EFESO
MANAGEMENT CONSULTANTS

Turning Transportation Organizations into *High-Performance Engines*

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Introduction:

Organizations that rely on heavy assets are regularly challenged to meet high levels of service delivery; increased asset availability, reliability, utilization of their fleets; and improved cost efficiency.

Many transportation organizations are now quickly approaching a fiscal cliff caused by the end of pandemic-era federal funding, aging infrastructure, budget cuts, complex labor negotiations, rising workforce costs, and demands for safer and improved services.

The legacy ways of operating will no longer suffice as poorly maintained assets go offline, capital costs increase, and utilization rates and revenues fall. Across the transportation industry, agencies of all sizes are grappling with labor shortages and widening budget gaps, in some cases reaching hundreds of millions of dollars, driving an urgent need for supplemental funding and longer-term financial solutions.

Transportation organizations, many of which manage billions of dollars in assets, have never faced this magnitude of change required with today's funding dynamics. Now more than ever they need to better optimize and take care of existing assets (continually requesting more and newer assets is a way of the past). This will require improved labor productivity, improved reliability, and significantly greater operating expense reduction.

Addressing these challenges requires a re-examination of asset management through a more strategic and integrated lens. What's needed to deliver improved asset performance is a targeted comprehensive strategy not only covering capital investment, but including plans for cultural change and operational improvements.

This asset optimization approach to transportation organizations promises to achieve:

- **Improved Labor Productivity:** Increased labor productivity enables increased wrench time, giving technicians more time preventing breakdowns and correcting repairs.
- **Improved Reliability:** Fleet maintenance improvements can boost utilization rates and extend the life of assets, which will lower the size and frequency of investments for new vehicles and infrastructure. Maintenance improvements also can reduce quality problems after assets are released back to work and also reduce average maintenance times to repair (as much as 50% reductions).
- **Overtime Reduction:** As asset reliability declines, many agencies experience escalating overtime costs with limited corresponding improvements in system performance. Improving labor productivity in parallel with targeted reliability initiatives is essential to reversing this trend.
- **Safety:** Improved fleet maintenance directly contributes to a safer working environment by reducing mechanical failures, unplanned repairs, accidents, and hazardous conditions that place passengers, operators, and frontline maintenance staff at risk.
- **Continuous Improvement:** Fostering a culture of continuous improvement helps agencies harvest knowledge and innovative ideas from their workforces, which now, more than ever, is needed to improve the use of expensive and aging assets.

Operational Excellence Transformation for Improved Asset Performance

An Operational Excellence Transformation can deliver both long term sustainable gains and quick wins, through: process optimization, labor productivity, reliability improvements, high performance frontline leadership coaching, and operating expense reductions. The following steps will result in a comprehensive operational excellence system across maintenance workstreams.

HQ Performance Command Center:

Establish a headquarter-based center that incorporates all major functions and senior leadership spanning

bus/train reliability and engineering, research and analysis, the enterprise asset management team, and senior O&M leadership.

During weekly sessions stakeholders review (key performance indicators (KPIs), system-level issues, improvements progress, and action plans. This is not a status report; it is a progress and information sharing process designed to prioritize and expedite improvements that drive performance. This leadership-driven process includes performance feedback loops to the workforce; team-based problem solving; employee engagement in problem solving; and deployment of continuous improvement tools. It's also the mechanism to deploy and monitor major initiatives.

Daily Pulse Process at Each Division Garage:

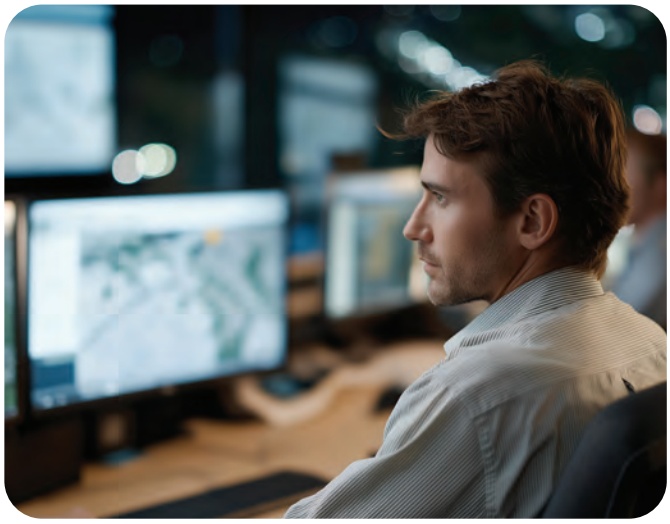
Establish daily fact-based cross-functional standing meetings (Pulse) in garages to drive maintenance improvements. Follow PDCA (plan-do-check-act), review plan vs. actual performance to identify problems, investigate to root cause, and offer countermeasures that can prevent problem recurrence.

Daily Pulse Process meetings serve three purposes: [1] establish a management system that uses daily facts to determine root causes and improve day-to-day operating performance; [2] optimize wrench time and maximize workloads; and [3] achieve operating performance improvements in safety, reliability, cost, and efficiency. This small feedback loop management process gives the Chief Operating Officer and cascading leadership down to frontline supervision a means to deploy actions quickly.

