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Introduction

Recent years have seen a wave of strategic acquisitions and partnerships in the asset management world - and no wonder. An acquisition is a far faster route to asset growth than trying to grow business organically. Large enterprises are actively shopping for complementary companies to gain scale, differentiate and diversify their offerings, broaden their geographic distribution, and enhance their valuations. The combined entities stand to benefit from economies of scale, increased efficiencies, shared resources, and a crosspollination of talent and expertise.

Realizing these benefits, however, is not easy and never a given at the outset of a transaction. The measure of success of an acquisition is often how quickly and smoothly the acquiring company can assimilate the assets and operations of the acquired entity and start delivering on the expected benefits for stakeholders. The goal is to get to "business as usual" with minimal internal disruption - and virtually no apparent disruption in the end client experience.

Having been involved in hundreds of asset management mergers, acquisitions and strategic partnerships, SS&C has identified a number of challenges and needs that both parties should anticipate in a large-scale transition. The speed of integration - and therefore the success of the deal - may well hinge on any one or a combination of these factors. The intent of this paper is to help strategic acquirers develop plans and strategies for clearing the path of any obstacles to a smooth transition, no matter how large in scale.



Operational Integration: People, Process, and Technology

A major driver behind nearly all business combinations is to unlock and leverage the inherent synergies that presumably exist across the two organizations – the much talked about but difficult to realize "1 + 1 = 3" effect. In the asset management industry, realizing economies of scale often proves extremely difficult. The effort brings to light the major challenges – as well as opportunities – involving people, process, and technology.

People

The combined organizations may have significant cultural differences, which can profoundly affect human capital management and the everyday working environment. Melding disparate cultures is just the first step in realizing the anticipated benefits of efficiencies and economies of scale. Moreover, a resource overlap in front-, middle- and back- office support functions is virtually inevitable, given the high degree of uniformity of organizational structures and operating models across the asset management industry. Arriving at the optimal staffing adjustments will entail some hard decisions.

Process

A major factor in achieving the desired benefits of the transaction is examining the front-to-back operating model of each entity and identifying best practices that can be gleaned from each for the new organization. An unbiased, fresh look is essential to determine the optimal organization structure, identify significant areas of improvement needed, and develop a comprehensive plan to execute the necessary changes. A phased approach will help avoid major disruptions to operations, end users, and especially external clients.

Technology

The integration of two entities from a people and process perspective will quickly surface major technological redundancies across the front, middle and back offices. Even before the acquisition, one or both of the entities may have multiple portfolio accounting or trade order management systems. Imagine how that issue will be compounded when the organizations are combined. Given the proliferation of systems, you can expect huge challenges in managing pro forma Investment and Accounting Books of Record (IBOR/ABOR), as well as data and interface costs. Substantial IT support will be required.

Technology integration is among the foremost challenges to a successful transition. Consolidation is essential. To determine which technology platforms must stay and which can go, you will need to consider the degree of overlap or variation in investment mandates and asset types between the two entities, and the back-end accounting and reporting requirements for clients. Combining two domestic fixedincome shops, for example, is relatively straightforward from a technology standpoint, while combining a manager focusing on the MBS/ABS sector with one specializing in international equity markets is not. Similarly, the accounting and reporting requirements for pension funds is far more straightforward than those of an insurance company – the former relatively basic, the latter far more complex due to the need for:

- 1) General Account requirements for U.S. GAAP, Statutory and Tax accounting and reporting, which requires multiple accounting bases or books.
- 2) Statutory accounting and reporting associated with Separate Accounts. Once again, a phased implementation approach to technology consolidation will be critical to minimize disruption for staff and clients.

The accounting and reporting requirements for an insurance company are very complex. A phased approach to technology consolidation helps minimize disruption.



Data Integration from Disparate **Legacy Systems**

Data Integration - As a corollary to the technology challenge, the data within each entity's legacy systems is rarely if ever homogeneous, and therefore difficult to consolidate for performance, risk and, other analytics. Firms often try to resolve this disparity by extracting the information into data warehouses or data lakes. This process typically requires the development of customized data extracts, files or queries, and then the use of an advanced ETL tool to do a deliberate mapping of data fields, tags, labels, and formats to get all of the disparate data sets into a uniform format for import into the data warehouse or lake. While this may achieve the goal of consolidating the data in one location, it requires extensive reconciliation, particularly when the data is likely tagged in many different ways. For example, one system may have "alternative investments" as an asset class, while another may track comparable holdings as "equities". In another case, a counterparty might be identified by an abbreviation, or as a company that was acquired by the true counterparty, making it difficult to measure risk exposure to a particular counterparty without significant manual manipulation. To add even further complications, most entities currently tag their investment data with a series of user-defined fields to tag securities or holdings to unique strategies or asset classifications for reporting, rating, performance measurement, or risk management purposes. Understanding the purpose of these user-defined fields and preserving their integrity through the integration, normalization, and consolidation process must also be taken into consideration.

