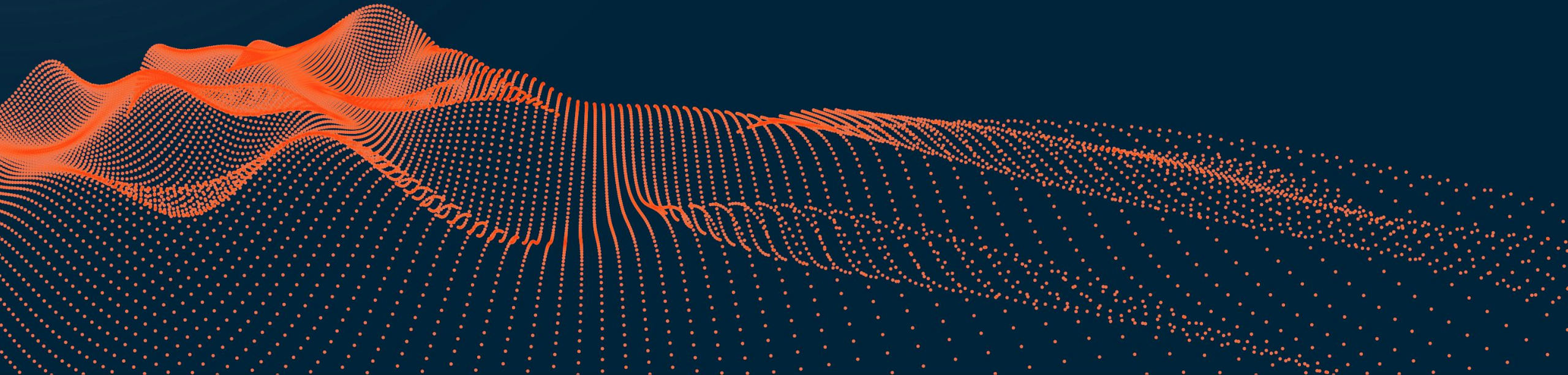


# Data Analytics in Asset Integrity

TOOLS OR BEST PRACTISES  
AROUND OPERATIONAL RISK  
MANAGEMENT



## WHO ARE WE

- Asset Integrity Management Consultancy
- Multidiscipline group of engineers, data science, & oil and gas professionals
- Extensive background in asset integrity management and R&D

## WHAT WE DO

- We build trusted relationships
- By combining engineering expertise with commercial understanding to deliver financial value to asset owners
- We use a combination of traditional and advanced techniques to better fit and enable decisions and performance optimization



