KPMG

GCloud 14
Sustainment Engineering

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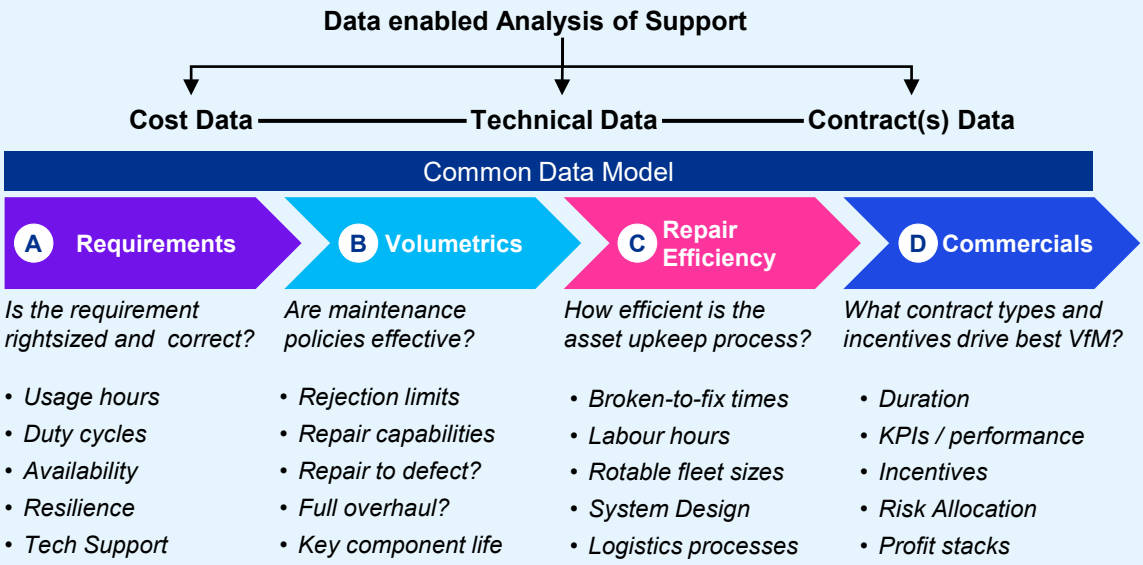
What is Sustainment Engineering?

Sustainment Engineering lowers asset upkeep costs whilst sustaining or improving asset availability. Support costs are driven by four interrelated, complex and compounding factors, which we call ABCD. Using a common data model, a consistent methodology and value focused tool set across ABCD allows us to support customers critically analyse and sustainably improve:

A. Requirement Setting
B. Volumetrics
C. Repair Efficiency
D. Commercials

Sustainment Engineering Methodology



Sustainment Engineering delivers data driven critical analysis of 'end to end' asset support to

Increase Availability

Asset reliability improves, and time-to-fix reduces. This enables asset users to sustain effectiveness better and become more responsive to changes the requirements.

Reduce Costs

The digital' thread of data across ABCD allows value opportunities to be identified, sized and acted upon in the right order. It allows 'what if' analysis, targeting improvement work into the right areas.

Improved Collaboration

The digital thread at the heart of Sustainment Engineering enables multiple stakeholders to collaborate around the same data to achieve the required agility and accelerated performance.

Benchmarking & Scalability

The ability to work from a common data model enables direct identification of performance outliers, gap identification and the fast application of better methods, tooling and policies.

