



... invention ... modularisation ... standardization ... value analysis ... QFD ... cost analysis ...

**Problem** Within a comprehensive analysis possibilities should be developed to improve the competitiveness for a manufacturer of expensive and ambitious components of the investment industry. These solutions should include innovative ways of product improvement as well as product redesign based on the value analysis or logistical topics. The aggravating element in this project was the extreme conservative behaviour of the market which is primarily focussed on safety and reliability aspects.

**Project description and results** Within a first rough analysis the demands of the market and its potential has been checked. Parallel to this the internal lead and manufacturing times have been checked and documented.. These results were basis for a benchmark to steps for an improvement of the complete situation in three steps:

- **Short term**  
Based on the existing design standards and block modules have been defined which in connection with logistic decisions helped to reduce the lead time by 50 %.
- **Middle term**  
Investment activities and technological improvements helped to reduce manufacturing times and cost up to 50 %.
- **Long term**  
New solutions have been found which allowed an improvement of the existing technical solution. These improvement are now used in discussions with the customers to convince the customer of the innovative competence and power.

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