A major component of the Daily Pulse Process is improving resource planning and scheduling processes. The daily meetings should examine the current planning process and seek ways to enhance it. This includes a structured look ahead at resource requirements needed to ensure proper coverage for maintenance technicians and ongoing assessments of direct maintenance workloads planned, scheduled, and delivered.

High-Performance Frontline Leadership:

With generational attrition of knowledgeable frontline supervision leaving in droves, frontline leadership's ability to lead the technical workforce is a major challenge. Overcoming this requires high-performance leadership best practices: training frontline leaders to set expectations, observing and enforcing line leadership behaviors on the floor and providing balanced consequences to drive discretionary employee effort.



Specific frontline leadership activities include formal classroom training; on-the-job (OJT) coaching and mentoring; expectations setting; active supervision and "rigor" to drive execution and accountability; union relationship building; and supporting employee-engagement, personal ownership, morale-building, and team-based problem solving.

Reliability Deep Dive:

Analysis of root causes of the repeater and top failure modes is necessary to implement permanent corrective action. Develop a roadmap to permanently correct and prevent recurrence. Put your Engineering and/or Reliability team to work. Solve and implement corrective actions using a systematic root-cause analysis to effectively activate immediate campaigns to prevent service calls and establish a "pull-in" process to close out all deferred maintenance as buses arrive back to the garages. Then "clean sheet" the entire preventive maintenance inspection (PMI) process to flip 70-80% corrective maintenance to 70-80% preventive maintenance.

During the Reliability Deep Dive, reassign your engineering department to be in the garages and on the floor working with technicians to troubleshoot and teach. Engage the training department to support this process so techs can accurately troubleshoot the failure modes. As behaviors begin to change, a number of more detailed reliability initiatives can be implemented.

Training on Waste Reduction/Lean Techniques:

Critical for the change process to be successful is to provide training to cascading leadership and union leadership on the principles and application of Operational Excellence, where learning to see waste is paramount to baselining current-state performance. Seeing waste in every process enables employees to internalize that what they do each day may not be fully contributing value and, thus, impair their ability to achieve O&M goals and strategic objectives.

Maintenance Labor Standards and KPI Dashboard:

To enable productivity visibility, develop bus and railcar maintenance and servicing labor standards for regular planned inspection, maintenance, running repair, and servicing/ fueling processes. In conjunction with this, develop efficiency and productivity KPI dashboards. Roll out and adopt labor standards with built-in KPI efficiency and productivity measures, which will drive increased value-added direct task work. Visibility is the starting point to pinpoint low levels of productivity—by work order and by technician.

Storeroom Optimization Design:

Typically, storeroom performance in transportation organizations have created numerous wait times that impact maintenance availability. To resolve these bottlenecks, modernize and optimize the storerooms.

Kickstart an optimization warehouse improvement initiative to establish a Lean Warehouse grounded in Operational Excellence and frontline empowerment. Applying Lean principles—particularly 5S, visual management, and value-stream mapping—streamlines the flow of materials and information supporting vehicle maintenance. OWI starts with a thorough assessment of the storeroom, validating the business case, and establishing a baseline for improvement. From there, co-develop practical solutions with the department's maintenance and storeroom teams, focusing on better space utilization, inventory accuracy, and kitting processes to support preventive maintenance and reduce vehicle downtime. Continue to work towards developing visibility tools to assist purchasing buyers on criticality and prioritization of component parts.

Collaboration with vehicle maintenance leadership, purchasing, and frontline staff is central to the effort, ensuring that improvements are not only technically sound but operationally relevant. Integrating technology enhancements—such as a best-in-class barcode system—and aligning roles and responsibilities will help to build a sustainable warehouse operating model. The results are storeroom processes that embed Lean practices, foster a culture of ongoing improvement, and deliver measurable impact across your maintenance operations.

Process Re-engineering:

Improvement implementation must include senior/mid-level leadership, frontline supervision, and the unionized workforce. There are various methods to design and implement process improvements, including management-driven improvement initiatives, small team projects, and on-going Kaizen process workshops on-the shop floor.

The Kaizen improvement process has been considered the benchmark to engage employees who learn about and implement root-cause analysis tools and waste reduction techniques in a structured format. Benefits of the Kaizen improvement process include employee involvement and tapping their knowledge to generate breakthrough ideas (the workforce knows their job best); workforce ownership of improvements that improve process sustainability; quick implementation and results; and fostering a PDCA structure. Kaizen—the on-going continuous improvement vehicle—feeds into the Daily Pulse Process and weekly HQ Command Center to deliver improvements to top-level KPIs.

