



STOREROOM & MRO



ERUDITIO

MRO Storeroom Associates Final Case Study

A3 Strategic Project Charter



Business Opportunity Our MRO is focused on sustainable processes and achieving cost objectives by implementing solutions aimed at avoiding stock outs. This project is focused on driving M4_SR Stock Health to the 97% target. Strategic Objectives: • Increase M4 Storeroom Service Level by 3% by 1NOV2024. • Identify top 25 Back Ordered Items in M4_SR proposing solutions using proven methods by 1NOV2024. • Create general inventory criticality matrix by 1NOV2024. Benefit: A/Critical Item adjustment, cost avoidance + accrued carrying cost.	Target Condition • Storeroom Service Level Target for M4_SR increased by 3% (Current Year to Date = 92.9%). • Complete 100% analysis for top 25 items BO offenders and provide recommendations. • Criticality Matrix developed and presented by EOY to stakeholders.												
Current Condition Strengths: • All inventory is currently classified • KPI objectives are transparent • All items have minimum • Most INV is tied to assets Weaknesses: • No formalized ROP/ROQ Calculation • BO % is high • Too many variables while developing criticality matrix • Lead times might not be accurate SWOT Analysis Opportunities: • The ability to reduce the inventory value without creating risks to the site. • Providing a global criticality matrix to properly classify inventory • General inventory optimization including late PO follow-up Threats: • Data integrity pushing to MRO dashboard • Buy-in from team • Proven calculation for ROP/ROQ	Proposed Action Plan <table border="1"> <tr> <td>Asset Health</td><td>Improve Maintenance Effectiveness</td></tr> <tr> <td colspan="2"> • Create the Asset Catalog • Analyze Asset Criticality • Evaluate Failure Modes • Identify Mitigating Actions </td></tr> <tr> <td>Work Execution</td><td>Reduce Maintenance Costs</td></tr> <tr> <td colspan="2"> • Analyze Planning & Scheduling Effectiveness • Develop Effective Work Procedures • Evaluate Preventive Maintenance Effectiveness • Implement Standard Work for Quantitative PM Inspections </td></tr> <tr> <td>Reliability Engineering</td><td>Increase Focus Line Performance to 3-Sigma</td></tr> <tr> <td colspan="2"> • Resolve Critical Failures to Root Cause • Evaluate Focus Line Process Reliability • Evaluate Life Cycle Cost of Solutions • Optimize Maintenance Strategies </td></tr> </table>	Asset Health	Improve Maintenance Effectiveness	• Create the Asset Catalog • Analyze Asset Criticality • Evaluate Failure Modes • Identify Mitigating Actions		Work Execution	Reduce Maintenance Costs	• Analyze Planning & Scheduling Effectiveness • Develop Effective Work Procedures • Evaluate Preventive Maintenance Effectiveness • Implement Standard Work for Quantitative PM Inspections		Reliability Engineering	Increase Focus Line Performance to 3-Sigma	• Resolve Critical Failures to Root Cause • Evaluate Focus Line Process Reliability • Evaluate Life Cycle Cost of Solutions • Optimize Maintenance Strategies	
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Strategic alignment of MRO Storeroom:

The business case used (A-3) for the Storeroom process was to evaluate the current back orders and determine high offenders. These items were then evaluated to ensure they are linked to the assets and bill of material (BOM) properly. Once that was completed, we reviewed the lead time for the items and the reorder point and reorder quantity. Adjusted in all areas to improve back orders, which improves our key performance indicator (KPI) of Service Level. The initial report was pulled at the beginning of the project then it was pulled again on the specific items to verify improvement. Not only does this impact our KPI, but it will improve costs associated with rushing these items in and reduce waiting times for our maintenance teams.

Leadership sponsorship with the MRO Storeroom process within the overall facility operation was extremely high. This was an easy win due to my position as the MRO Manager. Along with the A-3 case discussed above we will continue to drive efforts around stock evaluation of movement/obsolescence, lead times, order points, duplication, and improved technologies overlaying our current processes. There is a bit of pushback regarding funding for a tool I believe is beneficial, but overall, my upper management team is extremely receptive to the improvements.

The initial primary area of focus regarding the Storeroom process was focusing on our Service Level KPI. However, after gaining valuable insights for the program we will be evaluating several other areas including storeroom layout, duplication, procedure improvements, item storage/maintenance, and asset/BOM association.

The improvement process:

My timeline for Storeroom implementation was relatively short. The initial report was generated upon program start (June 2024) and closed out at the end of the year 2024.

There were a few key milestones for this improvement. First was the initial identification upon the item list. Then the evaluation and revisions occurred. After that point the close out was when the items we reevaluated for back-order occurrences at the end of the year. They were measured via the reports, costs associated, and end of year list comparison. Due to this being a relatively small project to evaluate success, key milestones and timelines were easily attainable. The process now can be replicated for additional back ordered items for improvements and overall MRO efficiencies.