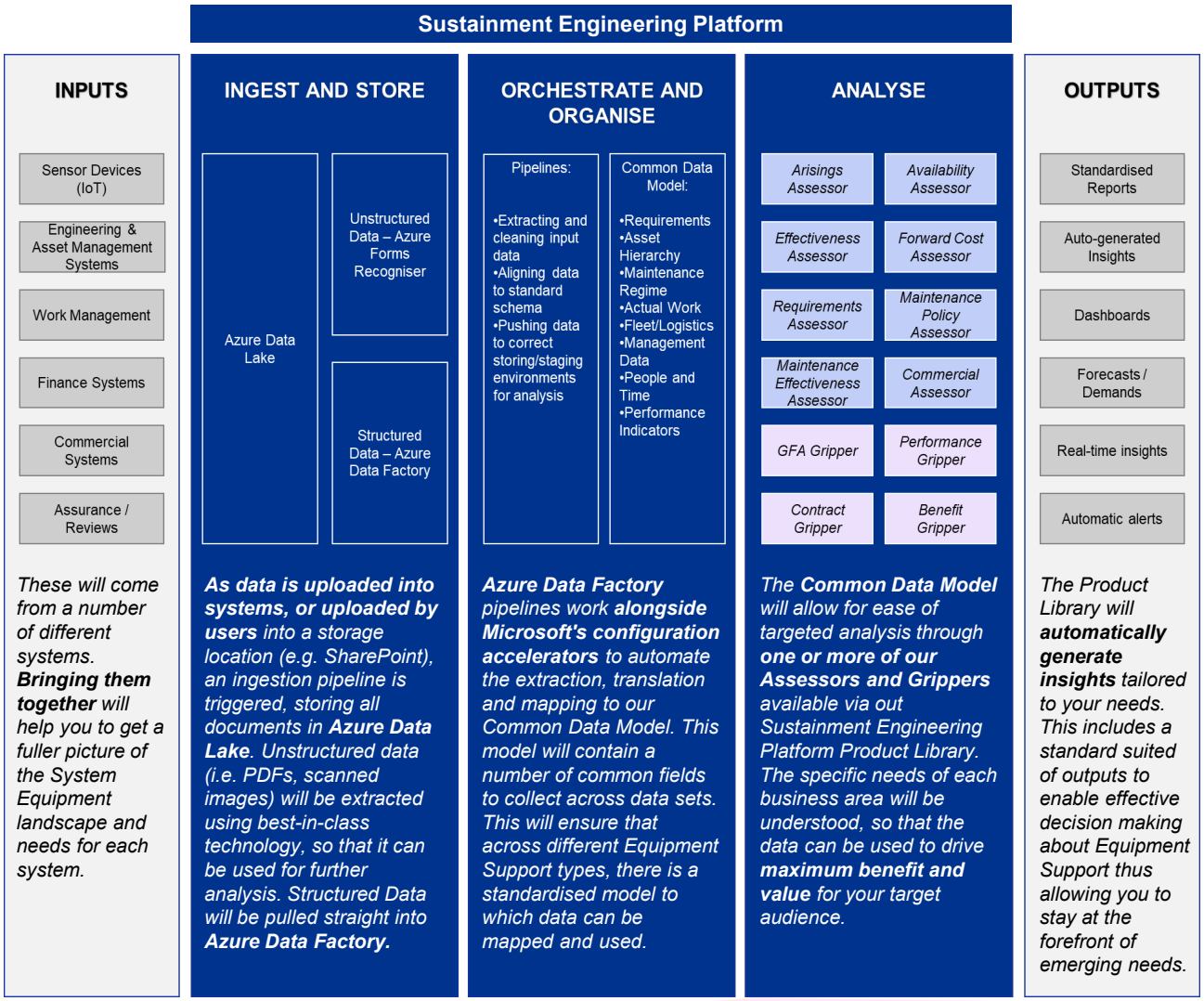
How do we support Sustainment Engineering?

Sustainment Engineering is the identification, review, assessment and resolution of deficiencies across an assets support construct. We have curated the development of 12 products and services that are fully enabled by our **Sustainment Engineering Platform.** The underpinning technology allows you to:

- Get insights across your data by collating and analysing multiple cost and availability defining data sources
- Reduce upkeep costs, increased asset availability and reduce user disruption using primary data including, real-time information, to improve decision making
- Extending overall system effectiveness through the ability to detect, monitor, analyse and treat system performance inefficacies.

