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ICORR ABERDEEN BRANCH WELCOMES

CHRIS BURKE, BENG (HONS), MIET

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Oil & Gas

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Oilfield Services

Achieve accurate and reliable measurements in the harshest environments whether you're pumping drilling mud, cement, or stimulation fluids.

Offshore

Reduce operational costs and improve production whether you're in a fixed, floating, or subsea environment.

Transportation & Storage

Accurately, safely, and efficiently move, handle and store product while responding to customer and market demands.

Gas Processing & LNG

Improve efficiency and reduce cost for optimized throughput and plant performance across every facet of the gas processing value chain.

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CHRIS BURKE

UPSTREAM SALES MANAGER

- BEng (Hons) Electronic & Communication Engineering – Robert Gordon University
- 20+ years experience in the Oil and Gas Industry
- 15+ years Asset Integrity Experience:
  - Support Engineer - Roxar
  - Corrosion & Erosion Monitoring Engineer - ConocoPhillips
  - Senior Engineer – Oceaneering
  - Senior Project Engineer – SMS
  - Consultant – Sandman Engineering
  - Sales Manager - Permasense

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THE ROLE OF ADVANCED INSTRUMENTATION IN PROCESS INTEGRITY MANAGEMENT

IOT & Industrial Technology

- New devices
- Increased Functionality
- Industrial Wireless Technology
- Easier installation / maintenance

