Implementing DFMA®

AN INTERACTIVE DISCUSSION
What are the Objectives of DFMA® Implementation?

WHAT DOES “SUCCESS” LOOK LIKE?
The Objectives of DFMA® Implementation

- Employee knowledge, skills and attitude for DFMA® utilized across various business functions
  - Product/System Development & Design
  - Supply Chain Development
  - Productivity Improvement
  - Competitive Product Analysis

- Competence with DFMA® methodology and software

- Targeted applications with significant, validated results
DFMA® Integrated into the Life Cycle

Competitive Analysis

DFMA Product Simplification & Costing

PDP Feasibility

PDP Design

PDP Testing & Prep.

Production

DFMA Productivity Improvement

DFM Supplier Costing ("Should Costing")
Signs of Success

- Conversational Language
  - “How many parts ...?”
  - “What’s your theoretical minimum?”
  - “How can we reduce the number of fasteners?”

- Standard Work Documents

- DFMA® Related Metrics Being Monitored

- Project Plans Include DFMA® Activities

- Programs Launching On Time With Fewer ECO’s

...
In what ways can DFMA® be implemented?

WHO ARE THE USERS/LEADERS?
HOW IS IT INCORPORATED INTO CURRENT STANDARD WORK?
WHAT ARE SOME OF THE LESSONS LEARNED?
Concurrent engineering (CE) is a work methodology emphasizing the parallelization of tasks (i.e. performing tasks concurrently), which is sometimes called simultaneous engineering or integrated product development (IPD) using an integrated product team approach.
DFMA® Implementation Strategies

- **Engineering Team**
  - Design/Development integrates into project plan
  - Responsibility assigned to team member(s)

- **Operations Team**
  - Manufacturing and Supply Chain define expectations for project teams
  - Representatives take responsibility for execution

- **Subject Matter Experts (SME)**
  - Core group of identified individuals recognized for their knowledge and facilitation skills
  - Provide application support for one or more teams concurrently

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DFMA® is a Team Sport
SME Strategy Case Study

- Conducted numerous workshops to provide broad-based training and application experience and to create a funnel of improvement projects
- Project monitoring system established to track projects, validate results, report summarized annual results
- Established group of SME’s to train, coach, and lead others in their application and to manage software use
- Results: 100+ projects at various stages of execution with $M’s of validated cost savings
- Migrating “upstream”
How are knowledge, skills, and attitude established in the organization?
Different Players, Different Needs

- Leaders … executives, managers, project leaders, etc.
  - Role: set goals, make decisions, **enable** teams
  - Knowledge: what, why, & when of DFMA® … Informed

- Project Team … cross-functional, integrated project team
  - Role: develop & design product, document design intent, manage costs
  - Knowledge & Skills: what, why, when, and **how** of DFMA® … Consulted

- DFMA® Leaders
  - Role: primary DFMA® users, facilitate team through DFMA® analysis
  - Knowledge & Skills: what, why, when, how, and **facilitation** of DFMA® … Responsible
BDI DFMA® Workshop Options

- **DFMA® Proof of Concept Workshop ... Knowledge**
  - **Audience:** Up to 30 with emphasis on stakeholders, decision makers and organization leaders
  - **Project:** Small sample assembly but can use client provided project(s)
  - **Duration:** 1-2 days

- **DFMA® Implementation Workshop ... Knowledge, skills, & results**
  - **Audience:** Up to 24 cross-functional/cross-organization
  - **Project:** Multiple small projects with small teams (3-5 people)
  - **Duration:** 2 or 3 days depending upon size of projects

- **DFMA® Guided Analysis Workshop ... Knowledge & results**
  - **Audience:** Project core team members
  - **Project:** Single project with application facilitated by BDI
  - **Duration:** 1-5 days depending upon project size
Leverage the Habit Forming Process

- Make it Easy
- Make it Attractive WIIFM
- Make it Satisfying
- Make it Obvious

Cue

Craving

Reward

Response

Source: James Cleary, “Atomic Habits”
Continue Learning From Each Other

Take advantage of this evening and tomorrow to meet people you don’t know and learn from each other.