Sample Content for Simple Cost Allocation Management
SAP Profitability and Performance Management
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PUBLIC

Sample Content for Simple Cost Allocation Management

Processes and Functions supporting Sample Business Scenarios

Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.
	Textual cross-references to other documents.
Example	Emphasized words or expressions.
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE`	Keys on the keyboard, for example, `F2` or `ENTER`.

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1 Introduction and Basics

1.1 About this Guide

This guide provides information about the sample content for Simple Cost Allocation Management, which can be installed on top of SAP Profitability and Performance Management. This sample content describes a project accelerator, ideas, and best practices for modeling an end-to-end profitability and cost calculation model that is feasible for actuals, planning, forecasting and simulations. It covers the full contribution margin scheme at a granular product level. It also contains references to further documentation that you should read before performing these tasks.

The structure of this document is organized around the following topic:

Business Example
This part of the guide covers the main features of the sample content. It describes the information model and calculation model.

Target Audience:

- Business experts
- Solution consultants
- Presales teams

Considerations

It is essential to be accustomed with the content of the corresponding guides and documents related to this topic before beginning with this example. For more information about the available guides and documents, as well as integration with other systems, roles, configuration information, users and authorization concept, see section Related Documentation.

1.2 Constraints

This guide does not provide information about the installation of the sample content. For more information about this, see section Related Documentation.

1.3 Related Documentation

The following table lists related documents.

Topic	Guide/Tool/Title	Links
• Installation and planning of your system landscape • Activities to keep the system running • Information about how to ensure the required security for your SAP landscape	Administration Guide	Administration Guide
• Sample content for Simple Cost Allocation Management	Sample content for Simple Cost Allocation Management	https://launchpad.support.sap.com/#/notes/2834680 SAP Note 2834680
• Operation of SAP NetWeaver	Technical Operations Manual	https://help.sap.com/viewer/p/SAP_NETWEAVER_750
• Application Help	Detailed Application help for SAP Profitability and Performance Management	SAP Profitability and Performance Management
• SAP HANA Administration Guide	Administration guide for SAP HANA; supported SDA databases	https://help.sap.com/viewer/product/SAP_HANA_PLATFORM/
• SAP Notes		https://launchpad.support.sap.com

1.4 Glossary

ABC	Activity-based costing
BI	Business intelligence
BW	Business warehouse
CM	Contribution margin
GL	General ledger

2 Business Example

The market is at the dawn of the next big technology change where everything is connected, and software is embedded in people's lives. This technology change is bringing new opportunities and new threats. Cycle time for innovation is 5–10 times faster, and enterprises can no longer compete unless complexity is reduced. Business efficiency is ahead of the market and product and service profitability are constantly tracked and optimized.

That is why digital performance management will be the game-changer for companies who want to be successful in the digital economy. A digital performance management solution for 21st century business needs to measure and manage enterprise efficiency and drive product and service profitability in real time.

Built on SAP HANA, SAP Profitability and Performance Management is a next generation digital performance management solution that provides breakthrough real-time business data aggregation capabilities for SAP and non-SAP systems, a high-speed finance and risk calculation engine and comprehensive simulation and scenario management.