Data Integrity and Validation - The use of spreadsheets and other data extract queries to consolidate data, such as by counterparty, asset class, industry, or region; introduces significant data integrity risks and the chance of errors through manual intervention. This creates major inefficiencies and reconciliation issues that would be alleviated by consolidating

the data into one platform in which the data is tagged in a consistent manner. During the integration process, there may also be gaps in data sets, which need to be identified and bridged in order for accounting, valuation, rating, and reporting processes to run smoothly going forward. For example, if one data set has missing factors for a period of time for ABS instruments, these must be identified and updated in the data set for proper cash flow schedule generation. In another example, some firms use data from multiple ratings agencies to generate "derived ratings," which are used to determine haircut rates or security downgrades or reclassifications, such as thresholds for Below Investment Grade (BIG) securities. If there are holes in ratings data from one data set to another, this will impact the derived ratings that are subsequently generated. Similarly, data sets that may have missing or stale NAIC Codes can impact insurance Statutory Reporting, which requires assets to be reported on specific schedules based on their appropriate NAIC code or designation. Finally, once all holes in the data have been plugged, a validation process needs to be run to ensure that the data set is not only complete but timely and accurate. This may involve a financial impact analysis, in which yield calculations are re-run post-integration to ensure the resulting yields are consistent and accurate across the data sets.

It's not easy, but excellent alternatives to the "data lake solution" are available.

With planning and expertise, an acquiring company can glean actionable insights that bring together the best from both entities.



As the volume of assets under management increases, so does the importance of a highly flexible, robust, and scalable risk management system.

One solution that can alleviate some of the data integration challenges is to convert the data into a system that can account for, process, and store data from all asset classes in a standardized form while preserving user-defined fields and entity-specific, custom asset classifications. This will enable the combined entity to run queries – ideally using modern API-based approaches – along with performance, risk, and analytics efficiently across the newly-aggregated data set. As noted earlier, the mapping still requires some significant, deliberate, upfront planning based on how the data will be used upstream, but the system that becomes "a single source of the truth" with standardized data can provide powerful, reliable, and actionable real-time analytics.

In practice, a proper data conversion into one system requires:

- Upfront data checks to ensure data completeness, including prices, factors, ratings, NAIC codes, and asset classifications
- Review and validation of the data through financial impact analysis, including yield proofs
- Checks to ensure user-defined fields are preserved and consistent
- · Controls to verify that the right system tables are being populated properly and consistently
- Reconciliation of the consolidated data set to any off-system repositories

In short, the most successful data integration projects will leverage flexible ETL capabilities for data mapping and normalization, along with proper validation checks by respective investment data domain experts to identify and remediate data anomalies during the normalization and consolidation process. This will help preserve the integrity of the combined data set in the final middle- and back-office platforms and data warehouse, while minimizing the need for further manual data manipulation or reconciliation.



Effective Risk Management

As the volume of assets under management increases, so does the importance of a highly flexible, robust, and scalable risk management system. The number of risk factors and the complexity of scenario generation increases as market exposures are added to an investment portfolio. An effective risk system therefore requires speed in valuation and simulation, as well as the ability to report at any frequency with adaptability to changing parameters.

Risk systems need to meet various needs: investor reporting, portfolio management, new asset classes, and exposures. In all cases, it is important to avoid lengthy calculations as users alter the preferred dimensions and drill-downs when seeking insights on the drivers of portfolio risk and return. New assets might contain highly bespoke terms and conditions. The interfaces and underlying pricing libraries should therefore allow for generic trade representation. A system capable of handling illiquid or alternative assets should be capable of modeling proxies, ingesting distributions, and connecting to external modeling systems that may be best suited to the risks in question.

