Df-OS
Digital Factory Operating System

PM (Preventive Maintenance)

Powered by Df-OS (Digital Factory Operating System)

Table Of Content

Project Background

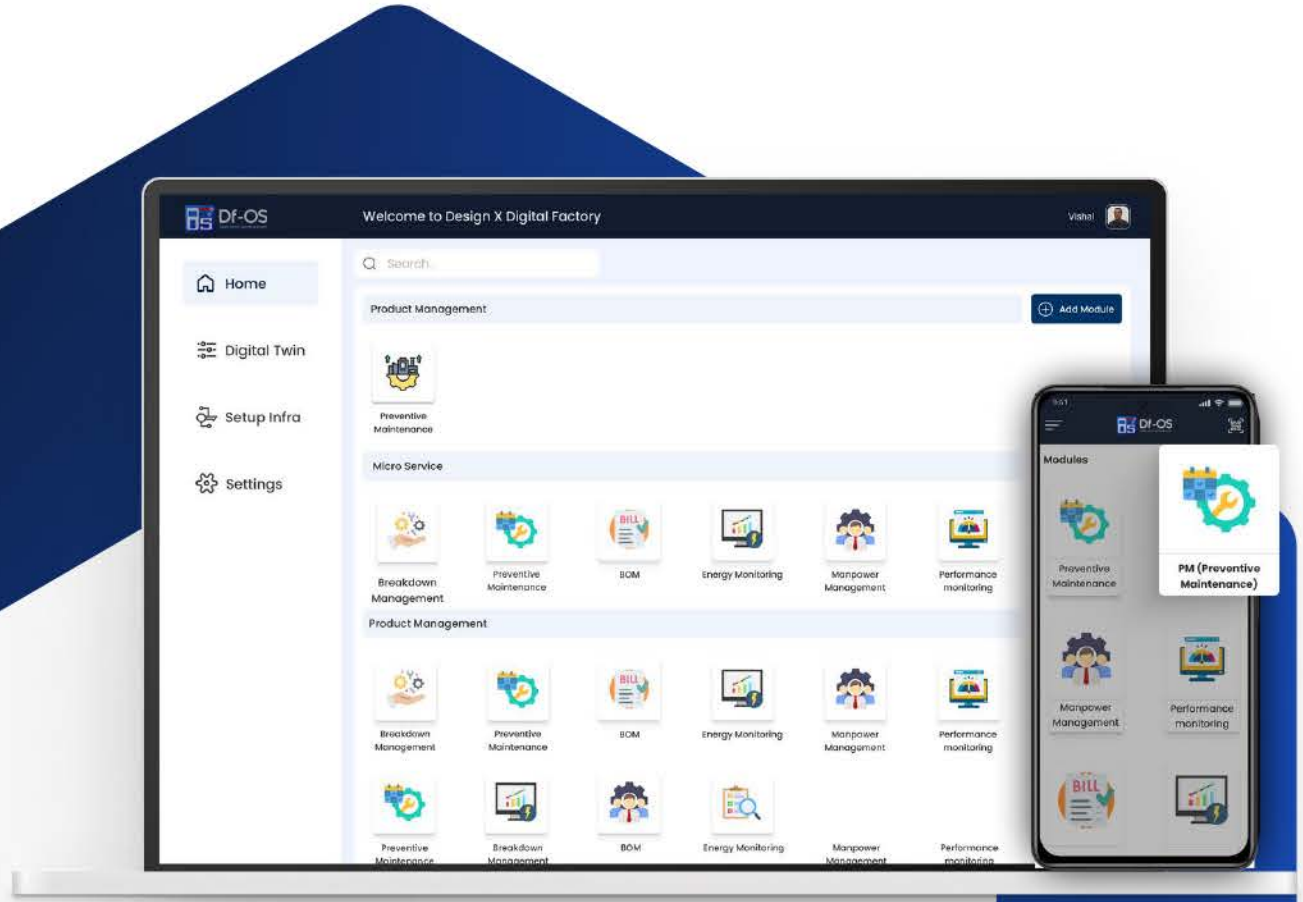
Preventive Maintenance (PM) is a proactive approach designed to maintain equipment and machinery through scheduled tasks aimed at preventing breakdowns and extending asset life.