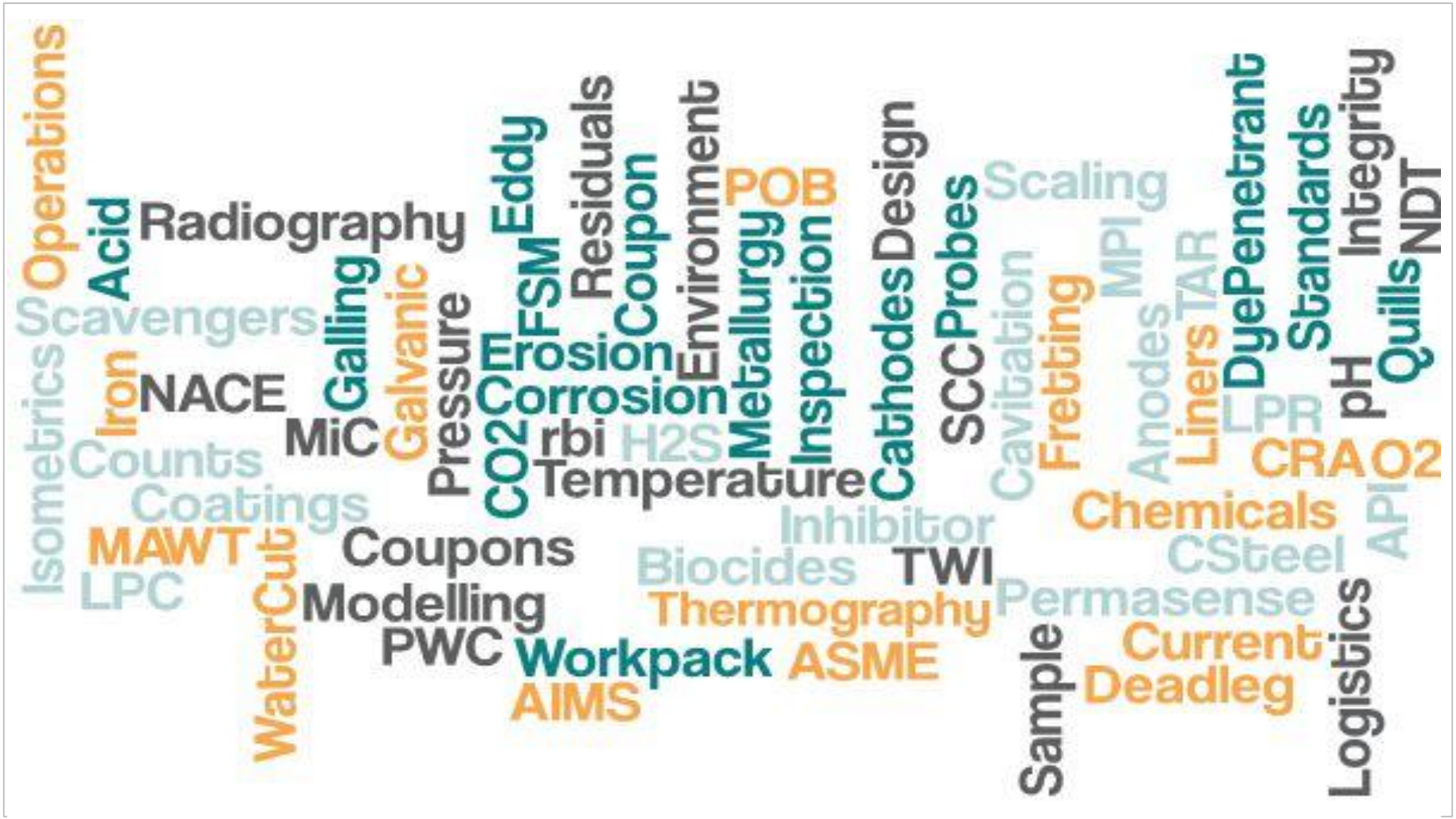
Oil & Gas Industry Challenges

- Ageing Assets
- Declining Production
- Increased Maintenance / Inspection challenges
- POB Limitations

Value of Advanced Instrumentation

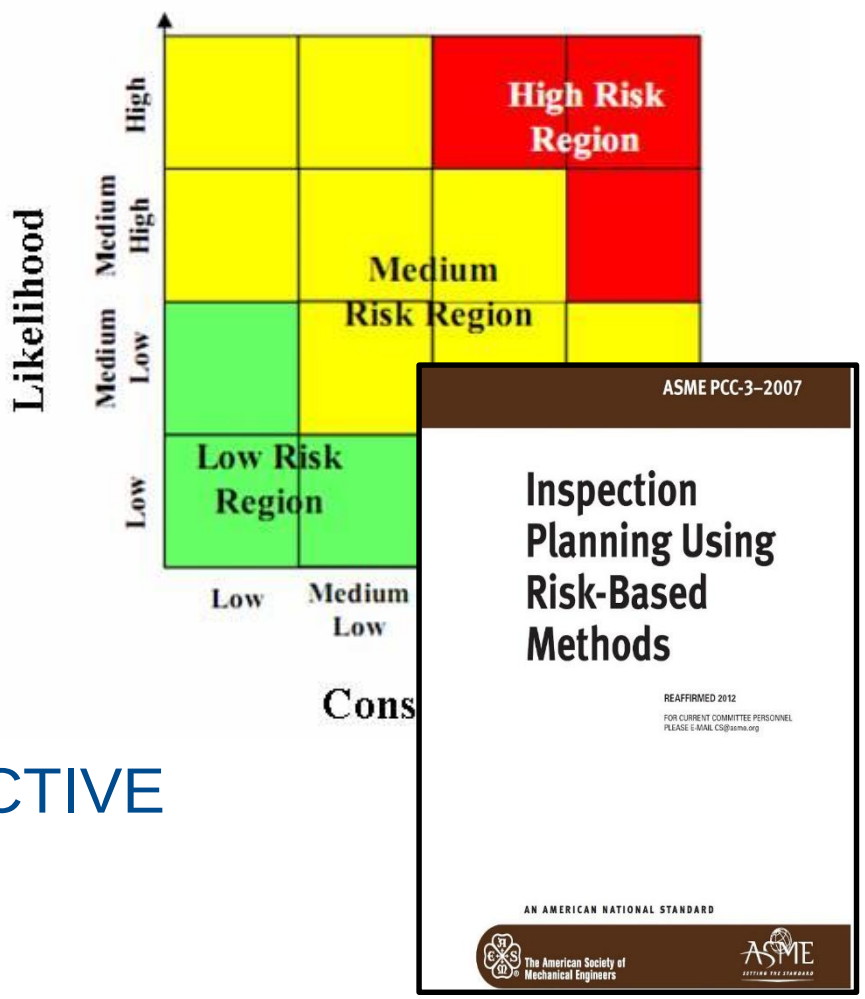
- Continuous Monitoring
- Remote Monitoring
- Data Visualisation & Analysis software
- Lower Installation costs

