



# ASQ CRE Prep course

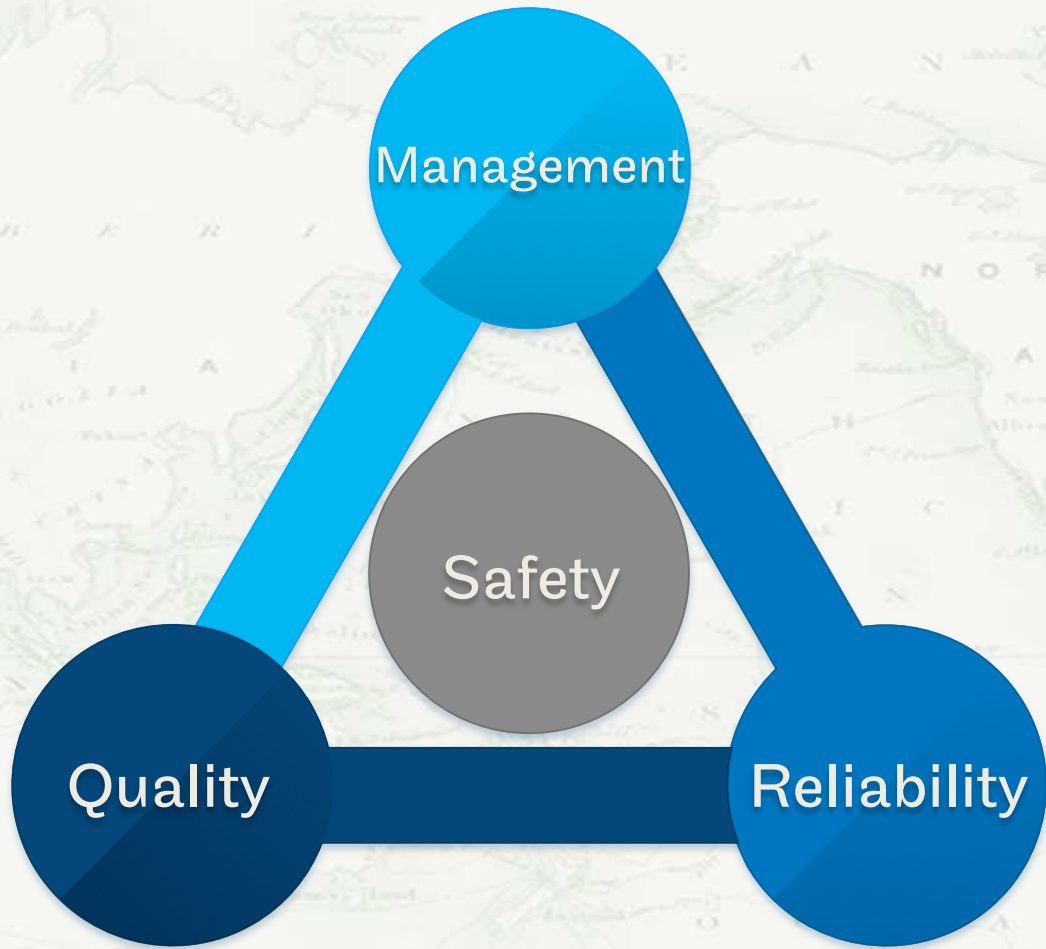
Lesson I. A. 2.

Interrelationship of Safety,  
Quality, and Reliability

No tradeoffs here in most cases

# INTERRELATIONSHIP OF SAFETY, QUALITY, AND RELIABILITY





Management

Safety

Quality

Reliability



# Quality

- **The totality of characteristics of a product or a service that bear on it's ability to satisfy stated or implied needs.**
- **Color?**
- **Form factor?**
- **Weight?**
- **Speed?**



Quality

# Reliability

- **Four elements**
  - **Function**
  - **Environment**
  - **Probability**
  - **Duration**

- **The probability that an item can perform it's intended function for a specified interval under stated conditions.**



Reliability

# Safety

- **Absence of unacceptable hazards**
- **Injury / Death**
- **Property Damage**
- **Environmental Harm**



Safety

# Management

- **Pulling it all together**
- **Responsibility**
- **Delegation**
- **Liability**



Management

Quality over  
time?





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Lesson I. A. 3.

Role of the Reliability  
Function