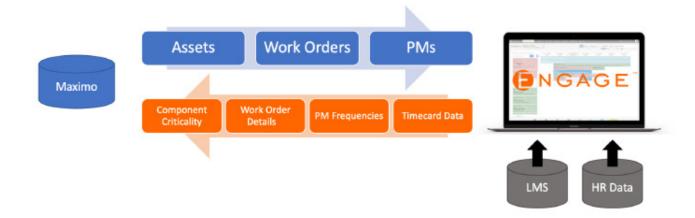


A Review of the Advanced
Functionality of IBM Maximo when
coupled with the ENGAGE Solution



Introduction

IBM Maximo is an enterprise asset management software used by organizations worldwide to manage and maintain their assets. It is designed to help organizations improve operational efficiency, reduce downtime, and manage costs by providing a comprehensive view of asset performance and maintenance. However, while Maximo offers a wealth of data on assets and processes, accessing and using this data can be a challenge. By integrating ENGAGE with Maximo, organizations can unlock the full potential of their data and make informed decisions that drive operational excellence. This whitepaper compares the use of ENGAGE with Maximo versus Maximo alone in terms of Work Management and Maintenance Basis Management looking specifically at seven key features: work order planning, work order scheduling, timecard management, PM change requests, PM forecasting, managing maintenance strategies, and classifying components.



Work Management

This section compares Engage and Maximo in terms of 4 main work management processes: resource availability, work order planning, work order scheduling and assignment, and timecard management. While Maximo has its strengths, it has limitations in certain areas such as limited availability view, manual timecard entry, and lack of effective employee-based assignment system. ENGAGE complements Maximo by offering a more comprehensive and efficient approach to managing resource availability, planning work orders, scheduling and assigning work, and managing timecards. By leveraging the strengths of both systems, organizations can reduce downtime, improve efficiency, and streamline their workforce management processes.

Resource Availability

When it comes to resource availability, Maximo allows you to schedule work within a timeframe and see the assets, locations, items, and tools that are required for the work, along with their availability. However, there is often a need to reference external reports and talk to people offline to understand their true availability. Because of the limited availability view and incomplete information, it can be challenging to know the true scope of people's availability. This results in either more or less work being scheduled than can be completed, which either creates unnecessary downtime or requires additional rescheduling later on to account for incomplete work.

ENGAGE provides a more comprehensive and robust approach to resource availability. In ENGAGE, employee work schedules determine availability allowing for better planning and scheduling of maintenance work. Vacation and time-off requests along with the associated supervisory approvals are housed within the same system, so the most up to date information is displayed on the Resource Calendar. The calendar provides a single, comprehensive view of scheduled manpower for the entire organization with an intuitive "Excellike" interface, showing which shift they are scheduled for and any applicable exceptions. By integrating with other systems like Learning Management Systems (LMS), human resource systems (HRS), or medical systems, hours available for performing work are automatically calculated. As another way to promote employee-led resource availability, ENGAGE provides the on-loan functionality which allows users to be scheduled in other departments for a set period to fill in gaps and reduce any resource surplus.

Work Order Planning

Work Order Planning: Maximo is a comprehensive database and serves as the primary source of record for all work orders in an organization. It allows users to create work plans associated with each work order, which specify the required labor, materials, tools, services, and tasks needed to complete the work order. While Maximo serves as a valuable database for organizing work orders, it only plans one record at a time which causes limitations when it comes to bulk planning. Additionally, without a review and approval process of work order plans, compliance, consistency, and accountability are limited.

For the planning process, ENGAGE has plan templates that can be easily created and applied to work orders, either individually or in bulk based on specific requirements such as job plan number. These templates include all necessary considerations for the work order, such as job steps, equipment and tools, personnel requirements, materials, and safety considerations. In advance of each day, resources which are planned to be made available can be assigned to specific work, with the ability to provide information such as day-specific guidance, shift assignment, job expenses, meals and allotted hours. ENGAGE also has a process to review and approve work order plans, emailing the appropriate stakeholders, to ensure sound decision making and organizational awareness. Since Maximo remains the source of record for all work orders, all analysis performed within ENGAGE is written back into Maximo's system to maintain consistency. By leveraging the capabilities of both Maximo and ENGAGE, organizations can effectively organize and plan work orders, reducing downtime and improving overall efficiency.

Scheduling & Assignment

With accurate information on available resources, the next step is to schedule and assign work orders. While Maximo has scheduling capabilities, it has limitations when conducting long-range planning with individual work orders and lacks an effective employee-based assignment system. To address these shortcomings, ENGAGE is an ideal complement to Maximo.

ENGAGE enables users to schedule work and assign resource accounting for personnel requirements, technician availability,

and outage scheduling concerns. With a user-friendly dragand-drop interface and color-coding for items such as an outage or emergency repair, work order scheduling and assignment becomes much easier. Scheduling ensures that all conditions and prerequisites are met, minimizing variability that leads to inefficiency and underutilization of field resources. Work orders are tracked through various statuses, such as "In Planning," "Waiting for Supervisor Review," and "Scheduled", adding additional context to Maximo work order statuses. The assignment sheet allows supervisors to view user qualifications by clicking on their name, which is particularly useful when assigning work orders that require certain qualifications.

Timecard Management

Timecard management is a critical aspect of any organization's workforce management process. While Maximo is the source of record for time entries before they are processed over to payroll, it's not efficient or user-friendly for data collection. Users must enter time manually into individual work orders, which can be time-consuming and prone to errors.

