

# The Next Frontier in Insurance Operations

Solving for the Evolution  
of the Insurance  
Operating Model



Citisoft

# Table of Contents

3

Introduction

4

The changing role of  
the investments team

6

The challenge of  
data aggregation

8

Changes in  
operating models

10

The evolution of the  
insurance market

13

Navigating the  
solutions market

16

The future of  
insurance operations

# Introduction

→ The world of insurance asset management has changed drastically in the past decade—insurers now face the unique challenge of investing in sophisticated private market, derivative, and fixed income strategies while continuing to meet regulatory requirements. With the prevalence of aging technology and a shifting vendor landscape, meeting these obligations while minimizing combined ratios has become more difficult than ever.

In addition to rising market and macro complexities, the insurance market itself has grown increasingly fragmented. The remit of the insurance investments team has grown and with it has grown the complexity and diversity of challenges. The modern insurance organization must meet a wide range of challenges and goals across investment profiles.

As an investment management consultancy, Citisoft has more than three decades of experience supporting investment managers in designing and implementing operating models that can meet the challenges of a complex and evolving market. With rare exception, there is no market segment more sophisticated in its needs than insurance asset managers.

Even as insurance industry investment strategies grow more complex, the asset management industry at large is undergoing a modern renaissance. Technology innovation has increased in the past five years, and these changes have further challenged insurance asset managers to re-think their operating models. With the rise in cloud-enabled technologies, new levels of platform interoperability, new outsourcing options, and



## Insurance Investment Profiles

### GENERAL ACCOUNT

All insurance asset managers have a general account wherein their mandate is to invest to support the insurance business' liabilities. This type of investment was historically characterized by lower-risk investment products and stringent regulatory demands. These challenges persist, but insurers are increasingly broadening their portfolios to include new product types.

### COMPANY PENSION ASSET

This investment profile is liability-driven but must adhere to different regulatory requirements than the general account.

### CORPORATE ASSET

This investment profile is focused on investing a corporate pool of cash and meeting a different mandate than in liability-driven investing. As insurers increasingly deploy new investment vehicles and strategies to maximize corporate returns, the front office's capabilities and technology needs have matured.

### HYBRID

Hybrid insurance asset management falls under the umbrella of large insurers that offer mutual fund products in addition to managing their general account and internal assets. This typically adds significant operational complexity to the business of running an institutional, retail, or wealth management operation.

removal of barriers between front, middle, and back office, asset management is entering a new era. These advances are no doubt beneficial to insurers—but are solutions providers poised to meet the diverse needs of insurance asset managers?

We believe that recent changes in the solutions market and new technologies offer insurers the opportunity to meet regulatory and solvency obligations more efficiently, gain unprecedented risk and exposure transparency into their assets, automate investment subledgers and integration into the general ledger, and leverage tools that enable sophisticated portfolio management across asset classes and jurisdictions.



#### KEY TAKEAWAY

Recent changes in the solutions market offer insurers the opportunity to automate subledger integration, leverage tools that enable sophisticated portfolio management, and gain unprecedented transparency across asset classes and jurisdictions.

# The changing role of the investments team

➔ Historically, underwriting has provided the most revenue and taken on a commensurate share of operating budgets. However, investments teams have steadily increased the value they provide to an insurance firm—for many companies, the investments team now contribute a significant portion of firm-wide revenue. While many insurers are eager to maximize revenue by investing in new products, strategies, and asset classes, firms must toe the line between increasing cash invested and meeting stringent solvency requirements.

Cloud capabilities, streamlined processes, strategic managed services, and elimination of labor-intensive manual processes, all hold the promise of significant cost reduction.

