NEIS Insight

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PRODUCT CALCULATION

Product Calculation can be seen as „Know yourself"

A basic feature every company has up and running?

No!

Why ?

To know the cost of your products / services is a basic requirement for every company. Nevertheless many companies, do not have it in place at all or do have it however the information is questionable / wrong or uncomparable between operational units.

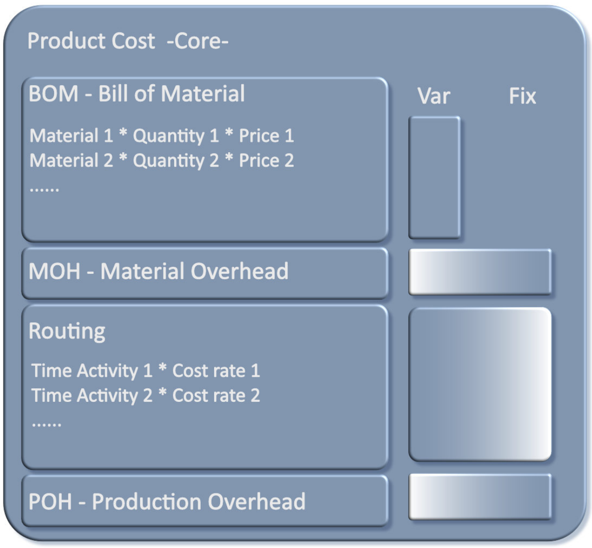
Once again only + - / x are involved, once again theoretical foundations have been laid 100 year ago, nonetheless it is more complicated to get it right than most people think and that's why some companies gave up or even never tried.

I'd like to encourage to do it and to do it well. If you know who you are and what you can do and combine that with knowing the market place You could harvest the fruits of margin and profit optimization. This could also be seen as creating the best possible fit between the market and your enterprise.

OVERVIEW

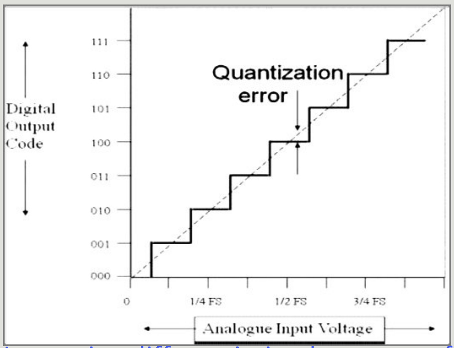
What is a product cost calculation for standardized products and services

1. First layer: Capturing the real cost of your individual products. Having correct inventory valuations. Having correct Margin information
2. Second layer: Matching your capabilities with the market needs & competitive landscape
3. Third layer: Marketing analytics & Product costing in combination give you the tool set to optimally focus your enterprise towards the customers, to drive sales volume, profit and ROCE.



In order to get the product calculation right a team approach is necessary, requiring different departments like operations, human resources, IT and finance as a minimum. They elaborate and implement an aligned concept and monitor later adherence to the model and consistency of parameters.

At the core is the well known basic calculation comprising of Bill of Material, Routing and Overheads. Once the development / engineering



Increasing differentiation by means of cost centers, work centers, activities so that the error becomes small.

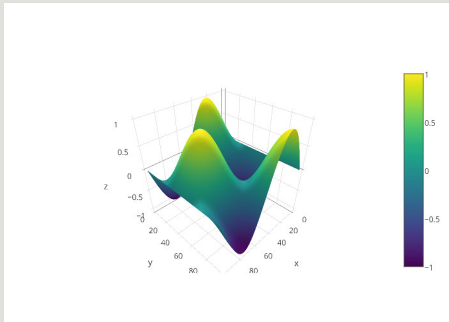
is ready the Material cost are relatively easy. Over the time inventory differences indicate evtl. a necessity to update the quantity structure (e.g. overly optimistic scrap assumption). A process to update material prices is required. The more difficult part are the activities. Here current reliable data for the standard times or the feedback of actual times used are important.

The fineness of cost centers, work centers and activities needs to be high enough to capture the reality of costing variance to a large extent and to reduce the "Quantization error". For service businesses where the material part is very small or even non-existent, accuracy in activity timing and suitable fineness becomes very important.

As this is only a model of the reality you need to be clear on the many underlying assumptions and document them. This leads you also to list of shortcomings (in favour of efficiency) which later can be optimized or remain. In due course when business cases need to be judged based on product margins, it is important to review the relevance of any of those shortcomings and underlying assumptions.

The calculation must be calibrated overall (company, factory) but also for substructures (cost centers, product groups, etc.), which is the most underestimated part of the exercise as again esp. Finance & Operations need to work closely & honestly together in order to reach that goal.

To implement the Product cost core is in most cases relatively easy, however the calibration is difficult as is to keep that precision consistent over the global footprint and over the years. Yet an inaccurate product calculation generates just a lot of data to handle but does not produce any information. In the worst case it produces even false signals. This leads to a credibility crisis and the de-facto break down and a shadow existence. Nobody believes in the results, nevertheless the system is kept technically alive to produce a lot of data garbage.



Resulting Product Cost along two product features.
With market prices in the same logic you will retrieve a „Margin Landscape" which can then be optimized.

If you have a product costing system it helps to develop also a pricing system. This will give you more analytical openings and assists you in areas of low margin to differentiate if this is caused mainly by too high cost or too low prices.

ADAPT TO THE MARKET LIKE A GLOVE

A good product / service calculation is a representation on how good the company can serve the customers well in an cost effective manner. This of course represents just a certain short period of time. Both the market will move as will hopefully the capabilities of company.

Management is now challenged to keep a large and thick margin cushion between the cost curves and the price curves in this dynamic market requirements vs. company capabilities landscape. Operations & Finance are challenged to keep the accuracy high all the time in order to prevent false signals and supply Management with valuable information.

The measurement instrument of product / service margins is a sensitive one, as it is made of little hardware, a lot of software, but mainly of humans. Like for the implementation it requires a minimum skill set mainly in operations, IT and finance and a minimum headcount during its whole life cycle.

If during a economic crisis or a management chance the collateral damage in the key departments/employees is too high the product calculation system collapses.

Then restart the exercise after the turbulence settled !

Good luck with your efforts and have a nice day.