



Equipment Troubleshooting Agent

Knowledge Management Challenges & Approach in Maintenance Workforce

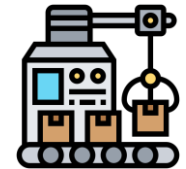
Key Challenges in equipment troubleshooting

- **Unplanned equipment failures** leading to extended downtime and production loss
- **Historical failure data is hard to search** and lacks actionable insights
- **Knowledge concentrated in a few experts**, unavailable during critical events
- **Inconsistent failure notifications** with non-standardized details
- **Inefficient troubleshooting** causing excess part usage and higher inventory costs
- **Knowledge gaps among field technicians**, increasing customer and operational risk

Approaches for AI-Driven Approach for Equipment Troubleshooting

Real-time Troubleshooting Assistance

- **Root Cause Identification:** AI suggests probable causes based on symptoms and history
- **Guided Diagnostics:** Step-by-step troubleshooting workflows for field teams
- **Parts Prediction:** Recommend required parts early to reduce delays and rework



Key Features of Equipment Troubleshooting Agent

Natural Language Fault Query

Technician describes the fault in plain language — the agent identifies the matching damage code using partial text matching against SAP PM notification history

Historical Issues

Agent retrieves all the historical issues for the equipment, filters by damage, and surfaces the most frequently occurring cause code from past records

Spare Part Recommendation from Maintenance History

Retrieves components from past maintenance orders from S/4HANA, counts part frequency across all linked orders, and recommends the most commonly used spare part

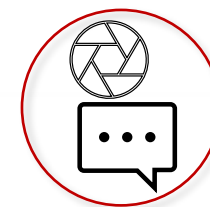
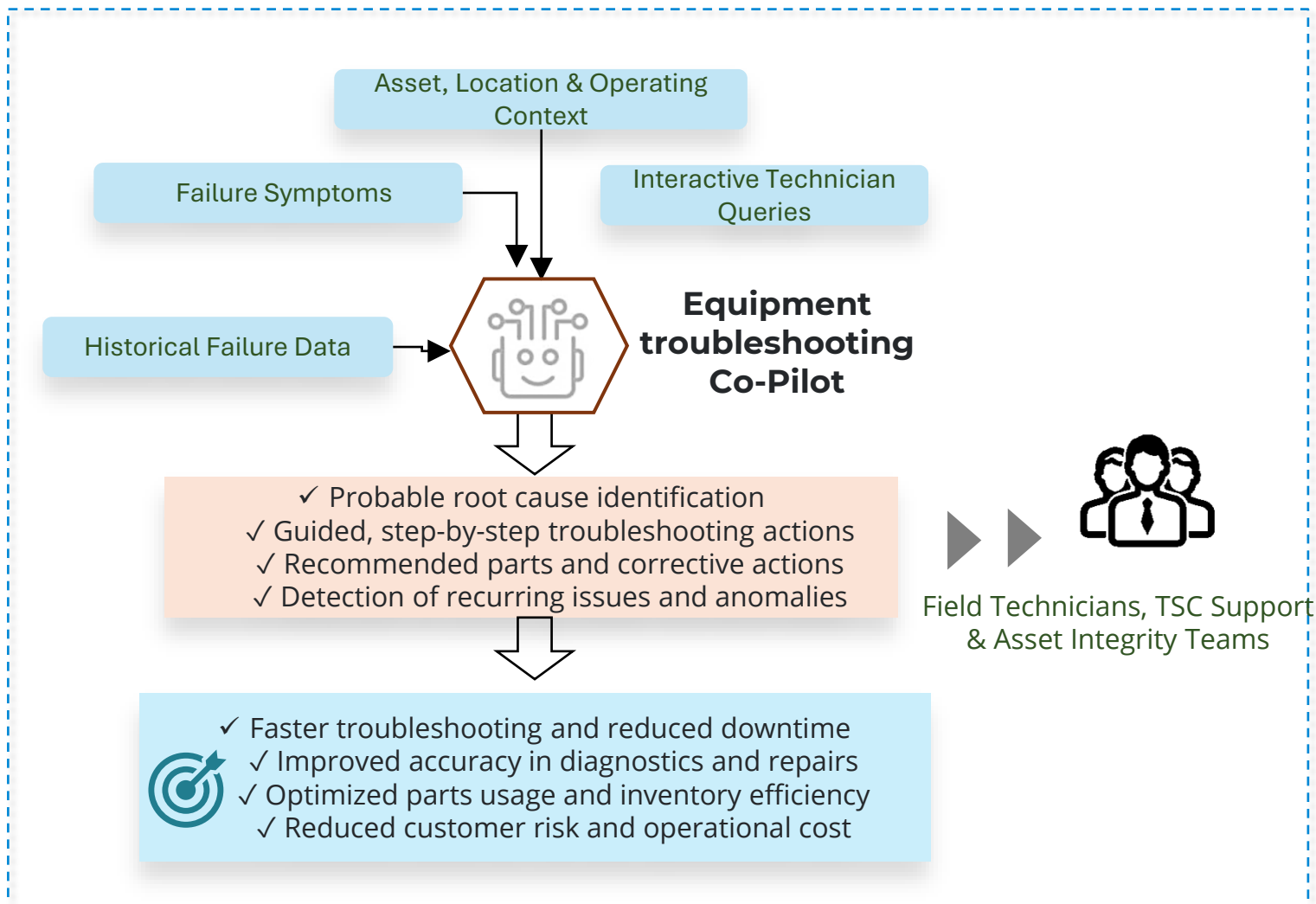
Automated Work Order Creation

