MDO FOCUS
ON MRO DATA

A big part of the operations of asset-intensive industry deals with MROs. Short for Maintenance, Repair, and Operations items, they comprise components and consumables that contribute to the production of finished goods. The nature of these items, such as lubricants, nuts, and bolts make them harder to track and often get overlooked.

Master Data Online (MDO) is an enterprise data platform that provides the protection layer for data entering your systems. It manages all key aspects of data quality and governance. Its Data Intelligence Workbench (DIW) delivers high-quality data using various models and business rules, both pre-defined and customized.

MDO has all the capabilities to track and manage MRO data — ultimately, harnessing this data to digitally transform your business.

MRO Data Challenges

- No framework and governance for MRO creation
  - Duplicate entries become inevitable, leading to duplicate stock in inventory.
  - Rampant PO free-text entries, leading to unmanaged spending and "squirrel stores".

- No end-to-end visibility and analytics
  - Hard to do supply chain planning. Unplanned purchasing and maintenance become the norms.
  - Not able to leverage complete data to negotiate the best deals with OEM suppliers.

- No automation
  - Corresponding contract and supplier data don't get updated with MRO data changes — risks of misinformation.

- No data ownership
  - Data quality isn't guaranteed, nobody trusts data, leading to manual work behind the scenes.

These challenges can impede your organization's strategic initiatives of cost savings, productivity, and efficiency.

MDO Approach for MRO Data

- Analyze and Qualify
  - Analyze data in both Material Master and PO Free Text.
  - Qualify data that needs to be catalogued (e.g. high-criticality spares to be in inventory).

- Spec Library and Standards
  - Define the standards based on the industry and application of the materials. The Spec Library becomes the key mandate to catalog MROs, used to generate descriptions as opposed to free-text inputs.

- Cleanse and Enrich
  - Enrich the standardized MRO data with industry-relevant descriptions and attributes using AI and ML for part descriptions and manufacturer numbers.

- Master Data Governance
  - Deliver complete Material Master covering supplier, maintenance, and plant details.
  - Establish governance models and roles, flexible to evolve over time.

The first three steps apply to existing data while the fourth step involves on-going governance to both existing and incoming data.

Key Solution Differentiators

- PO Free Text Handling
  - Analysis of free text patterns to determine qualification criteria and schema rules to create additional placeholders in the dataset (e.g. Manufacturer's Part Number, OEM Part Number, and Manufacturer). The free text gets broken up and fed into various attribute fields.
  - Data enrichment — combination of our Content Library, ECCMA, and experienced Data Quality Service team to deliver:
    - Spec Library
    - Enriched descriptions and multiple manufacturers' (HERS) data

- Content Library (ConnektHub)
  - Various pre-defined schemas, specifications, and standards across industries — ready to use.

- One-stop Master Data Governance Platform
  - Integration of MRO data on one platform. This ensures unique MRO records, hence maintaining data integrity across multiple areas, including Procurement, Plant, and Maintenance.
  - In-built classification of UNSPSC and eOTD standards for consistent naming conventions.
  - Ongoing data governance based upon defined business rules.

- Supplier Self-service
  - The MDO RFS-115 framework (based on ISO 8000-115 Master Data Exchange) allows suppliers to directly maintain details of their parts and quotes. Data accuracy is upheld with data ownership being shifted to the suppliers.

- Out-of-the-box Integration with SAP
  - Seamlessly integrate with SAP environment through SAP Cloud Platform.
  - Able to support various protocols to send and receive data from other ERP systems. Minimal coding required.

Benefits of Managing MRO Data

- Enable the reduction of Free-Text spend
  - Free-Text spend is uncontrolled spend. When converted to using cataloged materials the spend falls into controllable categories and therefore negotiable. This enables the Procurement Team.
  - 5 to 10% savings on current Free-Text spend with little effort.

- Working Capital
  - Duplicates directly impact working capital and the labor required to manage these materials.
  - Reduced spend.

- Increased Productivity
  - Enable comprehensive supply chain planning that involves Maintenance, Procurement, and Inventory through visibility in MRO movement.
  - Minimize unplanned breakdowns.

- Foundation for Data Culture
  - Establish data ownership and governance through business roles, approvals, and validation rules.
  - Instill data culture where people fully utilize data to execute daily tasks, collaborate, and make decisions.