Mo.net Financial Modelling Platform
Decoupling Calculations from Policy Administration Systems

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Revision 2

Introduction

Across the life insurance industry, a structural issue has quietly taken root. Critical actuarial and financial calculations - the very numbers that underpin customer values, regulatory reporting, and executive decision-making - are embedded deep inside policy administration systems that were never designed to act as enterprise calculation engines.

This architectural choice creates friction almost everywhere it matters. Policy servicing teams struggle to implement changes quickly. Actuaries maintain parallel models to compensate for opaque administration logic. Finance teams wrestle with IFRS 17 calculations living uncomfortably inside operational systems. Transformation programmes find themselves forced toward high-risk "big bang" core replacements simply to modernise calculation capability.

This paper sets out a different approach. It details how Mo.net can operate as a shared, governed enterprise calculation layer that sits alongside existing policy administration platforms. In this model, Mo.net consumes policy data, executes transparent and auditable models, and returns results to downstream systems, while the policy administration system continues to own policy lifecycle, workflows, and data of record responsibilities.

The outcome is a cleaner architecture, faster change, reduced transformation risk, and clearer ownership of "the numbers" across the organisation.

Calculation Logic in the Wrong Place

Most UK and EMEA life insurers run one or more policy administration systems that are very good at what they were built to do: managing policy state, processing events, and supporting operational workflows. Over time, however, these systems have accumulated increasing amounts of actuarial and financial calculation logic. That logic is often embedded in product configuration, bespoke

code customisations, vendor-specific scripting languages, or opaque internal calculation engines.

The consequences are familiar. Even minor actuarial changes can require full PAS release cycles, slowing response to regulatory, commercial, or assumption updates. When values differ between systems, it becomes difficult to explain why, because the calculation logic is hard to inspect and even harder to trace. Similar logic is duplicated across administration systems, actuarial projection models, and finance tools, increasing reconciliation effort and operational risk. And for organisations embarking on transformation, replacing the core system can start to feel like the only way to modernise calculations, despite the cost and delivery risk involved.

In effect, policy administration platforms have become accidental calculation platforms. They were never designed for that role, and the strain is showing.

Separating Policy Truth from Calculation Truth

A more sustainable architectural pattern is emerging among leading insurers. It starts with a simple principle: policy systems should remain the system of record for policy state and events, while calculation logic should live elsewhere.

In this model, the policy administration system continues to manage lifecycle events, endorsements, and data of record. When a calculation is required, whether for a surrender value, an illustration, or a finance report, the PAS triggers a request to a separate calculation layer. That layer executes the relevant model and returns the result to the calling system or other consumers.

Crucially, calculation logic is governed, versioned, and auditable in one place. There is a single source of truth for the numbers, even though those numbers are consumed by many systems. Mo.net is well positioned to fulfil this role, as several insurers have already discovered.

Mo.net as the Enterprise Calculation Layer

In this alternative world Mo.net acts as a centralised, model-driven calculation engine capable of supporting a wide range of use cases using the same underlying logic. For policy servicing, this includes surrender and paid-up values, bonuses, claims values, and both unit and non-unit calculations. For customer communications and analysis, it supports point-in-time projections, scenario and sensitivity testing, and “what-if” modelling. For finance and IFRS 17, it delivers fulfilment cash flows, CSM roll-forwards, sensitivities, disclosures, and audit-ready outputs.

What matters is not just the breadth of calculations, but the consistency. The same models, assumptions, and logic drive operational values, actuarial projections, and financial reporting.

Reference Architecture

In a typical deployment, the policy administration system remains responsible for policy state, lifecycle events, workflows, and data of record. When an event occurs or a value is required, the PAS sends an event or request to Mo.net. Mo.net executes the appropriate actuarial-grade model, deterministically or stochastically, in batch or real time, using governed and versioned logic. The results are then returned to the PAS or distributed to other consumers, including illustration platforms, actuarial reporting tools, finance and IFRS 17 systems, and data and MI platforms.

This architecture works alongside existing estates without requiring PAS replacement. Mo.net can integrate with platforms such as TCS BaNCS, DXC Assure, Sapiens, Fadata, msg life, and Oracle OIPA, as well as modern digital cores such as EIS, Equisoft, and Lumera.

Why This Matters Across the Organisation

For the Chief Actuary, the current environment typically means maintaining multiple models for administration, projections, and finance, followed by lengthy reconciliation exercises and long lead times for change. By contrast, using Mo.net as a shared calculation engine allows one set of transparent, inspectable models to feed multiple purposes. Actuarial teams can iterate faster, experiment in a controlled way, and retain clear ownership of the logic that drives results, without being entangled in administrative plumbing.

Finance leaders face a different but related challenge. IFRS 17 logic is often embedded in actuarial tools or, worse, hidden inside policy systems, resulting in weak audit trails and heavy reliance on specialist knowledge. Executing finance-grade calculations in a governed engine provides clear lineage from assumptions to outputs and ensures consistent results across reporting and analysis. The payoff is improved audit confidence, faster close cycles, and clearer accountability for financial numbers.

From a CIO or enterprise architecture perspective, tight coupling between systems and heavy PAS customisation slows change and increases transformation risk. Externalising calculation logic into Mo.net enables a more decoupled architecture. It reduces pressure on core systems and provides an incremental modernisation path that lowers risk while future-proofing the estate against PAS change or replacement.

Operational and policy administration teams also benefit. Calculation changes can be deployed faster, with clearer logic behind customer values and more consistent servicing outcomes. This reduces operational workarounds, lowers exception volumes, and makes it easier to explain values to customers when questions arise.

For transformation programmes, the implications are significant. Instead of treating core replacement as the only route to improvement, insurers can externalise calculation logic first, modernise administration incrementally, and allow multiple systems to coexist. This phased approach delivers earlier business value and materially reduces programme risk.

Strategic Benefits

Taken together, this approach accelerates actuarial and finance change, reduces disruption to core systems, improves transparency and explainability, ensures consistency across consumers, lowers duplication and rework, and restores business ownership and control over calculation logic.

Complementary, Not Competitive

Mo.net is not positioned as a replacement for policy administration systems. PAS vendors remain responsible for policy lifecycle management, workflows, integrations, and data of record. Mo.net becomes the enterprise calculation service those systems consume.

This makes Mo.net a natural complement rather than a competitor, particularly in large UK and EMEA estates where replacing the PAS wholesale is neither practical nor desirable.

Conclusions

Life insurers no longer need to choose between embedding critical calculations in inflexible policy systems or running disconnected actuarial and finance models that never quite reconcile. By positioning Mo.net as a shared enterprise calculation layer, insurers can decouple calculation from administration, align actuarial and finance logic, modernise incrementally, and regain control of their most critical asset: the numbers.

Contact Us

For more information regarding the Mo.net platform and how it can help you with any of your existing or emerging enterprise calculation needs, please get in touch:

Software Alliance Limited
30 Stamford Street, London, SE1 9LQ
Tel: +44 (0) 20 3964 2755
www.softwarealliance.net

Author: Guy Shepherd