ENGAGE offers an automated timecard management process that automatically fills out each employee's timecard based on the daily assignment sheets, streamlining the entire process. from vacation request and approval to documentation and timecard submission. Employee timecards are automatically generated based on the employee's assigned work orders as well as their assigned training, vacations, and other obligations. This feature eliminates the need for email threads to manage vacation requests, the reliance on manual verification and email communication to notify employees of training, and the redundant entry of approved vacation into the timekeeping system. With ENGAGE, all timecards are submitted and processed accurately, ensuring that employees are properly compensated for their time. ENGAGE makes it easier to create records automatically as a byproduct of the schedule, creating synergies and eliminating manual work. By using ENGAGE, organizations can improve their timecard management process, reduce errors, and ultimately improve efficiency with a significant time savings of 15 minutes per employee per week.

Maintenance Basis Management

ENGAGE is a comprehensive solution for organizations looking to improve their maintenance management processes. With powerful modules for PM change requests, PM forecasting, component criticality, and managing maintenance strategies, ENGAGE provides users with the necessary tools to reduce unnecessary preventative maintenance tasks while ensuring compliance and mitigating risk. By automating manual processes, providing comprehensive revision control, and presenting data in an action-oriented format, ENGAGE helps organizations make data-driven decisions more efficiently, saving valuable time across engineering, maintenance, and operations. With ENGAGE, organizations can gain greater precision and strategic insight into their operations, ultimately driving greater efficiency and performance across their organization.

PM Change Requests

Maximo's functionality for managing change requests in PMs is focused on the fundamentals and processing one change at a time. When changes occur, the record simply changes and there is no change process associated with its PM program. Without workflows and approvals, these changes can fly under the radar without documentation and without proper notification.

ENGAGE offers an enhanced PM change process with a configurable workflow, the ability to capture additional information relevant to the change, and the ability to make changes in bulk. With this module, notifications and emails can be sent, and the technical basis for changes can be captured while maintaining a history of PM changes. This process improvement is relevant across industries and ENGAGE provides an easy way to track revisions of PMs and establish a "Living PM Program." By documenting engineering decisions and regulatory compliance, organizations can avoid costs associated with non-compliance and potential operational, safety, or environmental incidents. The PM Change Requests module in ENGAGE enables organizations to establish a robust PM program, ensuring compliance, mitigating risks, and improving operational efficiency.

PM Forecasting

Maximo provides users with the capability to forecast preventive maintenance activities based on predictive maintenance logic. The standard PM programs in Maximo typically only generate the next instance of a given PM performance as a work order, making it challenging to effectively plan resources to complete the work beyond that. Without tools to visualize future PM's, it is difficult to see supply and demand over time.

With ENGAGE, you can seamlessly overlay projected PM performances with resource capacity for a comprehensive understanding of capacity and demand further into the future. This cutting-edge visualization functionality allows you to gain a better grasp of your resources and gives you ample time to make any necessary adjustments to meet potential resource constraints. With ENGAGE's innovative features, you can unlock a new level of precision and strategic insight into your operations, ultimately driving greater efficiency and performance across your organization.

Component Criticality

Maximo offers a simple attribute for documenting component criticality that has no basis or revision tracking. This information is typically stored outside of Maximo without linking to the reason behind the criticality. This is a key limitation that makes it difficult for users to maintain accurate and up-to-date information on the criticality of components, which can lead to inefficiencies and potentially costly errors.

However, with ENGAGE, organizations can benefit from a comprehensive, revision-controlled criticality documentation system. This powerful module is a valuable complement to Maximo, providing users with more detailed and accurate information on component criticality, which is essential for effective maintenance planning and resource allocation. By reducing the administrative work needed to manage degraded conditions, ENGAGE streamlines maintenance processes, enabling organizations to operate more efficiently and effectively. Additionally, the module's intuitive interface and superior visibility features help ensure that all stakeholders have access to the information they need, eliminating the need for Excel-based solutions.

Maintenance Strategies

Making informed decisions based solely on EAM/CMMS systems such as Maximo can be a challenging task. With no built-in functionality to measure maintenance program performance and the difficulty of viewing multiple pieces of information simultaneously, users are often forced to rely on external reporting or manually create spreadsheets to access relevant data.

ENGAGE provides a comprehensive solution to these challenges by combining data from multiple sources and presenting it in an action-oriented format. This feature saves valuable time across engineering, maintenance, and operations and enables users to make data-driven decisions more efficiently. ENGAGE also provides an efficient and streamlined solution for adjusting the maintenance strategy for a component. It automatically creates maintenance strategy evaluations based on various inputs, such as changes to component classifications, templates, completed work order fields, and feedback, like the 'as found' condition code. This feature allows for more rapid improvement, reduces maintenance costs more quickly, and provides an effective solution to the previously inefficient process of adjusting maintenance strategy based on craft feedback. With ENGAGE, users can make informed decisions and improve maintenance performance more efficiently than ever before.

Conclusion

IBM Maximo is a powerful tool for asset management, but accessing and interpreting its vast amount of data can be challenging. ENGAGE, when integrated with Maximo, offers advanced functionality that enhances data accessibility and provides effective workflows and tools to enhance that data to improve efficiency. By leveraging the capabilities of both Maximo and ENGAGE, organizations can effectively manage and maintain their assets, reducing downtime, improving overall efficiency, and making informed decisions that drive operational excellence. With the increasing importance of data in decision-making, the integration of ENGAGE with Maximo offers a valuable solution for organizations seeking to optimize their asset management processes.