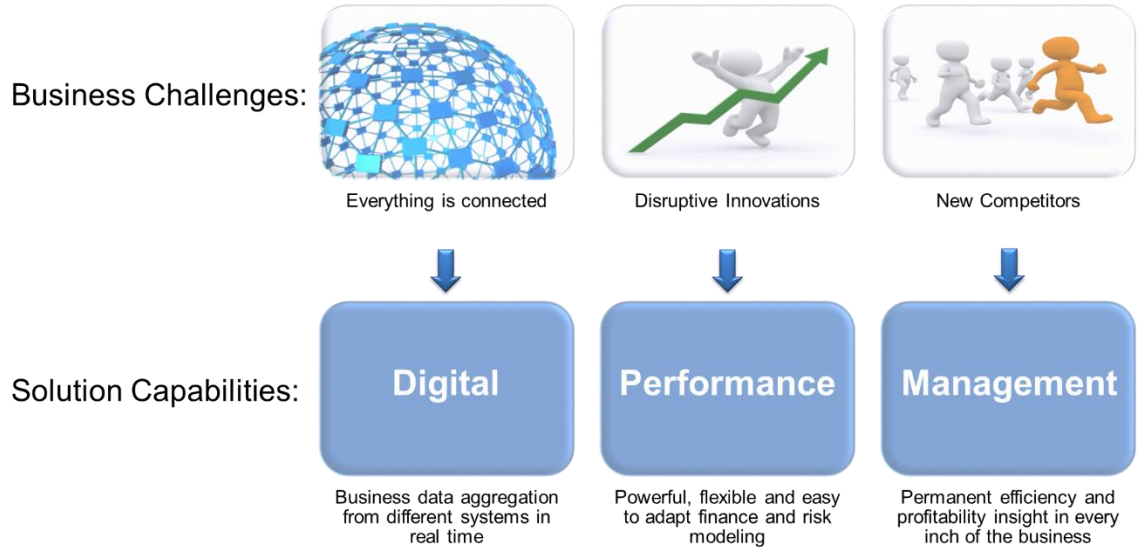

Figure 1: Digital Imperative

2.1 Scope and Business Definition

Simple Cost Allocation Management is an important task for every enterprise with the goal to optimize profitability and to minimize cost by gaining simple but deep insights on granular revenue and cost information at product, channel or customer level, using standardized approach with SAP S/4 HANA transaction financial data (S/4 ACDOCA table).

This sample content covers an end-to-end example of an Activity-based Costing Model applicable for allocating the data based on revenue or business driver as a distribution base with the focus on profitability at product and service, channel and customer level. It incorporates a predefined process template with manual data input and automatic calculation activities to run the model in production as well as for what-if simulation purposes.

The following screenshot shows the function hierarchy of the sample content and the process template.

