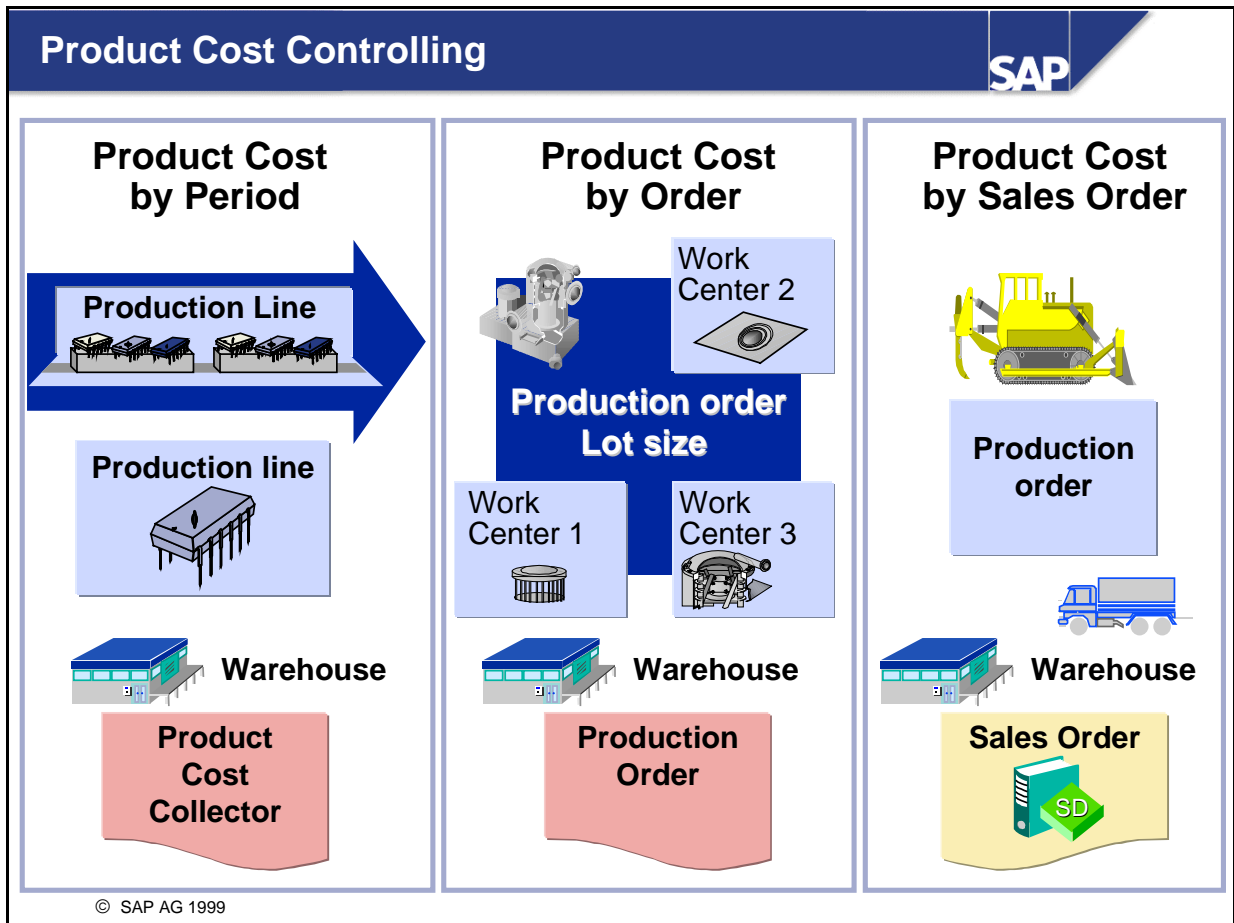
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- The system recognizes the following budget types for internal orders:
 - The original budget is the budget originally approved.
 - Budget updates for orders include supplements and returns and are used when unforeseen events and additional requirements force a correction to the original budget.
 - The current budget includes the original budget and all budget updates.
- In addition to the budget update functions, you can make changes to the original budget. You can freeze the original budget using status management. You accomplish this by creating a user status that prohibits the Budgeting business transaction, but allows supplements and returns.
- When you create or update your budget, the system documents the transaction in a line item. You can display the budget line items from the budget screen. You can enter text for budget line items to provide support for the budget transaction.
- In Customizing, you must define a number range for your budget documents. Number range 04 is provided for order budgeting.
- When you save the budget, the system checks that the sum of the annual values matches the overall value for the order.

