

5 Steps to Getting on the Right Track in [MRO Inventory Management](#)

In June 2018, I was invited to speak at the [UK Manufacturing and Supply Chain Conference](#) in Coventry on the Subject of MRO Inventory Management. Based on the standing room only, it was obvious from the start that this is a growing pain for organisations, large and small.

My focus was not to solve all MRO Inventory Management issues in one foul swoop though. Rather, I wanted to show how organisations could take some light touch, manageable steps to **reduce MRO inventory levels and costs while maintaining their maintenance SLAs and downtime KPIs**.

Put another way, how to use Advanced Analytics to drive usable insights and visual outputs to help move from ‘trench warfare’ to meaningful collaboration between Finance, Maintenance and Asset Management.

The premise of my talk was that there is some middle ground between advanced MRO spare parts optimisation and the typical minimum or maximum levels of stock.

The main attendees came from Utilities, Logistics and Heavy Manufacturing and they actually all had very similar **challenges**.

- How can we balance the competing goals of maximising our working capital and minimising the risk of downtime due to stock outs?
- How can we identify current obsolete stock? How can we monitor when stock is going to become obsolete? How can we identify what we can remove from our warehouse and balance sheet?
- How can we improve our data quality to include things such as asset criticality?
- How can we get a clear picture of our current MRO stock levels, segmented by stock types, SKUs or location to help us to understand optimum strategies for each?
- How can we look at unusual behaviours to ensure we are alerted to stock out risks or inefficient buying behaviour that is costing us money?
- Ultimately, how can we get decision support information that all different parties can agree on?



[Getting MRO Inventory Management Right](#)

Traditionally MRO Inventory Management has been based on gut feel, experience and complex spreadsheets. Centralised Asset Management Systems such as IBM Maximo, store the relevant data (often in very poor quality), but cannot analyse or present it in a way that the business can use to deliver the maintenance required and the optimum stock levels.

Advanced Analytics:

- offers an insight driven approach that **delivers outputs** through easy to consume visual dashboards,
- delivers an **ongoing process** rather than a one-time snapshot of your inventory data,
- provides for immediate results **to identify and remove obsolete stock** and

- enables an on-going capability to maintain your **optimal levels of different MRO inventory** and **improve data quality** where required for better and more accurate insights.

Front and centre to the success or failure of a solution is **gaining buy-in and trust from all the stakeholders** involved. For Finance this means showing that inventory optimisation is not the same as inventory reduction. For operations this means showing clear evidence that inventory reduction will not increase risk of a stock out.

So how can Advanced Analytics bring the right mix of inventory to deliver both cost effectiveness and the highest performance for maintenance?

1. **Help in defining what is critical** – In a certain Utility, classifying stock items based on recency and frequency allowed them to immediately identify non-moving stock and then use the SKU value to get to work creating a criticality index. This was then added to the analysis. In doing so, they considered the risks and costs associated from a stock out of each non-moving spare part. The impact of downtime on the business and the work around options were investigated, which delivered an accurate criticality for each item.



2. **Current inventory segmentation** – You can plan and establish inventory control per category and set different strategies, based on lead time, criticality, movement frequency, insurance items, cost, etc. The ability to drill down and segment your stock helps ensure that appropriate policies are applied consistently. Not all spare parts will be managed in the same way. Segmentation will also help focus clear ownership and discussions with the relevant stake holders.



3. **Reduce current and future obsolete stock** – Visualising the stock usage history, you can quickly see which parts are non-moving, remove the non-critical parts and, on an on-going basis, monitor which parts are becoming obsolete. This can also take into consideration changes of equipment and machinery.



4. **Demand forecasting for slow, seasonal and lumpy demand items** – As much as 90% of MRO inventory can be defined as slow moving, so it's important that forecasts for demand also take lead time and irregular usage patterns into account.



5. **True Collaboration to achieve business results** – All Advanced Analytics initiatives come to nought unless the business owner uses the outputs. A critical point raised several times at my talk was that people had seen the technology as “Black Box” where the maintenance operators ignored the outputs because they couldn't understand the logic behind them. Insights displayed in an “easy to use” format are critical in getting buy-in from the different stakeholders, each with their own respective KPIs.



An interesting point raised by one participant was that **they see the MRO Inventory Management as the first step in their journey to full Predictive Maintenance**. Given the limited data required to deliver MRO spare parts optimisation and the significant ROI that can be achieved, this is a space that looks set for explosive growth.

About Presidion

Presidion have operated for over 20 years and have been the pioneers in implementing cutting edge Predictive Analytics solutions with top UK and Irish organisations. We specialise in helping organisations leverage their data to deliver tangible practical returns on investment, aligned with their strategies.

Presidion works with both government and commercial clients, currently partnering with hundreds of organisations enabling them to understand what has happened in the past, anticipate what may happen next to take appropriate and timely strategic decisions for their organisation.