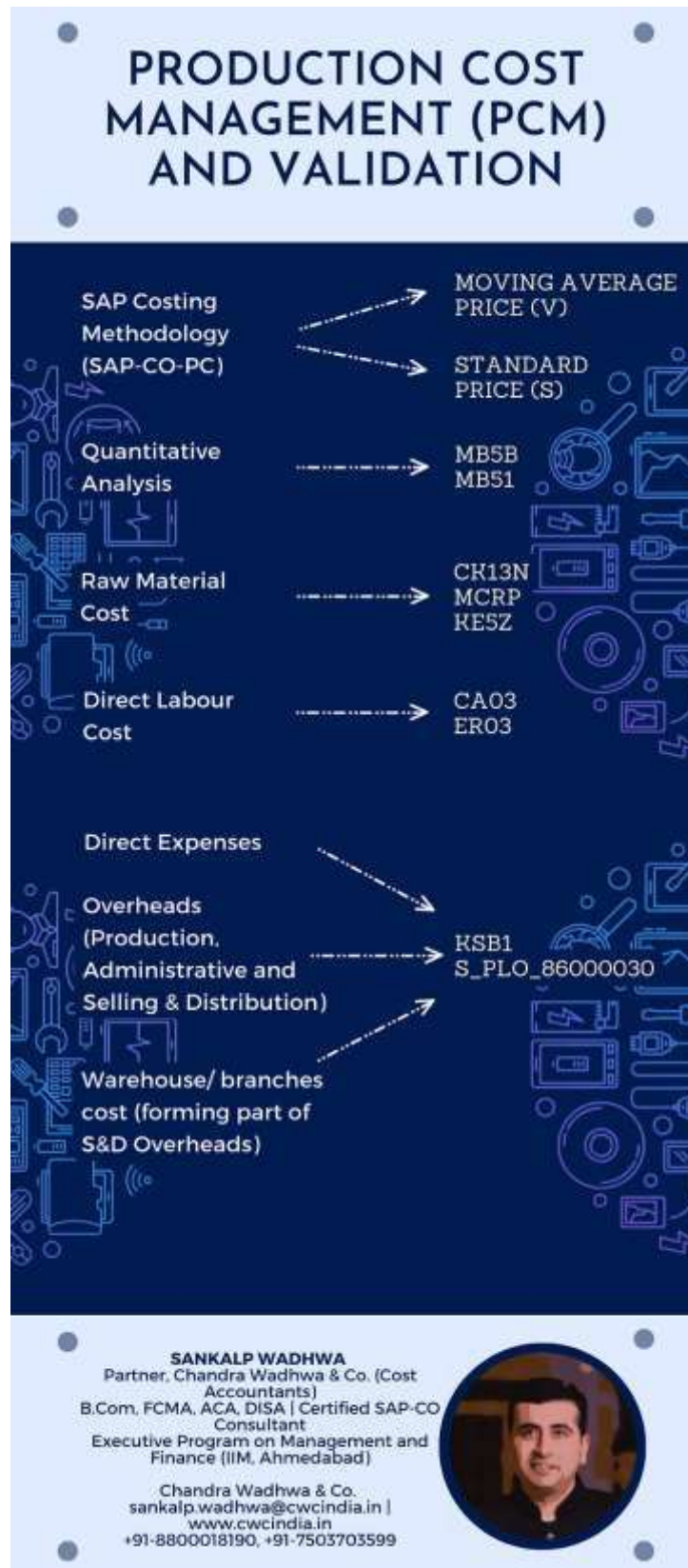


Product costing - the art and science of assigning true costs to a diverse product range





THE INTRODUCTION:

The company in question is one of India’s largest consumer electronics companies, producing a wide range of consumer durables, including speakers, IT accessories, mobile accessories, personal care appliances, and medical products. It has sold over a billion products and services across 20,000+ pin codes in India.



THE PROBLEM:

To develop a detailed and comprehensive product costing substructure mechanism that embeds into the overall product cost management (PCM) [1] structure. Thus, the PCM framework will form part of the comprehensive management information system (MIS), facilitating a decision support system for the management to make well-informed decisions.

Re-configure the product costing framework into the SAP-ERP system (SAP-CO-PC) to enable its alignment with MIS and SAP systems.