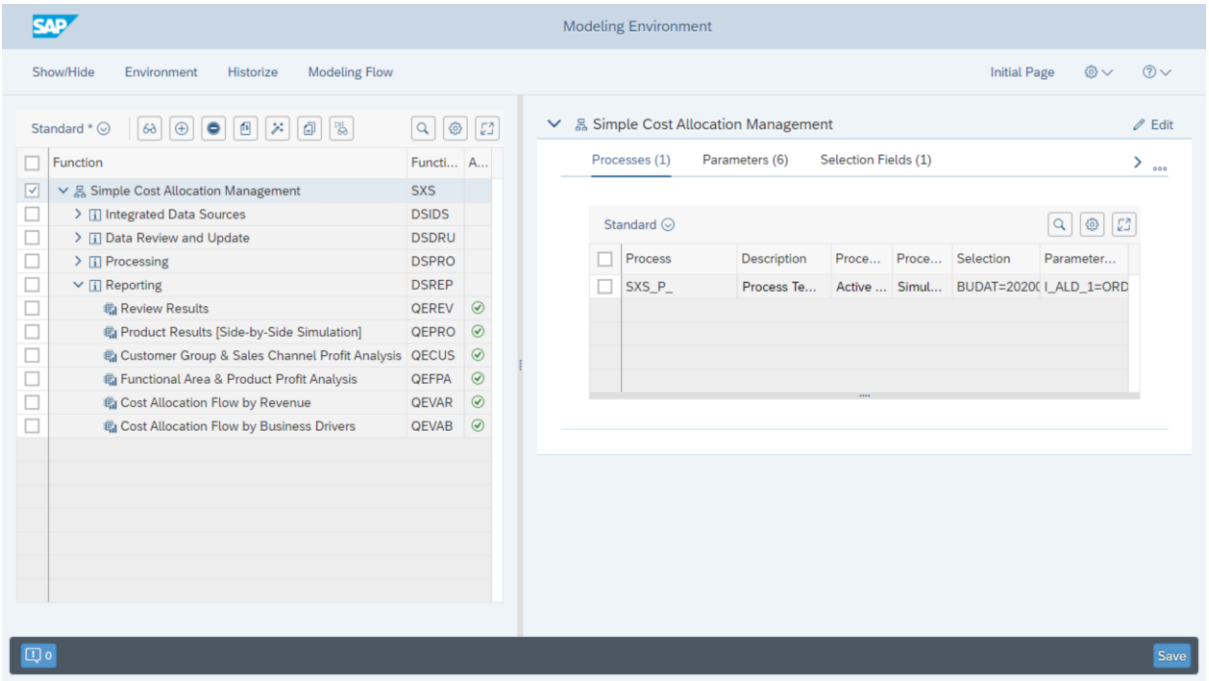

Figure 2: Sample Content Information and Calculation Model

You can also find the information contained in the following chapters on the respective *Documentation* tabs for the model.

3 Simple Cost Allocation Management in Detail

Simple Cost Allocation Management is an important task for every enterprise, because it enables them to optimize profitability and minimize cost by providing deep insights into granular revenue and cost information at product, service or channel level.

This Simple Cost Allocation Management (Environment ID=SXS, Version=5) sample content covers an end-to-end example of an activity-based costing model, applicable for allocating the data based on revenue or business driver distribution base with the focus on profitability at product & service, channel and customer level. It incorporates a predefined process template with manual data input and automatic calculation activities to run the model in production as well as for what-if simulation purposes.

This sample content comes with the SAP Profitability and Performance Management software installation and can be run out of the box.

It consists of one calculation unit function that is structured hierarchically with description functions physically below it in the system:

- Integrate Data Sources

  Defines the information model for that user inputs manually or imports from external data sources.
  - *Universal Journal Entry (S/4 ACDOCA table)*
  - *Allocation Drivers*
- Data Review and Update

  Provides specific input options for the following:
  - *Review Universal Journal Entry*
  - *Update Financial Positions*
  - *Update Allocation Drivers*
- Processing

  Here the core of the calculation model is defined to get to a complete multidimensional P&L on granular level.

  - *Calculate Additional Activity Drivers*
  - *Allocate to Regions and Products [Scenario 1]*
  - *Allocate to Regions and Products [Scenario 2]*
  - *Combine Indirect and Direct Costs*

- Reporting
  Provides one review report with end-to-end traceability from GL accounts and several specific reports for results at activity and product level. In addition to these predefined reports, the most comprehensive overview is the value flow report, which gives the user end-to-end traceability from resources through all applied drivers to the result.

  - *Review Results*
  - *Product Results [Side-by Side Simulation]*
  - *Customer Group & Sales Chanel Profit Analysis*
  - *Functional Area & Product Profit Analysis*
  - *Cost Allocation Flow by Revenue*
  - *Cost Allocation Flow by Business Drivers*

The *Simple Cost Allocation Management* calculation unit defines the process template **SXS_P_ - Process Template** with the following activities:

- ***Review Input Data:***
  - *Review Universal Journal Entry*, where the user can check the GL data used in the process
- ***Update Assumptions:***
  - *Update Financial Positions*, where the user can apply plan and forecast data changes
  - *Update Allocation Drivers*, where the user decides which GL accounts are allocated to which resource(s). It also allows to take over only a specific percentage from a GL account or to spread the GL account value to various resources.
- ***Execute Calculation***: which runs the complete calculation of the profitability and cost model
- ***Report:***
  - *Review Results*, which provides a predefined profit and loss result report per quarter.
  - *Product Results [Side-by-Side Simulation],* which provides a predefined profit and loss result report per product and service and per scenario.
  - *Customer Group & Sales Channel Profit Analysis*, which provides a detailed analysis of product results gained through sales to different customer groups
  - *Functional Area & Product Profit Analysis*, which provides product results per each functional area
  - *Cost Allocation Flow by Revenue*, which provides a granular traceability report from the originating GL account data through applying revenue as distribution base and portions to the final amount at product & service level
  - *Cost Allocation Flow by Business Drivers*, which provides a granular traceability report from the originating GL account data through all applied business drivers and portions to the final amount at product & service level.

Note

For demonstration purposes, all activities in the standard sample content have been defined with level "0" so that they can be executed in parallel. In implementation projects, you can define dependent activities by using different levels.

