

Determination of Optimal Functionality

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Abstract. There are several tools in TRIZ and in system design for finding new functions for engineering systems. Increasing functionality is often taken as a synonym for increasing value. The continuing existence of simple tools like hammers and pencils, though, proves this assumption to be wrong. We are researching ways to determine the optimal amount of functionality integrated in an engineering system, which will correspond to maximal value. According to the current state, a value benefit analysis can provide helpful means for decision of the optimal functionality. There are, however, less common cost factors which must be considered. Moreover, we suggest to consider not only a specific engineering system, but an extended system comprising the whole set of tools required by the user to perform a specific task.

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