EAM-related spend can be as much as 40% of overall cost for an asset-intensive organization. Systematically addressing gaps and opportunities across the four key elements of EAM can drive significant value.

For asset-intensive organizations, improvement of asset performance and reduction in asset-related costs are critical challenges. Too often EAM processes are managed independently with asset and work management, planning, execution and measurement disconnected from enterprise goals.

The four key elements of EAM

PwC works with clients to understand where opportunities for improvement exist and then build a roadmap of required tasks and tactics to match asset management to enterprise goals.

Each element is crucial for the delivery of sustained, maximum results. EAM improvement initiatives must adopt a balanced approach by addressing the gaps in each of these elements. It is our experience that many EAM initiatives do not succeed because they only address one or two of these elements.
On the one hand, reliability-focused projects risk becoming irrelevant by causing neglect of actual work execution. On the other hand, IT or business process improvement projects, often anchored by a new EAM software system, tend to focus too much of their time and effort on incremental process change and the rigors of system implementation. Consequently they load the same old flawed maintenance data and PM tasks into their new system while skimping on the effort to deliver the right maintenance policies, appropriate KPIs and an effective Business Performance Management (BPM) system. As a result, they may achieve incremental work management improvements but their impact is limited due to ineffectual preventive programs and a lack of effective and visible business performance measurement.

How can we help?

EAM Performance Improvement

PwC’s approach to EAM performance improvement focuses on a two-pronged strategy of maximizing both EAM effectiveness (the right task at the right time) and EAM efficiency (improved execution) for the existing asset base while proactively seeking to make the most of the assets themselves. This strategy is supported by four key elements as shown above. These components must be addressed in a balanced approach to drive a leading and sustainable result in the longer term.

EAM Business Performance Measurement

Effective BPM is a key tool in modifying the behavior of a large group of people; it represents one of the most important investments in terms of driving sustainable improvement. Plainly the KPIs and metrics must be carefully designed and chosen to ensure they are driving the right behavior. Well-designed dashboards provide effective management information and enable managers to maximize maintenance spend to benefit the business.

EAM Implementation Services

PwC has delivered numerous successful system-enabled EAM business transformation projects. Based on our extensive project experience and the deep knowledge of our seasoned professionals, we have developed an EAM Center of Excellence (CoE). Within the CoE we have organized our content to accelerate implementation projects with a growing library of industry leading business processes, accelerators and templates, including electric, gas and water utilities organized by business functional unit (e.g., Generation - Nuclear, Fossil & Renewable and Transmission & Distribution). Our industry experience and PwC’s Transform Methodology together offer a proven approach to meeting your project goals.

EAM Assessments

To understand how well your company is performing relative to leading practices and industry peers, PwC offers assessment to address:

- EAM system capability and utilization to support business processes
- Asset configuration, master data management and documentation
- Asset reliability and preventive maintenance program effectiveness
- Maintenance organization, responsibilities, empowerment and accountabilities
- EAM system landscape for integration with other enterprise systems

Results of the evaluation can be used to detail current gaps/opportunities, as well as establish a baseline for EAM system requirements to support an implementation or performance improvement initiative.

The program manager of a highly successful SAP-based EAM program states: “Perhaps most important of all though - the business value of an EAM investment is not in transaction processing, it is in the analytics that provide information for improved management decision-making.”
Become recognized as a leader in your industry

PwC was engaged by a leading utility to implement asset management processes and tools at their state of the art water reprocessing facility. The client wanted to:

- Rollout a new EAM system
- Deploy a world-class reliability approach based on RCM
- Design and implement an online condition monitoring system

PwC helped the client:

- Reduce both corrective and preventive maintenance hours by over 25 percent, while improving all key asset performance statistics
- Extend asset life to reduce Capital Improvement Program expenditure
- Gain recognition from their peers and an Operations Award from the Association of Metropolitan Sewerage Agencies

Asset Reliability Optimization

To improve asset reliability, we apply proven methods such as Reliability Centered Maintenance, Maintenance Task Analysis and Root Cause Analysis. These analysis recommendations can result in dramatic improvements to the effectiveness of your preventive, predictive and risk-based maintenance programs. You can also expect recommendations to make one-off changes to design, operator/maintainer training or operating procedures. Working with you, we will prioritize assets where the consequences of failure are the most grave (i.e., lost revenue, safety or environmental compliance). Our consulting services help companies establish a reliability program, provide training in introductory through advanced level reliability methods, mentor staff in the application of reliability methods, and offer contract facilitation

Life-Cycle Simulations

When designing a new facility or major upgrade, project managers estimate life-cycle costs to assess the payback period for their investment. Such estimates are often based on intuition or prior experience, a practice which may be deceptive when the project is based on a new technology or process. For higher risk projects, prudence dictates a more rigorous and defensible approach, using a life-cycle simulation of as many realistic variables as can be anticipated. We can help by working with you to build simulations using Monte Carlo techniques to determine which business objectives are not met by the design and under which conditions. Because of our emphasis on reliability, availability and maintainability, we focus on maintenance optimization, design redundancy (standby and protective devices) and strategies to maximize spare parts.

Achieving results

PwC has a team of highly experienced subject matter specialists who have spent their careers in EAM and have the passion for and experience with EAM performance improvement, system implementation and reliability techniques to help asset intensive industries like yours achieve sustainable results. The PwC EAM Center of Excellence features an extensive repository of leading practice content honed by real-world experience - business processes, KPIs/metrics, assessment tools, training plans and templates. PwC's Transform methodology offers proven templates, plans and accelerators to improve quality and productivity.

About PwC

PricewaterhouseCoopers (PwC), a global provider of professional services and recognized leader in EAM consulting services, offers clients an array of proven EAM strategies, leading practices and tools to deliver on their operation goals. Our team of EAM consultants has been successfully deploying EAM, SCM, Performance Improvement, and reliability programs for more than 13 years at over 350 customers in North America and globally.
To have a deeper conversation about any of the issues in this paper, please contact:

Christopher Fynn  
Principal  
(646) 471-1266  
christopher.c.fynn@us.pwc.com