Only the Reliable Will Survive

Presented By: Joe Lochard





In The Last 15 Years, 52% of Fortune 500 Companies **Have Disappeared**

CONSIDER THIS...

1955

Average life expectancy 75 years.

2015

Average life expectancy 15 years and declining*



Source: Richard N Foster and Sarah Kaplan-Why Companies That Are Built to Last Underperform the Market-2001





Achieving a Reliable State Faces Many Challenges







So What Does Good Reliability Look Like?

Leading Organizations Score...

46% Less on MAINTENANCE

58% Less on STORES

...than Average Performers







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How Does Good Reliability Behave ?

Leading Organizations Score...

90% Higher in Foundational Elements **117%** Higher in Condition Based Maintenance

115% Higher in Reliability Engineering

61% Higher in Lubrication

85% Higher in Planning and Scheduling **103%** Higher in Asset Health Management

...than Average Performers







Organizations Want/Need The Reliable Experience

So What is the Common Thread?



Aligned Business Processes



Skilled Workforce



Detailed Equipment Records



Consistent Work Execution



Improved Equipment Availability ∎Î

Culture Of Continuous Improvement





Source: John Schultz, EPRI, CSI, HSB, Solomon, SAE, PIMA/TAPPI, CMA, AIST



The "Reliability" Journey





How Can We Help You Get There?







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Foundational Elements – Today

FOUNDATIONAL ELEMENTS



- Over 60% of sites that we benchmark do not have an actionable Asset Catalog (ISO 14224 Standard)
 - They don't know what they own
- Over 70% of sites have insufficient asset criticality
 - They cannot distinguish what is important beyond top 10-20%
- Over 80% have not mapped components to failure modes and failure modes to inspections
 - They don't know why they are performing the tasks that they are performing
- Over 90% have not optimized Equipment Maintenance Plans
 - They are often performing the wrong tasks, at the wrong frequencies, with little or no work execution standards



Proactive Workflow Model





So How Do We Deliver Customer Value?









Delivered Through Integrated Asset Reliability & Protection Solutions

PEOPLE



Work Execution Management

- Planning & Scheduling
- Job Plan Improvement
- Develop Work Procedures
- Spare Parts
- BOMs



Routine Equipment Care



Recruiting

- Talent Sourcing
- Talent Screening
- Direct/Contract Hire

Workforce Development

- Training
- Coaching & Mentoring

PROCESS

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- Asset Health Assurance
- Asset Catalog
- Criticality
- Doc & BOMs
- FMEA (AHA + RCM)
- PM Writing
- EMP Design/Implementation

Reliability Engineering

- PM Evaluation/ PM Optimization
- Root Cause Analysis
- Reliability Centered Maintenance
- Failure Reporting and Corrective Action System
- Spare Parts

TECHNOLOGY



Full Suite of CBM Applications /Technologies

- Vibration
- Infrared
- Ultrasound
- Oil Analysis
- Motor Circuit Analysis
- Advanced Diagnostics
- Sensory Inspection
- Inline Monitoring

Engineered Products & Services

- Lubrication Systems
- Emissions
- Controls
- Oil and Fluid Filtration

Reliability Management System (iReliability™)

Change Management & Leadership Alignment



Reliability Driven Plants Deliver Results



So Where are You on Your Reliability Journey?