Our Sustainment Engineering Platform

By pulling all input data sources into a Common Data Model, our Sustainment Engineering Platform (SEP) will enable users to be able to drive insights from a set of Common Data Fields in order to generate insights. We will work alongside you to understand the specific nuances of each business requirement, to understand the data available, the outputs that are required and how we can cut the data to generate the insights you require.



Our Sustainment Engineering Platform Product Library

Our Sustainment Engineering Product Library comprises of 8 Assessors and 4 Grippers which enables critical analysis of asset support data to improve asset availability and reduce asset support costs:
These are split into:

- **Assessors:** these insight products assist Equipment Support teams to improve availability and reduce support costs by critically analysing requirements, maintenance polices, maintenance efficiency and the commercial constructs that provide vendor support .
- **Grippers:** these control products offer real-time analysis of equipment location, availability and supply chain disposition and contract performance, allowing the organisation to make informed management decisions using real-time data to deliver the required outputs and best value for money.

Further detail about the Assessors and Grippers available can be found overleaf

What is our SEP Product Library?

Our Common Data Model allows us to the data into a number of views. These will help you to understand your system equipment better and make strategic decisions to enable you to be more effective and efficient in the Defence space. Each of our Assessors and Grippers have been described below.

Assessors	
Arisings Assessor	*Analyses past reliability, failure modes, and future usage plans to predict future rejections of rotable equipment. This data-driven approach enables accurate demand forecasting, identifies necessary supply flexibility, and improves availability confidence, ultimately maximizing value for money.*
Availability Assessor	*Uses real-world data to create a virtual model of equipment usage and maintenance. This allows for testing different system designs, performance levels, and process changes virtually, enabling you to optimise availability and cost efficiency without real-world implementation risks and costs.*
Effectiveness Assessor	*Uses industrial engineering techniques to measure work effectiveness and identify opportunities for improvement in methods, utilisation, or effort. It builds a cloud-based database of work, quantifies and sizes the reasons for work frustration, and recommends improvement strategies.*
Forward Cost Assessor	*Will interrogate pricing mechanisms and financial manipulations under-pinning supplier cost models, built from customer-led requirements, and processed using SEP. Effective in single source contracts with strict pricing/profit rules. This capability may be customer-updated beyond initial build.*
Requirements Assessor	*Analyses volumetric and duty cycle requirement specifications to identify improvement opportunities in method, data exploitation, and accuracy. This leads to better budgeting and ensures accurate demand forecasts for internal and supplier use.*
Maintenance Policy Assessor	*Critically analyses equipment maintenance policies to safely reduce the number and cost of repair events. Data-driven subject matter experts will review maintenance polices to identify and size opportunities to reduce sustainment costs, user disruption and improve availability.*
Maintenance Effectiveness Assessor	*Analyses equipment maintenance efficiency to reduce repair times, labour costs, and working capital. A dynamic model of asset usage and maintenance identifies areas for improvement, and time standards for maintenance work are developed to quantify and size improvement opportunities.*
Commercial Assessor	*Analyses equipment/asset support contracts to identify opportunities for improved vendor performance. A gap analysis compares the contract against best practices and precedents, focusing on key areas like reporting, transparency, performance management, and flexibility.*

Grippers	
GFE Gripper	*Tracks the location and condition of assets in real-time, using user-defined rules to flag assets requiring attention. This reduces asset loss, time-to-find, automates stock-takes, enables timely maintenance, and optimizes asset distribution.*
Performance Gripper	*Tracks real-time location and condition of government assets across supply chains. Data analysis is tailored to asset managers' needs enables better decision-making, improved asset flow, and increased availability. This establishes continuous asset monitoring for better visibility and control.*
Contract Gripper	*Tracks real-time location and condition of government assets across supply chains. Data analysis against contractual requirements identifies performance gaps and enables better decision-making. Allows for continuous contract performance monitoring for improved accountability and compliance.*
Improvement Gripper	*Evaluates the applicability and impact of known and effective efficiency levers, digital tools, and methods in asset supply and maintenance systems. It identifies actionable changes for performance and cost improvements, tracks their implementation, and monitors their impact.*