

“TrackTreads Asset Management System”

By

smartDataTM
ENTERPRISES
Scaling Expectations

CMMI Dev/3 Organization



Project Name

TrackTreads Asset Management System

Case Study Overview

This case study explores how TrackTreads helped fleet operators in the mining and heavy equipment sectors overcome challenges in managing undercarriage wear and maintenance. By implementing a digital solution for field inspections and predictive analytics, TrackTreads provided clients with the ability to track wear in real-time, forecast repairs, and optimize equipment performance. The case study outlines the problems faced by clients, the solution TrackTreads delivered, the system's core features, and how it addressed key challenges, leading to improved operational efficiency and cost savings.

Problem Statement

Fleet owners and operators of tracked machinery face challenges in tracking undercarriage wear and maintenance needs, often relying on time-consuming manual inspections and disparate data systems. This leads to inefficiencies, inaccurate forecasting of maintenance needs, and unexpected equipment failures, increasing operational costs and downtime.

Solution

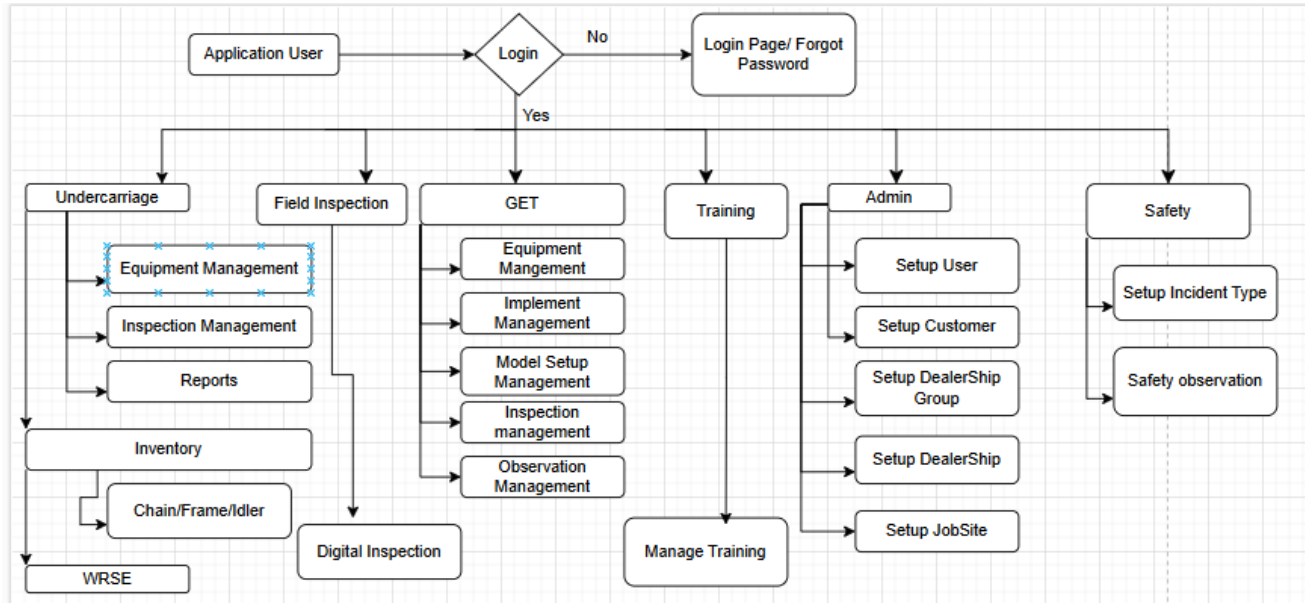
TrackTreads offers a comprehensive SaaS-based platform for undercarriage management, providing a mobile app for field inspections and a web-based portal for data analysis and reporting. The system supports all types of tracked machinery, including rope shovels, and offers predictive insights to help manage component wear, forecast replacements, and track cost-per-hour usage.

Core Features/Advantages

- Mobile Inspection Tools: Field measurements, images, and comments collected through mobile devices (iOS, Android, Microsoft), with integration for ultrasonic tools.
- Real-time Syncing: Data is automatically synced to the web portal for supervisor analysis.
- Custom Reporting: Users can generate real-time undercarriage condition reports on-site, helping customers act quickly.
- Predictive Maintenance: TrackTreads' analytics help forecast component wear, set custom inspection limits, and compare component performance across fleets.