The PM process has been successfully digitized using Df-OS (Digital Factory Operating System), replacing the traditional paper-based methods. This transition has eliminated inefficiencies such as missed maintenance schedules, inaccurate records, and challenges in monitoring equipment health. By automating scheduling, task tracking, and reporting within Df-OS, the organization has significantly improved equipment uptime, maintenance efficiency, and data accuracy.

Problem Statement

Before the implementation of Df-OS, the paper-based Preventive Maintenance system suffered from **multiple inefficiencies**, including **delayed task execution**, **missed maintenance schedules**, and **challenges in tracking equipment history**.

These issues led to **increased downtime**, higher equipment failure rates, and elevated operational costs. The absence of a centralized monitoring system hindered timely interventions and data-driven decisions regarding equipment health. With Df-OS, these challenges have been addressed, providing real-time visibility into maintenance activities.



Proposed Solution

- **Digital Workflows:** Replace paper-based forms with digital checklists and procedures.
- **Automated Scheduling:** Set up predefined schedules for PM tasks based on their monitoring frequencies.
- **Real-Time Monitoring:** Integrate machine sensors for real-time health monitoring, automatically flagging potential issues.
- **Centralized Data Management:** Store maintenance history, logs, and reports centrally for quick access and analysis.
- **Automated Alerts & Notifications:** Notify teams of upcoming maintenance tasks or when specific thresholds are exceeded.
- **KPI Tracking & Reporting:** Track key metrics like Mean Time Between Failures (MTBF) and generate reports for performance analysis.