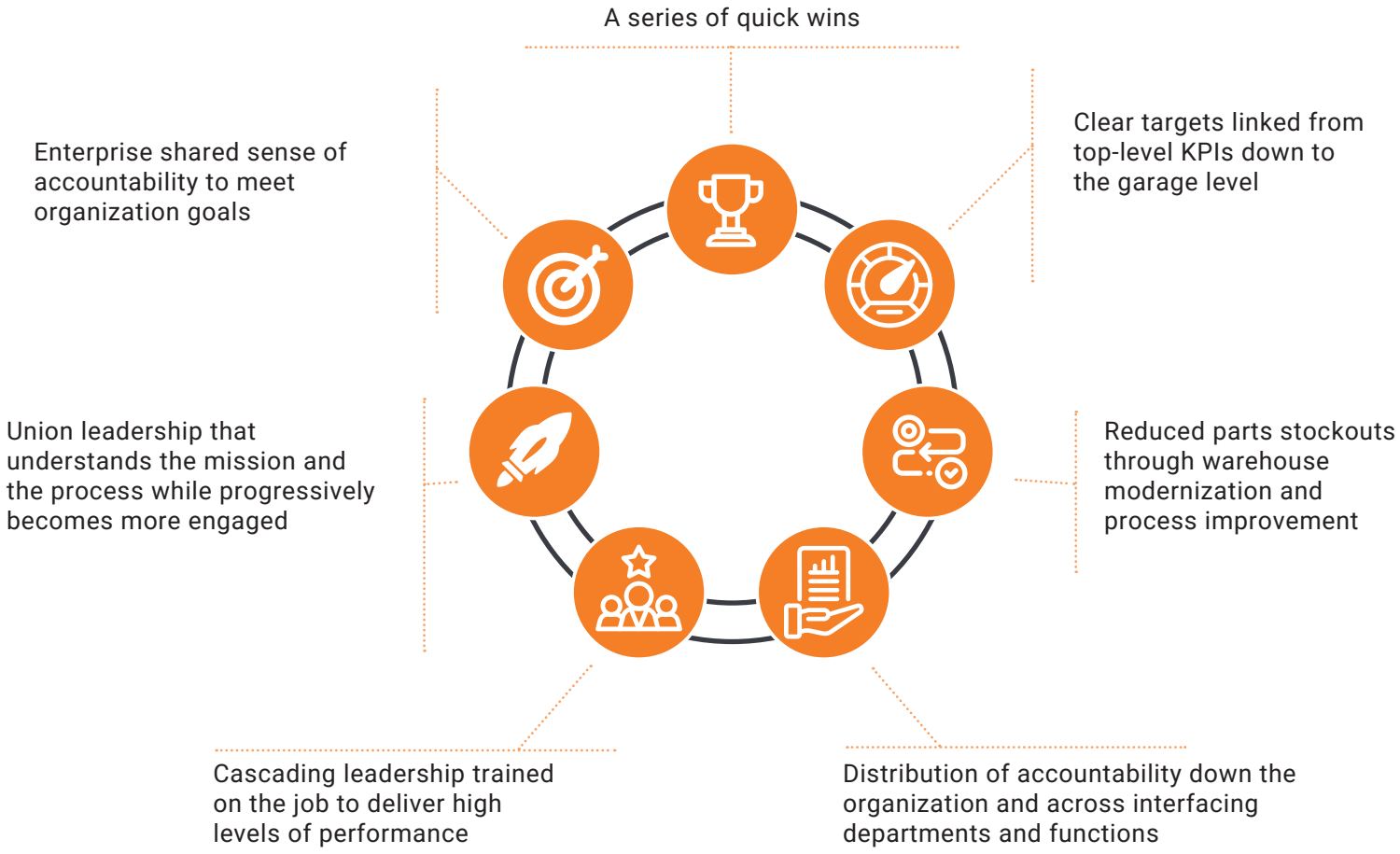
Operational Excellence Cultural Maturity:

Focus continues on monitoring the processes, metrics, and continued leadership behaviors, and forever continuance of Kaizen workshops.

Get the ELT and cascading leadership in the routine practice of “going and seeing” in the maintenance garages.

As Operational Excellence becomes fully functioning, it’s the system your leadership and increasingly involved unionized workforce rely on to capture sustainable continuous improvements. Your leadership and the union leadership form an Operational Excellence council to guide the framework going forward. Operational Excellence objectives (what) and actions (how) are applied to career planning, promotions, and performance goals. Codifying Operational Excellence into annual individual leadership planning encourages leading, nurturing, sustaining, and driving an Operational Excellence culture.

Operational Excellence Transformation Benefits



Within 12 months, Operational Excellence is your path to converting your transportation organization into a high-performance engine.

The results are transformational and, most importantly, sustainable. This shift allows agencies to break the cycle of escalating overtime and unplanned service disruptions—instead positioning leadership to actively direct operational performance.

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In the Transportation sector, EFESO supports major transportation and mobility organizations in strengthening service reliability, improving fleet availability, reducing lifecycle costs, and enhancing customer outcomes.

Our team includes former transportation executives, maintenance and operations leaders, and reliability engineering specialists with decades of field leadership experience.

We address system-level challenges such as workforce deployment, frontline leadership performance capabilities, fleet readiness, parts and supply-chain resilience, technology enablement, and service delivery performance, linking strategic priorities to day-to-day operational execution and compliance requirements.

Real Results, Together

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