

Inspiring a Quality Culture

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Assuring Mission Success
Getting it Right (the First Time)



- Why is a Quality Culture Important ?
 - Assures Mission Success
 - Increases Mission Performance
 - Improves Corporate/Organizational Reputation
 - Contributes to Workforce Development
 - Improves Morale
 - Reduces/Controls Cost
 - Delights the Customer
 - Creates a “virtuous” cycle

Pay now or pay (much) more later...



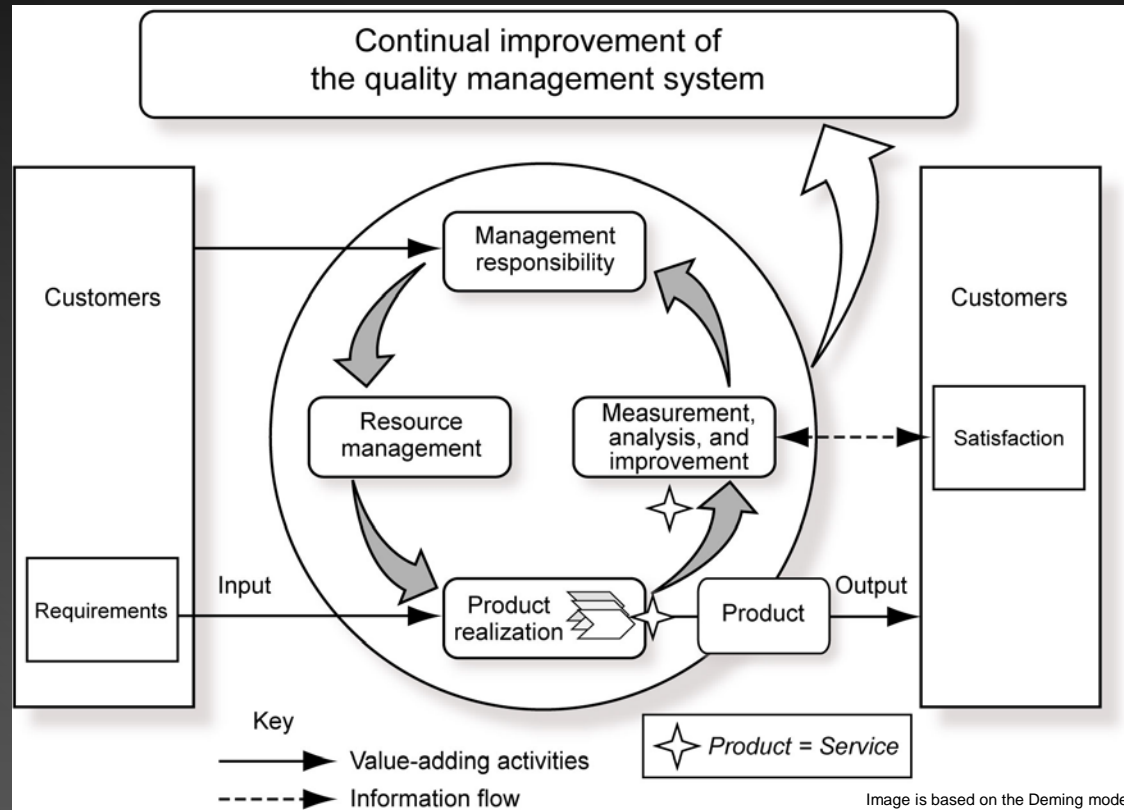
- What is a Quality Culture ?
 - Shared set of beliefs and values that are reflected in everyday behavior
- Elements of a Quality Culture
 - Leaders who are focused on the Mission, whose actions match words
 - Leaders who demand Excellence and recognize the power of Continuous Improvement
 - Everyone Contributes with a deep sense of Teamwork, Accountability and Attention to Detail
 - Shared and Open Communications to engender Trust and Learning
 - Focus on Processes such as *an effective QMS* with repeatable, measurable outputs
 - Effective Audit and Workforce Development/Training Programs

Quality is “baked in” and not “bolted on”...
Incentives Drive Behavior



- What is a Quality Management System ?

- Set of processes aimed at achieving Mission Success through a closed loop cycle of Continuous Improvement (Plan—Do—Check—Act)

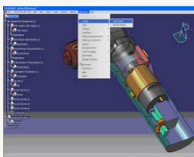


Success depends on Disciplined, Proven, Repeatable Processes...



