Enterprise CMMS Selection and Implementation in a Food & Beverage Company

Successful implementation of CMMS delivers real benefits to challenges

Company Facts

Overview

- Location – Tulsa, OK
- Industry – Food & Beverage

Success Highlights

Challenges

- Manual Processes
- Lack of Visibility
- Reactive Maintenance
- Inventory Management

Solution

- CMMS Implementation

Benefits

- Improved Maintenance Efficiency
- Increased Equipment Uptime
- Enhanced Inventory Management
- Data-driven Decision-making
- Improved Compliance and Safety
- Cost Reduction

Maintenance has historically been viewed as a repair center, and the adage that it is a "Necessary evil" has plagued manufacturing for decades. Current challenges to meet customer demand require a Computerized Maintenance Management System (CMMS). CMMS implementation refers to the process of adopting and deploying a computerized system to manage and streamline maintenance operations within an organization. A CMMS is designed to assist maintenance teams in organizing and tracking maintenance activities, scheduling preventive maintenance tasks, managing work orders, tracking inventory and assets, and generating reports for analysis and decision-making. It helps improve the efficiency and effectiveness of maintenance operations by providing a centralized platform to manage and monitor maintenance activities.

The Business Situation

Our client is a California-based food and beverage manufacturer specializing in the production of frozen foods and ingedients, with nation wide distribution, nine plants spanning six states. With large equipment and complex maintenance operations, the company faced challenges tracking maintenance activities, optimizing equipment uptime, and managing inventory efficiently. With guidance from AMSS consultants, client determined that implementing a Computerized Maintenance Management System (CMMS) would overcome these challenges.

Challenges

1. Manual Processes: Maintenance operations were primarily managed through paper-based systems, leading to inefficiencies, data inconsistencies, and difficulty retrieving historical maintenance records.
2. Lack of Visibility: There needed to be more real-time visibility into equipment status, pending work orders, and maintenance schedules, which hindered effective decision-making.
3. Reactive Maintenance: Due to the absence of preventive maintenance planning, the company experienced frequent breakdowns and unplanned downtime, impacting production schedules and profitability.
4. Inventory Management: Tracking and controlling spare parts and inventory levels were challenging, leading to stockouts, excess inventory, and increased costs.

Why CMMS Implementation Fails

When properly implemented, a CMMS is a powerful tool for organizing, documenting, and tracking maintenance activities. But believe it or not, as many as 80% of CMMS implementations fail to meet their objectives. Why?

1. Lack of Clear Goals and Objectives
2. Too Large of a Project Scope
3. Poor Execution
4. Inadequate Training
5. Inadequate Planning
6. Lack of User Acceptance
7. Lack of Ownership
8. Changes in Priorities
9. Changes in Key Personnel

The Solution

CMMS implementation followed these steps:

1. Needs Assessment: AMSS comprehensively assessed client's maintenance requirements, identified pain points, and defined specific goals for implementing a CMMS. Client identified needed improvements in maintenance efficiencies, reduction of downtime, and wanted to streamline inventory management.
2. Software Selection: After evaluating various CMMS software options presented by AMSS, client selected a robust and scalable system aligned with their requirements. The chosen CMMS offered features such as work order management, preventive maintenance (PM) scheduling, inventory tracking, and reporting capabilities.
3. Data Gathering and Migration: The client collected and organized existing maintenance data, including equipment lists, maintenance history, and spare parts inventory. The data was migrated to the CMMS database, ensuring accuracy and completeness.
4. Configuration and Customization: AMMS configured the client's CMMS to suit their specific workflows and needs. Asset hierarchies were established, maintenance tasks and schedules were defined, user access levels were setup, and data fields were customized to capture relevant information.
5. Training: Training sessions were conducted by AMSS for maintenance personnel to familiarize them with the CMMS software. The training covered various aspects such as creating work orders, performing preventive maintenance tasks, utilizing inventory management features, and generating reports for analysis.
6. Testing and Pilot Phase: The CMMS implementation underwent thorough testing to identify and rectify any issues or bugs. A pilot phase was initiated in one department, allowing a select group of users to test the system's functionality and provide feedback for further improvements.
7. Deployment and Integration: The CMMS was rolled out across all departments following successful testing and user feedback. Integration with existing systems, such as the ERP software and asset management systems, was ensured for seamless data flow and synchronization.
8. Monitoring: To monitor the effectiveness of the CMMS implementation, client established key performance indicators (KPIs) to track and evaluate maintenance performance. These KPIs included metrics such as equipment uptime, maintenance response time, preventive maintenance (PM) compliance, and inventory turnover. Regular reporting and analysis of these metrics allowed the company to identify areas for improvement, make data-driven decisions, and optimize maintenance processes.

The Business Impact

As a result of successfully implementing their CMMS system, the client received tangible benefits including, but not limited to:

- **Improved Maintenance Efficiency:** The CMMS streamlined maintenance processes, eliminated manual paperwork, and reduced administrative tasks. Maintenance personnel could easily create work orders, track their progress, and schedule preventive maintenance (PM) activities, improving efficiency and reducing response times.
- **Increased Equipment Uptime:** By implementing preventive maintenance schedules, the client significantly reduced unexpected breakdowns and equipment downtime. Proactive maintenance planning and timely repairs enhanced equipment reliability, minimizing production disruptions.
- **Enhanced Inventory Management:** The CMMS enabled accurate tracking and management of spare parts and inventory levels. Automated reorder alerts and optimized inventory control reduced stockouts, excess inventory, and associated costs.
- **Data-driven Decision-making:** Real-time access to maintenance data and comprehensive reporting capabilities empowered management to make informed decisions. The ability to analyze historical maintenance records, track performance trends, and identify areas of improvement allowed the client to optimize resource allocation, budgeting, and long-term equipment planning.
- **Improved Compliance and Safety:** The CMMS facilitated better compliance with regulatory standards and safety protocols. It ensured that maintenance tasks were performed in a timely manner and documented appropriately, reducing the risk of accidents, liability, and non-compliance penalties.
- **Cost Reduction:** Through better maintenance planning, optimized inventory management, and reduced equipment downtime, the client achieved cost savings. They minimized emergency repairs, avoided production delays, and optimized spare parts inventory which ultimately improved profitability.

What's Next

The successful implementation of the CMMS at our food and beverage client's facility addressed their maintenance challenges and significantly improved efficiency, equipment uptime, inventory management, and decision-making. They were able to transform from reactive maintenance practices to proactive strategies, resulting in cost savings, enhanced productivity, and improved customer satisfaction. The CMMS has become a vital tool for the organization, providing real-time visibility, data-driven insights, and streamlined maintenance operations.

About AMSS

Located in Green Bay, Wisconsin, Advanced Management Systems & Services is full-service management consulting firm that leverages the expertise of every team member to enhance the productivity results and activities utilizing available technologies and methodologies to achieve the results our clients need to remain profitable and grow.

AMSS
Advanced Management Systems & Services

Contact us for more information
+920-393-9155 amssconsulting.com