Top 10 Benefits of Using a CMMS / EAM Solution

Top 10 ways a Best-in-Class CMMS / EAM solution can help your organization maximize asset performance and increase profitability.
Organizations are under pressure to squeeze more profits out of their assets by reducing their maintenance and operational costs and increasing equipment uptime. Because of this, organizations typically operate their maintenance departments as a cost center, strictly concerned with adhering to budgets and decreasing expenses. Implementing a Computerized Maintenance Management Software / Enterprise Asset Management (CMMS / EAM) solution, however, can help transform maintenance into a profit center by allocating operating costs to improve efficiency and maximize asset performance, resulting in higher profits.

Before you begin your CMMS / EAM search, it is important to understand why you need to make a change and what your organization’s tactical and strategic objectives are. Do you need to improve your current maintenance processes and procedures to become more efficient and effective? Are you experiencing frequent equipment failures? Is your Maintenance Repair and Operations (MRO) spending out of hand? Are you experiencing too much unplanned equipment downtime? Implementing a new CMMS / EAM solution has the potential to solve those issues and provide tremendous value, but the importance of selecting a solution that is the right fit for your organization cannot be overstated. There are hundreds of providers to choose from, so as you evaluate solutions, taking the time to really consider how the following benefits could positively affect your organization and improve profitability will help you develop a strong business case to support your CMMS / EAM project.

1. Reduce Equipment Downtime

Unplanned equipment downtime can cause an organization to experience revenue loss and reputation damage. Equipment needs to be available for maintenance to perform Preventive Maintenance (PM) and repairs, while production needs equipment available to meet customer demand. Clear and consistent communication between the maintenance organization and production is imperative, and a PM system is critical to effective asset management. From inspection tasks designed to detect impending failures to lubrication and wear part replacement, your PM system is the first line of defense against unplanned downtime and equipment failures.

“The primary goal of maintenance has always been to minimize downtime, and the primary goal of operations has been to maximize utilization.”

- Aberdeen Group

CMMS / EAM solutions provide a single platform to easily plan, organize and manage all your PM work including building PM Master Plans, linking them to equipment and scheduling PM Work Order (WO) generation. Best-in-Class CMMS / EAM solutions will also provide a comprehensive audit trail of all PM work and report scheduled compliance. With regular, planned maintenance, your assets are less prone to breaking down and your repair costs will reduce, as well.
2. Streamline Work Processes

More and more organizations are using smart phones and tablets for increased convenience and productivity. Accessible CMMS / EAM solutions for initiating or requesting WOs, approving maintenance work and purchasing activities, scheduling, WO execution and inventory issues allow users to execute work while “in the field,” leading to streamlined work processes and minimized non-productive time (NPT). Point-of-execution data capturing capabilities will also improve data accuracy and real-time visibility into maintenance progress.

By providing your maintenance technicians with a solution that supports all aspects of the work execution process, including labor times, part issues, meter reading updates, electronic checklists, inspection points and the ability to attach and view pictures, files and/or other supporting documentation, work is simplified and executed faster, leading to a streamlined maintenance process.

3. Improve OEE

Overall Equipment Effectiveness (OEE) factors the availability, performance and output quality of an equipment asset. Maintaining existing equipment is much more cost-effective than purchasing new equipment, and CMMS / EAM solutions can address the problems that contribute to loss events, such as PM programs, inspections and adjustments, effective critical spares strategy and analyzing downtime reason codes or Root Cause Analysis (RCA).

- A PM is critical to effective asset management. From inspection tasks designed to detect impending failures to lubrication and wear part replacement, your PM system is the first line of defense against unplanned downtime and equipment failures.
- In highly regulated industries, routine examinations, measurements, testing, gauging and comparisons of equipment assets is critical to ensuring production safety, reliability and quality.
- To keep the organization running efficiently while controlling costs, avoiding prolonged production outages or facility problems because required parts are not in stock is essential. Spare parts inventory is vital to production operations, so MRO inventory managers need the ability to quickly and easily identify and locate items to minimize emergency procurement.
- A maintenance Business Intelligence (BI) solution that gives instant insight into the unique Key Performance Indicators (KPIs) and metrics that are important to your organization’s success will enable you to drill into your equipment “bad actors.” By having the ability to get detailed analysis of which equipment is continuously down and why, you can make better and faster decisions to overhaul, replace or repair.

“Companies that invest in an asset management solution often reduce maintenance costs by 9.5% and asset downtime by 14% while increasing OEE by 8%.”

- Aberdeen Group

Improving your OEE means that your operations will be much more efficient and reliable, leading to increased outputs and transforming your maintenance organization into a profit center.

4. Effective Maintenance Planning and Scheduling

Effective maintenance planning and scheduling is the first step in moving from a reactive / break-fix maintenance approach towards a more preventive and proactive approach. Properly planned and scheduled maintenance is proven to be safer, more efficient and effective and costs significantly less than break-fix maintenance. By mutually reviewing schedules and agreeing on the work to be done, maintenance work schedules improves the collaboration between operations and maintenance and focuses on getting the right skills, parts, tools, appropriate instructions, permits and safety procedures together when the equipment is available. Many CMMS / EAM solutions are flexible and support scheduling methods including, but not limited to:

- Individuals and/or Crews
- Shifts
- Equipment
- Lines
- Buildings and/or Campuses

By migrating your maintenance approach towards Best-in-Class, you will extend equipment life while reducing the overall maintenance and operation costs.
5. MRO Inventory Management

The overall goal of inventory management is to get the right parts to the right place at the right time to maximize asset performance, optimize stocking levels and improve inventory service. CMMS / EAM solutions can help control costs and avoid prolonged production outages by:

- Allocating and reserving parts and materials for WOs
- Maintaining sufficient quantities of required items and reducing emergency orders through integrated work planning, scheduling and automatic re-ordering of items in blanket orders
- Identifying and removing obsolete items by analyzing item usage and where they are used
- Easily monitoring and accessing on-hand quantities through cycle counting, multiple warehouse and bin management
- Improving inventory accuracy and staff efficiency through wireless inventory transactions and bar code support

6. Ensure Regulatory Compliance

CMMS / EAM Event Tracking modules track any type of event that occurs within a plant, such as accidents, emissions, inspections, corrective actions, WOs, etc. It also stores and tracks documentation of those events, including regulatory reports, internal reports and drawings. Most industries must comply with national and international regulatory standards and have periodically inspections or audits. Some of the benefits of Event Tracking solutions include:

- Comprehensive audit trail of events and follow up actions
- Eliminates paper-based logs
- Reduces the risk of noncompliance penalties
- Ability to record history without opening a WO
- Easily accessible information reduces the audit preparation time

By having a single platform for tracking all types of events, linking documents to the events and capturing follow up actions for a clear audit trail of activities, you will be able to easily demonstrate regulatory compliance by generating reports detailing all maintenance work on certain assets.

7. Eliminate Paperwork

Maintenance work is identified and requested from everywhere in your organization. From simple hot/cold temperature adjustment requests to generated PM work and highly sophisticated automated alerts of equipment issues, you need an easy way to manage and organize your work without sifting through piles of paperwork. CMMS / EAM solutions help organize and control your work and eliminate the need for paper WOs.
By providing employees with an intuitive work request submission solution that is browser-based and accessible anywhere, users are able to submit maintenance work requests, complete with pictures, files and/or other supporting documentation. Those work requests are immediately added to the work backlog for processing, and users are automatically notified as progress is made.

Once the requested work is approved, scheduled and assigned, the maintenance technician can access all the work details on their mobile device or computer, such as part issues, user manuals, Lockout/Tagout (LOTO) procedures and detailed instructions. Accessible work execution solutions reduce errors, save time and improve data accuracy, and WO statuses are immediately available for further processing and analysis, providing complete, real-time visibility into maintenance progress.

8. Increase Safety

Organizations are responsible for managing their impact on the environment, providing safe work places with proper safety equipment and procedures while protecting employee and community health. CMMS / EAM solutions maintain equipment and ensure that safety standards are met. CMMS / EAM solutions help prevent equipment failures and support Process Safety Management (PSM) operations through:

- Written process safety information linked to areas, equipment and WOs
- Identifying hazards by linking Material Safety Data Sheets (MSDS) to areas, equipment and inventory items
- Safe Work Practices specified in WOs and at the area and equipment levels. Safe Work Practices include items such as:
  - Job Safety Analysis
  - Safe work instructions
  - Personal Protective Equipment (PPE)
  - Permit requirements, such as hot work, confined space entry, etc.
  - Lockout/Tagout (LOTO) procedures
- Mechanical Integrity supported by scheduling and documenting periodic inspections and testing of process equipment
- WOs supporting Management of Change (MoC) where PSM-related work must go through a specific series of user-defined stages
- Event Tracking provides a complete audit trail for any type of incident with documentation, tracking and follow-up actions
9. Get Insight into Maintenance KPIs and Metrics

A robust Maintenance BI solution gives you instant insight into the unique KPIs and metrics that are important to your organization’s success. You may have heard before, “You can’t improve what you don’t control, and you can’t control what you don’t measure.” To be consistently successful and continually improve your maintenance organization, defining strategic goals is crucial, and a BI solution that provides powerful data management, predictive analytics and reporting technology is essential to meeting those goals.

By enabling users to instantly access adoption, performance, improvement data and metrics on tablets, smartphones or computers, you get real-time answers to critical business questions that help measure progress throughout all levels of the organization.

10. Reduce Overtime

As stated previously, planned and scheduled maintenance is proven to be safer, more efficient and effective while costing significantly less than break-fix maintenance, and a reduction in overtime is one of many contributors to cost reduction.

Your maintenance organization will become more effective and efficient by utilizing a CMMS / EAM Scheduling module to set resource levels, develop “what-if” scenarios and see planned and available resources at a glance. With the ability to easily rework schedules when resource and equipment availability changes, you can decrease the amount of emergency maintenance and cut overtime.
Summary

Maintenance is the foundation for any organization and should be viewed as an important investment for continued success and profitably. Effectively tracking and controlling your equipment, maintenance and spare parts inventory is critical to achieving your profitability goals, but you need tools that are easy to learn and easy to use in order to maximize asset performance and control costs. CMMS / EAM solutions can definitely help you achieve tremendous cost savings, but there are endless solution providers that are eager to earn your business. Like with any business investment, you want to maximize your return on investment (ROI), and choosing the functionality and solution provider that fits your needs will enable you to become more profitable.

Make sure your vendor can demonstrate a long and successful track record of providing maintenance and asset management solutions with supporting services. Ideally, the CMMS / EAM solution is designed, implemented and supported by maintenance professionals, so you know the solution will be easy to use and efficient. It is also vital that your solution provider has knowledge and a deep understanding of your industry’s needs and requirements. By finding specialists with extensive knowledge and experience in your industry’s operations, regulations and necessities, you will benefit from a CMMS / EAM solution that provides all the industry-specific functionality your organization requires.

AssetPoint is the provider of TabWare, the leading CMMS / EAM solution for organizations of all sizes who want full functionality without the expense, resources and time other solutions demand. Designed by maintenance professionals for maintenance professionals, TabWare CMMS / EAM is proven to maximize asset performance, resulting in reduced operating costs and higher profit margins. Visit our website to find out why leading organizations in the Oil & Gas and Industrial industries depend on TabWare to keep their assets up and running.