One shift that is driving more capital to the investments team is changing reinsurance dynamics. While insurance companies have historically offloaded risk to major reinsurers, in recent years, that has increasingly been performed by the investments team. Insurance firms are embracing investments hedging to cover their losses in the same way that reinsurance does. A simple example of this is catastrophe insurance: if an insurance company historically had a reinsurance agreement in place to protect their properties against a hurricane, they may have shifted some or all of that protection to weather derivatives. The rise of alternative capital and its importance to the insurer's business strategy is putting strain on investments teams to invest in complex asset classes—something that most legacy technologies and manual, month-end processes are not built to support.



#### KEY TAKEAWAY

Insurers are looking to increase the proportion of revenue generated by investments teams and also offload risk through alternative capital, thus placing more strategic importance on investments team operations and performance.

As insurance firms look to modernize their technology to support the broader purview of the investments team, their combined ratio is at the forefront of decisions around spend. This ratio of premiums to expenses is incredibly important to an insurance firm's reputation in the market and the minimization of expenses is a priority for insurance leadership. When it pertains to technology, the combined ratio is both a challenge and an opportunity. Any IT transformation program involves a major outlay of cash. However, cloud capabilities, streamlined processes, strategic managed services, and elimination of labor-intensive manual processes, all hold the promise of significant cost reduction. With long-term thinking in mind, the advent of modern solutions for the insurance investment team will mean a lower combined ratio.

# The challenge of data aggregation

→ As insurers make changes to their business model and investment strategy, this introduces significant complexity to their operation. Insurance lines of business need to be registered by state and country, each with their own obligations. An insurance firm may be managing one portfolio but servicing ten lines of business across multiple jurisdictions with different reporting requirements for the state or country it is domiciled in or the investments that it holds. In addition, there may be upwards of three or four different reporting currency obligations for those assets requiring many-to-one custodial relationships.

Adding to challenges of cash management, investments need to be decomposed into the appropriate structure based on line of business, account type, jurisdiction, regulatory reporting, solvency and currency requirements. A firm may need to report GAAP to US regulators, jurisdictional IFRS, and then translate that into tax accounting bases and reporting. For most insurers, all these requirements are processed out of disparate systems—causing a massive aggregation problem.

In the investments front office, investment managers have shifted to daily performance measurement providing insights to make better investment decisions and leverage more complex investment strategies. This shift is now permeating through to the middle and back office with these teams required to produce daily accounting information. This daily insight is offering performance teams a more holistic view of assets and smoothing out the peaks and valleys of end of month processes. For many insurance asset managers, this move is a requirement as they increasingly shift from simple fixed income portfolios to more complex, multi-asset investments.

Adding to challenges of cash management, investments need to be decomposed into the appropriate structure

Pulling together consolidated reporting to view risk, exposure, or performance metrics has long been labor intensive and risk-prone. In an effort to support visibility into look-throughs and fill the gap of a consolidated subledger, insurers have typically relied on an encumbered, labor-intensive finance and control model around reporting. Traditionally insurers' investments data is siloed and maintained in data stores that are disconnected from the underwriting and claims data, causing problems in look-throughs, and limiting total exposure and other analyses. Over the past several decades, insurers have spent millions customizing patchwork platforms to gain transparency and consolidated reporting—even still, very few firms have been successful.

Data is critical to daily operations—but it is also the bedrock of the industry's evolution. AI, machine learning, process automation, natural language processing and other technologies that rely on unstructured data are all poised to re-shape insurance operations—and all rely on a modern data architecture. Beyond their use cases for the investment team, these technologies are becoming integrally important to the business model. Natural language processing can scan thousands of legal documents to fine-tune actuarial analysis. Satellite imagery can be used to evaluate losses remotely. Internet of Things (IoT) technology placed in cars, container ships, or construction sites can be used to assess risk premiums. These technologies are pushing the industry forward but involve huge volumes of both internal and third-party data. Without a modern, integrated, and robust data architecture, insurers cannot embrace this evolution.

Data is critical to daily operations—but it is also the bedrock of the industry's evolution.



#### KEY TAKEAWAY

Insurance firms face stringent obligations across jurisdictions and lines of business which has historically created data silos and patchwork processes to support their diverse operational needs.

