

Mitigate Risks from Changes or Variants

Background

- Variants and changes are severe risk drivers
- Simulation and tests address the known effects of changed components or function groups
- Unexpected failures result from unidentified side effects somewhere else in the mechatronic system

Customer benefit

- Transparency of change effects across a complicated mechatronic system
- Quantification of unintended side effects for a change-related risk-mitigation program
- Automatic analysis for unified consideration of hardware and software changes

Requirement

- Identify intended and unintended effects of changes and variants across the whole product structure
- Consider hardware and software changes
- Evaluate damaging effects across the whole product for risk mitigation

The Solution: Change Management

- Identify the risk drivers for function groups:
 - Risk \leftrightarrow damaging load & observable
- Identify A change starts the inverted effect \rightarrow risk-chain for all function groups:
 - Damaging load & observable \rightarrow risk
- Risk mitigation program for all influenced risks on all function groups

