PIT MINING DASHBOARD ANALYSIS

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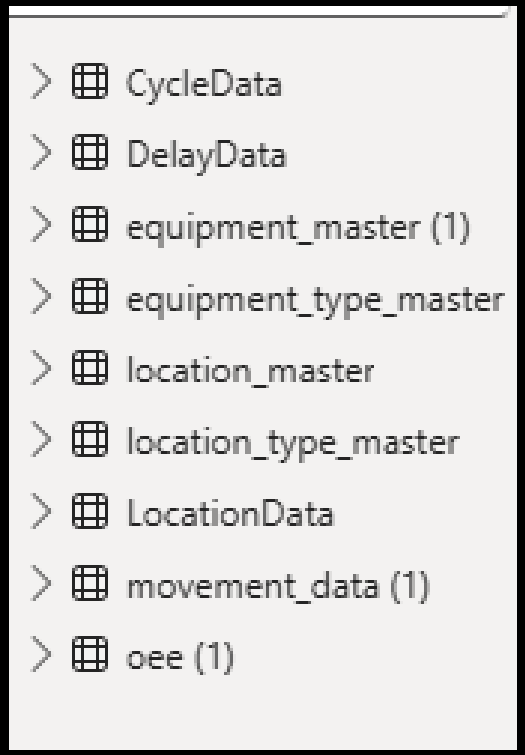
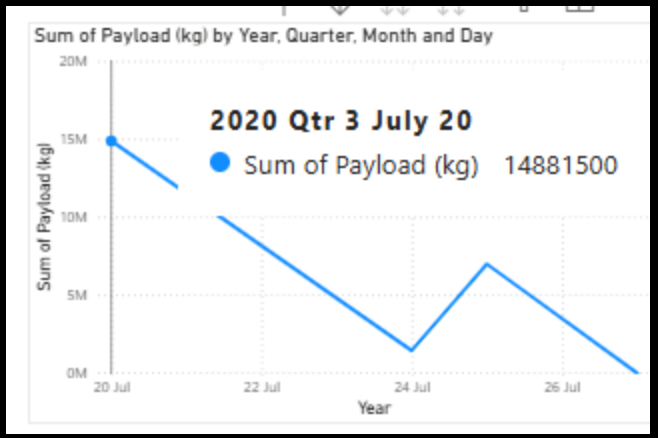
DATA OVERVIEW

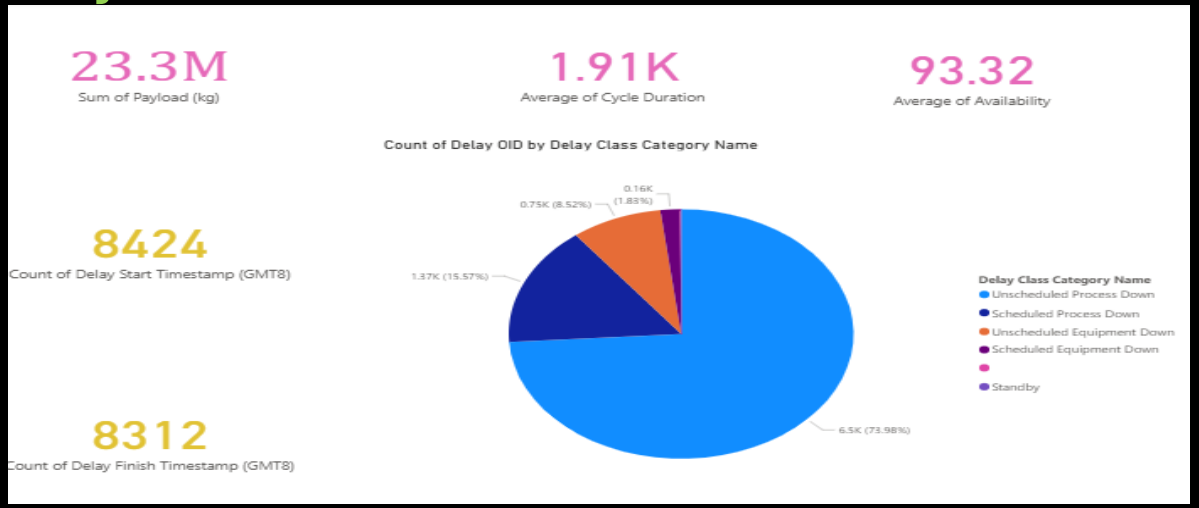
- • Equipment Master: Details of equipment and types
- • Movement Data: Payload and time of material movement
- • OEE Data: Availability, Performance, and Quality metrics
- • Delay Data: Downtime reasons and durations



DASHBOARD SUMMARY

- This report includes multiple Power BI dashboards:
- • OEE Trend Dashboard
- • Equipment Performance Dashboard
- • Delay Analysis Dashboard
- • Movement and Payload Dashboard
- All dashboards visualize key metrics and trends.