# Changes in operating models

→ Given the high level of operational complexity in the insurance business, the challenges of keeping up with broader trends in investment management has been particularly difficult. Modern technology has grown leaps and bounds but the insurance market has relied on installed platforms and bespoke processes to manage their operational needs. Over the last ten years, many insurers have made the shift to more complex investment strategies, but it was not until recently that the insurance market began embracing a new way to think about their operating model.

Broadly speaking, insurance investment managers have been shifting from a siloed operating model to a more holistic approach that blends traditional front, middle, and back office processes.

The breakdown of these barriers puts data at the center of the organization and empowers operations and investment teams to work together to streamline processes, increase transparency, and ultimately, make better investment decisions. Given the complexities of running an insurance business, the ability of insurance firms to achieve this level of integration has been throttled but the

vendor market is maturing considerably in the insurance space. With new solutions available that are built-for-purpose for the insurance market, insurers may finally achieve the dream of a consolidated and integrated sub-ledger.

The pressure is now mounting for the vendor market to also introduce a system that can manage both portfolio/IBOR and NAV-striking/ABOR via a single set of transactions—this will push insurers to an operating model that prioritizes daily and intraday data.

With new solutions available that are built-for-purpose for the insurance market, insurers may finally achieve the dream of a consolidated and integrated sub-ledger.



# Legacy Operating Model



# Next Generation Operating Model



In tandem with this shift to intra-day is an increasing need for operational staff to support this shifting operating model. Solutions providers are moving beyond software into SaaS models that can support everything from hosted data warehouses to reconciliation to regulatory reporting. While there is still significant variability in how insurers choose to outsource their investment operations—some insurers choose to pick one strategic advisor to manage all credit and assets, some choose partial, and others are fully in-house—there is an undeniable increase in outsourcing options and insurers that are choosing to incorporate managed services into their operating model.



#### KEY TAKEAWAY

Insurance investment managers are shifting from a siloed operating model to a more holistic approach that blends traditional front, middle, and back office processes.

# The evolution of the insurance solutions market

➔ Most insurers have operated on the same platforms for decades—many on an installed basis, using significant workarounds to accommodate the expansion, contraction, and evolution of their business. These legacy technologies are typically firmly entrenched and functionally-rich for insurance accounting needs but have de-prioritized user experience, transparency, and day-to-day visibility into investments and accounting data.

Because of the extreme specialization of the insurance space and the investment in retrofitting existing solutions into operational processes, few insurers have pressured solutions

providers to make changes to their technology stack. But with cloud-enabled technology and the ability to accelerate product development, solutions providers are now sunsetting legacy solutions and introducing the next generation of insurance platform technology.

This poses both a challenge and opportunity for insurers—for many, the sunsetting of a core investment accounting solution necessitates the re-evaluation of a market they are not familiar with and a re-design of their entire operating model. This type of endeavor is never painless, requiring a large upfront investment in strategic redesign, due diligence, and creation of a new future state. The flip side of this coin is that insurers will come out the other side with control over operational risk, increased efficiency through technology-driven processes, and a more empowered organization.

At the core of most modern technology change programs is data access, involving both the tooling and processes that extend data and data-driven insights throughout the organization. This goal is particularly hard to reach for insurers who must maintain various data types across business lines and jurisdictions. Despite this challenge, solutions providers have made significant changes to how data is processed, stored, and accessed in recent years—and insurers are now poised to capitalize on this innovation.

In particular, there has been a focus on how to put near real-time data in the hands of more users, particularly in the front office, through improved user experience. Leading providers are introducing new technology, user interfaces, and reporting capabilities to their

Leading providers  
are introducing  
new technology,  
user interfaces,  
and reporting  
capabilities to their  
existing platforms.

existing platforms. Through these enhancements, many providers aim to create a one stop shop for data needs across the organization, including integration and interoperability with external solutions.

