Calculation of Complexity Costs – An Approach for Rationalizing a Product Program

This paper proposes an operational method for rationalizing a product program based on the calculation of complexity costs. The method takes its starting point in the calculation of complexity costs on a product program level. This is done throughout the value chain ranging from component inventories at the factory sites, all the way to the distribution of finished goods from distribution centers to the customers. The method proposes a step-wise approach including the analysis, quantification and allocation of product program complexity costs by the means of identifying of a number of suggested Life Cycle Complexity Factors (LCCFs). The suggested method has been tested in an action based research study with promising results. The case study shows how the allocation of complexity costs on individual product variants provides previously unknown insights into the true cost structure of a product program. These findings represent an improved decision basis for the planning of reactive and proactive initiatives of rationalizing a product program.

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