Creates a SAP PM work order with equipment number, damage description, and spare part — on explicit user confirmation, with no additional input required

Equipment Troubleshooting Agent

A smart troubleshooting assistant designed for field and support teams to rapidly diagnose equipment failures and identify required parts.

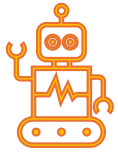
It analyses historical failure data, real-time inputs, and asset context to deliver actionable, equipment-specific guidance.



AI-powered virtual troubleshooting assistant for field operations and equipment reliability teams.

Provides **context-aware diagnostics, root cause insights, and parts recommendations** to resolve failures faster and at lower cost.

Joule Agent for Worker Guidance



**Intelligent Agent for
Natural Language Based
Query**



**Guides Workers on Any
Query Instantly**

Protective Device Activation Cause

Timeline

Today 2:52 PM

What is the cause behind the Protective device activated damage for the equipment 10000148?

For Protective device activated on equipment 10000148 this is the cause code: Cause Code: Operating sequence error Maintenance Order(s): 4003196

Do you want me to provide suggested spare parts for this?

find me spare parts used in this workorder 4003196.

Spare Part Details
Used in Maintenance Order 4003196

Spare Part ID
168

Plant Code
4322

Operation Number
0010

create a work order for the Protective device activated damage, with spare part 168 for this equipment 10000148.

The work order "000004004954" for equipment 10000148 has been successfully created, associated with notification 0049596.

Message Joule...

Joule text message

Working on your task...

Extracting relevant data...

Breaking down the task...

Planning next steps...

Fetching fault history for equipment 10000148.

Extracting relevant data...

Checking for answers...

Extracting relevant data...

Preparing response for user confirmation.

Refining the results...