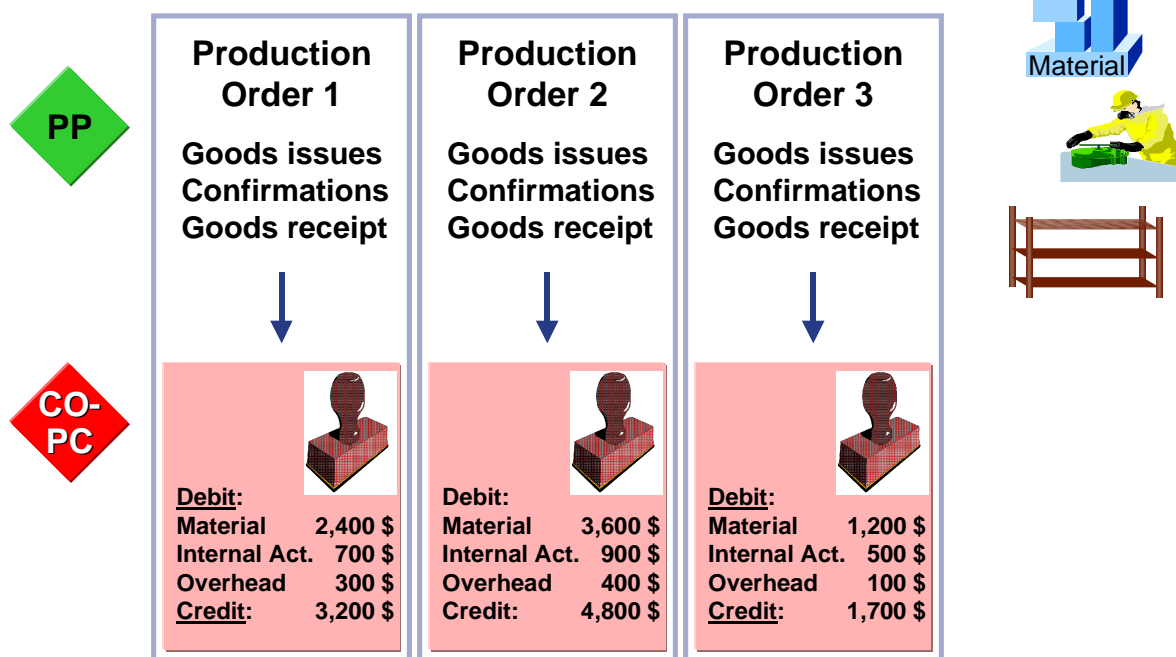


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- In addition to other budgeting parameters, the budget profile also controls availability checking.
- In the profile, you can specify the circumstances under which the availability check can be activated. You also specify whether checks on funds availability use either the annual or overall budgeted value.
- Tolerances define how the system should respond to a given degree of budget overrun. In the example above, when the budget is consumed (100%), a warning is issued with an automatic mail message to the person responsible for the budget. With a budget overrun of ten percent (110%), the R/3 System issues an error message, and the document that caused the overrun cannot be posted. Tolerances are established for a budget profile by activity groups, allowing you to set up different tolerances for different types of transactions.
- When you select the action Warning with Mail, you must specify a budget manager in Customizing. If no budget manager is entered, the system generates an error message.
- You can exclude individual cost elements from availability control.

