

# REVOLUTIONIZING SERVICE DOCUMENT MANAGEMENT WITH AI/ML INTEGRATION

# About the Customer

Our Customer is a leading provider of Essential Safety & Compliance and Contractor Management Services, trusted by over 400 clients and managing more than 13,000 commercial properties across Australia.

Recognized as industry experts, they are influential members of prominent organizations like the Fire Protection Association Australia, Property Council of Australia, National Fire Industry Association, and Facilities Managers Association, regularly providing updates on the latest industry changes.

# Business Challenges

The Customer faced significant challenges in manually verifying a large number of service documents to ensure services were actually carried out. This manual process was time-consuming and error-prone, causing delays in service delivery and compliance reporting. Each document had to be reviewed for fields such as:

- Service Delivery
- Service Date
- Service Frequency
- Technician Name
- Critical/Non-Critical Defect
- Technician Signature
- Service Completion/Non-completion

Documents then had to be sent to Accounts Payable to clear payables to Sub-Contractors, adding further delays

# Key

# challenges included:

### 1. Manual Verification:

- Time consuming process to verify each document
- High potential for human error

### 2. Volume of Documents

· Handling a vast number of service documents manually

# 3. Accuracy and Consistency

· Ensuring all relevant fields are correctly filled and verified

# 4. Compliance and Reporting Delays

Delays in service delivery and compliance reporting due to manual process

### 5. Resource Intensive

· Significant manpower required for document review and approval

# 6. Accounts Payable Processing

- Additional time needed to review and forward documents to Accounts Payable
- Delays in clearing payables to Sub-Contractors

# 7. Risk of Overlooking Critical information

• Possibility of missing Critical/non-critical defect details

# 8. Impact on Service Delivery

 Potential delays affecting overall service delivery and customer satisfaction

# The

# Solution:

To address the challenges of manual service document verification, Recochain's AI/ML Technology and Retrieval Augmented Generative AI was implemented, integrating seamlessly with Customer's existing Preventive Maintenance System(PMS). Below is how the solution was implemented

### 1. Automated Service Data Extraction:

- AI/ML Technology: The system uses advanced algorithms to automatically extract key service fields such as Service Date, Service Frequency, Critical/non-critical defect along with other fields, from service documents
- Seamless integration with Customer's existing Preventive Maintenance System(PMS) for further processing.

# GOAL

Streamline document verification and approval to reduce manual effort, minimize errors, ensure compliance, and improve efficiency and service delivery.

# **STORY**

The customer faced delays and errors due to manual verification of numerous service documents, affecting service delivery and compliance reporting.

# SOLUTION

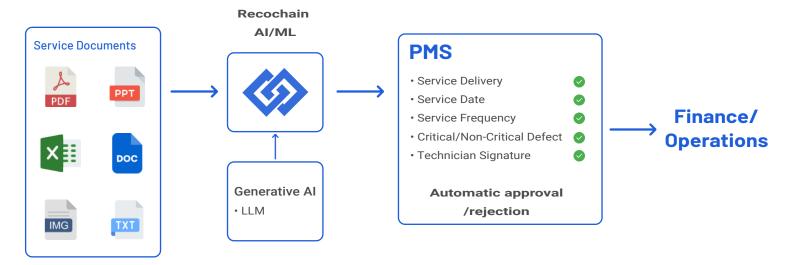
Recochain's AI/ML and RAG technology integrated with the customer's PMS(Preventive Management System)to automate data extraction and verification, providing auto-approval for complete documents and flagging incomplete ones for manual review.

# RESULT

- **Efficiency**: 70% reduction in document processing times.
- Accuracy: 85% decrease in error rates.
- **Compliance**: Real-time adherence and reduced operational costs.
- Service Delivery: Faster approvals and timely payments, supporting scalability and better decision-making with LLM insights.

# 2. Auto Approval Workflow

- Automatic Approval: Once relevant fields are extracted, the documents are automatically approved if all necessary information is present.
- Manual review for missing fields: If any critical fields like Critical/Non-critical defect classification are missing, the document is flagged and sent for manual review to ensure accuracy and completeness.



# 3. Improved Process Efficiency

- Streamlined Workflow: The integrated system streamlines the entire workflow from Document submission to approval, significantly reducing the time and effort required for manual checks
- Error reduction: Automated extraction and contextual understanding reduce the likelihood of errors ensures consistent data quality.

# The

# Impact:

# 1. Increased Efficiency and Accuracy

- Reduced document processing times by 70%
- Decreased error rate by 85%

# 2. Enhanced Service Delivery and Cost Savings

- Faster approval processes led to quicker service delivery and timely payments
- · Efficiently handled increased document volumes, supporting operational scalability
- Lowered operational costs by 40% and optimized resource allocation

# 3. Higher Customer Satisfaction