The activities have not been assigned any performer or reviewer teams. This means that any SAP Profitability and Performance Management execution user can run the activities. In an implementation project, you need to assign teams to further restrict the use of an activity and to specify which users can execute an activity.

Characteristic-based authorization has not been defined for the environment fields used in the sample content. This means that any execution user can view and work on the all the data. In an implementation project, you can define characteristic-based authorizations. For example, you can define that in the *Review Universal Journal Entry* report, the company data for "Sunshine New York" company is visible only to specific users. Characteristic-based authorizations also help in decentralized planning so that sales planning data can only be changed by one group of people, while marketing planning data can be changed by another group, for example.

3.1 Integrate Data Sources

In this section, you can define the required data sources.

Note

This sample content does not work with specific customer data and cannot presume any customer-specific system landscape, application or interface.

The integration of data sources uses functions of the type Model Table to make data from test data available in an implementation project to connect to the real and concrete customer data sources and targets.

The complete information model is kept lean to ease the adaption in an implementation project.

Example

The Integrate Data Sources section assumes just ten fields as a general ledger data feed. In most cases, this is sufficient and is much easier to provide than 50 fields.

3.1.1 Universal Journal Entry (S/4 ACDOCA table)

This Model Table function is used to provide information from the financial side, with possible integration with SAP S/4HANA ACDOCA table (Universal Journal Entry) and use it as Purchase Data where transactions are stored.

It defines the following fields:

- *Product for Profitability Analysis*: This field represents different product or service that this fictional company sells to its customers.

- *Cost Center*
- *Profit Center*
- *Functional Area*
- *Posting Date*: This field represents the date of the transaction, which is executed in accounting solution in SAP S/4HANA.
- *Ledger*
- *Posting Period:* This field represents the month in which the transaction is executed in accounting solution in SAP S/4HANA.
- *Chart of Accounts*: This field represents unique standard naming or numbering of one accounting or financial system that should be followed.
- *Account Number:* This field represents GL Account that will record revenues or costs for each transaction.
- *Amount in Transaction Currency*: This field is used as a key figure to record amount on each reference document or invoice and uses *Currency Key of Original Transaction Currency* as its currency field.
- *Currency Key of Original Transaction Currency*: This field represents currency of transactions recorded in each invoice from S/4 ACDOCA table from financial data.
- *Amount in Company Code Currency*: This field is used as a key figure to record amount on each reference document or invoice at Group Level of this fictional sample company, and uses *Group Currency* as its currency field.
- *Company Code Currency*: This field represents currency of transactions recorded in each invoice from S/4 ACDOCA table from financial data, but translated into currency at a Group Level, to prepare it for advanced reporting or analytics at a Group level.
- *Scenario:* This field represents the flag of different datasets, which will go through the same or similar processing functions.

3.1.2 Allocation Drivers

This Model Table function is used to store the distribution bases for allocation, and for this simple example to include different columns to make them available for allocation usage from the receiver side.

It defines the following fields:

- *Posting Date*
- *Product for Profitability Analysis*
- *Customer Group*
- *Region*
- *Revenue*
- *Orders*
- *Pieces*
- *Service Hours*

3.2 Data Review and Update

In this section, you define additional Query functions to enable execution users to conveniently review and maintain data.

In the review and maintenance process, the following activities are run before the Simple Cost Allocation Management calculation is executed:

- *Review Universal Journal Entry,* which gives read-only access to S/4 ACDOCA financial data
- *Update Financial Positions*, which gives read and edit access to S/4 ACDOCA table but just for the forecasted amounts
- *Update Allocation Drivers*, which gives read and edit access to allocation drivers

> Note
>
> The edit access queries sometimes provide only a subset of the test data for editing to show-case the function.

3.2.1 Review Universal Journal Entry

This Query function is used to provide read data access to S/4 ACDOCA table, which serves as an input for the profitability and cost calculation.

See *Universal Journal Entry (S/4 ACDOCA table)* function for details about the fields.