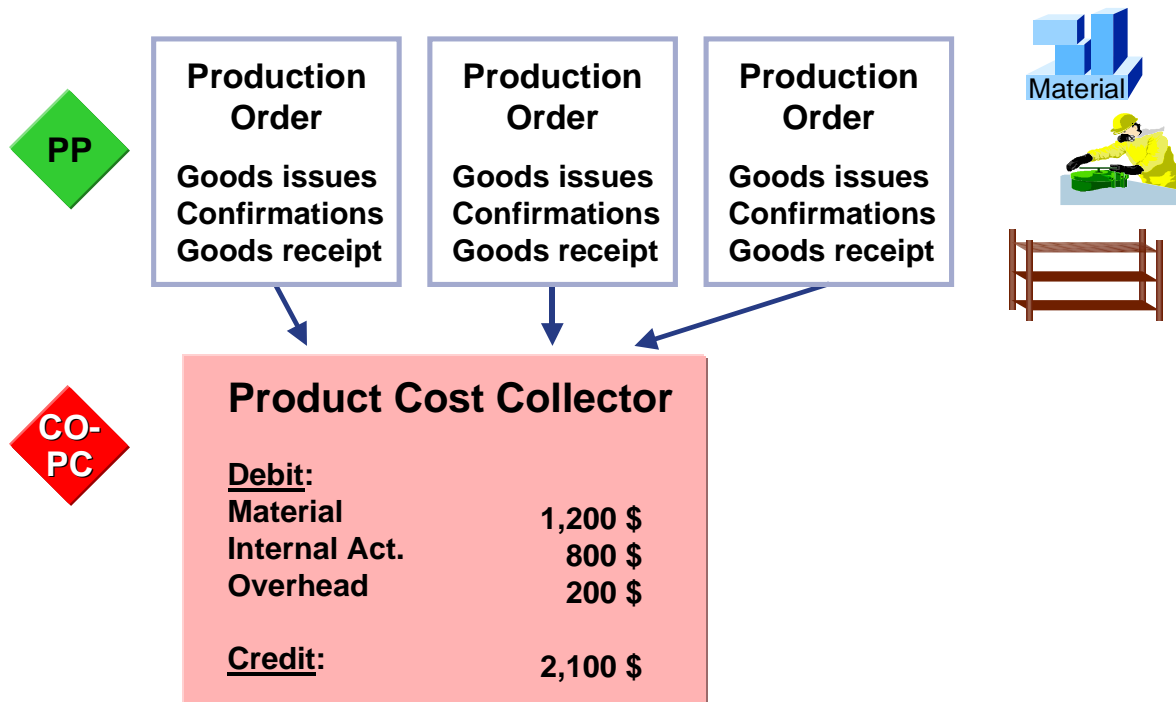


- In Product Cost by Order, Cost Object Controlling provides information on production orders whose costs are settled to stock. The order quantity is of central importance for cost object controlling in this scenario, since the planned costs of the order are calculated using this quantity, and the actual costs cannot be settled until the final delivery of this quantity has been made. The actual costs for the internal activities and materials are collected on each production order, and can be compared with the planned costs for the order, as well as the results of the product cost estimate.
- In contrast to Product Cost by Order in which you analyze costs by lot, in Product Cost by Period you analyze costs by period. You collect the costs on a product cost collector over an extended period of time, and analyze the debits and credits in each period. Product cost collectors enable you to collect costs at the product level independently of the production type. Regardless of whether the production environment is order-related production, process manufacturing, or repetitive manufacturing, you collect the production costs for the product on a product cost collector and analyze the costs in each period.
- In the application component Product Cost by Sales Order, the sales order items function as the cost objects for which you can calculate costs and revenues for both planned and actual data. You can use the Product Cost by Sales Order component in the following situations:
 - When you are manufacturing in-house with reference to a sales order in complex make-to-order production
 - When you are purchasing customer-specific trading goods with reference to a sales order and reselling them to your customers
 - When you are providing services whose costs are assigned to a sales order



