



## Technology Challenges/Constraints

- Miniaturization & Tolerance Truncation
- Cycle-time competing with precision requirements
- Traceable artifacts to support tolerance regimes
- Inadequate models for physical parameters
- Customer requirements exceeding state of the art

## Business Challenges/Constraints

- Industry profit margins are radically low
- 80 % of costs related to physical parameters
- Tolerances decreasing & bad decisions increasing
- Yield losses too high at all mfg. stages
- Acceptance testing and sorting are high cost

## “Quality Transformation” - Do It Right The First Time

Turn engineering efforts into a science and eliminate redundant and inefficient development initiatives

Gain a thorough understanding of the constraints & implications to critical functional characteristics

Utilize this core knowledge to optimize leading-edge processes which meet or exceed market needs and use to your advantage to determine and optimize the vital few development needs

(Applies To: Product, Tooling, Equipment, Design, Process and Measurement)

*“Find the waste... Get rid of it... Keep it gone... Do it right the first time”*