

# Use Case Library

## Comprehensive AI Opportunity Catalog

### Overview

Total Use Cases: 25

Active Portfolio: 1

Organization: RSA Insurance

Report Generated: August 11, 2025

Classification: Strategic Planning Document

### Executive Summary

This catalog presents a comprehensive library of AI use cases specifically curated for the insurance industry. Each entry includes details on strategic alignment, expected business impact, feasibility, resource requirements, and potential ROI.





# Portfolio

**25**

Total Use Cases

**1**

Active Portfolio

**24**

Reference Library

## Use Case Inventory

### 1. AI-led Policy Comparison

**ACTIVE**

An AI system to compare complex commercial insurance policies (including competitor products), highlighting key differences in coverage, exclusions, an...

Process: Underwriting

Business Unit: Commercial

Impact: 3.2

Effort: 3.2

### 2. Predictive Risk Scoring

**PENDING**

Machine learning model to predict policy risk levels during underwriting, improving pricing accuracy and reducing losses.

Process: Policy Servicing

Business Unit: Property

Impact: 4.4

Effort: 3.4

### 3. Fraud Detection AI

**PENDING**

Advanced pattern recognition to identify potentially fraudulent claims by analyzing historical claim patterns, network analysis, and behavioral...

Process: Claims Management

Business Unit: All Lines

Impact: 3.4

Effort: 2.8

### 4. Dynamic Pricing Engine

**PENDING**

An AI-driven engine that optimizes and adjusts premium rates in real-time based on market conditions, competitor pricing, and incoming risk data.

Process: Policy Servicing

Business Unit: Commercial

Impact: 3

Effort: 4

## 5. Catastrophe Modeling Enhancement

LIBRARY

AI-enhanced catastrophe models using satellite imagery and IoT data for more accurate risk assessment and exposure management.

Process: Risk Consulting

Business Unit: Property & Casualty

[Impact: 3.2](#)

[Effort: 2.8](#)

## 6. Customer Sentiment Analysis

LIBRARY

NLP tool to analyze customer communications and social media mentions to identify satisfaction trends and potential churn risks.

Process: Policy Servicing

Business Unit: Life

[Impact: 3.2](#)

[Effort: 2.4](#)

## 7. Automated Prefilled Forms

LIBRARY

An AI system that pre-populates application forms by extracting information from historical client data, public records, and previous submissions to speed...

Process: Underwriting

Business Unit: All Lines

[Impact: 3.4](#)

[Effort: 3](#)

## 8. Agentic AI for Underwriting

LIBRARY

A multi-agent system to automate the entire underwriting workflow, from data intake and risk profiling to pricing, compliance checks, and decision...

Process: Underwriting

Business Unit: All Commercial

[Impact: 2.8](#)

[Effort: 2.8](#)

## 9. Document Processing Automation

LIBRARY

OCR and NLP solution to extract key information from policy documents, reducing manual data entry errors and processing time.

Process: Submission & Quote

Business Unit: Marine

[Impact: 3.2](#)

[Effort: 3](#)

## 10. Climate Risk Modeling

[LIBRARY](#)

Advanced climate models using AI to assess long-term climate risks and their impact on insurance portfolios and pricing strategies.

Process: Risk Consulting

Business Unit: Property & Casualty

[Impact: 4](#)

[Effort: 3](#)

## 11. Claims Processing Automation

[LIBRARY](#)

End-to-end AI solution for first notice of loss through settlement, including damage assessment, coverage verification, and payment processing.

Process: Claims Management

Business Unit: Property & Casualty

[Impact: 3.4](#)

[Effort: 2.8](#)

## 12. Behavioral Risk Analytics

[LIBRARY](#)

AI analyzes policyholder behavior patterns to predict claim likelihood and adjust pricing or coverage terms proactively.

Process: Risk Consulting

Business Unit: Personal Lines

[Impact: 2.8](#)

[Effort: 2.8](#)

## 13. FNOL Claims processing

[LIBRARY](#)

Claims Related

Process: Claims Management

Business Unit: Property & Real Estate

[Impact: 4](#)

[Effort: 4](#)

## 14. Broker Portal Intelligence

[LIBRARY](#)

AI-powered broker portal that provides personalized dashboards, automated reporting, and intelligent recommendations for portfolio optimization.

Process: Sales & Distribution

Business Unit: Commercial

[Impact: 3.4](#)

[Effort: 2.6](#)

## 15. Voice Analytics for Claims

LIBRARY

Speech-to-text and sentiment analysis for customer calls during claims process to improve service quality and identify process improvements.

Process: Claims Management

Business Unit: All Lines

[Impact: 3.2](#)

[Effort: 2.2](#)

## 16. Cyber Risk Assessment AI

LIBRARY

Advanced AI system to evaluate cyber risk exposure for commercial clients using external threat intelligence and internal data.

Process: Policy Servicing

Business Unit: Cyber

[Impact: 4.4](#)

[Effort: 3.6](#)

## 17. Predictive Risk Scoring Engine

LIBRARY

A machine learning model that analyzes historical and real-time data to predict policy risk levels, improving pricing accuracy and loss ratios.

Process: Underwriting

Business Unit: All Lines

[Impact: 3](#)

[Effort: 3.4](#)

## 18. ESG Impact Scoring

LIBRARY

AI system to evaluate Environmental, Social, and Governance factors in underwriting decisions and portfolio management.

Process: Risk Consulting

Business Unit: Commercial

[Impact: 3.4](#)

[Effort: 2.8](#)

## 19. Customer Journey Optimization

LIBRARY

AI-driven analysis of customer touchpoints to optimize experience and reduce abandonment rates in the sales funnel.

Process: Customer Servicing

Business Unit: All Lines

[Impact: 3.2](#)

[Effort: 3](#)

## 20. Predictive Maintenance for Assets

LIBRARY

IoT and AI solution to predict maintenance needs for insured commercial assets, reducing claim frequency and building stronger client relationships.

Process: Risk Consulting

Business Unit: Commercial Property

Impact: 3.2

Effort: 3.2

## 21. Regulatory Compliance Monitoring

LIBRARY

AI system that monitors regulatory changes and automatically assesses impact on existing policies and procedures.

Process: Regulatory & Compliance Business Unit: All Lines

Impact: 3.2

Effort: 2.8

## 22. Underwriting Digital Assistant

LIBRARY

Provides underwriters with a summarized view of submission data, highlighting information outside of guidelines, assessing appetite capacity, a...

Process: Underwriting

Business Unit: Property & Casualty

Impact: 3.4

Effort: 3.4

## 23. Telematics-Based Pricing

LIBRARY

Usage-based insurance pricing models using telematics data for more accurate risk assessment and personalized pricing.

Process: Policy Servicing

Business Unit: Motor

Impact: 2.8

Effort: 2.8

## 24. Portfolio Risk Optimization

LIBRARY

AI-driven portfolio analysis to optimize risk distribution, identify concentration risks, and suggest rebalancing strategies.

Process: Financial Management

Business Unit: All Lines

Impact: 3.2

Effort: 3.2

## 25. Automated Claims Triage

[LIBRARY](#)

AI-powered system to automatically classify and prioritize incoming claims based on complexity, urgency, and potential fraud indicators.

Process: Claims Management

Business Unit: Auto

[Impact: 3.8](#)

[Effort: 3](#)