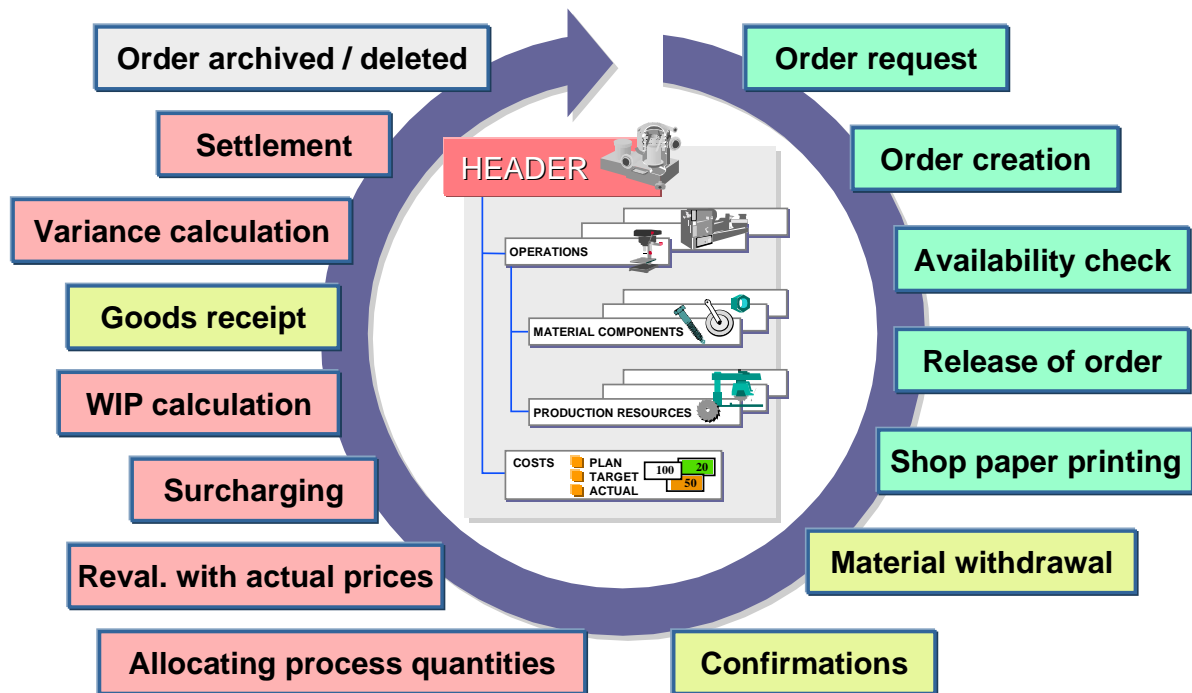
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- In Product Cost by Order, the production orders themselves are the cost objects. Costs charged to the orders are usually analyzed and settled by lot. This means that variances can only be analyzed after the entire planned production quantity has been delivered into inventory.
- The Product Cost by Order component allows you to do the following:
 - Calculate and analyze planned costs, target costs, and actual costs of production orders and process orders
 - Calculate or update the Work in Process and the finished goods inventory
 - Calculate and analyze variances
 - Transfer data to Financial Accounting (FI), Profitability Analysis (CO-PA), Profit Center Accounting (EC-PCA), and Actual Costing / Material Ledger (CO-PC-ACT)
- When a production order is created, a preliminary cost estimate will be carried out automatically to calculate the planned costs for the order.
- Actual costs are incurred when raw materials from stock and activity types from cost centers are consumed. Primary costs can also be posted directly from other system components to the production order, and overhead can be charged to the order as well. Process costs can be posted by allocating process quantities using the process template.
- Since these various actual costs are posted to the production order simultaneously with the consumption of materials and activity, production order costs can be reviewed and analyzed at any time.
- As deliveries of finished goods are made to stock, the inventory value is debited and the order is credited.



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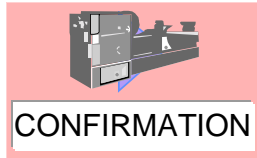
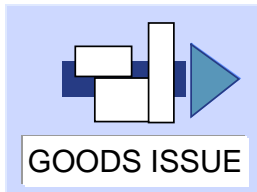
- A product cost collector is a cost object in the Product Cost by Period component that collects the actual costs incurred in each period for the production of a material. When you use a product cost collector, the product becomes the main cost object.
- Product cost collectors are independent of the production type. This means that the actual costs for a product cost collector can be collected in any of the following environments: order-related production, process manufacturing, or repetitive manufacturing.
- Actual costs can be collected on the product cost collector in the following ways:
 - Through logistics transactions (such as goods issues or confirmations) for manufacturing orders (production orders or process orders) and run schedule headers. For example, goods issues to a production order or reporting point backflushes in repetitive manufacturing debit the product cost collector with actual costs. Goods receipts from production credit the product cost collector.
 - Directly, for example through G/L account postings in Financial Accounting (FI)
- You can view the actual costs for the product cost collector in the Information System at any time
- During the period-end closing process, you can:
 - Charge the product cost collector with process costs by means of a process template
 - Revalue the activities at actual activity prices
 - Calculate overhead for the product cost collector
 - Calculate the value of your unfinished products (work in process) for the period
 - Calculate the variances of the period
 - Settle the work in process and variances to other application components