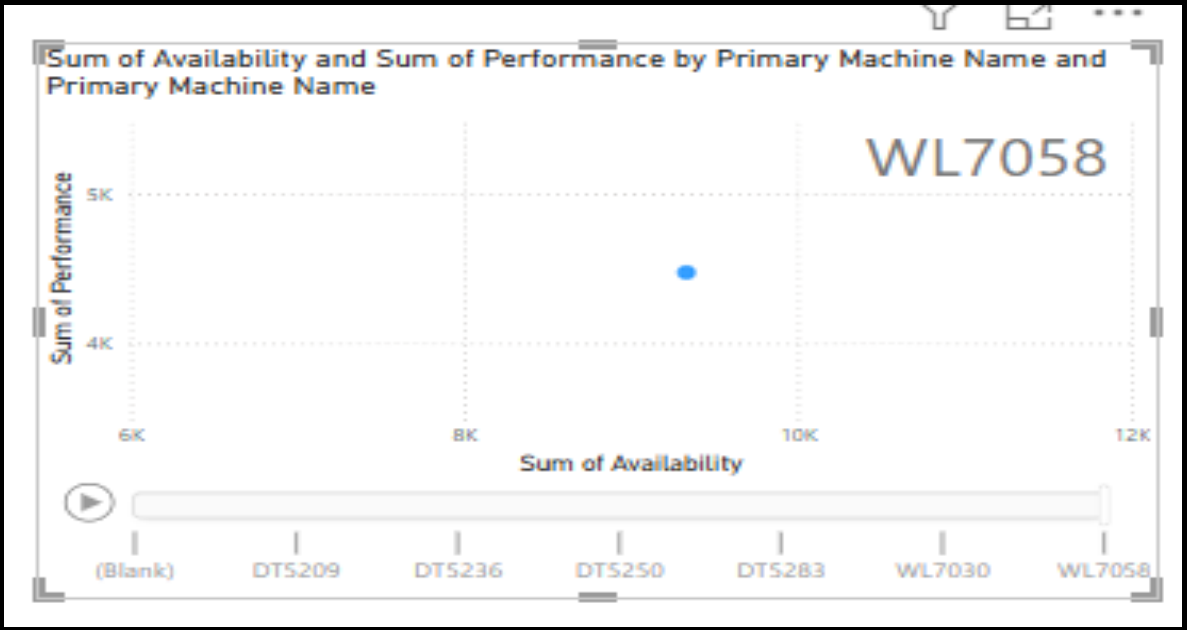
OEE BREAKDOWN ANALYSIS

- • Tracked Availability, Performance, and Quality KPIs
- • Spikes in performance drop identified with timestamp
- • Visual: OEE Trends and Category Breakdown

Primary Machine Name	Sum of Availability	Sum of Performance	Sum of Quailty
	9,332.37	4,473.87	44,594.13
DT5209	9,332.37	4,473.87	44,594.13
DT5236	9,332.37	4,473.87	44,594.13
DT5250	9,332.37	4,473.87	44,594.13
DT5283	9,332.37	4,473.87	44,594.13
WL7030	9,332.37	4,473.87	44,594.13
WL7058	9,332.37	4,473.87	44,594.13
Total	**9,332.37**	**4,473.87**	**44,594.13**

