WHITEPAPER

The Transformation of Insurance Investment Analytics, Operations and Accounting

Survey of Leading Companies Assesses the Industry's Readiness for Change

Scott Kurland, Managing Director, SS&C Technologies
Dennis Moore, Senior Sales Executive, SS&C Technologies

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The insurance industry is confronting profound and perhaps a permanent change in the wake of the global pandemic. On the investments side, a prolonged decline in interest rates is driving insurers to diversify their investment portfolios beyond fixed income into alternative assets, thereby increasing risk and operational complexities. Meanwhile, pressures on profitability and expectations of investors (including private equity firms) are compelling companies to find ways to lower operating costs through efficiency and productivity improvements. In the fourth quarter of 2020, SS&C Technologies fielded a survey of leading North American insurers to assess the state of their investment operations, along with their plans and ability to adapt to these challenges. This paper details the survey's key findings and their implications for the future of insurance investment operations.

Introduction

Increasing automation to reduce costs in investment operations is one of the highest priorities over the next three years for a sizeable majority of North American insurers. Yet only a small number of firms have implemented automation-oriented technologies in their operations so far. Most are still struggling to quantify the return on investment and make the business case for investing in Artificial Intelligence (AI) and automation-based solutions.

These are among the topline findings of a survey on "The Future of Investment Analytics, Operations and Accounting," fielded by SS&C Technologies in the fourth quarter of 2020. Fifty leading North American insurance companies participated in the survey, with assets under management ranging from around US$1 billion to over US$100 billion.

The survey took place amid the COVID-19 pandemic, which the analyst firm McKinsey cites as a cause of "ongoing disruption" in the insurance industry. In particular, the response to COVID-19 is seen as prolonging an environment of historically low-interest rates, which continues to squeeze insurers' profitability.

Interest rate stagnation is the chief driver of diversifying investment portfolios beyond fixed income and listed equities. A 2020 survey by BlackRock (as reported in Pensions & Investments) found that 47% of insurers are willing to take on more risk, including positions in illiquid private market investments, in the quest for higher returns. However, this trend introduces complexity to every aspect of investment operations, including trade processing, securities data maintenance, reconciliation, accounting, analytics, regulatory reporting, compliance, risk, and performance measurement. With this added complexity comes increased operating costs due to the additional systems, personnel and domain expertise required to accommodate the diversified investment types.

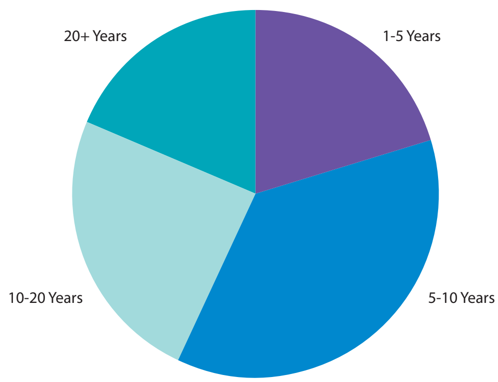
Simultaneously, the persistence of low interest rates underscores the need to drive down costs through increased operational efficiency and measurable productivity gains to maintain profit margins. As the McKinsey report put it, "Drastic improvements in productivity are likely necessary to maintain profitability in this low-interest-rate (and often lower-premium) environment."

Given more complex, diversified investment strategies for insurers and the urgent need to improve productivity, SS&C undertook this survey to assess the industry's progress in adapting its operations to the changing landscape. This article delves more deeply into the survey findings and their implications and points to some potential opportunities insurers might consider addressing the challenges they face.

Change comes slowly

One of the more telling statistics emerging from the survey is the tenure of insurance firms' relationships with their investment accounting and analytics solution provider. Investment accounting and analytics providers can profoundly impact everything from the ability to submit timely and accurate annual, quarterly and supplemental filings to appropriate regulatory authorities, manage cash flows and investment portfolio risk and make critical investment decisions off of accurate holdings data. While most companies surveyed (57%) have been using the same system or provider between one and ten years, a significant percentage (43%) have had the same solution for more than ten or even 20 years.