Onboarding additional assets will also put demands on data teams and require additional market data. Firms will need to identify data providers for niche markets. Terms and conditions may need translating. Data clean-up efforts will need to be broadened. Incorporation of investments in unfamiliar markets or new asset classes requires extra attention. Instrument terms, risk factor simulation, and risk reporting must all be consistent across a now more diverse portfolio. Expanding a system designed for one market into a new market or merging two previously disparate risk systems can be extremely onerous and labor intensive. Risk systems designed to be flexible, scalable and multi-asset class in nature can mitigate these challenges by offering a broader established risk architecture. With this in place, less effort can be spent on adapting or 'porting' code, enabling a greater focus on developing an intelligent and coherent view of risk across the firm.

Workforce Optimization

In many transitions involving a merging of operations and systems, outsourcing is an option that warrants serious consideration. Outsourcing technology and certain specialized operational activities is often an answer for the challenges of platform integrations, data migration, and account conversions – giving the combined entities a fresh start with new and evolving technologies instead of trying to reconcile incompatible platforms.

A question that usually arises when outsourcing is on the table, especially in large organizations, is the impact on employees - will in-house operations teams become redundant? The outsourcing provider, however, should not overlook the value of those employees and their knowledge, as well as certain existing technology assets.

To help retain talented employees during the transition process, as well as to optimize duplicate processes, today's asset management organizations are deploying intelligent automation technologies such as robotic process automation (RPA), natural language processing (NLP), artificial intelligence (AI), and machine learning (ML), which dramatically transform the employee experience. By automating repetitive, rulesbased, mundane, or high-volume tasks, staff time is freed up to focus on higher value activities such as client service and analysis.

In addition to a better employee experience, leading global asset management firms that have deployed digital labor in their front, middle, and back offices have realized significant efficiencies in cycle time, handle cost, SLA adherence, and compliance burden. Some common processes that release substantial staff capacity when automated include:

- >> KYC/AML checks
- >> Client reporting and valuations
- >> Compliance reporting
- >> Investment research
- >> Digitalization of information held on PDF, paper, or email
- >>> Fund/product launches
- >> Client contact center processes
- >> Tax reporting
- >> Back-office trade processing and reconciliation



Investment Accounting

When one company acquires another's assets, the nature of each entity's business will have a big impact on investment accounting in middle- and back- office systems. Asset managers running portfolios for third-party clients will typically be concerned only with the Investment Book of Record (IBOR). When the decision is made to consolidate the investment platform, a point-in-time conversion will occur, bringing along any needed history to calculate historical performance returns. The acquired asset manager will also be concerned with the Accounting Book of Record (ABOR). Depending on the geographic dispersion of the client base, this may impact multiple accounting books for US Insurance Statutory, Generally Accepted Accounting Principles (GAAP), and International Financial Regulation Standards (IFRS), along with tax from US or Foreign Taxing Authorities. When ABOR is in the picture, the acquiring entity must establish the appropriate cost basis for pro forma accounting purposes. For example, when a US insurance company's assets are acquired, the accounting for the investment portfolio is typically treated as a going concern for STAT purposes, with the assets retaining their original acquisition dates and amortized cost, whereas GAAP and IFRS will establish a new cost basis for the assets at fair value as of the closing date of the deal. In GAAP terms, the step-up to fair value is referred to as Purchase GAAP or "PGAAP".

Another major consideration from an ABOR perspective are the adjustments that will be necessary to record the "financial impact" – affecting both the balance sheet and income statement – resulting from converting assets from one accounting system to another. The required adjustments are due to the inevitable differences in amortized cost or "Book Value" methodologies between the two accounting systems. The underlying calculations are extremely complex, while the related accounting guidance (for example., FAS 91/ ASC 310-20, EITF 99-20/ASC 325-40.) is often subject to broad interpretation. The net effect is differences in the manner in which the guidance is interpreted and implemented in the two accounting systems – often concentrated in the more complex asset types such as MBS/ABS securities and related variants. In addition to quantifying the required adjustments, it is critical to do a deep dive to understand the root causes and to rationalize and support the proposed adjustments to key accounting stakeholders including senior management and the auditors...



Purchase GAAP (PGAAP)

To further expand on the accounting considerations, PGAAP accounting is a common requirement for both the purchasing and the acquired companies after acquisitions. The preparation of the PGAAP financial statements for the acquired company is a necessary accounting exercise for publicly traded companies following US GAAP or International Financial Reporting Standards.