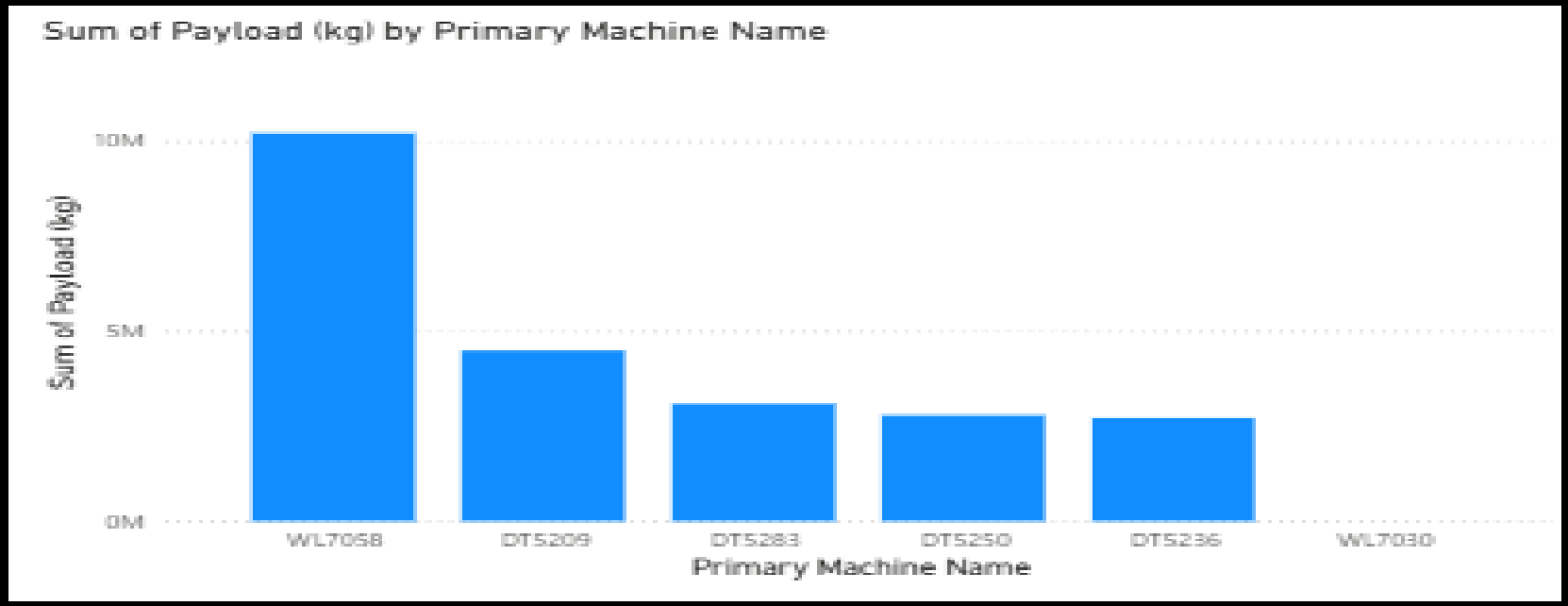
EXECUTIVE SUMMARY

- This project analyzes pit mining operations using equipment, movement, and OEE data.
- The goal is to identify inefficiencies, top/bottom performers, and actionable insights for operational improvements.



