

Developing a Maintenance “Master Plan”

By Mike Greenholtz, Vice President of Reliability Solutions, GenesisSolutions

In this article I will describe an approach for developing a Maintenance Master Plan, including the utilization of a Regeneration Process, which will provide the road map for the transformation and implementation effort.

Maintenance staff are constantly addressing the daily Run the Business needs. In today's environment of shrinking expense budgets, less capital for baseline equipment and facilities upgrades; coupled with staffing reductions or freezes, the Maintenance organization is already hard pressed for delivering results. Yet, every industry sector is currently looking at “Create the Future” scenarios to transform yesterdays work flow processes into a leaner, cost effective customer focused process. **The blueprint that defines your updated Maintenance organization charter, prioritized objectives and implementation schedule is the Maintenance Master Plan.**

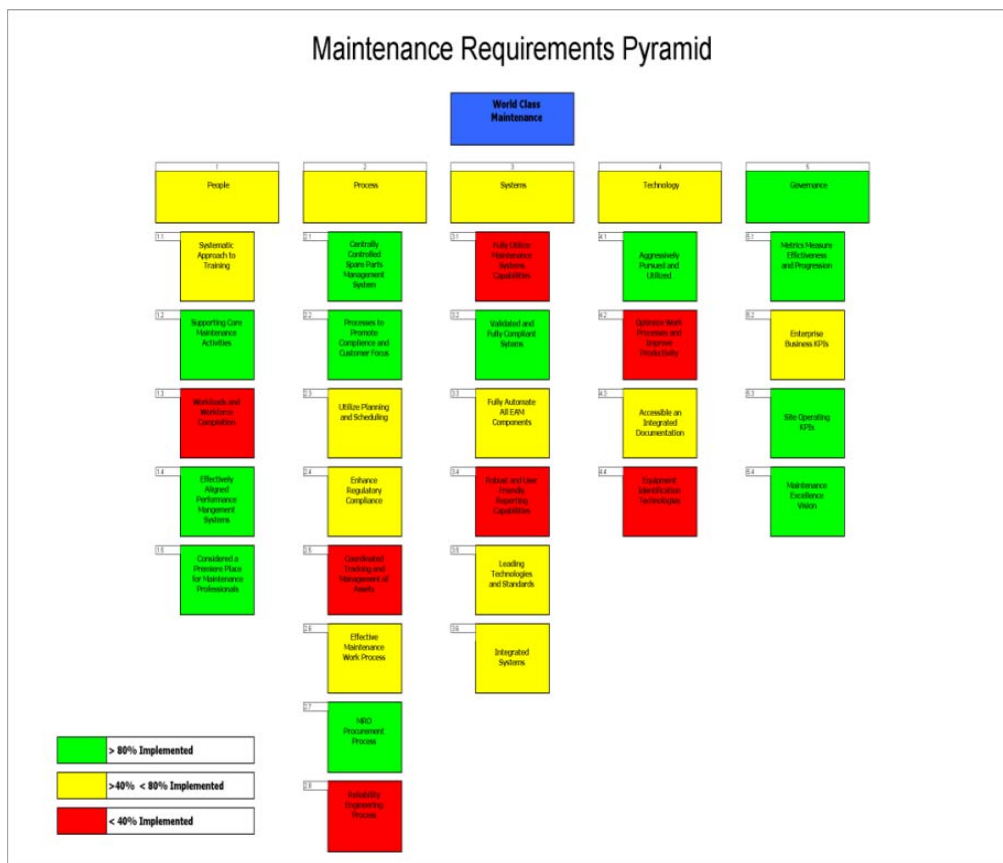
I subscribe to getting out in front of any transformation process to orchestrate a paradigm shift, as compared with being subjected to reactive organizational quick fixes. Let's face it; the Maintenance Department in general isn't necessarily known as the leading change agent within a plant. This may have a lot to do with time and resource constraints, difficulties navigating the change management process or perhaps the lack of buy in from the top. In my experience, **positioning your Maintenance organization to be viewed as a competitive advantage begins with making the business case for transforming the maintenance organization and associated processes.**

Achieving step function improvements in any process is seldom realized by merely tweaking the way we do work. A **Regeneration Process provides a simple, yet effective approach for laying out a Maintenance transformation road map and master plan.** Regeneration is defined as “an activity of renewal and revitalization.” So how can we use regeneration to transform our current Maintenance program from its current state to an improved future and evolving ideal state?

To begin, let's make the business case for change and **develop the value added proposition for transforming the existing maintenance processes.** I had previous success by **initiating a simple self-assessment survey** to several plants within my plant network. The survey was comprised of key elements, that when viewed in total, encompassed the overall Maintenance Process. The survey was reviewed prior to launch within the network, to insure we were comfortable with the survey language, definitions and also to be certain our responses were calibrated to a common standard.

The survey categories included **People, Process, Systems, Technology and Governance** and the associated responses were used to illustrate where we ranked on a Maintenance maturity curve. Additionally, **the survey clearly indicated opportunity areas as well as identifying existing best practices** that could be built upon and replicated. Each opportunity area was then benchmarked to similar industry verticals to extrapolate the inherent ROI's. In my case, the survey responses were presented to senior management as it provided a very accurate depiction of the status of our maintenance network (Figure 1.) By illustrating the potential opportunities and business impact, we gained endorsement to launch a Regeneration team.