3.2.2 Update Financial Positions

This Query function is used to provide read and edit data access to plan and forecast data from S/4 ACDOCA table, which serves as an input for the profitability and cost calculation.

See *Universal Journal Entry (S/4 ACDOCA table)* function for details about the fields.

3.2.3 Update Allocation Drivers

This Query function is used to provide read and edit data access to different key figures and allocation distribution base values, which serves as a receiver in the allocation process in the profitability and cost calculation.

See *Allocation Drivers* function for details about the fields.

3.3 Processing

In this section, the core functions of the model to calculate the profitability and cost results are defined.

The system executes the process after the input data is reviewed and updated.

It comprises the following functions:

- *Calculate Additional Activity Drivers*, which uses the *Allocation Drivers* function as input and calculates an additional activity driver.
- *Allocate to Regions and Products [Scenario 1]*, which uses the function *Universal Journal Entry (S/4 ACDOCA table)* as sender data and allocates it to regions and products using *Calculate Additional Activity Drivers* as receiver data.
- *Allocate to Regions and Products [Scenario 2]*, which uses the *Universal Journal Entry (S/4 ACDOCA table)* as sender data and allocates it to regions and products using *Calculate Additional Activity Drivers* as receiver data.
- *Combine Indirect and Direct Costs,* which collects the results calculated in two allocations and initial direct costs that are stored in *Universal Journal Entry (S/4 ACDOCA table)* where their functional area is not empty.

> Note
>
> The calculations described above are run and triggered as one process activity ("Execute Simulation"). This is possible due to the high processing speed and does not require the steps listed above to be executed in batch mode.
>
> The calculations described above were not configured to perform data aggregation or field exclusion. This means that no information is destroyed, and all results are available at granular level, providing complete traceability from the source of revenues and costs through all driver-based allocations down to the final result at product and service level.

3.3.1 Calculate Additional Activity Drivers

This Calculation function is used to calculate an activity driver, which is not delivered from a source system nor entered manually, but can be calculated based on some existing driver data.

For demo purposes, the following rule is maintained:

- **R0001 Calculate Number of Pieces per Order** calculates additional key figure as derivation of total number of pieces and total number of orders, to get the average number of pieces per order. This is just a sample of taking any activity or key figure as a benchmark for calculating other ones.

> Note
>
> Although the formula in the rule **R0001** looks simple, it does not produce and add just one record with one calculation result. The calculation is performed at granular level, this calculation is done on granular level, first taking the target

activity values and multiplies them to get the calculated result to use it eventually later in the other steps in the process. In other words, even if the calculation is defined at a higher level, it is actually executed at the most granular level.

3.3.2 Allocate to Regions and Products [Scenario 1]

This Allocation function uses the *Universal Journal Entry (S/4 ACDOCA table)* function as sender data and allocates it to resources using the *Calculate Additional Activity Drivers* function as receiver data. This function selects the first scenario from the Sender function to allocate the data based on **Revenue** key figure from Receiver function.

3.3.3 Allocate to Regions and Products [Scenario 2]

This Allocation function uses the *Universal Journal Entry (S/4 ACDOCA table)* function as sender data and allocates it to resources using the *Calculate Additional Activity Drivers* function as receiver data. This function selects the second scenario from the Sender function to allocate the data based on **Orders**, **Pieces** or **Service Hours** as a business dimension key figures from Receiver function.

3.3.4 Combine Indirect and Direct Costs

This Join function is used to combine indirect costs and direct costs and revenues from *Universal Journal Entry (S/4 ACDOCA table)* function and Allocation functions into one stream, to which the same calculation rules are then applied.

Since all joined functions share the same fields and granularity in the rules of the function, a simple union of both inputs is sufficient.

> Note
>
> No fields are ignored and all information is kept.

3.4 Reporting

This section is used to give the user the possibility to analyze the data from every business perspective, combining results with all possible dimensions from this financial or ERP system.

The following reporting Query functions are set:

- *Review Results*, which provides a predefined profit and loss result report per quarter.