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- The process chain shows each step of order related manufacturing.
- The order request may come from the SOP- planning that was described in the unit on plan integration. You can transfer the SOP- data to the production plan. The MRP- run can generate a plan order, which can be converted to a production order. The order request could also be based on a business request from outside the system. During the MRP- run, the system will also check the availability of the necessary raw materials and semi-finished goods required for the manufacturing process. If there are not enough materials available, the system may create additional plan orders for them, which can be converted to production orders, purchase requisitions, or purchase orders.
- When the order is created, a preliminary cost estimate is generally carried out (although not for repetitive manufacturing) to calculate the planned costs for the order. The planned costs are updated whenever the order is changed.
- When the order is released, actual costs can be assigned to the order. Actual costs are incurred when materials are withdrawn from stock for the order and when confirmations are created, which documents the consumption of activity types. Primary costs can also be posted directly from other system components to the production order. Shop papers are printed for the shop floor.
- After finishing the production process, the goods are delivered to stock. It is possible to perform partial deliveries at any time during the production process.

Resource Allocation



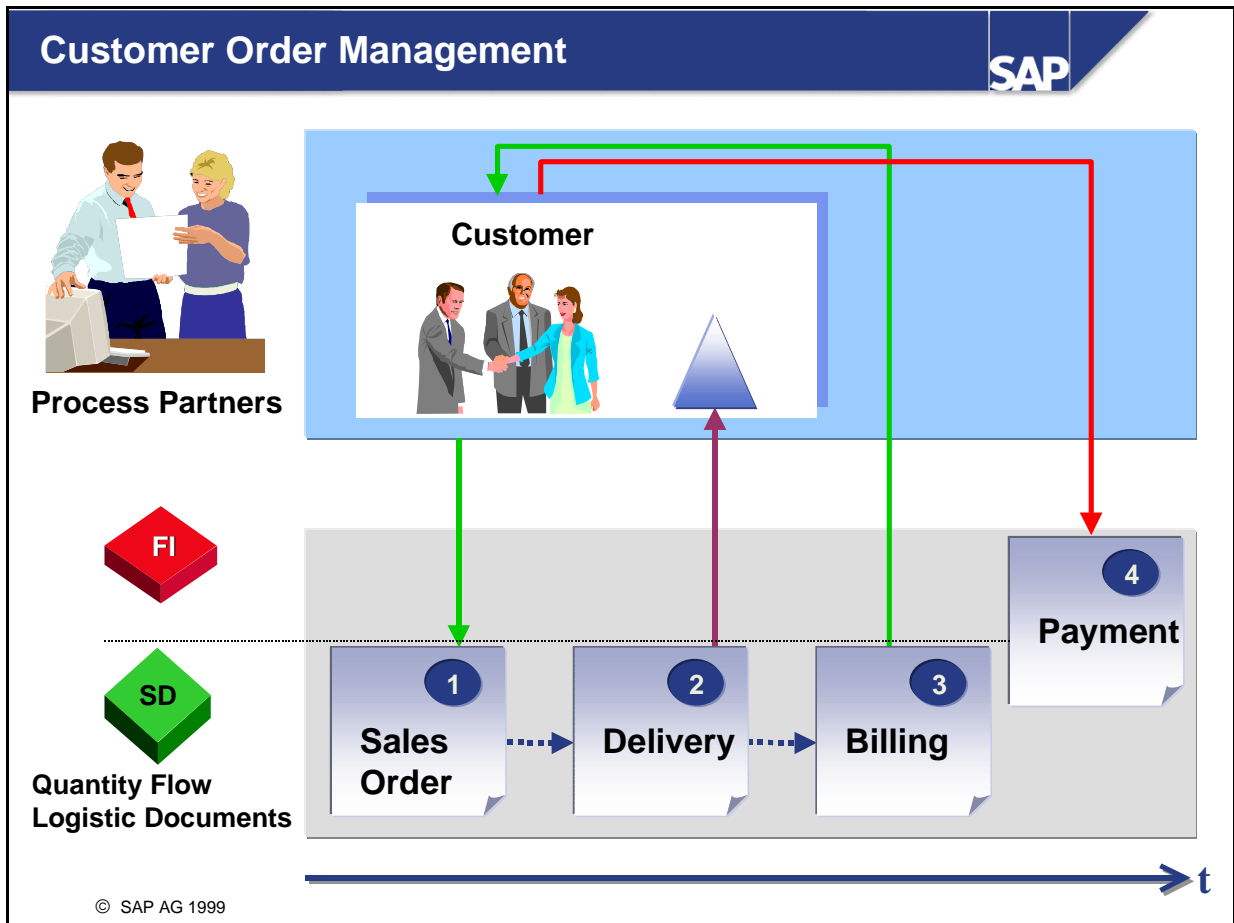
Cost Object

Name	Cost Items	Plan	Actual
→	glass	1,500	1,800
	Plug	2,000	2,200
	Cable	500	600
⚙	Material	4,000	4,600
⚙	Labor	2,500	2,800
⚙	Overhead	1,500	1,600
⚙	Process	1,000	1,500
⚙	Total Costs	9,000	10,500
⚙	Delivery Value		9,000
⚙	Order Balance		1,500

