Rotating Equipment Maintenance Dashboard

Data & Analytics (DNA) Team





EXECUTIVE SUMMARY

With the support of the Data & Analytics team, we have developed a centralized Equipment Maintenance Tracker application to digitize and streamline maintenance operations for rotating equipment.The system is designed to improve visibility, reduce manual efforts, and ensure compliance through real-time tracking and standardized workflows.

This demo will cover:

- Introduction and architecture of the Equipment Maintenance Tracker.
- Live demonstration of core functionalities.
- Feedback collection to guide next steps.
- Status updates on two other key initiatives: the Maintenance Activity Portal and AI-powered Smart Suggestion System (SSS)

Equipment Maintenance Tracker – Overview

The Equipment Maintenance Tracker is a web-based solution developed to improve how we manage our rotating equipment. It ensures better planning, monitoring, and reporting of maintenance activities.

01 Live Dashboard

- Provides an overview of equipment status, work order priorities, and overdue tasks.

02 Work Order Management

- Streamlines the creation, assignment, tracking, and closure of maintenance tasks.

03 Equipment Registry

- Detailed database of equipment with QR codes, maintenance histories, and asset master data.

04 Compliance Support

- Built-in safety checks, audit trails, and regulatory compliance tracking.

05 Integration with Analytics

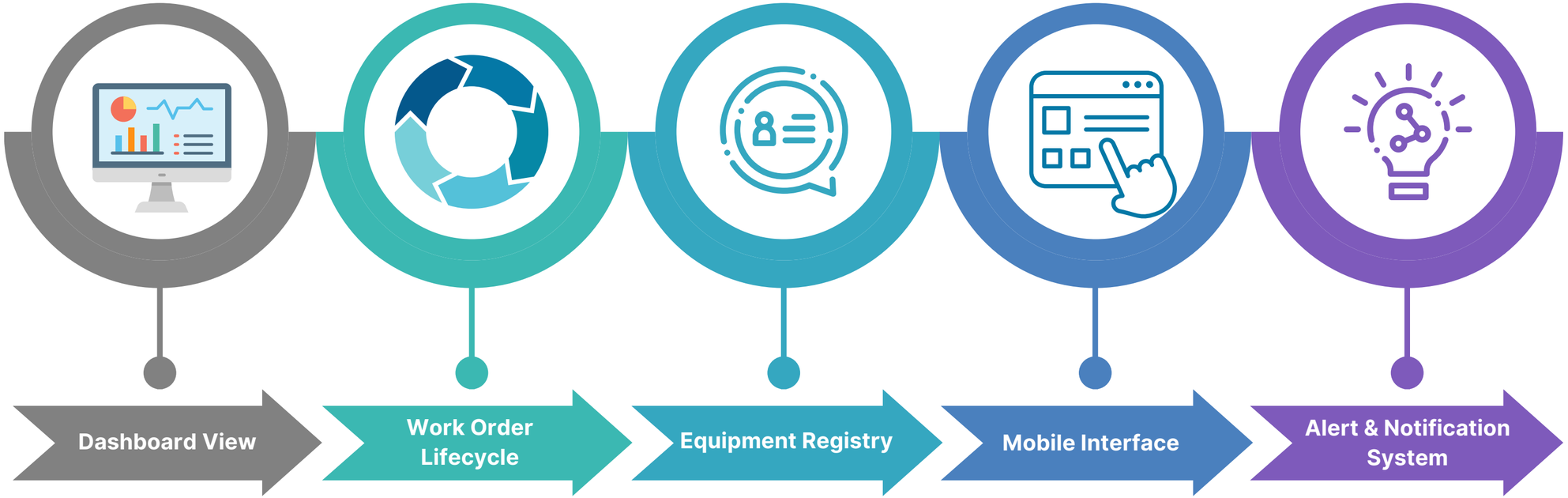
- Links to advanced reporting and data lakes for deeper insights.

06 Reporting & Analytics

Provides performance insights by equipment, technician, and location.

LIVE DEMO – APPLICATION IN ACTION

This demonstration will walk you through key components of the system



- An **interactive visual summary** of active, overdue, and completed maintenance tasks. **KPIs such as average** turnaround time, backlog, and compliance rates are also displayed.

- Walkthrough of creating a work order, **assigning it to the appropriate technician**, updating the status during execution, and closing with remarks and **checklist completion**.

Accessing detailed information about specific machines, including **previous work orders,** upcoming schedules, and **QR code scanning** for mobile access.

- A technician's view that supports field updates, even in **low-network conditions**, with seamless sync when back online.

- Demonstrating how the system sends **real-time alerts** and notifications for overdue tasks, maintenance reminders, and urgent issues.This ensures that **technicians and managers** are promptly informed of any critical maintenance actions that need attention.

PROJECT TIMELINE

Phase: 1

Equipment Maintenance Tracker

Status : ✅ Completed

Target Completion: June 2025

Phase: 1

Maintenance Activity Portal

Status : 🟡 80% Complete

Target Completion: August 2025

Phase: 1

AI-powered SSS

Status : ✅ Completed

Target Completion: May 2025

Phase: 2

AI-powered SSS

Status : 🔄 In Progress

Target Completion:

Phase: 3

AI-powered SSS

Status : ⏳ Planned

Target Completion: Q4 2025

FEEDBACK & NEXT STEPS

We value the input of the Maintenance Team in ensuring this solution is tailored to your daily workflows and operational needs.

Feedback Discussion Points:

- Are the KPIs and dashboard views aligned with your daily priorities?
- Is the work order flow intuitive and efficient?
- Are there additional reports or features that could add value?
- Any gaps in compliance tracking or documentation?

Next Steps:

- Incorporate suggested refinements from today's session.
- Complete mobile enhancements and finalize portal testing.
- Launch Equipment Maintenance Tracker for full departmental use.
- Progress AI-powered SSS into Phase 2 with predictive capability.
- Plan rollout of the Maintenance Activity Portal following final UAT.

Thank You

For Your Attention!

Qatar Petrochemical Company

Team :	Digital Team, QAPCO
Leader :	Head of Data & Analytics
Presenter:	Data Architect