THE SOLUTION:

Product costing is assigning costs to products based on the principle of cause-and-effect. Given below is a framework for deriving costs for each cost element:

Cost element	SAP tcodes	Data Source and Validation Rules
Raw material	<ul style="list-style-type: none"> • CK13N • MCRP • KE5Z 	<ul style="list-style-type: none"> • Material cost is generally derived from the Bill of materials (BOMs) [Refer to Footnote 2] using CK13N tcode • Quantitative reconciliation of standard vs actual material consumption* • Physical verification of closing material stock helps in further validating BOM. (Expected material closing stock vs Actual material closing stock) <p>* Actual Material Consumption = Material Opening Stock + Quantity Purchased – Material Closing Stock Standard Material Consumption = Product BOM recipe X FG quantity produced (using MCRP tcode)</p>

Cost element	SAP tcodes	Data Source and Validation Rules
Direct Labour	<ul style="list-style-type: none"> CA03 CR03 	<ul style="list-style-type: none"> Use CA03 tcode to check direct labour hours (production routing) Review work centres mapping using CR03 tcode Analyse actual hours consumed for manufacturing products vis-à-vis estimated hours using the product routing data system Reconcile actual labour cost booked with derived labour cost, based on product routing data and quantity produced Over/ under-absorption to be reviewed in the context of normal and abnormal factors
Direct expenses	<ul style="list-style-type: none"> KSB1 S_PL0_86000030 	<ul style="list-style-type: none"> Checking direct expenses booked in GL accounts (using S_PL0_86000030 tcode) with reference to cost centre-wise booking (using KSB1 tcode)
Overheads (Production, Administrative and Selling & Distribution)	<ul style="list-style-type: none"> KSB1 S_PL0_86000030 	<ul style="list-style-type: none"> Checking overheads booked in GL accounts (using S_PL0_86000030 tcode) with reference to cost centre-wise booking (using KSB1 tcode) Review basis of allocation/ assignment of costs to products
Warehouse/ Branches cost (Forming part of S&D overheads)	<ul style="list-style-type: none"> KSB1 S_PL0_86000030 	<ul style="list-style-type: none"> Checking branch/ warehouse expenses booked in GL accounts (using S_PL0_86000030 tcode) with reference to cost centre-wise booking (using KSB1 tcode) Review basis of allocation/ assignment of costs to products Costs assignment should align with the principle of cause and effect, if identifiable
Quantitative Analysis	<ul style="list-style-type: none"> MB5B MB51 	<ul style="list-style-type: none"> Product-wise quantity reconciliation* to be performed using MB5B and MB51 tcodes <p>*Actual Sales = Opening Stock + Quantity Produced - Closing Stock ± Other Adjustments</p>
SAP Costing Methodology		<ul style="list-style-type: none"> Moving Average Price (V) changes in consequence of usage and entry of invoices. It is calculated by dividing the value of material by the quantity in stock. SAP Best Practice recommends moving average price (V) for material valuation with raw materials and trading goods. Standard Price (S) is a constant price without considering usage or invoices. Therefore, the material stock is valued at the same price over an extended period. Price variances are posted to price difference accounts, thereby not affecting the standard price. SAP Best Practice recommends standard price (S) for material valuation with finished goods and intermediate products/ WIP.



THE RESULTS:

The company implemented the new product-costing framework effectively. Following are the significant achievements:

Raw material

- The company observed that the variance between actual and standard material consumption was ~10-15% (which was charged off to the product material cost). Accordingly, an adequate internal controls mechanism/ framework was implemented to plug the variance gap, which got reduced to ~2-5%.
- Duplicate bills of materials (BOMs) for different products were identified and subsequently revised/ refined by recalibrating BOMs.

Quantitative analysis

- Earlier, material movements were not adequately captured, resulting in reconciliation gaps at the SKU level with even unavoidable quantity loss (~2% of the total production). The new framework helped in traceability at the SKU level. Thereby reducing quantity losses to ~0.1% of the total production.
- Earlier, there was no distinction between the material codes for products manufactured and traded. After the new product costing framework, the traceability at the SKU level became comparatively more straightforward, resulting in efficient allocation of differential costs to manufactured and traded products.

Selling and distribution cost

- The new product costing framework enabled the identification of the selling and distribution costs based on the principle of cause and effect instead of the revenue allocation approach.



FOOTNOTES

1. *^Understanding Product cost management in depth*
2. *^Refer case study on Bill of Material*



FREQUENTLY ASKED QUESTIONS:

Q. What is product costing?

A. Product costing is the process of determining the actual cost of a product, including direct and indirect costs, in order to set a fair price that covers all costs and ensures profitability.

Q. What are direct costs?

A. Direct costs are costs that can be directly traced to the production of a specific product or service, such as raw materials, labour, and manufacturing overhead.

Q. What are indirect costs?

A. Indirect costs are costs that are not directly related to the production of a specific product or service, but are necessary to run the business, such as rent, utilities, and administrative salaries.

Q. What are the challenges of costing for a diverse product range?

A. Product costing for a diverse product range can be challenging due to the complexity of assigning costs to individual products with different production processes, materials, and overhead costs. In addition, it can be challenging to accurately allocate indirect costs to individual products, and there may be differences in the level of detail required for cost tracking.

Q. What are the benefits of accurate product costing?

A. Accurate product costing can help a company make informed decisions about pricing, product mix, and production processes. It can also help identify areas for cost reduction and improve profitability. Additionally, it can enhance financial reporting and provide transparency for stakeholders.