Asset Integrity Management



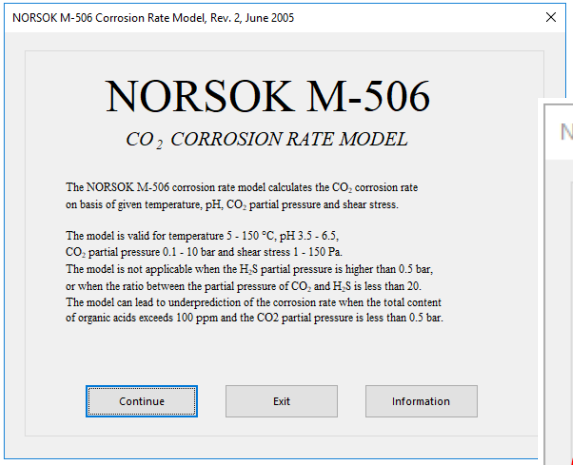
Risk Based Inspection

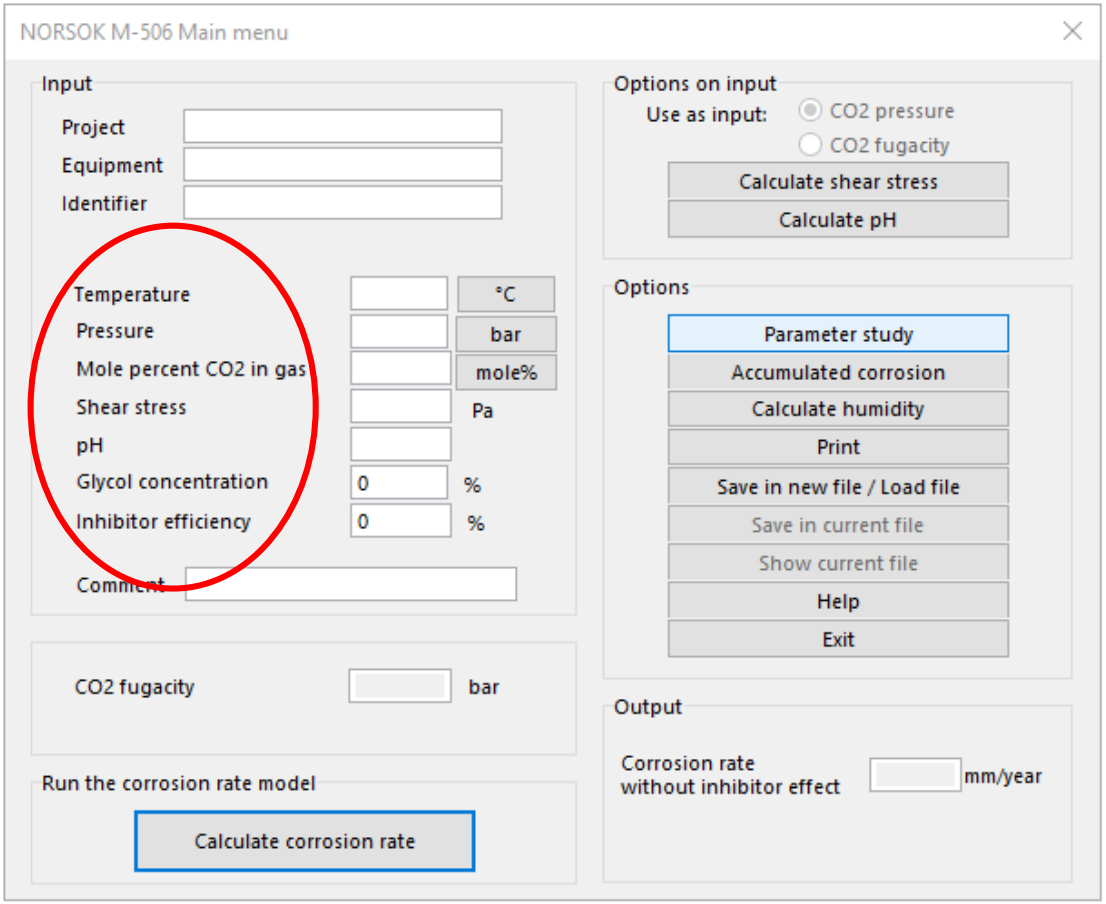
- Criticality = Likelihood x Consequence
- Inspection scheduling / planning



REACTIVE not PROACTIVE

CO2 Corrosion Modelling Example





The Role of Advanced Instrumentation in Process Integrity Management

- Real-time monitoring of process parameters
- Trend changing process conditions
- Verify integrity of plant equipment & pipework
- Predict future rates of corrosion

Integrity Advantages of Advanced Instrumentation

- Monitor high risk locations
- Monitor difficult to access potentially hazardous locations
- Verification of RBI methodology
- More efficient scheduling of inspection resources

