Case Study

AI-Powered Smart Underwriting Fabric

Customer:

A Leading US Life Insurer

Decisioning Capability

Autonomous Case Planning & Disposition

What it does:

From a single goal, the Co-Pilot builds a full end-to-end underwriting plan without step-by-step input.

How it works:

- o Intake & de-duplication
- o Document-type and language detection
- o Identity/AML/KYC validation
- Evidence synthesis and multi-axis risk scoring (medical, financial, lifestyle, fraud)
- o Age/amount & product rules evaluation
- o Requirements determination (APS, paramed)
- o Disposition (Preferred / Standard / Table / Decline / Refer) with NBAs and citations

Policy-driven branching & guard-gates:

Adapts plans to product, jurisdiction, and face amount; enforces hard gates (e.g., KYC/OFAC pass before auto-issue).

Evidence and guard-rail gates:

Every recommendation carries the triggering values, rule clauses, and version info for audit.

Actioning Capability

Tool Selection, Use & Safe Execution

What it does:

Selects and uses the right tool at the right time, logging purpose, inputs, outputs, and provenance for audit.

Available tools:

- Application APIs for case metadata, status updates, attachments, and QA tasks.
- Code generation & execution for unit normalization, numeric checks, currency conversion.
- Search engine for latest glossaries, style guides, lexicons.
 ML models for doc classification, structured extraction with provenance, medical signal mapping, fraud detection.
- Knowledge databases serving versioned, in-force rules/manuals.
- Neural translation (LLM) to generate rationale and NBAs from retrieved context.

How it behaves:

- Pulls case data, attaches outputs, updates status in workbench.
- o Runs integrity checks and formatting via code execution.
- Retrieves and applies up-to-date domain-specific references.
- Uses guard-rails to send low-confidence outputs to human review.

Perceiving Capability

Environment-Aware Re-planning

What it does:

Senses changes and adjusts the plan in real time without manual intervention.

Perception & responses:

- New APS or lab: Re-run impacted steps, update disposition, log change diff.
- Conflict detection: MVR DUI vs "no violations" triggers conflict task, blocks auto-issue.
- Policy/version awareness: Guideline updates trigger re-evaluation of impacted cases, flagging version deltas.
- Identity/AML signals: Mismatch or OFAC hit pauses processing, triggers outreach, resumes on clearance.