However, a privately-owned acquirer may also want to prepare PGAAP financial statements to aid in monitoring the performance of the purchased business. Before the PGAAP exercise begins, both the purchasing company and the acquired entity need to co-develop an accounting policy appropriate for the PGAAP requirement.

PGAAP is an accounting book in which every item is treated as if it was purchased on the PGAAP date. Therefore, on PGAAP date, everything is valued at fair market value. The existing GAAP basis would carry the investments at historical book value. Because PGAAP deals with marking everything to market on PGAAP date, the underlying accounting principles would reflect the relevant requirement. For example, the PGAAP may follow US GAAP or it may follow IFRS.

For insurers, the common practice is to follow the purchaser's existing accounting policy. However, the PGAAP accounting policy may begin with the existing accounting policy of the purchased company.

Regardless, the PGAAP accounting policy must be designed with input from both the purchasing company and the purchased company, with discussions made alongside their respective auditing firms in the early stages. The key decisions made in the PGAAP exercise should be well-supported and the expected outcome well-communicated. Management of both companies should agree to those decisions to avoid unfavorable outcomes near the end of the exercise. Certain legacy investment accounting systems may have limitations on the number of accounting bases that can be supported, which can lead to delays or errors resulting from manual workarounds or offline processes. Modern platforms built on the latest technology and that support unlimited accounting bases will undoubtedly provide more flexibility and accuracy, and better controls.



Tax Impact on Portfolios

The transfer of assets from one entity to another through an acquisition has significant tax ramifications, which require thoughtful planning and action on the buyer's part. The initial consideration for tax purposes is whether the transaction is structured as a stock or asset deal and whether it is taxable or tax-free. This has a material impact on the attributes being transferred, such as the adjusted tax basis and holding period of the assets involved. A stock acquisition typically gives rise to an "inside-outside basis difference," in which the buyer's basis in the target company (the outside basis) is different from the target company's basis in its own assets (the inside basis). Buyers can overcome this disparity by filing Section 338 tax elections that treat a stock acquisition as a deemed asset acquisition. However, this planning approach usually triggers the need for a "purchase price allocation," meaning the buyer must take its purchase price and allocate it across seven predetermined classes of assets of the target company, resulting in a "step-up" in the inside basis of the target assets, typically to their market values. The result of this approach is that the value of the assets (and associated tax attributes) in the hands of the seller are different to the value of the assets (and tax attributes) in the hands of the buyer.

Once the nature of the transaction, and whether a purchase price allocation will be undertaken, has been established, the buyer is ready to enter the newly acquired assets into a software system. At this point, the buyer must understand the depth and breadth of the tax calculations historically performed, and whether those calculations were automated, subject to manual offline processing, or some mix of the two. The newly utilized software may offer features and perform calculations that were not historically available. The buyer then needs to assess how to transition these features - do they accept and continue the historic treatment for the acquired assets and apply the new functionality to newly purchased positions, or do they transition the entire portfolio to the new system and all its newly available features? This decision requires thought, as it may bring with it significant tax filing and disclosure obligations.

Identify tax planning opportunities early, so that the buyer can assess the financial impact and plan for an optimal tax transition.

An example of such a feature may be the bifurcation of original issue discount (OID) from market discount. If the bifurcation was not historically available to the seller (either because the legacy system did not support it or the work was performed manually), then they may have recognized market discount currently as opposed to reaping the benefits of tax deferral. Transitioning to a new system may therefore offer tax-planning opportunities through deferral not previously available. These opportunities should be identified early so that the buyer can assess the financial impact and plan for an optimal tax transition. The basis step-up mentioned earlier, if undertaken, also creates differences in asset values and income recognition that the buyer must accommodate. Finally, all of these changes may give rise to book-to-tax differences that differ from what the seller was reporting, triggering the need for additional reporting and third-party disclosures.

From a practical perspective, since entering the portfolio into a system does not happen overnight, the assets can be entered into the system and a baseline before-and-after comparison performed, with the understanding that certain true-up adjustments will be required when the transition is complete. Best practice is to ensure such true-ups do not occur during a guarter close – its best to plan a true-up in May, for example, rather than March or June. Once the accounts are moved and the reconciliation is complete, the book-to-tax differences must be quantified and reported. Depending on the nature of the transaction, these differences may not be the same for the seller and buyer. In practical terms, this means that in certain transactions the baseline comparison between seller and buyer becomes irrelevant.

