

AI-Powered Smart Underwriting Fabric

Customer:

A Leading U.S. Life Insurer

Abstract:

By automating evidence handling and decision rules, the insurer cut decision times, lifted straight-through issuance, and freed underwriters from clerical work, boosting speed, accuracy, and scalability across underwriting.

The Context:

The insurer processes over 180,000 life applications annually, each containing e-apps, medical records, lab reports, credit data, and financial evidence. Despite accelerated programs, underwriters still spent excessive time on document wrangling, manual data entry, rule look-ups, and follow-ups, slowing cycle times and limiting capacity. Automation was required to streamline these repetitive, non-judgment tasks.

- Time-intensive manual indexing, data entry, and follow-ups.
- Complex rule checks (age/amount grids, Rx flags, AML hits).
- Underwriters bogged down with clerical work over risk analysis.
- Delays in issuing policies impacting customer experience.



The Solution:

Through Neutrinos AI Hub, the insurer deployed a suite of Auto-Underwriting Agents to digitize intake, automate data extraction, score risks, and apply decision rules, all while keeping underwriters in control of final approvals.

- **Smart intake agent** for OCR and classification of 14 document types.
- **Data extraction agent** pulling structured fields with source traceability.
- **Medical-risk scoring & financial risk agents** scoring impairments, Rx, lifestyle, and credit flags.
- **Decision-rules engine & co-pilot chat** applying 2,000+ rules & surfacing evidence with “explain why” traceability.

The Impact:

Median decision times dropped significantly, straight-through issue rates **reached 70%**, and manual data-entry touches **fell by 80%**.

Evidence follow-up cycles **shortened by 60%**, freeing underwriters to focus on complex impairments and facultative negotiations, while policies issued faster improved customer experience.

Value Realized:



Reduced decision time

with faster straight-through issuance rates



80% drop

in manual data-entry touches per case



Expanded underwriter capacity

redirected to complex, high-value cases



Scalable agent pattern extended to variable universal life and annuity suitability