- Comprehensive Data History: Complete inspection history allows for thorough tracking of repairs, replacements, and cost analysis over time.

Master Flow



Challenges & Solutions

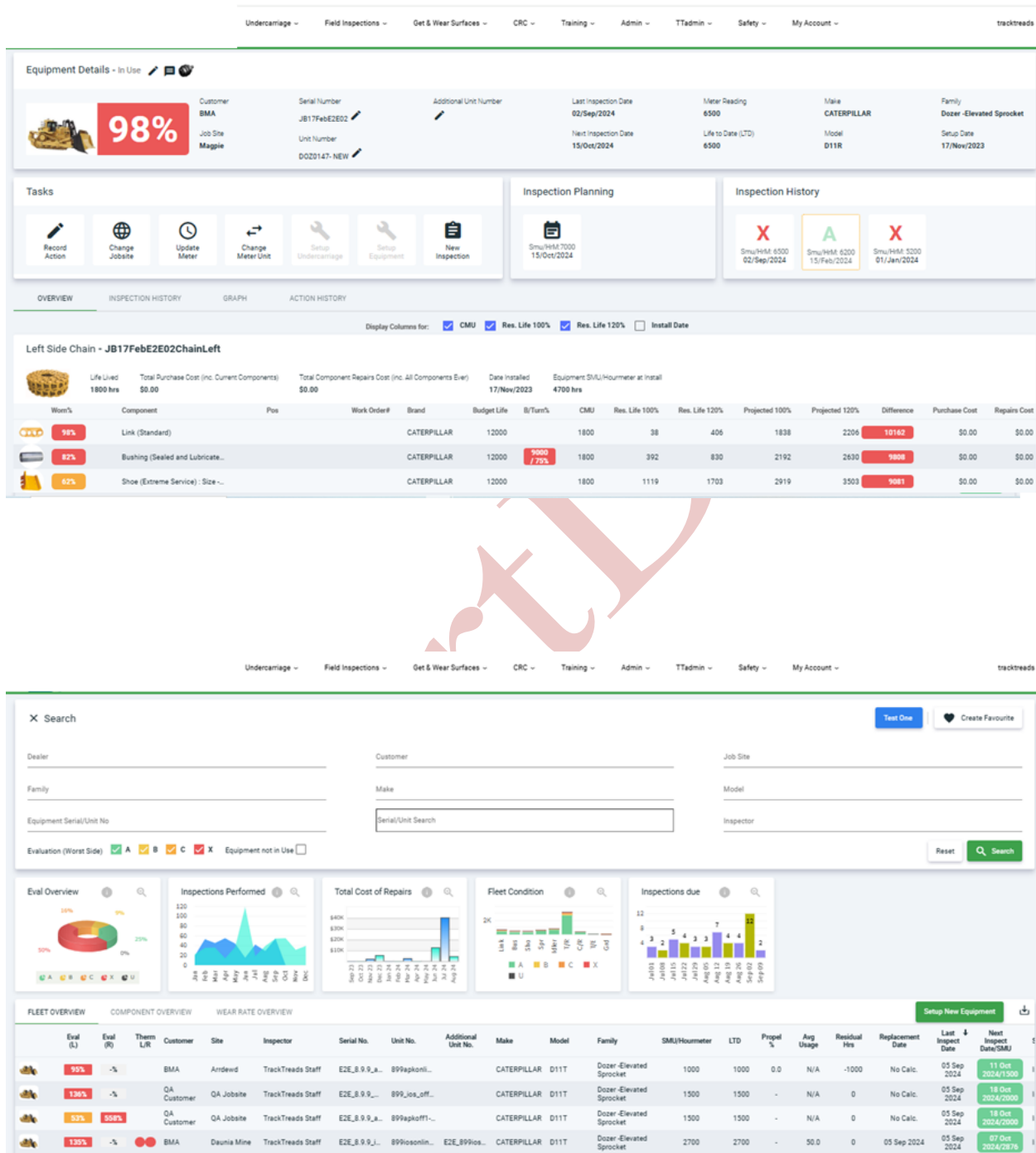
Challenges:

- Resistance to digital adoption: Field operators and technicians are often slow to adopt digital tools, preferring manual processes.
- Data Integration Issues: Many clients have legacy systems in place, making integration with new software complex.