Process Flow

PM Deployment

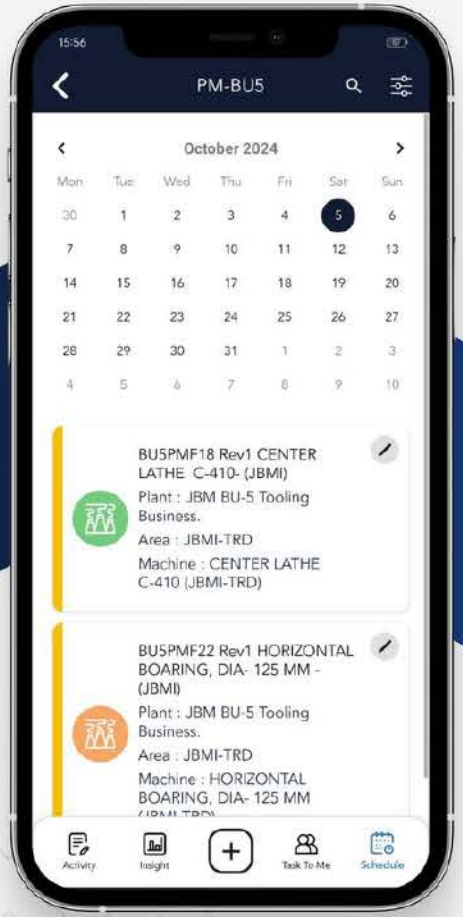
Digital PM Execution

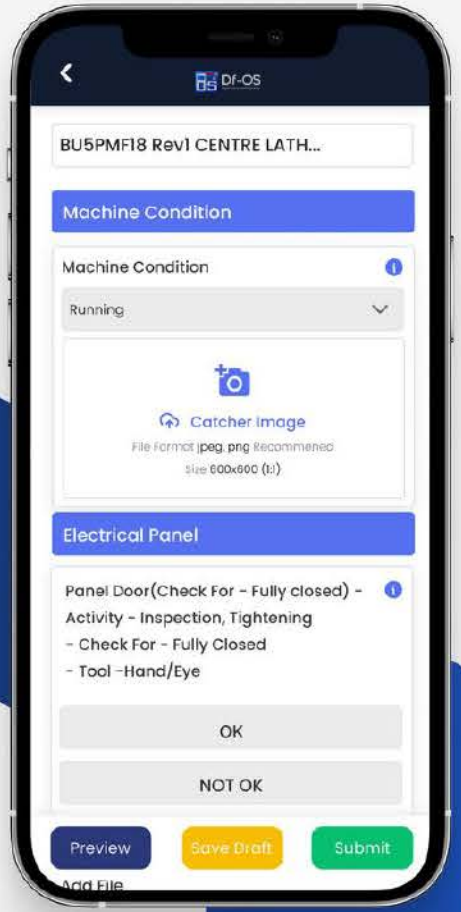
Task Allocation &
Follow-up Actions

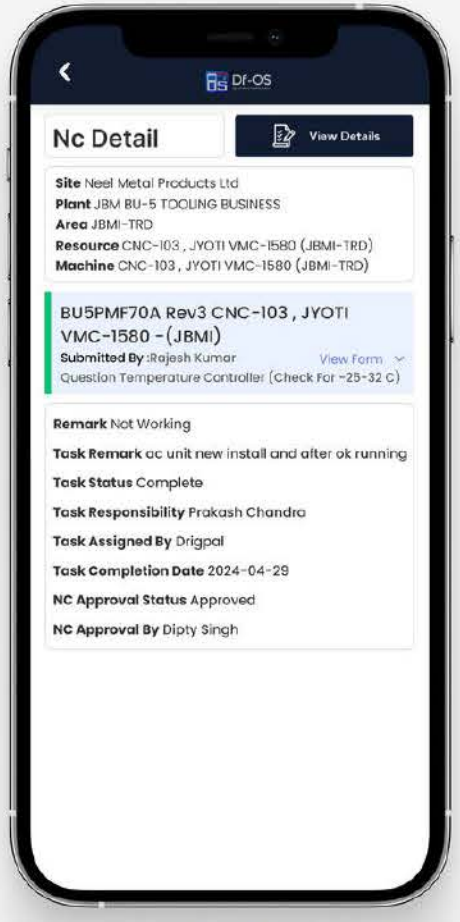
Action Reviewal
and PM Approval

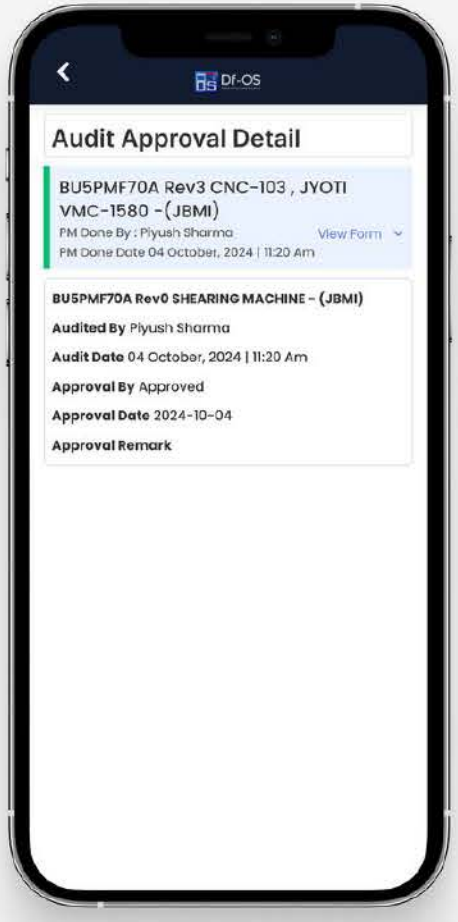
Real Time
Monitoring

User Interface









Key Results

Reduction in equipment downtime: Improved tracking and timely interventions through Df-OS have led to fewer equipment breakdowns.

Improvement in maintenance task completion: Automated scheduling and reminders via Df-OS have significantly increased the percentage of on-time task completions.

Real-time visibility: Maintenance managers now gain real-time insights into ongoing activities, enhancing accountability and reducing delays.

Enhanced equipment lifespan: Regular and timely maintenance facilitated by Df-OS has extended equipment life, reducing the need for costly replacements.

Data accuracy improved: Digital logging of maintenance activities within Df-OS has eliminated manual entry errors, ensuring accurate historical records.

Benefits

- Improved operational efficiency
- Reduced unplanned downtime
- Real-time data monitoring
- Better decision-making
- Increased equipment reliability
- Seamless remote platform accessibility

Contact Us

Unlock the transformative potential of Df-OS for your factories and operations. Connect with us today via phone, email, or LinkedIn to learn more!

https://dfos.ai

info@dfos.ai

+91 8595770364

https://www.linkedin.com/company/dfos/