Lifecycle-based Systems Engineering

Development

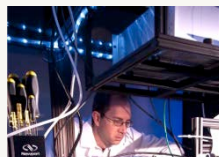


Courtesy of Enovia

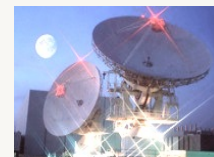
Supply Base



Manufacture & Test



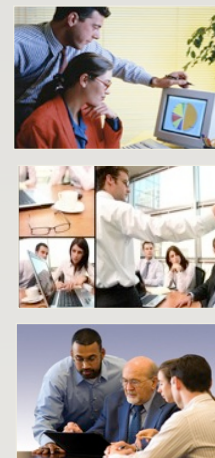
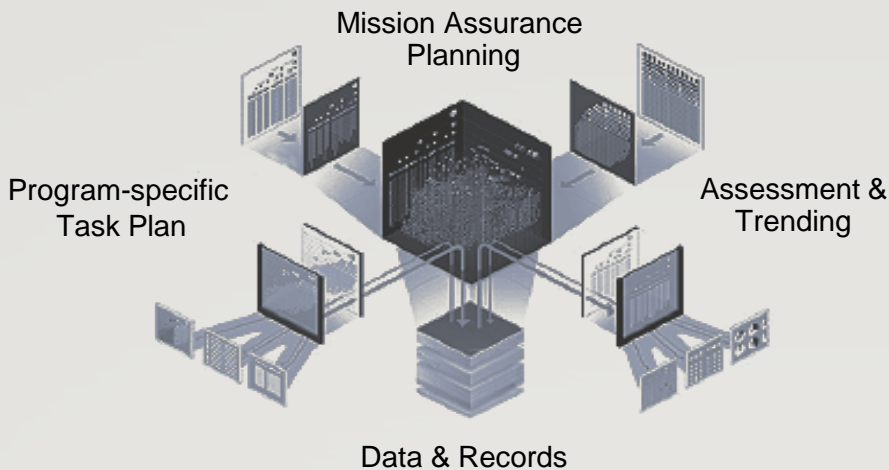
Operations & Support



