Design optimisation of Complex Mechanical Systems at the Conceptual Design Stage is an important strategic product development investment

As we all know, today's increasingly competitive environment demands that manufacturing companies review, optimise and adapt their existing design processes in order to increase their competitiveness by delivering highly reliable and robust products faster and with less cost to their Customers and Markets.

The optimal support of the Six Sigma business-driven approaches such as:

- Improving processes
- Decrease number of defects
- Reducing process variability
- Reducing Costs
- Increasing customer satisfaction

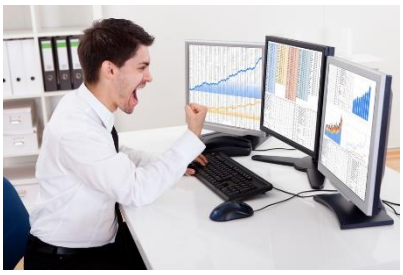
can start in the conceptual design stage. Following the Six Sigma methodology in the conceptual design stage makes it easier for the rest of the process to operate with "Six Sigma Quality".

Typical design optimisation goals

- Acceleration of product's time-to-market
- Reduction of associated costs for design changes
- Increase of product quality and robustness
- Analysis and correction of potential failures and associated risks as early as possible
- Identify and assess risks during conceptual product design

Requirements on the supporting software solution

- Can be used in the early conceptual design stage to optimise support of the Six Sigma business-driven approaches
- Easy and simple to use – no specialists required
- Offers analysis and simulation tools to evaluate designs, to capture and analyse failures in the early conceptual design stages and combines geometric, mathematic, and kinematic modelling with automated variation analysis, optimisation capabilities, and GD&T simulation to help engineers apply robust design principles to their work



Benefits

- More robust designs starting even at the conceptual design stage
- Reduction of required design iterations and design/re-design costs through early identification and avoidance of failures, issues, costs and constraints
- Decreased costs associated with design changes
- Acceleration of product's time-to-market
- Increased product reliability