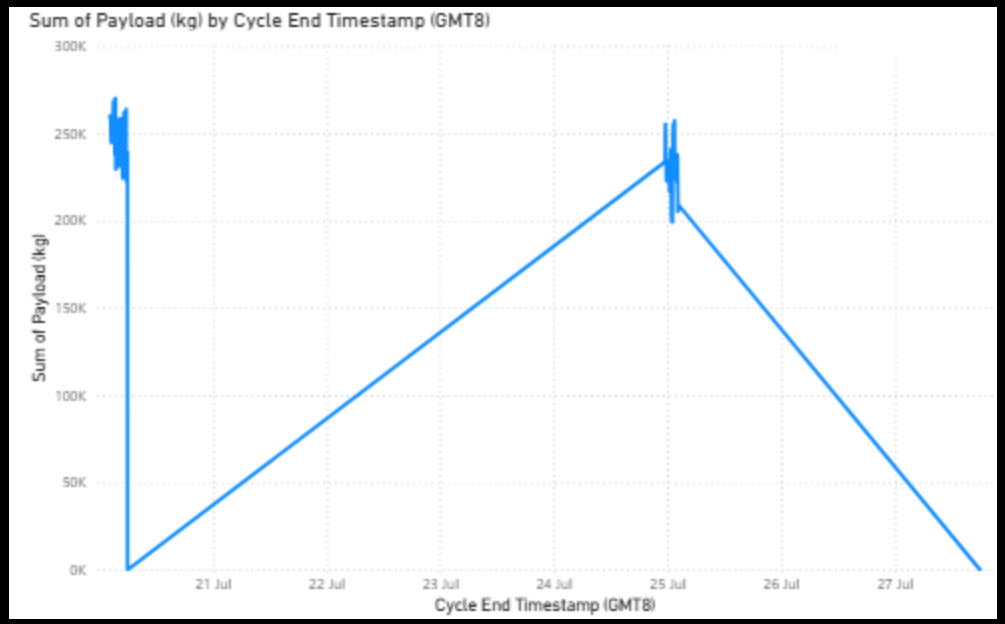
EQUIPMENT PERFORMANCE INSIGHTS

- • Identified top-performing machines based on OEE
- • Flagged machines with OEE < 80% for maintenance
- • Visual: Top vs Low Performing Equipment chart



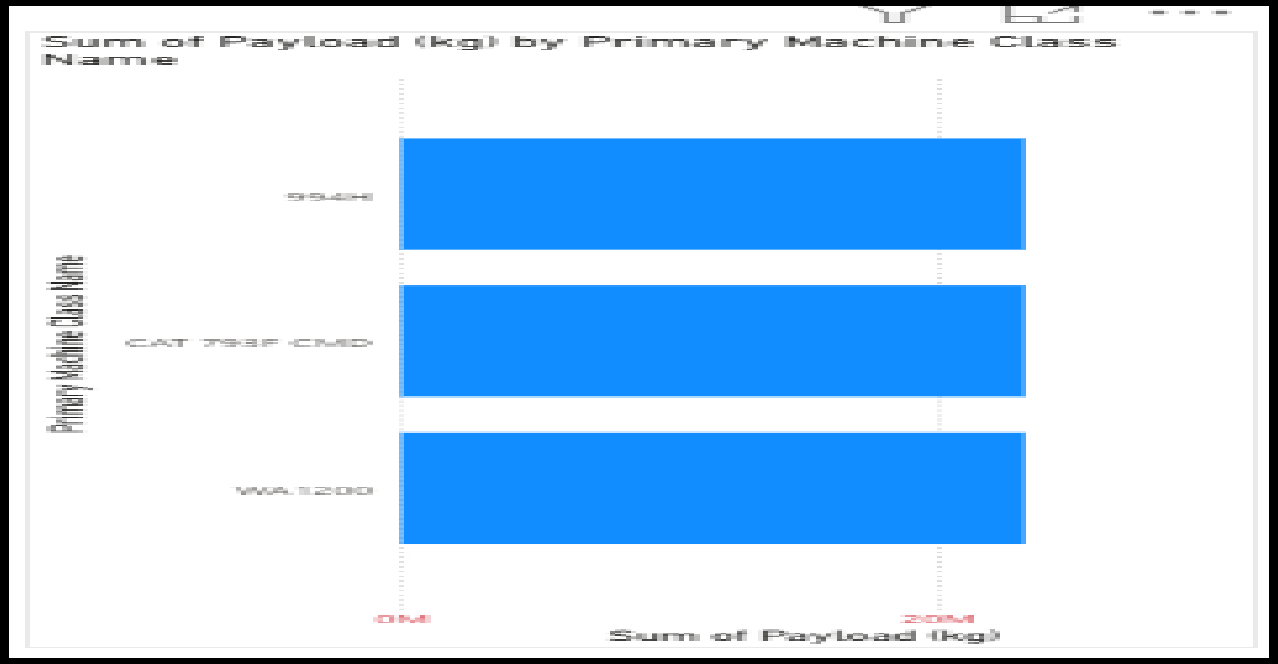
DELAY ANALYSIS

- • Common delay reasons: Fuel issues, Engine faults
- • Equipment with highest delays highlighted
- • Visual: Delay Type Breakdown & Trend Line



MOVEMENT & PAYLOAD INSIGHTS

- • Total material moved per equipment per shift
- • High and low payload cycles compared
- • Visual: Movement Timeline and Summary Table



KEY RECOMMENDATIONS

- • Service low-performing equipment
- • Investigate frequent delay causes (e.g., fuel or engine)
- • Optimize payload capacity distribution
- • Continue monitoring OEE to sustain efficiency

CONCLUSION & NEXT STEPS

- This analysis provides a roadmap for better asset utilization and fewer operational delays.

- Next Steps:
- • Implement maintenance schedule
- • Conduct delay root cause analysis
- • Set weekly OEE targets