Operational Advantages of Advanced Instrumentation

- Process Optimisation
- Higher plant availability requirements
- Longer runs between maintenance shutdowns
- Tighter HSE regulations
- Tighter CAPEX budgets
- More remote/unmanned or ageing assets

Data-driven decision making

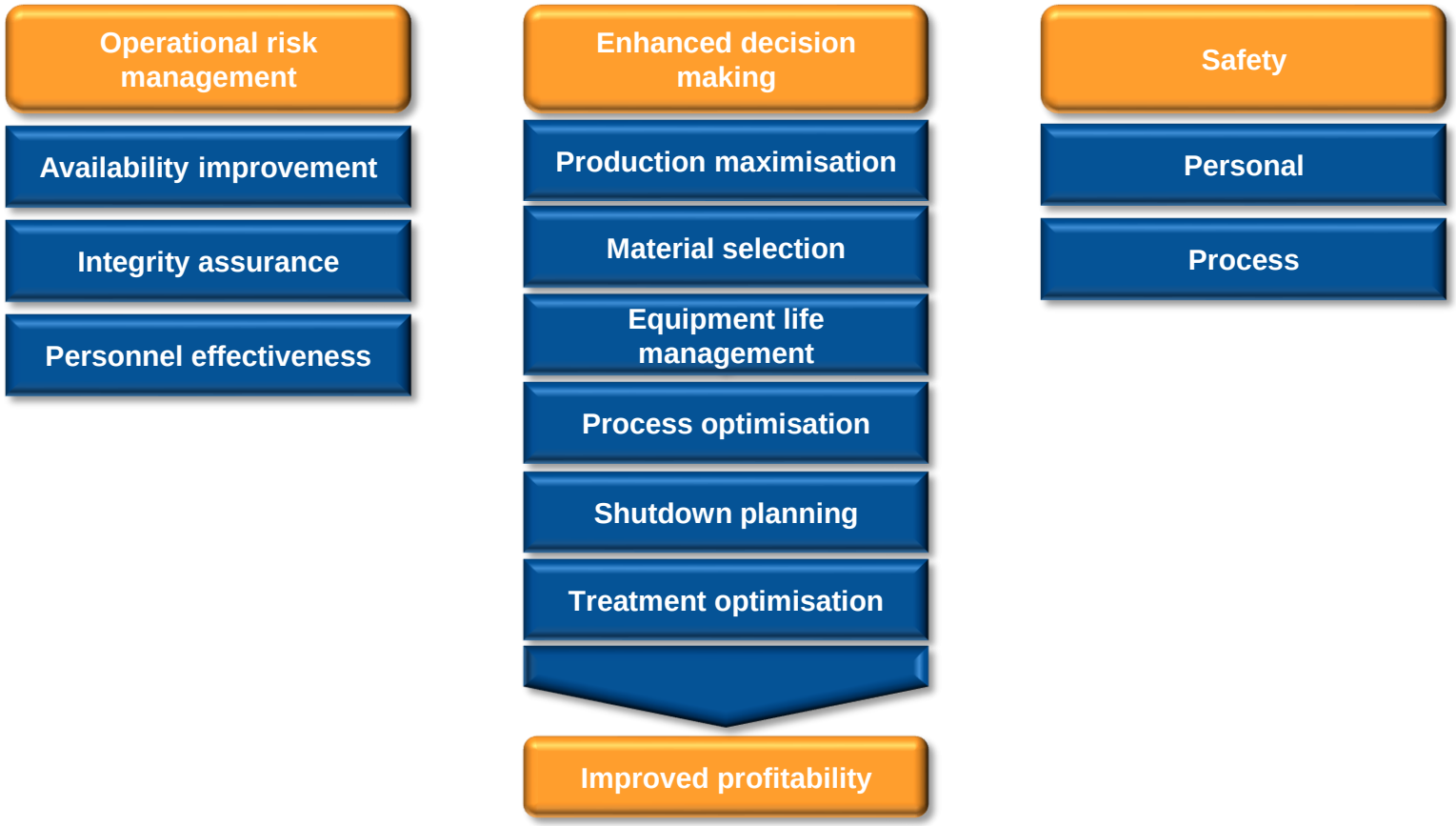
Increased margin $

Leaks/ loss of containment

Overly conservative operations

Reduced margin

Improved Risk Management, Profitability and Safety



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THANK YOU FOR YOUR ATTENTION
ANY QUESTIONS?