The other integration challenge being tackled by the vendor market is an integrated IBOR/ABOR software solution. Providers are meeting this need in three key ways: taking an existing IBOR solution and adding ABOR capabilities, designing an IBOR/ABOR solution from the ground up, or expanding an existing ABOR solution to support insurance accounting requirements. These approaches have helped round out a new line of market offerings, giving insurers choice where there had historically been little optionality.

In addition to new IBOR/ABOR solutions, providers are increasingly prioritizing coverage for non-traditional asset classes. For years, insurers have struggled with a patchwork of solutions purpose-built for various asset classes, but new solutions are beginning to offer integrated asset-level support for alternative and private assets from the same provider, if not the same platform. With the changing investment strategies of the typical insurance firm, this support is poised to continue maturing from both a software and technology standpoint.

With insurance functionality taking center stage for many solutions providers, there has been a corresponding increase in insurance expertise and operational knowledge. Service options are expanding from both traditional service providers and software vendors with the ability to provide new outsourcing options. For many insurers, the economies of scale available through outsourcing offer an enticing option as they re-consider operating models at a strategic level.

## How solutions providers and technology are evolving to meet insurance needs



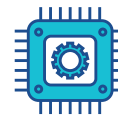
### **ADDING TO IBOR FUNCTIONALITY**

Taking an existing IBOR solution and adding ABOR capabilities.



### **GROUND-UP BUILD**

Designing an IBOR/ABOR solution from the ground up.



### **EXPANDING ABOR**

Expanding an existing ABOR solution to support insurance accounting requirements.

The evolution of the vendor market has accelerated in recent years, but many insurance firms have operated within a silo for decades, unaware of new market offerings and how those may fit into their business. The challenge therefore becomes how insurers should be thinking about a technology change program in light of their unique market challenges and the diverse menu of options now available to them.



**KEY TAKEAWAY** Historically, solutions providers did not prioritize investment in technology built for insurance investments teams. These platforms can no longer meet the needs of the modern insurance organization and the solutions market is finally evolving to keep pace with the changing needs of the insurance market.

# Navigating the solutions market

→ Whether a firm's investment mandates are allocated, sub-advised, joint venture, or internally managed, understanding current state is key to undertaking any technology change endeavor. Such a process should be both qualitative and quantitative—understanding data flows and requirements is equally important to working with stakeholders and assessing their needs. For the typical insurance organization, such an assessment will uncover numerous bespoke processes, workarounds, and gaps in knowledge between different areas of the organization. This assessment is the bedrock of any future state, roadmap, or implementation.

It's likely such an assessment will point to a future state that necessitates technology change. However, dismantling a

## Overview of Model

## Deployment Options



### SERVICE PROVIDERS

- Investment accounting and STAT/GAAP reporting for insurance clients as an outsourced service
- Historically, outsourcing in this space has been solely focused on investment accounting and periodic reporting requirements for insurance clients (primarily on legacy insurance accounting software)

- Minimal installed/in-house software in this model
- Fully outsourced technology, data, and operations for defined scope



### INSURANCE ACCOUNTING SOFTWARE

- Standalone multi-basis investment accounting solution
- Historically, this model has been the preeminent solution used to support investment accounting and periodic reporting requirements for insurance clients with in-house accounting and reporting teams

- On-premises still offered for some solutions; moving towards predominantly SaaS or cloud-based deployment
- Some managed services offered by vendors in this model; as well as full outsourcing by some vendors



### HOLISTIC SOFTWARE

- ABOR a component within a larger solution
- IBOR/ABOR is generated based on trading activity, in addition to taking in external data sources
- Extent of capabilities varies, with some solutions offering full IBOR/ABOR as part of their single solution

- On premise still offered for some solutions; moving towards predominantly SaaS or cloud-based deployment
- Some managed services offered by vendors in this solution include technical services, data services, as well as some operations services

complex, aging infrastructure is a time and risk-intensive process. Adding to this is the complexity of a vendor market that is actively innovating and evolving their offerings. For an insurer that has not been actively surveying the vendor market in the past decade plus, there is significantly enhanced risk in undergoing a search and selection or implementation.