## OUR OBJECTIVES

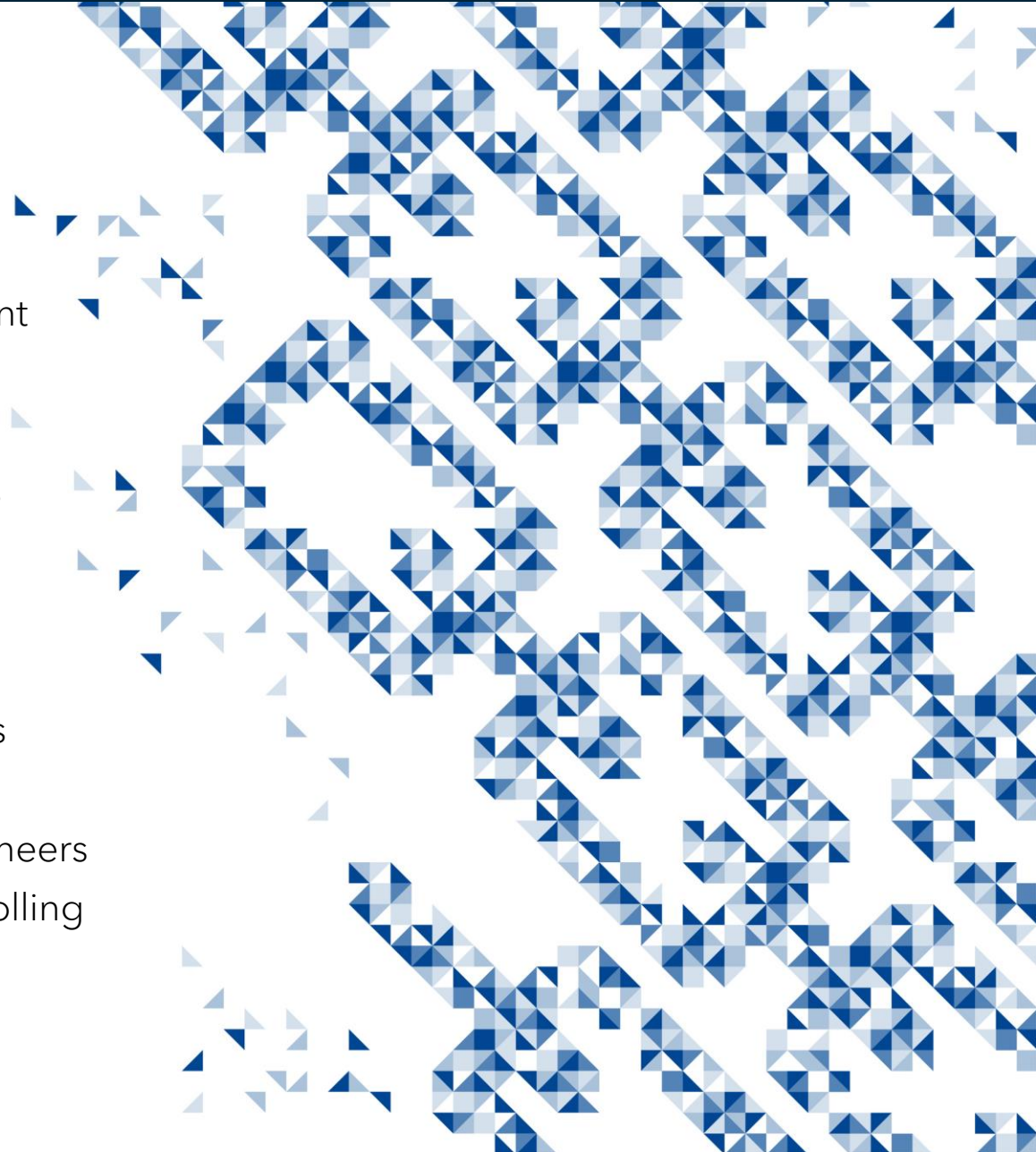
- To use digitalization and data analytics to help businesses regardless of sector or industry
- Decipher and benefit from uncleaned/uncategorized Data
- We generate and use data to innovate and digitize organizational change
- Accurately mapping and predicting integrity activities
- Exact - Powered by AIDA





## What is the latest thinking in Energy & New Technologies

- We consider that next generation, cost effective asset management relies on data
- As industry we know we produce a lot of data, though verifying its quality and finding actionable insight from it can be challenging.
- Data collection and its effective management, interpretation and evaluation are at the core of what we do and fuels our technologies
- A thorough understanding of relevant data enables integrity engineers and asset managers to make more informed decisions when controlling degradation and risk while working with constrained resources, to maximise business profitability.