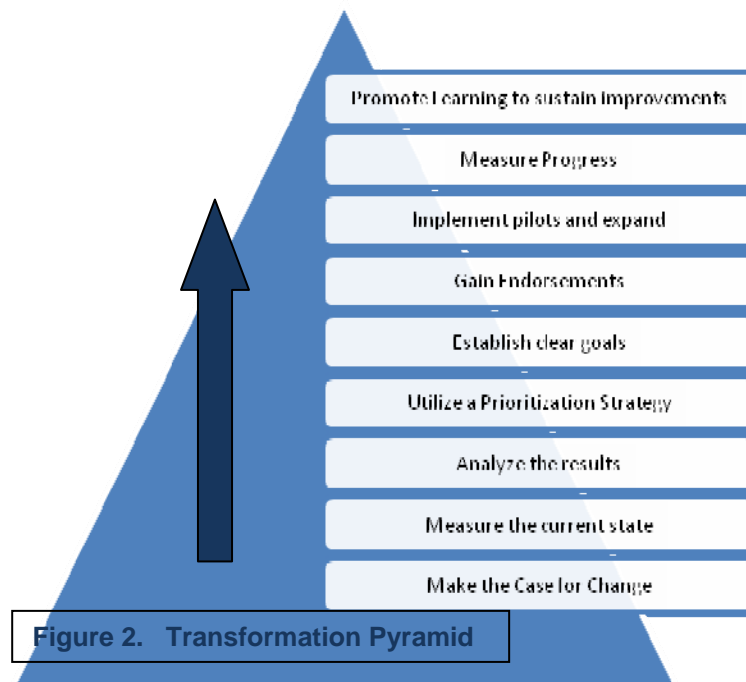
Figure 1.



We selected a small team of Maintenance, Engineering and Operations staff who were recognized as competent change agents and quite familiar with plant operations. The team began the task of regeneration by further reviewing the survey results and identifying those Maintenance Elements which represented our greatest opportunity for impacting the business. Based on the efforts from the Regeneration team, we decided to **prioritize our focus on**

Planning & Scheduling, Spare Parts, CMMS and PM Optimization. These represented the foundational elements for supporting the Best Practices to be developed as part of our Maintenance Master Plan. The survey results in the People and Governance categories also underscored our need to include provisions for CMMS role based training as well as standardized monthly reporting tools which we would use to monitor our progress with the goal of improving our maintenance effectiveness to mutually agreeable targets.

For each prioritized category, we identified a leader that could work within a broader network of subject matter experts and stakeholders to communicate the survey results and develop the path forward. In other words, the survey let us know our current level of performance and positioned our regeneration team to begin the process of defining where we going, how to get there and when. **This regeneration process, for defining current and future state, provides the road map for establishing the Maintenance Master Plan.**



The successive steps for regeneration are depicted in Figure 2. It's important to note that the Regeneration team later evolved into a full scale Maintenance Community of Practice (COP).

The COP provided an efficient structure for promoting a learning organization through routinely scheduled Best Practice and Key Performance Indicator reviews.

Critical success factors that supported the transformation effort was (1) gaining leadership support for the regeneration role assignments (2) identifying the appropriate location and unit operation to pilot the development and implementation of the new work flows and processes (3) gaining participation from the manufacturing shop floor and supporting functions (4) changing the culture to embrace rapid replication of Best Practices (5) linking the Maintenance process with Engineering and Procurement process to establish a comprehensive approach to asset management

Conclusion:

Implementing a full scale Maintenance Master Plan or launching a pilot transformation program is best positioned for success with collaboration across the maintenance organization, supporting functions and stakeholders. The authors experience with the regeneration process described in this article resulted in establishing a companywide Maintenance Master Plan, achieving sustainable Best in Class performance levels for pro-active maintenance (measured in work order count and labor hours), significant OEE improvements on targeted equipment as well as improving quality metrics.. Equally important, the collective efforts provided improved workforce morale, where everyone is empowered to improve the business.

About the author:

Mike Greenholtz joined Genesis in January 2010 as Vice President, Reliability Solutions after retiring from Wyeth (Pfizer). Mike's role is to provide leadership for creating operational and financial advantages for GenesisSolutions customers across industrial sectors. This includes identifying and implementing measures that enhance asset reliability, increase capacity, extend capital asset lifecycles, while reducing cycle time and maintenance costs

Mike has 28+ years of experience with Engineering & Maintenance operations. During his previous role as Assistant Vice President, Engineering Operations, Mike was responsible for developing and implementing a consistent and effective approach for providing equipment and facilities life cycle asset management on a global basis to both Manufacturing and R&D sites. Mike was also assigned as the Wyeth Engineering Integration leader during 2009 to insure a seamless integration of the engineering and maintenance processes for the combined Wyeth - Pfizer organization.



About GenesisSolutions:

GenesisSolutions provides best-in-class maintenance and asset management to the world's most sophisticated industrial organizations. Genesis has been a strategic partner with Wyeth (Pfizer) and worked closely with Mike for the past decade on CMMS and CCMS deployments as well as assisting with both strategic and tactical elements of the Maintenance transformation process.

We invite you to contact us with any questions you may have with your Maintenance Master Planning efforts. Whether you are looking to begin developing the transformation business case, launching a survey or defining the future state of your maintenance processes, GenesisSolutions can assist you at any stage of your implementation.