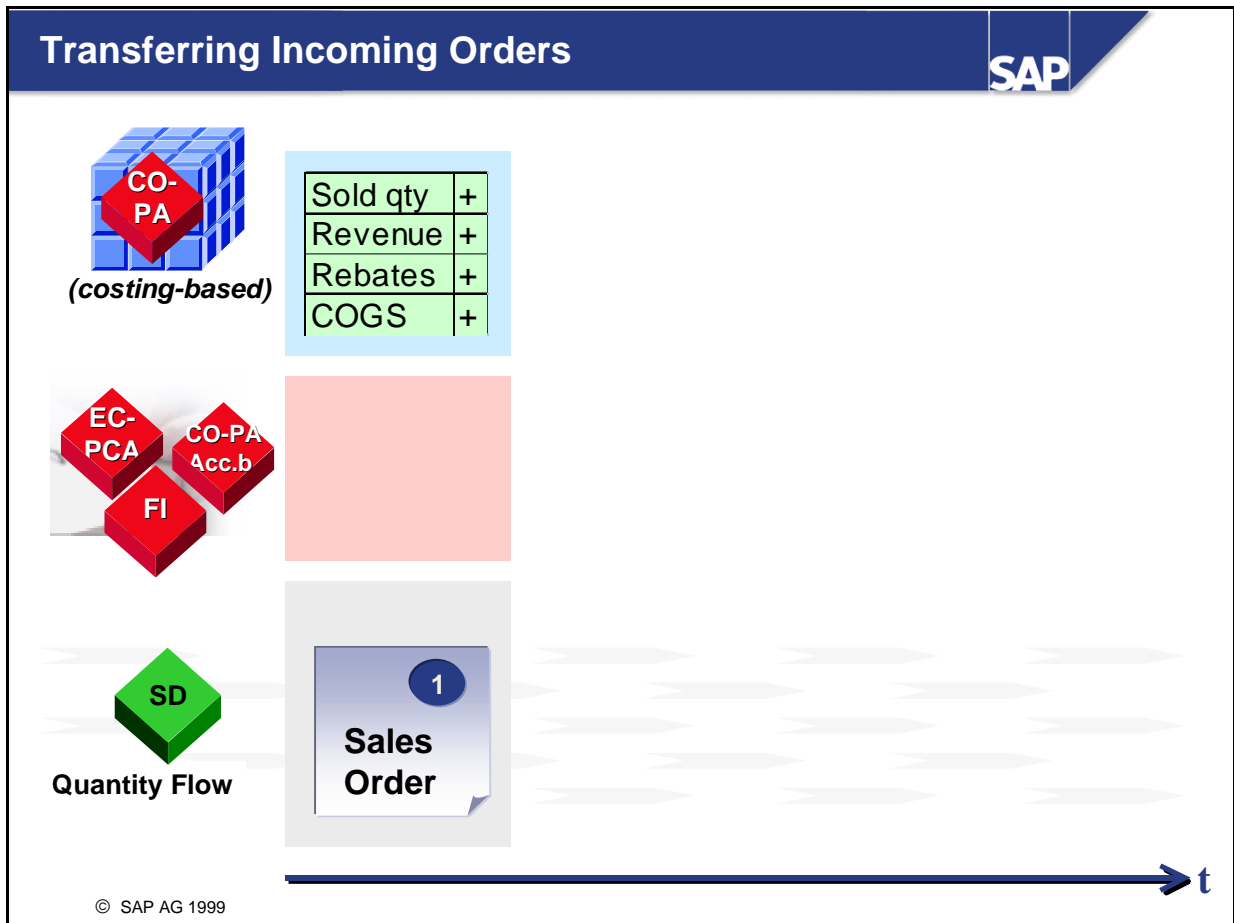


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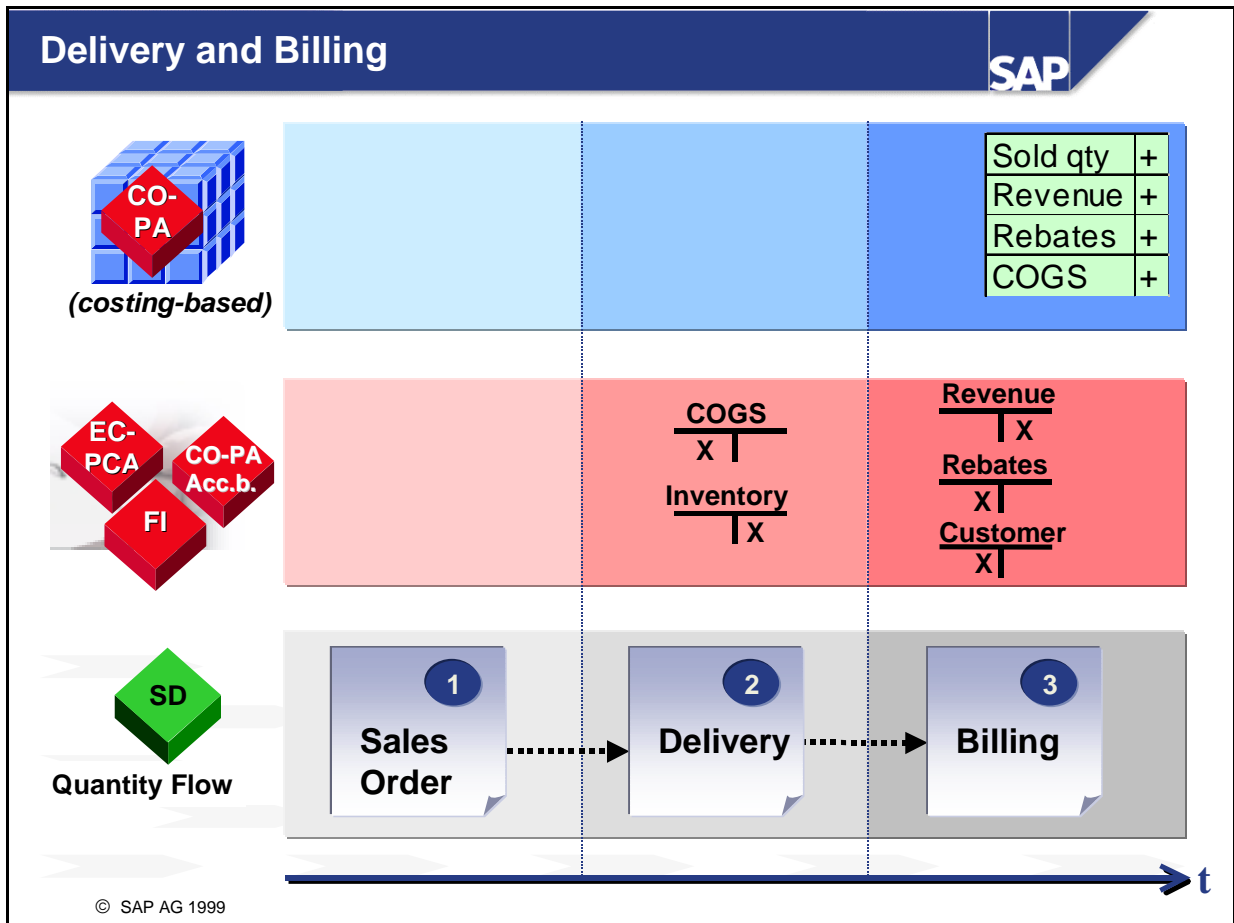
- After final delivery, any costs remaining on the order are settled to stock or to a price difference account. The order is then fully credited.
- If the price control indicator in the material master record is S, a price difference account is debited with the difference between the actual costs incurred and the credit postings for the goods receipts. The moving average price is recalculated and updated for statistical purposes.
- If the price control indicator in the material master record is V, the material stock account is debited with the difference between the actual costs incurred and the credit postings for the goods receipts. The total value of the stock and the moving average price are recalculated.
- If the warehouse stock at the time of settlement is less than the order quantity because goods were issued in the meantime, the following happens:
 - The costs that are based on the quantity that is still in stock are posted to the material stock account of the material.
 - The remaining costs are automatically posted to a price difference account.
- If the material ledger is active, the delivery is posted to the material ledger and can be used to calculate an actual material price at period-end.



