

Topic

Implement the project cost calculation in BW-BPS

Customer

Siemens AG, Power Generation Industrial, Plant Duisburg

Task

- Replace the existing Excel solution used for calculating project cost with planning folders in BW-BPS. These folders have to display the necessary reference data needed for the cost calculation. Moreover, they have to facilitate the manual entry of new plan values and the automatic creation of them by using planning functions and sequences.
- Implement functionality which is able to write the plan data into SAP R/3.
- Create BW reports, which include both the reference data and the newly created plan data.
- Create BW workbooks using the standard layout.

Implementation

In order to determine the project costs we required some reference data, such as the already accrued actual costs or the plan costs from certain plan versions.

We first checked what data was available in BW and which necessary data was missing from BW.

Using a bespoke extractor in R/3 and the corresponding modeling in BW, we implemented the missing reference data

from the “open material reservations” area.

The necessary reference data needed for the cost calculation was stored in an aggregate and optimal form in the Business Warehouse. To do this, we implemented the appropriate modeling in BW. We updated the aggregate reference data via several mapping rules. These were implemented through our own (and complex) routines in the update rules.

We also created new objects in BW to store the plan data that will be created at a later stage.

We based the creation of the planning functions and the planning environment in BW-BPS on these newly created objects. A result of this functionality was certain planned values could be calculated automatically. Moreover, we created an exit planning function, which takes the plan data created in a certain plan version of BPS and writes this back to the project planning in SAP R/3.

Subsequently, we created planning folders that provide users with the layout to enter the plan data manually and also incorporated the necessary automatic planning functions.

In order to ensure prompt reporting for the cost calculation, we created custom reports & workbooks, which provided all the necessary information. This was achieved using Business Explorer Analyzer in BW and displayed in the desired layout.

The data to be evaluated was authorization-sensitive; therefore we developed an authorization system to control users' access to this data.

Finally, we wrote all the technical documentation for their I.T. department, as well as detailed user documentation.

In summary, PIKON was responsible for the following activities:

- IP (Information Processing) design
- Designing a authorization system to control users access to sensitive information
- Data extraction from SAP R/3 and Excel (including the programming of a bespoke transaction data extractor)
- Data modeling and design in SAP-BW

- Implementing complex mapping rules via own coding in BWs update rules
- Creating the planning environment in BW-BPS
- Creating planning functions and sequences
- Creating a exit planning functions to transfer the plan values into SAP R/3 by data retraction
- Creating planning folders to enter the plan data manually and implementing planning functions
- Reporting in the Business Explorer Analyzer
- Writing detailed technical and user documentation