Any insurer considering a solution search and selection should have a broad understanding of the market before undergoing an RFI/RFP process. We see the insurance solution market as divided between three general groupings: service providers, insurance accounting software, and holistic software. In the chart on page 14, we have compiled a high-level overview of the types of models across solutions providers as well as their deployment options.

Each firm's unique need to meet reporting requirements or navigate complex business needs requires fit-for-purpose technology and processes. The fully managed solution that works for one insurance business may not be appropriate for another and the simple de-prioritization of one reporting feature may be a game changer when evaluating several platforms. Navigating the vendor market is never as simple as reading through RFI's—it requires a nuanced understanding of how each provider views the insurance market, which segments of the market each provider specializes in, and how each offering is most likely to evolve based on that provider's priorities.

## Each firm's unique need to meet reporting requirements or navigate complex business needs requires fit-for-purpose technology and processes.

Determining how to evaluate the vendor market can also be a complex endeavor. There is no one insurance solution provider that clearly outpaces competitors in functionality or service, so it is up to each insurer to identify and prioritize functional/technical requirements that are considered critical to their investment operations as the baseline for their search and selection process.

With providers that satisfy critical elements identified, final steps are often determined by confidence that a solutions provider has a roadmap that fits an organization's long-term goals. Navigating what's promised and what's practical in the vendor market is both an art and a science—one that can make or break an organization's long-term success.

# The future of insurance operations

→ For the insurance organization, there has never been a better time to evaluate a firm's operating model and technology. With front office needs growing more complex and varied insurance mandates demanding more data and reporting, few insurers have the infrastructure to support their business efficiently. Many insurance investment teams are operating on outdated technology and mired in workarounds that will eventually be unwound as legacy solutions are sunset or operational risk becomes too high.

It is well-timed—or perhaps overdue—that the solutions market is now maturing to address the evolution of the insurance market and the new challenges faced by insurance asset managers. With new SaaS, fully outsourced, and built-for-purpose technologies, insurers now have a wide range of options to meet their unique daily challenges. Beyond meeting day-to-day needs with more efficiency, new technologies hold the promise of achieving the long-held vision of a consolidated subledger across all accounts and the enablement of futuristic technologies like AI and natural language

The time is now to think about how the organization can build a data organization that empowers users across the front, middle, and back office.

processing that are pushing the insurance industry forward.

For our clients and other insurance asset managers, the time is now to think about how the organization can reduce operational risk, focus on core competencies, increase efficiency, and build a data organization that empowers users across the front, middle, and back office.



# Citisoft



## Contacts

### **TOM SECAUR**

*Chief Operating Officer*  
thomas.secaur@citisoft.com

### **DAVID HIGGINS**

*Managing Partner, EMEA*  
david.higgins@citisoft.com

### **JENNY MYNAHAN**

*Managing Director, Business  
Development, North America*  
jenny.mynahan@citisoft.com

### **THOMAS EIKREM**

*Managing Director, Business  
Development, EMEA*  
thomas.eikrem@citisoft.com

### **ALISSA DOHERTY**

*Director of Marketing  
and Communications*  
alissa.doherty@citisoft.com

# About Citisoft

Since 1986, we've solved complex technology and operations challenges for the investment management industry. With a team of over 85 dedicated consultants in North America and the UK, we're committed to working with asset managers and asset servicers globally on projects of every scope. From guiding complete business transformation programs to on-the-ground delivery, our team is equipped to fulfill any strategic or tactical need.

To learn more about our Advisory and Delivery Services or to leverage the legacy scale in your organization, contact us at [insights@citisoft.com](mailto:insights@citisoft.com) or visit us at [www.citisoft.com](http://www.citisoft.com).