TECH mahindra

CASESTUDY

Leading Insurer Cuts Claims Processing Time by Nearly 99% with AI



Scale at Speed™



Overview

A leading insurer was looking to modernize its claims intake process as growing volumes of emails and documents increased the burden on manual operations. Reviewing, classifying, and approving things in large volumes became a massive challenge, causing huge bottlenecks and drastically slowing down processing speed.

Tech Mahindra partnered with the insurer to build an AI-driven claims intake system using Microsoft Power Automate and Azure AI. This system automated document extraction, classification, and routing, reducing processing time by almost 99% while improving accuracy to a significant degree.

Client Background and Challenges

The client is a leading insurer that traditionally processes high volumes of claims submitted through emails and attachments across multiple document formats: PDFs, TIFFs, scanned images, documents, and others.

As demand escalated, volumes increased, and its manual intake process became increasingly difficult to scale while maintaining speed, accuracy, and traceability.

Here's how:

Manual email handling:
More than 25 employees manually reviewed emails and attachments across multiple mailboxes.

Mixed document formats:
PDFs, TIFF files, scanned images, handwritten documents, and embedded files made data extraction complex.

Long intake cycles:
Individual requests took four to eight hours to process, with after-hours claims adding to the backlog.

Extraction errors:
Manual extraction achieved approximately 82% accuracy, increasing errors and rework.

Scalability limitations:
A people-dependent process struggled to accommodate increases in claims volumes. improving accuracy to a significant degree.



Our Approach and Solution

We partnered with the insurer to develop a purpose-built, AI-enabled claims intake solution tailored to its operating environment and diverse document formats.

Microsoft Power Automate was deployed to continuously monitor shared mailboxes and orchestrate the claims workflow, while a custom-trained Azure AI model processed incoming documents. This solution extracted structured information, classified claims by type, assigned confidence scores, and routed claims appropriately.

Designed to process formats including PDFs, TIFF files, embedded images, and handwritten content, the solution also incorporated confidence scores. Files that had low-confidence scores or missing mandatory fields were automatically identified for human review, enabling teams to save time and optimize their focus where it truly mattered.

Together, these capabilities transformed a largely manual intake process into an end-to-end automated workflow that operates 24/7, and processes 10–10,000 emails a day with no extra cost or headcount, all with accuracy and traceability.

USP of the Solution/ Programme

A purpose-built AI intelligence pipeline that eliminates manual email triage for insurance claims — end-to-end, in under 60 seconds, at enterprise scale.

End-to-End Automation

From email arrival to downstream system forwarding — zero human touch for standard claims. Power Automate + AI model runs continuously, 24 hours a day, 7 days a week.

Confidence-Scored Exception Handling

Every extracted field carries a confidence score. Low-confidence or missing mandatory fields auto-flag for human review - no silent failures, no misrouted claims.

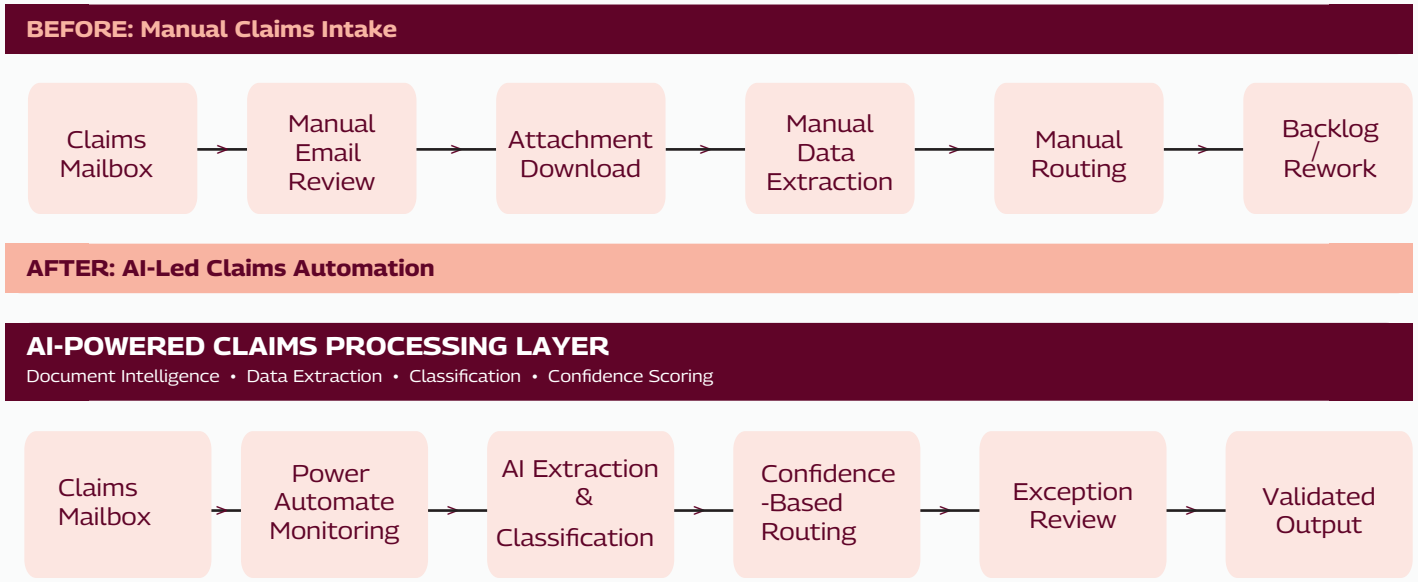
Multi-Modal AI Extraction

The AI model reads email subject, body AND all attachments (PDFs, TIFF scans, embedded images) in a single pass. No document format is missed or skipped.

Elastic Scale & Full Auditability

Processes 10 or 10,000 emails/day with no additional cost or headcount. Every action is logged with timestamp, extracted value, and routing decision for compliance.

Claims Intake Transformation



99% reduction in processing time from 4-8 hours to instant.

90% reduction in manual staffing.

Extraction accuracy increased from 82% to 99%.

0 manual backlog.

Business and Community Impact

Key highlights of the partnership:

- Nearly **99%** reduction in processing time, from four to eight hours to under one minute
- Extraction accuracy increased from approximately **82%** to over **99%**, reducing missing fields, errors, and rework
- More than **25** full-time roles reduced to two or three oversight roles, focused on exceptions, high-value claims, and customer interactions
- SLA compliance increased to over **98%** through faster and more consistent claims intake
- Almost zero missing-field incidents through confidence scoring and exception-based review
- **24/7** processing and scalable email throughput, helping manage peak volumes without additional staffing
- End-to-end auditability through timestamps, extracted fields, confidence scores, and routing records

About **Tech Mahindra**

Tech Mahindra (NSE: TECHM, BSE: 532755) offers technology consulting and digital solutions to global enterprises across industries, enabling transformative scale at unparalleled speed. With 150,000+ professionals across 90 countries, Tech Mahindra provides a full spectrum of services including consulting, information technology, enterprise applications, business process services, engineering services, network services, customer experience & design, AI & analytics, and cloud & infrastructure services. It is the first Indian company in the world to have been awarded the Sustainable Markets Initiative's Terra Carta Seal, which recognizes global co mpanies that are actively leading the charge to create a climate and nature-positive future. Tech Mahindra is part of the Mahindra Group, founded in 1945, one of the l argest and most admired multinational federation of companies. For more information on how TechM can partner with you to meet your Scale at Speed™ imperatives, please visit https://www.techmahindra.com/.

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