How long has your organization been using its current investment accounting solution/provider?

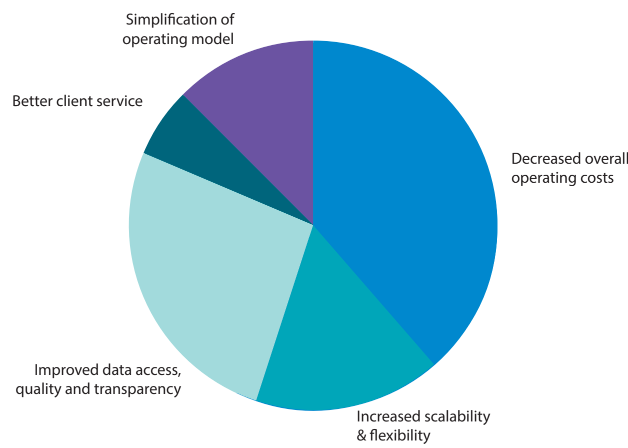


Answer Choices	Responses	
1–5 Years	20.41%	10
5–10 Years	36.73%	18
10–20 Years	24.49%	12
20+ Years	18.37%	9

The findings point to inertia to change on a sizeable segment of the industry and the difficulty of dislodging some established legacy systems. Most companies likely view changing the core operational platform as a monumental and costly undertaking. However, aversion to change may be preventing them from taking advantage of technological innovations and new capabilities that have become available in just the past few years. In a well-planned change scenario, the efficiency gains delivered by such new technologies should quickly make up for the change's effort and cost.

Under what circumstances might an insurer be compelled to change its current investment accounting and operations platform or provider? For 39% of respondents, decreasing overall operating costs was the primary reason to consider switching. Another 27% cited the ability to improve overall data access, quality and transparency.

What would be the biggest driver for your firm to consider switching its current investment operations & accounting platform or provider?



Answer Choices	Responses	
Decreased overall operating costs	38.78%	19
Increased scalability & flexibility	16.33%	8
Improved data access, quality and transparency	26.53%	13
Better client service	6.12%	3
Simplification of operating model	12.24%	6

Diversification brings complexity and increased risk

The prolonged interest rate slump has compelled insurers to diversify away from the conservative, comparatively low-risk fixed-income instruments on which the industry has historically relied. The SS&C survey bore out this trend. While traditional fixed-income and equities still dominate in the asset mix, more than half of the survey respondents reported that they are also investing in commercial mortgage loans, limited partnerships and private equity funds. More than a third invest in bank loans and use over-the-counter derivatives to hedge risk.

As the convergence trend between insurance and private equity continues to accelerate, so do the operating implications of expanding investment portfolios to alternative investments.

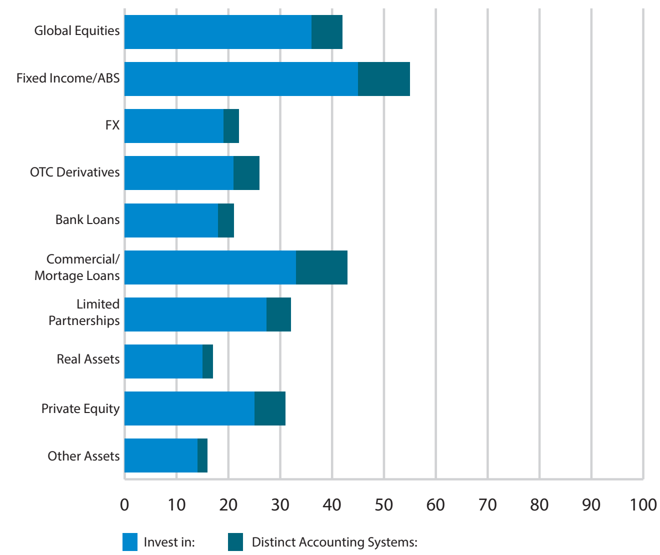
Nearly one-third of all survey respondents said they are using two or more different investment accounting systems in their operations, some are using four or more.

