

Use Case Library

Comprehensive AI Opportunity Catalog

Executive Summary

This catalog presents a comprehensive library of AI use cases specifically curated for RSA Insurance. Each initiative has been evaluated for strategic alignment, feasibility, resource requirements, and expected business impact to ensure optimal allocation of resources.

25

Total Use Cases

1

Active Portfolio

24

Reference Library

Organization: RSA Insurance

Report Generated: Monday, August 11, 2025

Executive Summary

This catalog provides an overview of AI use cases in the insurance sector, highlighting their business impact and potential ROI.

Use Case Inventory

1. Fraud Detection AI

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Claims Management	Impact: 3.4 / 10
Line of Business	All Lines	Effort: 2.8 / 10

Use Case Type

Predictive ML

Business Unit

All Segments

Geography

Global

Status

Discovery

2. Dynamic Pricing Engine

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Policy Servicing	Impact: 3.0 / 10
Line of Business	Commercial	Effort: 4.0 / 10
Use Case Type	Predictive ML	Quadrant: Watchlist
Business Unit	Mid-Market	Revenue Impact: 3 / 5
Geography	Global	Risk Reduction: 2 / 5
Status	Discovery	Strategic Fit: 3 / 5

3. AI-led Policy Comparison

ACTIVE PORTFOLIO

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

Category	Details	Scores & Metrics
Process	Underwriting	Impact: 3.2 / 10
Line of Business	Commercial	Effort: 3.2 / 10
Use Case Type	GenAI	Quadrant: Watchlist
Business Unit	Large Commercial	Revenue Impact: 3 / 5
Geography	UK	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 3 / 5

4. Predictive Risk Scoring

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Policy Servicing	Impact: 4.4 / 10
Line of Business	Property	Effort: 3.4 / 10
Use Case Type	Predictive ML	Quadrant: Strategic Bet
Business Unit	Large Commercial	Revenue Impact: 5 / 5
Geography	Europe	Risk Reduction: 5 / 5
Status	Discovery	Strategic Fit: 5 / 5

5. Catastrophe Modeling Enhancement

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Risk Consulting	Impact: 3.2 / 10
Line of Business	Property & Casualty	Effort: 2.8 / 10
Use Case Type	Predictive ML	Quadrant: Watchlist
Business Unit	Large Commercial	Revenue Impact: 2 / 5
Geography	Global	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 5 / 5

6. Customer Sentiment Analysis

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Policy Servicing	Impact: 3.2 / 10
Line of Business	Life	Effort: 2.4 / 10
Use Case Type	NLP	Quadrant: Experimental
Business Unit	E&S	Revenue Impact: 3 / 5
Geography	North America	Risk Reduction: 4 / 5
Status	Discovery	Strategic Fit: 3 / 5

7. Automated Prefilled Forms

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Underwriting	Impact: 3.4 / 10
Line of Business	All Lines	Effort: 3.0 / 10
Use Case Type	Process Automation	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 2 / 5
Geography	UK	Risk Reduction: 4 / 5
Status	Discovery	Strategic Fit: 4 / 5

8. Agentic AI for Underwriting

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Underwriting	Impact: 2.8 / 10
Line of Business	All Commercial	Effort: 2.8 / 10
Use Case Type	Agentic AI	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 3 / 5
Geography	Global	Risk Reduction: 2 / 5
Status	Discovery	Strategic Fit: 3 / 5

9. Behavioral Risk Analytics

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Risk Consulting	Impact: 2.8 / 10
Line of Business	Personal Lines	Effort: 2.8 / 10
Use Case Type	Predictive ML	Quadrant: Watchlist
Business Unit	Consumer	Revenue Impact: 3 / 5
Geography	UK	Risk Reduction: 2 / 5
Status	Discovery	Strategic Fit: 3 / 5

10. FNOL Claims processing

REFERENCE LIBRARY

Claims Related

Category	Details	Scores & Metrics
Process	Claims Management	Impact: 4.0 / 10
Line of Business	Property & Real Estate	Effort: 4.0 / 10
Use Case Type	Analytics & Insights	Quadrant: Strategic Bet
Business Unit	Mid-Market	Revenue Impact: 4 / 5
Geography	UK Domestic	Risk Reduction: 4 / 5
Status	Discovery	Strategic Fit: 4 / 5

11. Document Processing Automation

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Submission & Quote	Impact: 3.2 / 10
Line of Business	Marine	Effort: 3.0 / 10
Use Case Type	RPA	Quadrant: Watchlist
Business Unit	SME	Revenue Impact: 2 / 5
Geography	Global	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 3 / 5

12. Climate Risk Modeling

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Risk Consulting	Impact: 4.0 / 10
Line of Business	Property & Casualty	Effort: 3.0 / 10
Use Case Type	Predictive ML	Quadrant: Strategic Bet
Business Unit	All Segments	Revenue Impact: 4 / 5
Geography	Global	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 5 / 5

