



"A Better Use of Information"

**Alta Via Consulting, LLC**



## Product Costing Taken To The Next Level

**WHITE PAPER**  
BY JULIEN DELVAT, SENIOR CONSULTANT

**DEVELOPING AND WORKING WITH COMPLEX COSTING SYSTEMS**, has always been Alta Via Consulting's forte. So when our customers expressed their frustration to perform product-costing simulations with their existing tools, we took action to find a solution for this operational shortfall.

After raising the issue to our SAP Enterprise Resource Planning business partner, we worked together to design, configure and test a new costing simulation approach called *SAP Product Design Cost Estimate* or PDCE. Due to our involvement in creating this new tool, Alta Via has become the PDCE subject matter expert to help clients who are seeking information, proof-of-concept data and/or implementation assistance to fulfill their product costing needs.

### WHAT IS PDCE?

**WHETHER YOU'RE DEVELOPING A NEW PRODUCT** or working to fulfill hundreds of customers Request For Quote's (RFQ's), Product Design Cost Estimate allows your organization to simulate multiple costing scenarios to arrive at the best product or service solution – before committing valuable resources.

Product Design Cost Estimate (PDCE) is part of SAP's *Product Lifecycle Management (PLM)* portfolio and answers the call for upfront cost calculations needed early in the production /service design phase.

PDCE bridges the gap that existed in *Product Cost Planning* and *Easy Cost Planning*. PDCE allows the selection of various cost components (bill of materials, routings, overhead, plants, locations, etc.) that reside inside and outside SAP's Enterprise Core Component (ECC) to create multiple '*what if*' costing scenarios. The result being, it gives the key decision makers much needed visibility to analyze all of the available costing combinations to realize their intended strategic outcome.

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### WHAT'S IN IT FOR ME?

**SAP PDCE IS THE IDEAL SOLUTION** for the following scenarios:

#### ***New Product Introduction***

During the development phase of a new product or service, the R&D department has to build from scratch a new Bill of Materials (BOM). Whether this occurs in a third party application, *SAP Integrated Product Planning and Engineering (iPPE)*, or in the *SAP CAD Desktop*, the BOM resides outside of the ERP system. Therefore, it is extremely complicated to leverage ERP master data and its prices to come up with an estimate.

PDCE allows master data to be imported from third party (via XML or CAD integration with CAD Desktop) or iPPE-based applications (like CAD Desktop) using the master data and prices from the ERP system for fast and effective cost estimation.



**Continuous Improvement for Products & Services**

Once a product is in production, it still has a lifecycle of its own. Meaning, the Bill of Materials (BOM) should have the ability to change, depending on the evolution of technology or customer requests. However, once the BOM is in the ERP system, it becomes difficult to simulate product options like replacing an existing part with a new one, or move production from one plant to another. It is even more difficult to estimate the impact of such modifications before making a decision.

PDCE enables users to import an existing BOM from the ERP system, which can then be modified in a simulation environment without any impact on the user's current production system. New parts or materials can be inserted to replace off-the-shelf items along with any routing and/or overhead criteria that could be either imported or simulated. This allows decision makers to evaluate and examine the potential impact of a decision before implementing it.

**Target Costing**

When product development teams collaborate on improving or launching a new product or service, typically the target costing approach is used. For instance, the marketing department collects requirements for a new solution and formulates a target price. The finance department then sets the default margin rate, which determines the target cost. The target cost could potentially be broken down into each product feature and/or component. With the target cost established, the R&D department can either reuse an existing bill of materials, again from the ERP system or create a completely new one (with CAD Desktop or third party system). Now it is the controller's task to analyze and align the cost estimate (including material costs, manufacturing costs and admin costs) with the revised product's target cost.


PDCE is an ideal application for target costing. The marketing department can begin by defining and assigning a target price – dedicated tables can then be set up to read the default margin rate as determined by the finance department. This process can be followed up by the controller simulating the most desirable bill of materials, routings and overhead scenarios imported from the ERP or third party system.

**PRODUCT DESIGN COST ESTIMATE INTEGRATION**

**WITH SAP NETWEAVER PLATFORM**, Product Design Cost Estimate can access any information from the BI system... and without programming PDCE can be easily configured to access drivers and apply your own business logic. Additionally, the PDCE costing engine can be used as an integration point for other systems like *SAP CRM*, *SAP SRM*, *SAP PPM*, or *eSourcing* to name a few. You can rely on our expertise to get the best out of such a range of possibilities for integration.

The major hardware/software features of PDCE are:

- ERP / 3rd party integration for BOM, master data and prices import
- BI-base, allowing temporary master data (for new materials, for instance)
- Flexible yet powerful calculation and extension

SAP Product Design Cost Estimate is a license-free application, established as part of the *Product Lifecycle Management (PLM)* portfolio of SAP Business Suite. 

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**PDCE Integration Capabilities Diagram**