Alternative assets bring additional complexities around mark-to-market activities. Some of the complexity is driven by unique valuation policies and adjustments and event processing activities where event notices are often distributed in non-standardized PDF or Word formats from agent banks. To ensure timely and accurate processing of event notices requires significant manual effort to be collected, read and inputted into the accounting system or converted to machine-readable formats via AI-driven technologies such as Optical Character Recognition (OCR) and Natural Language Processing (NLP).

Alternative investments also require the tracking and documentation for unique, bespoke aspects and attributes of each deal, including contract structures, terms and covenants, along with various fees and expenses that need to be collected from operating companies and property managers. Furthermore, incorporating alternative assets into the investment portfolio requires changes to consolidated regulatory reporting requirements for insurers subject to U.S. Statutory reporting (i.e., Schedule B, BA, etc.)

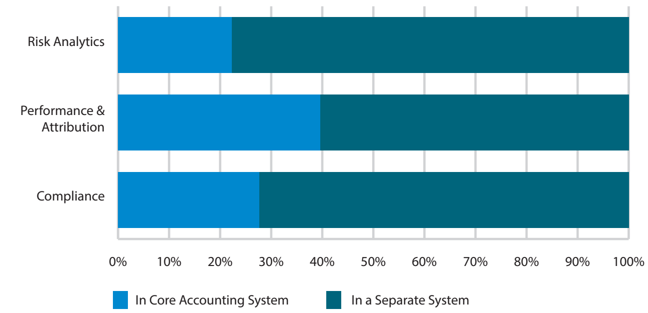
Coinciding with these findings, nearly one-third of all survey respondents said they are using two or more different investment accounting systems in their operations, with a small handful of those using four or more. The dispersion is due to separate, dedicated systems to properly account for the different instrument types, due to many of the nuances and challenges mentioned above. On average, around 22% of firms in the SS&C survey rely on at least one distinct accounting system to support a specific asset class. While most firms use only one accounting system, it is concerning that a significant percentage have to rely on multiple platforms to account for their diversified investments. Such fragmentation leads to increased operational inefficiency, making it harder for investment teams to manage risk, performance and reporting holistically across the full investment portfolio.

Which asset types do you invest in and how do you account for them?



Asset diversification also brings increased investment risk and performance measurement requirements — calling for more advanced technology solutions and sophisticated, cross-asset analytical tools that can closely identify and monitor correlations between different types of holdings and portfolios. In most cases, firms do not have analytics integrated into their core accounting systems. Around 78% of respondents need to pull data from one or multiple accounting systems into a separate system for risk analytics; 60% do the same for performance analysis and 72% for compliance monitoring. This proliferation of systems and processes exacerbates inefficiencies and raises the risk of data errors.

How do you monitor the asset types you invest in?



	In core accounting system	In a separate system	Total	Weighted average
Risk Analytics	22.22% 10	77.78% 35	45	1.78
Performance & Attribution	36.58% 19	60.42% 29	48	1.60
Compliance	27.66% 13	72.34% 34	47	1.72

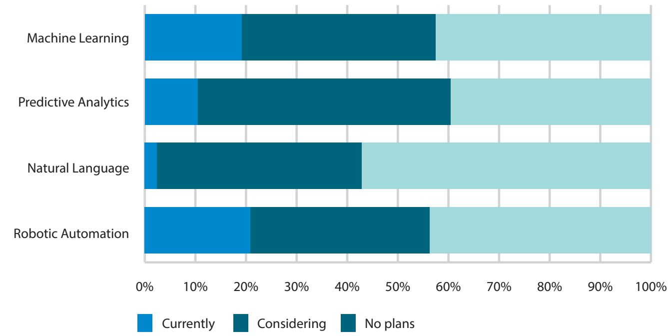
We see a growing need for native or tightly-integrated risk analytics to properly model and apply relevant shock, sensitivity and 'what-if' event scenarios to quickly identify and expose the theoretical risks and performance impact on core liquid and alternative investments.