- Effective sales order processing ties all activity to customer demand in a series of tightly integrated processes. R/3 Sales and Distribution gives you precisely this kind of sales order processing using a series of linked documents to generate a workflow for sales and distribution. Sales and Distribution begins with pre-sales processing and ends with customer payment for goods received and services rendered. Sales Distribution represents each of these processes with electronic documents, each linked both to preceding and subsequent electronic documents.
- As part of Sales Order Processing, you create a sales document.
- During Inventory Sourcing, R/3 determines the supplier of the inventory, based on data that you create and control. Is the supplier one of your plants? If so, which one? Is the supplier a third-party vendor? If so, which one?
- As a part of Delivery, you create a delivery document.
- During Billing, you create a billing document.
- In the Customer Payment process, you receive payment and post the payment receipt in Financial Accounting (FI).
- In R/3, the documents defined in Sales and Distribution help you manage the Customer Order Management cycle for you and your customer.



- You can value incoming sales orders (as expected revenues) and transfer them from SD to costing-based CO-PA in order to obtain an early analysis of anticipated profits. Consequently, you can create reports that not only reflect the course of actual profits and contribution margins on the basis of billing documents, but also allow you to analyze these developments on the basis of incoming orders.



- Data is transferred to account-based CO-PA at the same time as it is posted in Financial Accounting (FI). This means that the system creates line items in CO-PA when it creates the accounting documents upon goods issue and billing. Note that a line item is created in CO-PA for each item and each cost or revenue element. The amounts these line items receive are also the same ones posted in FI. No line items are created here for incoming sales orders, since those do not lead to postings in FI.
- The values in account-based CO-PA are assigned to profitability segments and are stored in the cost or revenue element determined in MM (for goods issues) or SD (for billing documents) and posted in FI. Note that the data is only transferred to account-based CO-PA if the general ledger account posted in FI is defined as a cost or revenue element in CO. (See also the general posting logic in Controlling.)
- A business transaction is usually concluded in SD with the billing **document**. The **billing** data is automatically transferred to FI, where the revenue and receivable postings are made at the same time.
- When a billing document is created, SD calculates all sales revenues, sales deductions, and other values (such as the standard cost) using pricing procedures, and stores these values in condition types. By assigning these condition types to the value fields in costing-based Profitability Analysis, you can have the system automatically transfer their values to CO-PA.