Lean and Beyond: Increasing the Awareness of MRO

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Manufacturers invest in reliability programs in order to deliver a reliable product at a competitive price. Reliable plants require reliable equipment that functions under prescribed lean principles; companies should look to “Lean and Beyond” to stay competitive.

There is a truism: You Can’t Be Lean With a Fat MRO Storeroom. You can have the most reliable maintenance programs; however, if your parts are unavailable when needed, the benefits of any program are diminished. Too many companies view MRO stores as a necessary evil; a situation recognized as a constraint but ignored as an opportunity for improvement. The recognition that a world-class MRO operation is a necessary component of reliable equipment [and a reliable plant] is essential. Subsequently, awareness is not enough; the ability to actually implement change is critical to produce a competitive and reliable product.

The missing link — as the more sophisticated companies are realizing — is the lack of a world-class MRO operation with a statement of work and direction linking operations to reliable maintenance practices.

Here Is the Fat Storeroom

Let’s compare a “Fat” storeroom to a Lean reliable stores operation. In a fat storeroom, inventory is inaccurate [no matter what reports say], inadequate descriptions exist and exist and exist; there are duplicated parts under different SKU numbers. On top of this, there is a negative stock turnover ratio. 50% of the inventory is unused or obsolete while the request to fill rate is less than 70%.

This lack of fulfillment causes uncontrolled “sub-stocks” to increase in order to guard against downtime. The existence of the storeroom itself creates a dumping ground for capital projects while warranties are lost or unused. As one company controller put it, we have “FISH” accounting methods: “First In-Still Here”.

A major critique of a fat store is the fact that the SKU’s do not relate to the Master Equipment List [MEL] and the ensuing Bill of Material [BOM]. There is little to no coordination of MRO operations relating to the deployment of maintenance reliability goals.

Why does this condition continue to exist? In most MRO stores, there is an unclear management direction among plant disciplines because the goals of each department are diverse and, at times, in conflict. Resistance to change – i.e. “this is the way we have always done it” – deters improvement; fear of the unknown – “will I have egg on my face?” – prevails. There is a basic lack of knowledge as to what to do, how to implement, etc., in order to go from “Fat” to “Lean.”

This situation is obfuscated by excuses such as “My opportunity costs would be too high…Who would do it”; “What would I do with my existing people?”; “Our current suppliers show up when needed; we can’t lose their service”.

Finally, management simply says, “It is what it is; put up with it” and they go on with “more important” matters.

So, stores remains fat and reliability suffers while reliability engineers work around the vacuity a fat stores operation creates.

Here Is the Lean Storeroom

Here are the financial and non-financial benefits that can be realized by going from FAT to LEAN

- Inventory turnover: From -1 to + 6
- Inventory reduction: 35%
- Request to fill rate: From 72% to 98.7%
- Spend reduction: 30%
- Freight reduction: 4.5%
- Warranty recovery: 90%
- Obsolescence recovery: 75%
- Supplier consolidation: from 288 to 6
- Transaction reduction: from 18,000 to 24
- Measured SKU price saving: from 5 to 10%

THE STOREROOM'S TOTAL COST OF OWNERSHIP [TCO] IS NOW AT OPTIMUM

Here Is Lean and Beyond

A Lean storeroom coordinated with the maintenance value stream goes beyond a lean world- class MRO operation.

MRO Lean & Beyond & the Maintenance Value Stream:

- Identification: SKU's vs. MEL
- Planning: BOMs Failure Modes [FMEA]
- Scheduling: Backlog Management; Mean Time To Repair[MTTR] contraction
- Execution: Kitting; Staging
- Reporting: Failure Mode Effects Analysis [FMEA] and Mean Time Between Repair [MTBR]

THE STOREROOM IS NOW LEAN (optimum T.C.O) AND A CONTRIBUTOR TO LEAN MAINTENANCE INCENTIVES.

There are two ways to acquire the desired stores operation:

1. Do It In House. The Eight "A"'s.

- Acknowledge the need
- Acquire the knowledge
- Assign the people
- Approve financing
- Access an experienced provider
- Accept the provider's offering
- Administrate the process
- Adjust the process and report the savings

2. Select a Third Party MRO Provider.

Select an expert MRO company with the experience and ability to deliver the actions needed for Lean and Beyond who will do so on site within your facilities. A statement of work that is constructed in concert with your chosen provider positions your program for success.

Traditional price quoting will not prove successful in the long run because the values needed are not just related to piece price. The selection decision should be based upon ability to optimize T.C.O., experience in on-site MRO management, and a guarantee of KPI (mutual) performance.

Know what you need to transform the storeroom to Lean and Beyond, then interview providers who will commit to your success. If you are not sure what to do, find a company who can guide success.

In the US economy that is struggling with worldwide competition, every cost recovery and process improvement opportunity is viewed as a critical part of the manufacturing process EXCEPT MRO STORES.

Any function within the manufacturing process proven to be a constraint to a reliable product and/or a detriment to plant profitability is changed or discarded EXCEPT MRO STORES.

Companies need to recognize that MRO stores cannot remain the exception.

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