While diversification may create opportunities to improve returns, those gains can be quickly offset by increased portfolio risk and inefficiencies resulting from patchwork platforms, increased data discrepancies, reconciliation activities and manual processing efforts. Insurers who can consolidate accounting and operational processes for most —if not all— of their core liquid and alternative investments into a single solution with tightly-integrated analytics will be best positioned to capitalize on asset diversification initiatives.

Intelligent technologies gain ground

Artificial intelligence and its variants, including machine learning, predictive analytics, natural language processing (NLP) and robotic process automation (RPA), are taking root in the investment, though they have yet to render the transformative impact that some pundits were predicting a few years ago. In the SS&C survey, only about 20% of respondents said they are using some form of machine learning, RPA or predictive analytics today in their investment operations. However, these technologies are on the radar, with 35-50% of firms looking into machine learning applications, predictive analytics, NLP, and RPA for the near future.

To what extent is your organization employing AI technologies to gain efficiencies and improve insights into investment operations?

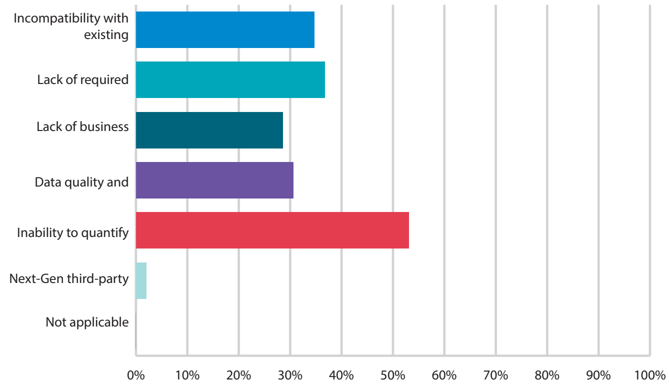


	Currently	Considering	No plans	Total	Weighted average
Machine Learning	19.15% 9	38.30% 18	42.55% 20	45	2.23
Predictive Analytics	10.42% 5	50.00% 24	39.58% 19	48	2.29
Natural Language Processing	2.38% 1	40.48% 17	57.14% 24	47	2.55
Robotic Automation	20.83% 10	35.42% 17	43.75% 21	48	2.23

If insurers are slow to embrace AI, it's not for lack of awareness or understanding. The biggest hurdle, cited by 53% of survey respondents, is the difficulty in properly quantifying or rationalizing the business value these technologies can generate. Firms cite a lack of internal technical expertise to make adoption feasible in the near term (37%), incompatibility with existing legacy systems (35%) and a lack of expertise to identify applicable use cases (29%).

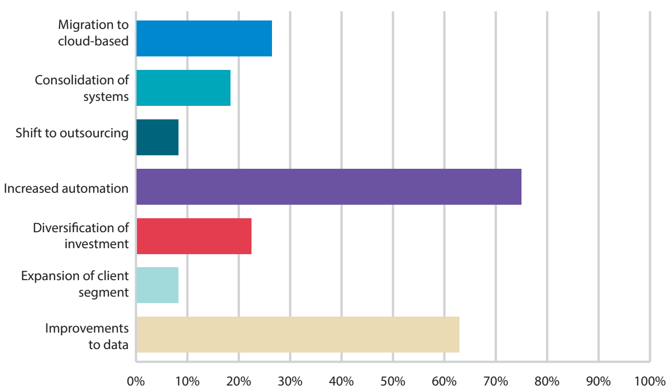
These numbers suggest that technology developers must assume some of the burdens for driving AI adoption in insurance investment operations. Technology companies that have successfully implemented AI initiatives need to do a better job of matching these technologies to their customers' needs while helping insurers formulate strong business cases with measurable results. The industry needs to see more success stories from early adopters with specific use cases to generate the confidence that will drive wider adoption across the industry.

What are the biggest challenges within your organization for implementing AI technologies in the investment area?