Solutions:


- Extensive Training: TrackTreads offers comprehensive onboarding and ongoing support to ensure a smooth transition to their digital inspection tools.
- API & Integration Support: Seamless integration with existing enterprise resource planning (ERP) and maintenance systems through custom APIs.

Screenshots



[Undercarriage](#)
[Field Inspections](#)
[Get & Wear Surfaces](#)
[CRC](#)
[Training](#)
[Admin](#)
[TTAdmin](#)
[Safety](#)
[My Account](#)
[tracktreads](#)

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Serial Number
JB17FebE2E02

Unit Number
DOZ0147-NEW

Additional Unit Number

[Change Equipment](#)

Customer: BMA Job Site: Maggie Meter Reading (SMU/Hourmeter): 1902 Life to Date (LTD): 1900 Make: CATERPILLAR Model: D11R Family: Dozer -Elevated Sprocket

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Equipment Hours

Meter Reading (SMU/Hourmeter) * hrs min

Forward Travel hrs hrs

Forward Travel km

Total Dist: 0 km

Inspection Date ** 12 Sep 2024

Reverse Travel hrs hrs

Reverse Travel km

Overall Notes

Inspection Notes

Job Site Notes


Underfoot Conditions

Observations

[Save](#)

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Serial Number
JB17FebE2E02

Unit Number
DOZ0147-NEW

Additional Unit Number

[Change Equipment](#)

Customer: BMA Job Site: Maggie Meter Reading (SMU/Hourmeter): 6500 Life to Date (LTD): 6500 Make: CATERPILLAR Model: D11R Family: Dozer -Elevated Sprocket

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Additional Observation Lists

Title	Answer	Image	Comment	Delete
Equaliser Bar Style	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Equaliser Bar Bore	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Blade Left End Bit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Blade Cutting Edges Left, Right, Centre	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>


[Add Observations](#)

Warning: You are currently missing the pmuReading, ForwardTravelHours, ReverseTravelHours, ForwardTravelKms, ReverseTravelKms, TrackSagLeft, TrackSagRight, DryJointLeft, DryJointRight, CannonExtLeft, CannonExtRight, ScallopLeft, ScallopRight, LinkHoLeft, LinkHoRight, JobSiteNotes, InspectionNotes, measurement.

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 tracktreads

Dashboard / Find Inspection / Interpretation



Serial Number
JB17FebE2E02

Unit Number
DOZ0147-NEW

Additional Unit No

Make
 CATERPILLAR

Model
 D11R

Inspection Id
 1004244

Quote

PDF

Send Report

Customer BMA	Meter Reading (SMU/Hourmeter) 6500 hrs	Forward Travel 0 km	Reverse Travel 0 km	Total Dist. 0 km	Reverse Dist. % 0 %	Inspection Comment	Inspector TrackTreads Staff	Inspection Date 02/Sep/2024
Job Site Maggie	Life to Date (STD) 6500 hrs	Forward 0 Hrs	Reverse 0 Hrs			JobSite Comment		

Underfoot Conditions

Inspect *	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Abrasive *	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Moisture *	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Packing *	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High

Track Sag

L	125 mm
R	mm

Cannon Ext.

L	45 mm
R	mm

Scallop

L	mm
R	mm

Dry Joints

L	
R	

of Links

L	
R	

Tension Indicator Installed

L	<input type="radio"/> Yes <input checked="" type="radio"/> No
R	<input type="radio"/> Yes <input checked="" type="radio"/> No

Thermal Images

L	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
R	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

Equaliser Bar Type

<input type="radio"/> Toe Out	<input checked="" type="radio"/> Straight
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Interpretation Comment

Quotes & Recommendations

1

+

Action Date Choose a date

Action SMU

+ Action Recommendation

+ Rule

Warning: You are currently missing the pmuReading, ForwardTravelHours, ReverseTravelHours, ForwardTravelKms, ReverseTravelKms, TrackSagLeft, TrackSagRight, DryJointLeft, DryJointRight, CannonExtLeft, CannonExtRight, ScallopLeft, ScallopRight, LinkNoLeft, LinkNoRight, JobSiteNotes, InspectionNotes, measurement.

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Conclusion

TrackTreads' undercarriage management software provides fleet operators with a cutting-edge solution to reduce downtime, improve maintenance planning, and enhance overall equipment life. By combining mobile inspections with predictive analytics, the system allows companies to make informed, real-time decisions on repairs and replacements, optimizing their asset management strategies.

TrackTreads Asset Management System

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