

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 a brief description, strategic alignment, and expected business impact. Each initiative has been evaluated for feasibility, resource requirements, and potential ROI to ensure optimal allocation of resources.

Portfolio

25

Total Use Cases

1

Active Portfolio

24

Reference Library

Use Case Inventory

1. Fraud Detection AI

[View](#)

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

2. Dynamic Pricing Engine

[View](#)

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

3. AI-led Policy Comparison

[View](#)

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

4. Predictive Risk Scoring

[View](#)

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

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. 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

7. 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

8. 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

9. 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

10. 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

11. 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

12. FNOL Claims processing

LIBRARY

Claims Related

Process: Claims Management

Business Unit: Property & Real Estate

Impact: 4

Effort: 4

13. 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

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](#)