Answer Choices	Responses	
Incompatibility with existing legacy systems	34.69%	17
Lack of required internal technical expertise to enable use	36.73%	18
Lack of business expertise to define applicable use	28.57%	14
Data quality and availability constraints	30.61%	15
Inability to quantify or justify business value	53.06%	26
Next-gen third-party investment application with embedded capabilities	2.04%	1
Not applicable	0.00%	0

Which of the following initiatives would you consider the highest priorities over the next 1–3 years?



Answer Choices	Responses	
Migration to cloud-based services	26.53%	13
Consolidation of systems & infrastructure	18.37%	9
Shift to outsourcing / co-sourcing services	8.16%	4
Increased automation to reduce operational costs	75.51%	37
Diversification of investments into additional asset types	22.45%	11
Expansion of client segments & geographies	8.16%	4
Improvements to data integrity, transparency, reporting and insights	63.27%	31

Simultaneously, there is a hunger for innovative, cross-asset systems capable of offering increased automation, consolidated reporting and embedded risk and performance analytics. Manual processing and the challenges of calculating accurate asset valuations lead the list of operational pain points, cited by 47% of respondents, followed by reconciliations (33%) and performance and risk reporting (30%). More than 75% of survey respondents said that increasing automation to reduce operational costs was one of their top three priorities over the next 1-3 years, followed by improvements to data transparency, integrity and reporting (63%) and migration to cloud-based services (27%).

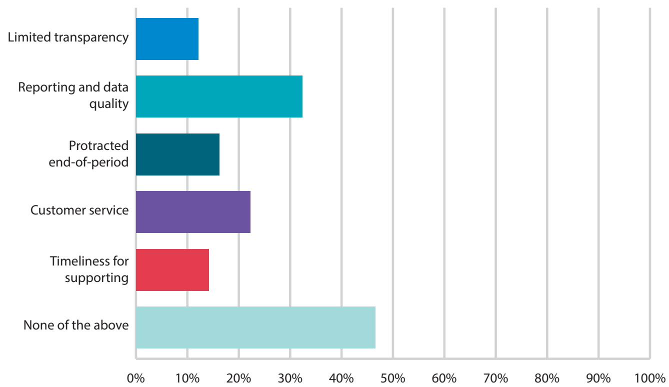
The outsourcing option

Outsourcing some or all technology and select operations activities has the potential to alleviate many of the asset diversification challenges and constraints on growth that insurers face. Most of the firms participating in the survey stated that they outsource some aspect of their business, most notably investment management (39%), investment accounting (32%) and trade matching and settlement (29%). Only around a third of respondents do not currently outsource anything.

As the survey suggests, there is an increasing trend of insurers outsourcing the investment management function to select third-party managers. This outsourcing trend increases the need for technology solutions that can aggregate, consolidate and reconcile transactions, holdings and cash data from external and internal managers for risk management, performance measurement and reporting purposes. All while simultaneously providing transparency and visibility into the underlying holdings of each external manager. Outsourcers with commensurate technological, operational, accounting, risk and performance analytics, and reporting expertise can also be leveraged to assist with this challenge.

Concerning feedback on their experience working with an outsourced provider, nearly one-third of survey participants stated they experience issues with data quality and reporting when dealing with their current outsourcing provider. Discrepancies may stem from incongruences between the outsourcer and the insurer, such as differences in market data sources, differences in asset valuation models, and timing/frequency of trade processing, accounting, reconciliation activities or report generation. In general, however, companies that outsource some of their investment-related activities are satisfied with their outsourcing arrangements. Nearly half cited "none of the above" when asked about the biggest challenges outsourcing presents.

For any outsourced investment functions, what are some of the biggest challenges you face?