- *Product Results [Side-by-Side Simulation],* which provides a predefined profit and loss result report per product and service and per scenario.
- *Customer Group & Sales Channel Profit Analysis*, which provides a detailed analysis of product results gained through sales to different customer groups.
- *Functional Area & Product Profit Analysis,* which provides product results per each functional area.
- *Cost Allocation Flow by Revenue*, which provides a granular traceability report from the originating GL account data through applying revenue as distribution base and portions to the final amount at product & service level.
- *Cost Allocation Flow by Business Drivers*, which provides a granular traceability report from the originating GL account data through all applied business drivers and portions to the final amount at product & service level.

> Note
>
> Specific chart types have not been defined in this sample content. Reports, therefore, use the default "Column" chart type. However, end users can change this type on the fly and save their chart type as the default layout.

3.4.1 Review Results

This Query function is used to provide read data access to the profit and loss results.

The following fields are preconfigured in this report:

- *Scenario*: Uses the different scenario dataset settings.
- *Amount in Company Code Currency*
- *Account Number*
- *Product for Profitability Analysis*
- *Cost Center*
- *Profit Center*
- *Functional Area*
- *Ledger*
- *Chart of Accounts*
- *Customer Group*
- *Region*
- *Posting Date*
- *Posting Period*
- *Company Code Currency*
- *Currency Key of Original Transactional Currency*

3.4.2 Product Results [Side-by-Side Simulation]

This field provides a predefined profit and loss result report per product and service and per scenario.

The following fields are available in this report:

- *Amount in Transaction Currency*
- *Scenario*: Uses the different scenario dataset settings.
- *Product for Profitability Analysis*
- *Account Number*
- *Cost Center*
- *Profit Center*
- *Functional Area*
- *Ledger*
- *Chart of Accounts*
- *Customer Group*
- *Region*
- *Posting Date*
- *Posting Period*
- *Company Code Currency*
- *Currency Key of Original Transactional Currency*

3.4.3 Customer Group & Sales Channel Profit Analysis

This field provides a detailed analysis of product results gained through sales to different customer groups.

The following fields are available in this report:

- *Amount in Transaction Currency*
- *Customer Group*
- *Product for Profitability Analysis*
- *Account Number*
- *Cost Center*
- *Profit Center*
- *Functional Area*
- *Ledger*
- *Chart of Accounts*
- *Region*
- *Posting Date*
- *Posting Period*
- *Company Code Currency*
- *Currency Key of Original Transactional Currency*

3.4.4 Functional Area & Product Profit Analysis

This Query function is used to provide profit results and the user has the possibility to analyze it per each functional area and products & services.

The following fields are available in this report:

- *Amount in Company Code Currency*
- *Functional Area*
- *Product for Profitability Analysis*
- *Account Number*
- *Cost Center*
- *Profit Center*
- *Ledger*
- *Chart of Accounts*
- *Customer Group*
- *Region*
- *Posting Date*
- *Posting Period*
- *Company Code Currency*
- *Currency Key of Original Transactional Currency*

3.4.5 Cost Allocation Flow by Revenue

This Query function provides a granular traceability report from the originating GL account data through applying revenue as distribution base and portions to the final amount at product & service level.

The following fields are available in this report:

- *Amount in Company Code Currency*
- *Account Number*
- *Profit Center*
- *Product for Profitability Analysis*
- *Cost Center*
- *Functional Area*
- *Ledger*
- *Chart of Accounts*
- *Customer Group*
- *Region*
- *Posting Date*
- *Posting Period*
- *Company Code Currency*

- *Currency Key of Original Transactional Currency*

3.4.6 Cost Allocation Flow by Business Drivers

This Query function provides a granular traceability report from the originating GL account data through all applied business drivers and portions to the final amount at product & service level.

The following fields are available in this report:

- *Amount in Company Code Currency*
- *Account Number*
- *Profit Center*
- *Product for Profitability Analysis*
- *Cost Center*
- *Functional Area*
- *Ledger*
- *Chart of Accounts*
- *Customer Group*
- *Region*
- *Posting Date*
- *Posting Period*
- *Company Code Currency*
- *Currency Key of Original Transactional Currency*

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