For this project, my Purchasing team most closely supported the Storeroom process as they assisted the analysis and revisions. They also monitored the back-order report as it is their daily function.

Results:

People were impacted by the implementation of the Storeroom process in a passive interaction. They were not informed of the change, but they experienced the positive position it put MRO in as their parts were available upon request. My 3rd party was impacted by an improved KPI and less urgency to rush orders on those items selected.

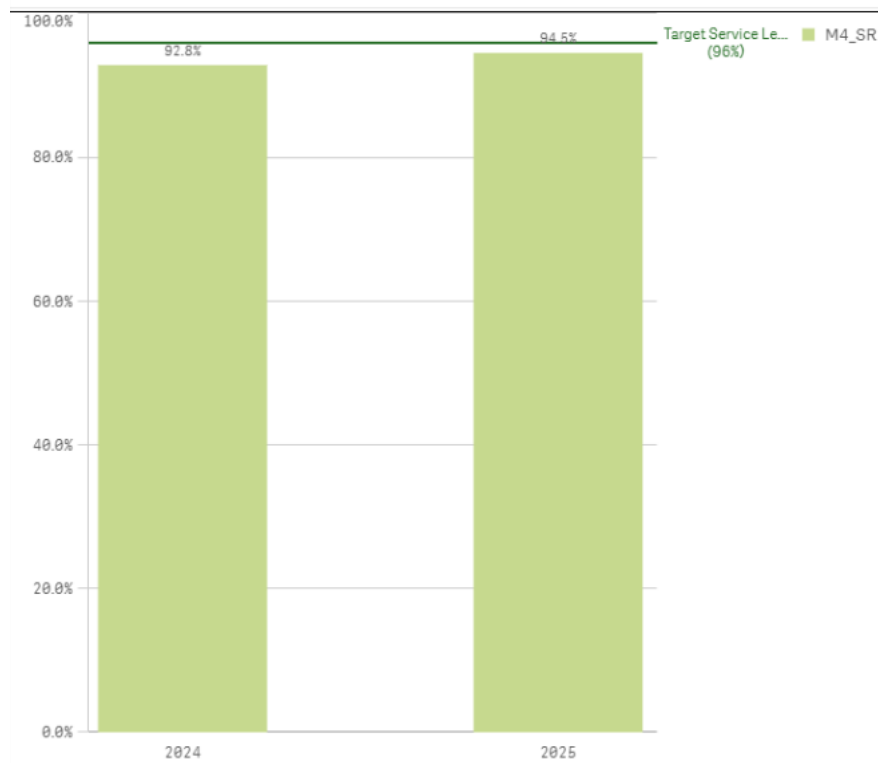
The primary measures of success for the implementation were KPI improvement, reduction in back orders, and no need for rush orders/shipping on those items.

We realized several benefits. One was improved MRO efficiency. Some others included accurate item setup for asset association, lead time, and reorder points and quantities.

Program Start: Storeroom Service Level Target for M4_SR increased by 3% (Current Year to Date = 92.9%).

Program End: Current Year = 94.5%

Calculation: The difference between the total number of issues made and the number of stock outs/back orders divided by the total number of issues made during the Measurement Window for M4 Stockroom.



Sustainability:

Currently my company is pitching for improved analytics to maintain the Storeroom process and new finds. We are looking at system overlays to identify duplication and possibly reduce storing locations. These analytics can also verify accurate lead times and adjust changes to reorder points and quantities.

The only leadership challenge associated with sustaining the gains is sourcing the funding and resources. I am confident that once the improved analytics are in place rules can be created for streamlined utilization. There are cost savings and cost avoidance that I have identified to offset the costs of the software. The other stipulation is that our computerized maintenance management system (CMMS) is validated. Therefore, only an approved IBM overlay would be allowed to connect and perform direct changes.

The next step for my company in general and that is imminent is to continue evaluation and contract negotiations with our 3rd party or determine if we want to switch vendors. This would have a direct relation to current processes, procedures, technologies and where to focus addressing gaps and inefficiencies.

Learning from this company's journey:

Other organizations can get started on Storeroom implementation by doing a thorough evaluation of storeroom state and processes. This assessment will determine the area to focus on as implementation can get overwhelming if the company is doing a complete overhaul all at once with many focus areas. Chunking out the implementation in stages will allow for dedication to adhering to the timeline strategy and embracing employee culture for the overall changes.

Culture plays a pivotal role when trying to make strategic improvements as the individual impact and buy-in is related to engagement. When the team is fully aligned and on board with an understanding of strategic impacts it will reduce resistance and increase sustainability.

Education plays an extremely key role in all processes, not only implementation. However, when you educate your team prior to implementation they are aware of the changes, and it can curb acceptance. This also increases the buy-in opposed to a disruptive turbulent change. Education provides the potential backbone to *why* you are changing and *what* methods have been proven in real-world applications, so it is not always necessary to "fail forward" while trying new techniques.