



New business models need to adapt to meet new customer expectations, reaching new horizons of operational effectiveness in a digitalized supply chain



Companies are rethinking and transforming their supply chains to meet the standards and demands of the Fourth Industrial Revolution, also known as Industry 4.0. As new technologies emerge, processes must adapt to keep up with changing customer expectations. Besides the need to adapt, supply chains can also reach new levels of operational effectiveness by leveraging the emerging digital business models to support a digital supply chain. Supply chains need to become much faster, more agile, and much more precise.

Maintenance, Repair and Operations (MRO) is part of a company's supply chain that has a direct relationship with a company's ability to optimize business operations, produce consistent quality of products and meet customer's expectations. Effective sourcing and management of MRO spare parts is integral to the digital supply chain strategy. Maintaining the right inventory at the appropriate levels is a consistent challenge with MRO.

MRO parts should be classified into four groups (**Inactive, Slow Moving, Fast Moving, and Critical**) based on the parts' usage. Sourcing, replenishment and stocking strategies should be developed for each of these categories and managed for operational efficiencies to support the digital supply chain.





MRO Optimizer advances a digital supply chain and helps the business by:

- growing the profit margin
- automating the replenishment processes and reducing manual work
- improving productivity through reduced downtime

MRO Optimizer uses a systematic approach to:

- identify and reduce duplicate parts through Machine Learning (ML)
- predict the MRO demand using custom rules, IoT machine data, and Artificial Intelligence (AI)
- optimize MRO inventory levels with increasing statistical confidence and continuously improving outcomes as the system is used
- keep the plant running by reducing stockouts

MRO Optimizer seamlessly integrates with **Oracle E-Business Suite, Oracle Supply Chain Cloud, JD Edwards, PeopleSoft, or any maintenance ERP application** and can automate item replenishment and sourcing processes.

MRO Optimizer is powered by Hamiltonian’s Käsei Data Management platform, allowing for Data Governance and workflow-based policies.

MRO Optimizer can be configured to ingest, process, create, and edit your MRO data using REST and SOAP webservices to integrate with the source application, and manage bi-directional data processing.





MRO Optimizer puts your data to work, for you.



Planned Orders allow changes to be made before creating requisitions:

- User-friendly interface to change the values
- Suggestions and ranking based on where the item is used, asset criticality and customer order status



Min-Max and other safety stock quantity adjustment suggestions can factor in:

- Asset criticality
- Equipment Constraints
- Past Usage
- Future Usage based on planned production/customer orders
- Planned Maintenance (PMs/PdMs)



Creation of Asset BOMs periodically from item issues



Item lead times are optimized to:

- Assign items to lead time buckets (ex: 1 Week, 2 Weeks, 4 Weeks etc.)
- Change the item lead time based on POs, receipts, and supplier response



Optimal stock levels can work across orgs/sub-inventories to:

- Look at inventory from other orgs that can be transferred to cover immediate need
- Separate item needs for special projects





We formulate and implement solutions that are vital for businesses to be competitive.

We Are The Hamiltonian.

We ensure that our customers are empowered to make right decisions with right data using right processes at the right time.

Through our **Optimizer** for supply chain, we improve bottom line results, reduce inventory and improve productivity.

With our **Data Lifecycle Management** solution, we make data simple, appropriate and actionable for businesses.

With our **IoT** solutions for supply chain industries, we alert issues, predict potential problems, and empower users to resolve issues on time.

We work with customers who have implemented Oracle Cloud Applications and Oracle E-Business Suite.



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