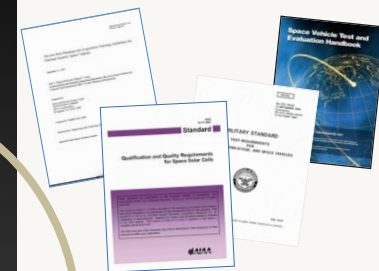
People, Processes, and Tools

Verification Management Process

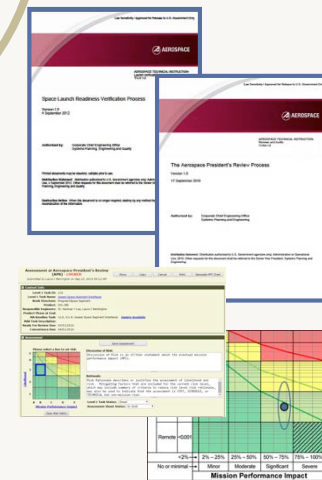
Lessons



Leverage Industry Best Practices

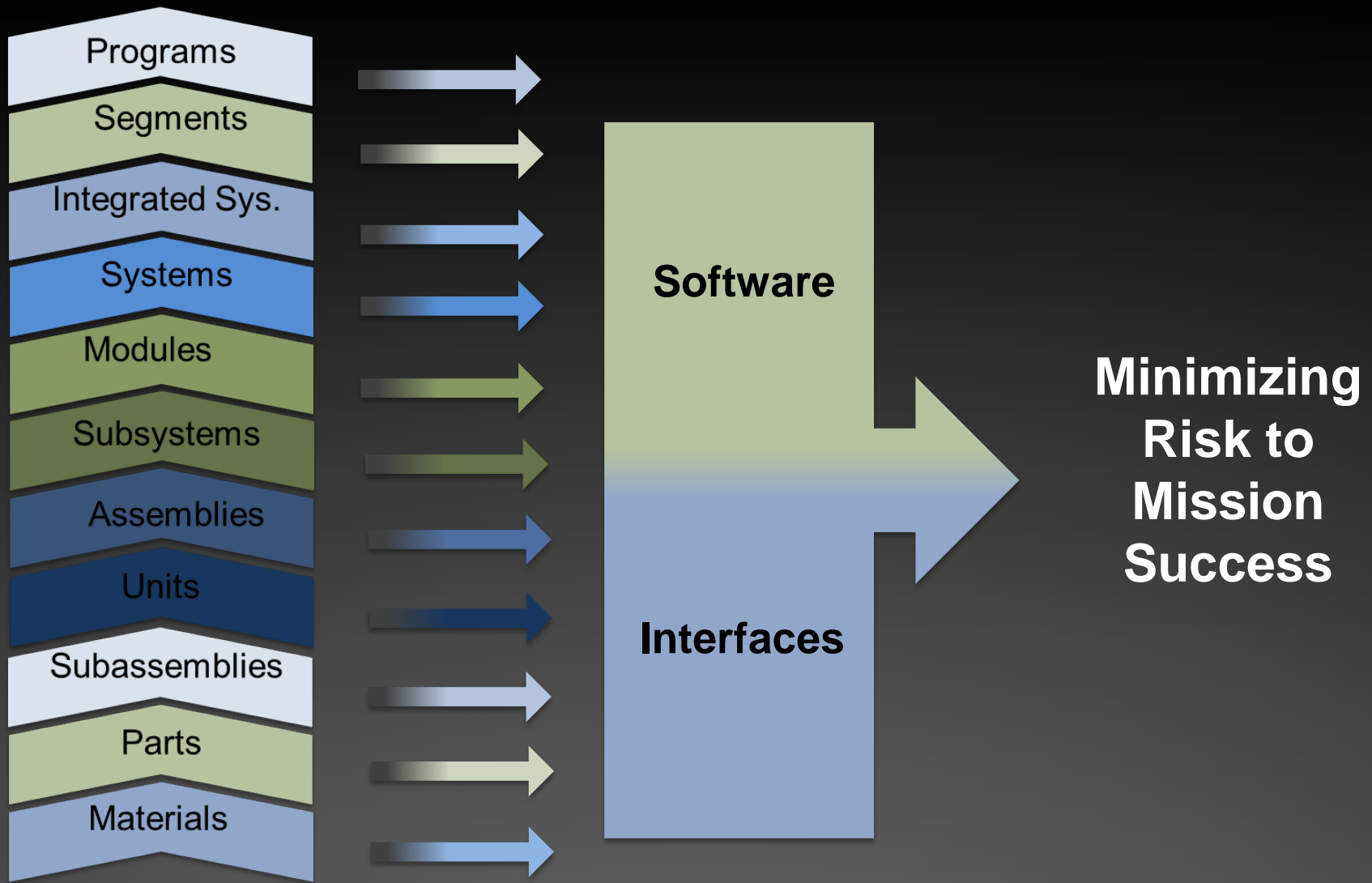


Aerospace Technical Processes - TIPS



...Carried out with Attention to Detail... Measured... And Documented...

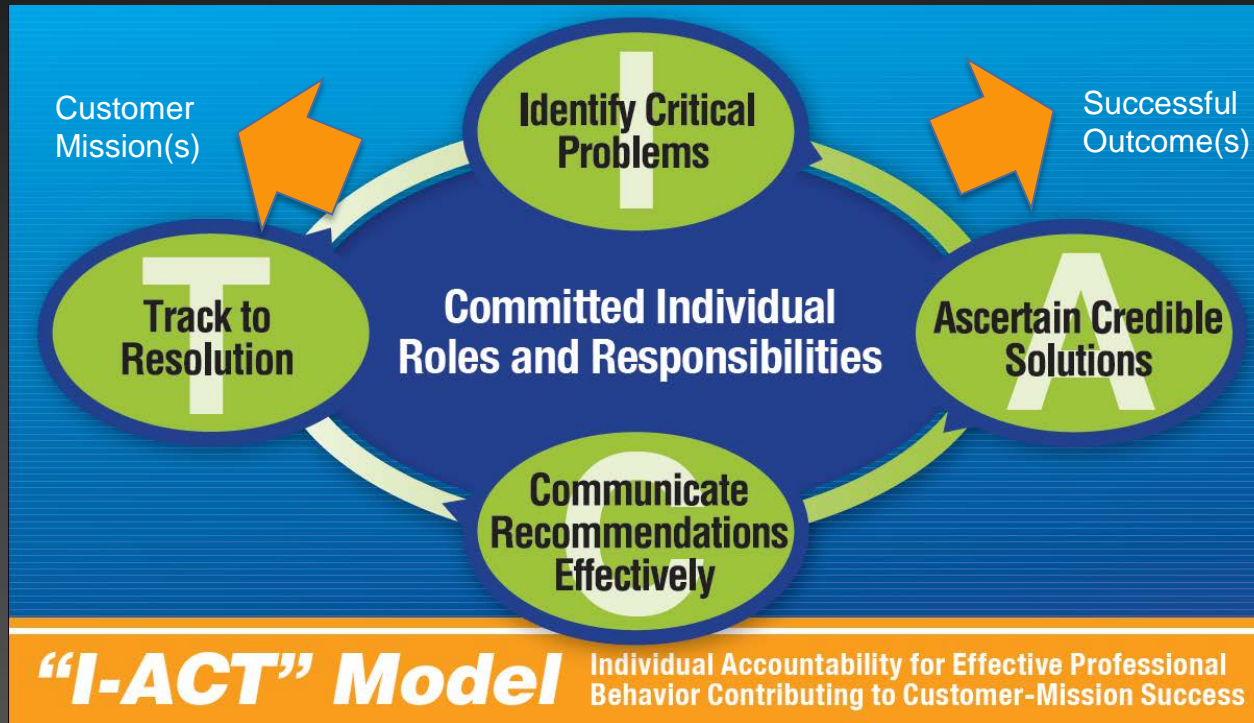




A Quality Culture is essential to achieve Mission Success in this complex arena



- Individual Accountability is demonstrated by Effective Professional Behaviors (“I-ACT” Model)



...That requires commitment from Everyone...
"You hold the key..."



- Future Quality Challenges and Opportunities

- New Technologies
 - Model Based Systems Engineering
 - Additive Manufacturing
 - Automation/Autonomy
- Microelectronics and Optical Parts/Components
- Liquid & Electric Propulsion Standards
- Li-Ion Battery Standards
- Software Quality Assurance
- Systems Engineering process for verifying HW/SW interactions for critical mission timelines
- Digitizing the quality function (Digital Assurance)

We need to continue to revise and tailor our approach and processes to “Get it Right”—the first time...



THE AEROSPACE CORPORATION



Assuring Mission Success