Answer Choices	Responses	
Limited transparency & oversight	12.24%	6
Reporting and data quality issues	32.65%	16
Protracted end-of-period closing processes	16.33%	8
Customer service responsiveness	22.45%	11
Timeliness for supporting new business opportunities or changing requirements	14.29%	7
None of the above	46.94%	23

Still, the survey findings suggest some hesitancy toward outsourcing, whether for control, compliance, transparency, readiness or simple change inertia. This is an area that warrants further exploration. For instance, outsourcing responsibility for investment accounting can greatly accelerate the timeline and reduce the costs associated with a system conversion and migration, making the prospect of change more palatable to the organization. Once this function has been outsourced, the insurer may be better positioned to grow organically through new product offerings or inorganically through strategic acquisitions, knowing they can leverage their outsourcer to implement the new offerings or onboard rapidly and account for and report on the newly acquired investment portfolios.

Outsourcing may also enable insurers to take advantage of new, intelligent technologies without a huge upfront investment or steep learning curve. Engaging third-party providers can provide more scale, automation, transparency, and reporting flexibility, as well as sophisticated cross-asset risk and performance analytics to better monitor and manage increasingly complex investment portfolios.

Furthermore, an outsourcing provider may reduce or eliminate the insurer's need to staff up internally with AI experts and data scientists. Finding the right talent is a key obstacle to increased automation and operational efficiency for many insurers today. Of the participants surveyed in the study, nearly 37% stated they lack the required internal technical expertise to implement AI-driven technologies. In comparison, more than 53% stated they struggle with the ability to justify the up-front investment required to benefit from such technology. As long as the outsourcing provider has made and continues to make investments in AI-driven technology and the requisite technical and domain expertise, insurers can benefit from greater automation and operational efficiency levels.

At the most basic level, outsourcing reduces the IT footprint, eliminates maintenance headaches, cuts operational overhead, and frees insurers to focus less on operations and more on investment strategies. Increasingly, however, insurers are looking to outsourcing as a way to gain the flexibility and agility to move their business quickly into new products and markets.

Conclusion

Insurance investment operations are at a pivotal juncture. Companies are adopting more aggressive and complex investment strategies to achieve higher returns while simultaneously increasing productivity and reducing operating expenses. Moreover, the industry is experiencing a wave of consolidation fueled by private equity. PE firms are either investing substantially or outright acquiring insurance companies at a rapid clip. According to McKinsey, insurance M&A now accounts for nearly half the private equity transaction volume in the financial services sector. It stands to reason that the breadth and complexity of combined investment portfolios, and the associated accounting, reporting, regulatory, risk and performance requirements are bound to increase accordingly.

If these deals are going to deliver the expected ROI and economies of scale to warrant the investment, modernizing and integrating merged entities' operational infrastructures will be imperative. In an industry that changes slowly, many players recognize that the status quo is unsustainable. As such, the need for innovative, cross-asset capable accounting and operational solutions, advanced risk and performance analytics, and domain-expert outsourcing providers is more urgent than ever.

In most cases, firms do not have analytics integrated into their core accounting systems. Around 78% pull data from more than one accounting system for risk analytics. It's 60% for performance analytics; and 72% for compliance monitoring.

SS&C's survey of leading insurance investment operations teams indicates insurers are keenly aware of these challenges. They have identified increased automation and the need for comprehensive decision support analytics as top priorities. Many have made initial forays into intelligent technologies to support their operational platforms' modernization or at least select parts of their business. Others have begun to recognize the strategic benefits of outsourcing to increase automation, operational scale, agility and efficiency. Such firms find themselves with the added capacity to define and refine the solutions they need, along with the respective business value. Given the current unprecedented changes that are taking place in the industry, insurers who can accelerate their transformation stand to be the winners in this new operating environment.

Singularity is SS&C's next-generation, integrated investment analytics, operations and n-basis accounting platform. It provides global insurance managers, REITs and other investment managers with unparalleled analytics insights, operational efficiency, and accounting and reporting flexibility and eliminates the need for multiple platforms. This is of particular value in an environment where firms are challenged to juggle the need for reduced operating costs with asset growth through increasingly complex and diversified portfolios spanning equity, fixed income and alternative assets. To learn more about the how SS&C's Singularity can help you adjust more quickly to changing market conditions and business needs **contact us**.