Joule text message

Joule object message

Joule text message

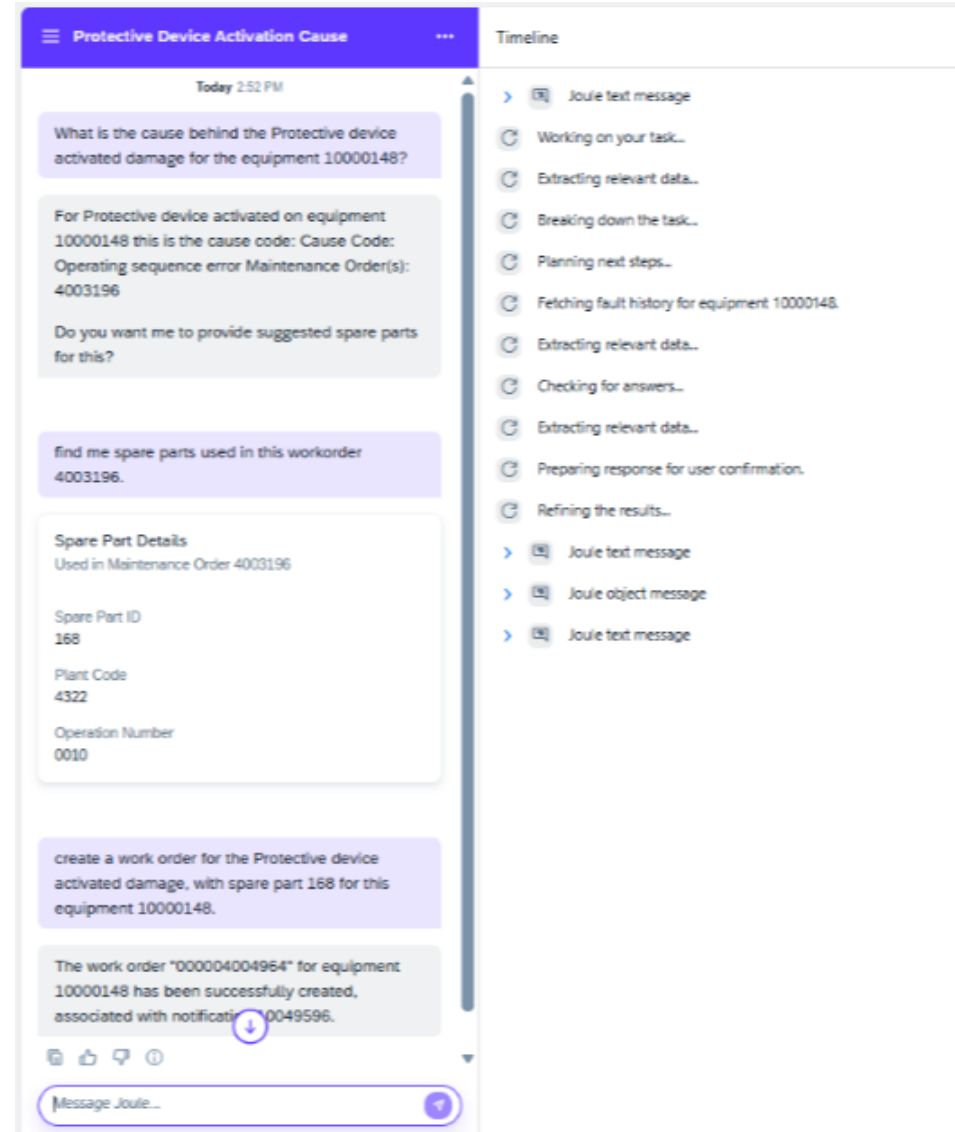
Suggestions for Resource Maintenance & Operations

Challenge:

- Large volumes of **failure data, alerts, and sensor readings** require manual analysis
- Troubleshooting requires **cross-referencing multiple documents** (SOPs, manuals, past failures)
- Inconsistent diagnostics due to **experience gaps across field teams**
- Delayed decisions lead to **extended downtime and incorrect parts usage**

Solution:

- **Identifies root cause codes** from SAP PM historical maintenance notifications using the equipment number
- **Suggests the most frequently used spare part** based on past maintenance orders linked to the fault
- **Creates a SAP PM work order** automatically with the equipment, damage, and spare part — on user confirmation



Learn More about Incture

www.incture.com



Request for Cherrywork application demo!

www.cherrywork.com



Incture®

