From Good to Great Automotive Designs with DesignXlorer

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Presented at:

2007 ANSYS U.S. Regional Conference Series Dearborn MI September 2007

Awarded:

Best Conference Paper Award

Abstract:

Successful organizations realize that probabilistic design techniques have enormous positive impact on time-to-quality. Time to market often becomes irrelevant when the total costs of poor quality factor into the analysis. Liability costs for some exceed the R&D budget. Consider rework costs on recalls, warranty payments, and lost customers from a negative brand image. Too often, companies simply make mistakes, or over react and build in superfluous safety factors.

This presentation summarizes current modeling processes and tradeoffs to automatically create optimum robust designs. Examples of probabilistic design and optimization from the ultra and fuel cell industries will be presented. Highlights include a reusable workflow process, as well as the challenges and recommendations for successful DFSS implementation.