13. Claims Processing Automation

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Claims Management	Impact: 3.4 / 10
Line of Business	Property & Casualty	Effort: 2.8 / 10
Use Case Type	Process Automation	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 3 / 5
Geography	Global	Risk Reduction: 4 / 5
Status	Discovery	Strategic Fit: 4 / 5

14. Cyber Risk Assessment AI

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Policy Servicing	Impact: 4.4 / 10
Line of Business	Cyber	Effort: 3.6 / 10
Use Case Type	GenAI	Quadrant: Strategic Bet
Business Unit	Large Commercial	Revenue Impact: 5 / 5
Geography	Global	Risk Reduction: 5 / 5
Status	Discovery	Strategic Fit: 5 / 5

15. Predictive Risk Scoring Engine

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Underwriting	Impact: 3.0 / 10
Line of Business	All Lines	Effort: 3.4 / 10
Use Case Type	Predictive ML	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 2 / 5
Geography	Europe	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 4 / 5

16. ESG Impact Scoring

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Risk Consulting	Impact: 3.4 / 10
Line of Business	Commercial	Effort: 2.8 / 10
Use Case Type	Predictive ML	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 3 / 5
Geography	Europe	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 3 / 5

17. Customer Journey Optimization

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Customer Servicing	Impact: 3.2 / 10
Line of Business	All Lines	Effort: 3.0 / 10
Use Case Type	Predictive ML	Quadrant: Watchlist
Business Unit	Consumer	Revenue Impact: 4 / 5
Geography	UK	Risk Reduction: 4 / 5
Status	Discovery	Strategic Fit: 3 / 5

18. Predictive Maintenance for Assets

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Risk Consulting	Impact: 3.2 / 10
Line of Business	Commercial Property	Effort: 3.2 / 10
Use Case Type	IoT + AI	Quadrant: Watchlist
Business Unit	Large Commercial	Revenue Impact: 4 / 5
Geography	Global	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 5 / 5

19. Regulatory Compliance Monitoring

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Regulatory & Compliance	Impact: 3.2 / 10
Line of Business	All Lines	Effort: 2.8 / 10
Use Case Type	GenAI	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 2 / 5
Geography	Europe	Risk Reduction: 4 / 5
Status	Discovery	Strategic Fit: 4 / 5

20. Underwriting Digital Assistant

REFERENCE LIBRARY

Provides underwriters with a summarized view of submission data, highlighting information outside of guidelines, assessing appetite capacity, and suggesting next best actions.

Category	Details	Scores & Metrics
Process	Underwriting	Impact: 3.4 / 10
Line of Business	Property & Casualty	Effort: 3.4 / 10
Use Case Type	GenAI	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 3 / 5
Geography	UK	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 4 / 5

21. Telematics-Based Pricing

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Policy Servicing	Impact: 2.8 / 10
Line of Business	Motor	Effort: 2.8 / 10
Use Case Type	IoT + AI	Quadrant: Watchlist
Business Unit	Consumer	Revenue Impact: 4 / 5
Geography	UK	Risk Reduction: 2 / 5
Status	Discovery	Strategic Fit: 3 / 5

22. Portfolio Risk Optimization

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Financial Management	Impact: 3.2 / 10
Line of Business	All Lines	Effort: 3.2 / 10
Use Case Type	Predictive ML	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 3 / 5
Geography	Global	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 3 / 5

23. Automated Claims Triage

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Claims Management	Impact: 3.8 / 10
Line of Business	Auto	Effort: 3.0 / 10
Use Case Type	GenAI	Quadrant: Watchlist
Business Unit	Mid-Market	Revenue Impact: 3 / 5
Geography	UK	Risk Reduction: 5 / 5
Status	Discovery	Strategic Fit: 4 / 5

24. Broker Portal Intelligence

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Sales & Distribution	Impact: 3.4 / 10
Line of Business	Commercial	Effort: 2.6 / 10
Use Case Type	GenAI	Quadrant: Watchlist
Business Unit	All Segments	Revenue Impact: 3 / 5
Geography	UK	Risk Reduction: 3 / 5
Status	Discovery	Strategic Fit: 5 / 5

25. Voice Analytics for Claims

REFERENCE LIBRARY

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

Category	Details	Scores & Metrics
Process	Claims Management	Impact: 3.2 / 10
Line of Business	All Lines	Effort: 2.2 / 10
Use Case Type	NLP	Quadrant: Experimental
Business Unit	All Segments	Revenue Impact: 3 / 5
Geography	UK	Risk Reduction: 2 / 5
Status	Discovery	Strategic Fit: 5 / 5

