

AI Co-Pilot for High-Net-Worth Underwriting

Customer:

A Leading Pan-Asian Life Insurer

Abstract:

By embedding multi-agent orchestration into HNW underwriting, a leading insurer equipped underwriters with an AI co-pilot that accelerated complex case decisions, improved accuracy, and added transparent evidence trails; delivering faster broker responses and greater capacity.

The Context:

High-net-worth underwriting demands navigating complex, evolving rules, medical risk manuals, Anti-Money-Laundering (AML) requirements, reinsurer treaties, and jurisdictional exposure limits. While core rule engines handled standard checks, senior underwriters spent hours combing PDFs and SharePoint for grey-area queries, slowing decisions and increasing inconsistency. A prior LLM pilot sped up searches but lacked document traceability and occasionally produced inaccurate responses.

- Fragmented reference sources across PDFs and internal sites.
- Time-intensive guideline searches by senior underwriters.
- Grey-area cases requiring manual judgement.
- Early AI pilot exposed hallucinations and missing audit trails.

The Solution:

Neutrinos built a multi-agent Underwriting Co-Pilot on its AI Hub to automate guideline retrieval, case summarization, and decision support. The orchestration combined domain-specific agents with a chat interface, embedding provenance for full auditability.

- **Knowledge-ingest agent** to vectorize guidelines with version and jurisdiction tags.
- **Contextual retriever agent** for hybrid search with confidence scoring and provenance.
- **Case summarizer agent** extracting demographics, ICD codes, lab flags, & financial ratios.
- **Next-best-action recommender** proposing tests, escalations, or facultative triggers.

The Impact:

Underwriters cut guideline search time dramatically and reduced decision cycles on complex cases from over an hour to near real-time.

Responses closely aligned with standard underwriting, errors dropped significantly, and the built-in evidence panel enhanced auditability; improving speed, confidence, and broker turnaround for high-value cases.

Value Realized:



Significant capacity gain
from reduced case cycle times



Same-day indicative decisions
for large sums assured



Lower error rates
and improved audit readiness



Scalable design to absorb new rules like IFRS-17 and emerging exclusions