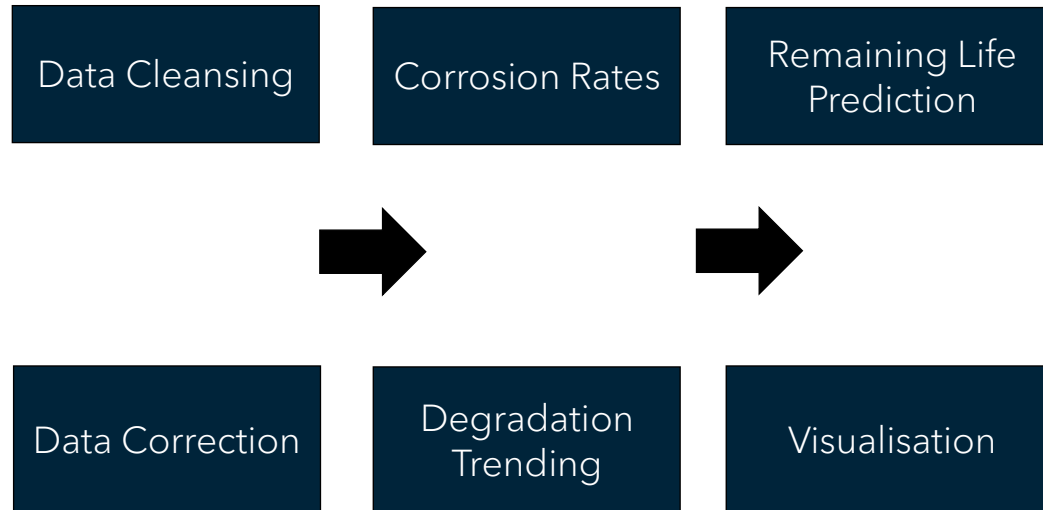
# AIDA -EXACT

Data cleansing, correction analysis & trending of integrity data

## INPUTS



## EXACT + ENGINEERING INSIGHTS



## OUTPUTS



▲ EXTRACT

▲ EXACT

▲ REFLEX

CURRENT  
INSPECTION REPORTS



DIGITAL  
INSPECTION DATA



EXACT  
OUTPUT



OPTIMAL RESOURCE  
DEPLOYMENT



DIGITISE

ANALYSE

OPTIMISE



HISTORIC  
UNSTRUCTURED FILES



REAL TIME  
DATA



INTEGRITY  
PLAN

▲ ALERT

# Advanced Integrity Data Analytics

2020

Major operator  
UKCS late life asset

Problem

Lack of confidence in condition  
Lack of confidence in data needed to solve the problem

8 Weeks

Identified Issues of over and under spend  
Restored confidence in asset condition

Value

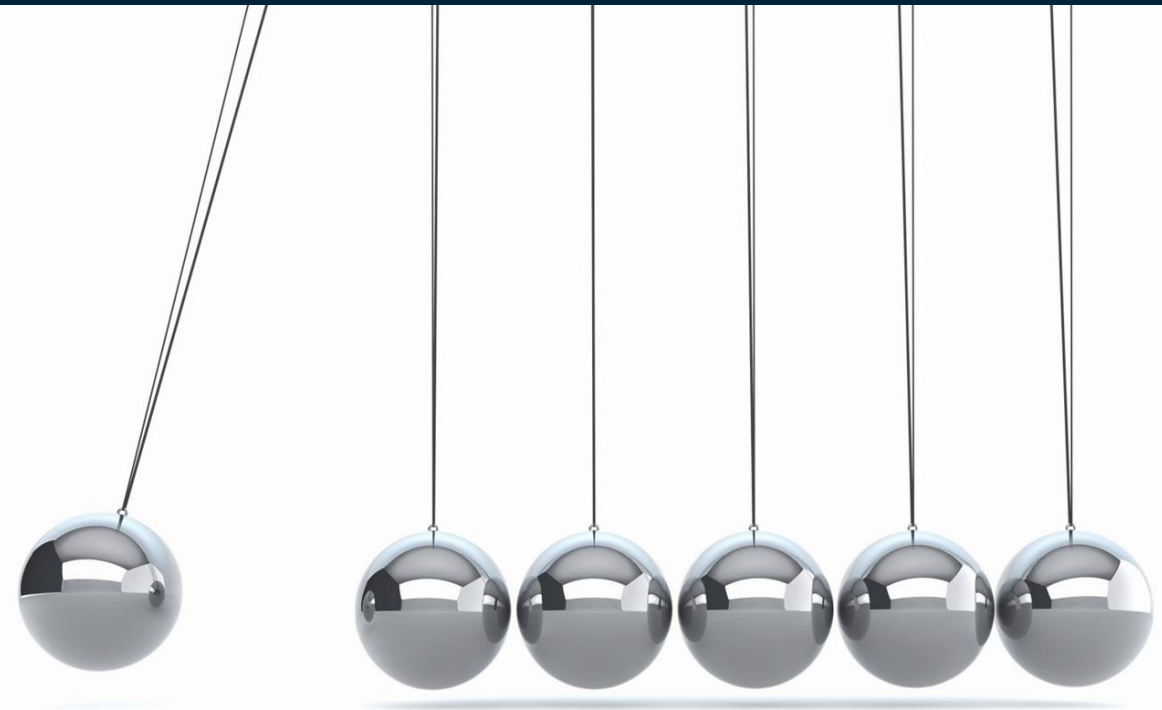
60% reduction in current year inspection  
2 undetected imminent failures identified

## COMMERCIAL

1. Results within 6-8 weeks
2. Return on investment in 1 year
3. Further savings year on year after this

## ENGINEERING

1. Less inspection, less failures
2. Clear justification for deferral
3. Clear justification for spend





- Data is key
- Small changes can provide huge incremental benefits across businesses
- The results are proven - better optimisation, improved efficiencies and decrease in down time.
- Digitalisation + Data Analytics is at the core of our AIM model.
- Digital transformation “done right” powered by AIDA can leap frog current performance and take you ahead of the competition