TAX CONSIDERATIONS

- Is the transaction a stock or asset deal?
- Is the transaction taxable or tax-free?
- Address any inside-outside basis differences.
- Enter newly acquired assets into a software system.
- Does the transition to a new system trigger an accounting method change?

Implementation with Minimal Disruption

As noted earlier, smooth operational and technology integration is critical to achieving the goals of the transaction in a timely manner, but is also one of the biggest challenges. It behooves the parties to work with an independent solutions and services provider with a track record in managing asset management acquisitions and transitions, with the overriding goal of ensuring no adverse impacts on client relationships.

A successful integration starts with a key process and system architecture review that paves the way to a multi-phase implementation roadmap, each phase designed with the desired end state in mind. Early phases focus on due diligence, knowledge transfers, key process documentation, technology assessments, and corporate infrastructure integration. The later phases of the project would include system development, process redesign and reengineering, third party integration, user acceptance testing, and parallel processing. Strong governance and project management throughout the process will ensure open communication among all parties involved, timely identification and resolution of issues, and ultimately an on-time, on-budget implementation.



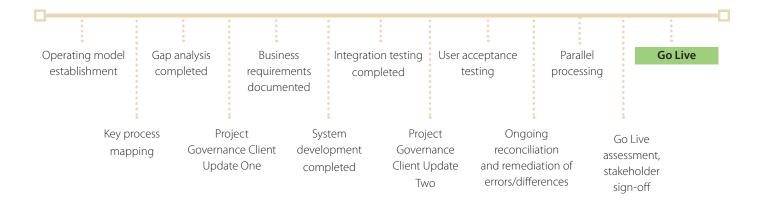
From the time a transaction is initiated and due diligence begins, the two parties – as well as their attorneys and advisors - exchange highly sensitive, confidential information and legal documents at a steady clip. Transmitting such information over the public internet or even through private networks exposes it to the risk of unauthorized access, leakage, competitive espionage, or outright theft. To minimize cyber risks, firms need an information security model for sharing data with multiple parties.

Virtual Data Rooms offer security and speed, superior to yesterday's physical data rooms.



Yesterday's physical data room where teams pore over pages of printouts has been replaced by the virtual data room or VDR, a secure digital repository with processes and protocols for information sharing and review. A properly equipped VDR, with GDPR-compliant, encrypted archives and information rights management (IRM) capabilities, will not only ensure higher level security, but also streamline and speed up the due diligence process through automation. It should allow simultaneous access for all parties, eliminating time constraints and reducing the need for travel and in-person meetings.

Milestones for smooth operational and technology integration:



In today's rapidly evolving environment, investor appetites are changing radically and managers' need for investor data is growing exponentially.



Transfer Agency Capabilities

Asset managers are increasingly taking the view that the transfer agency function is not merely a "shareholder recording keeping system," but a valuable strategic asset. The importance of partnering with an organization in which transfer agency is a core competency cannot be overstated. In today's rapidly evolving environment, investor appetites are changing radically and managers' need for investor data is growing exponentially. A transfer agent must have the resources to make continual, relevant investments in a platform that can keep up with the pace of change in the market. At a minimum, a transfer agency partner should provide a manager with a desired end-state operating model that includes:

- Brand protection: Meeting regulatory demands and addressing cyber, compliance, and continuity risks
- Cost reductions: Driving cost savings through shared resources and infrastructure, shifting capital expenditures away from the firm
- Opportunities to modernize: Migration from legacy platforms to advanced technology incorporating artificial intelligence, robotics, and high levels of automation
- Future-proofing: Continual innovation to deliver a superior investor experience, with a managed solution that works across geographies, asset classes, and product wrappers
- Operational efficiencies and scalability: Countering margin pressure, reducing ancillary expenses, and freeing the manager to focus on client value-add services
- Timely processing and full audit trail: For risk management and control

Gain from an Objective, Outside Perspective

These top 10 factors underscore the sheer complexity of a large-scale transition of people and assets from an integration and accounting standpoint. The common thread running through them is that each calls for deep technology and operations expertise specific to asset management. Rather than trying to resolve these issues on your own, it pays to engage an experienced solutions and services provider at the earliest stages of the transaction. Along with the latest technology, the right partner should also bring an understanding of the nuances of complex investment instruments and asset classes, as well as knowledge of global accounting standards, tax requirements, and regulatory regimes.

The benefits of an acquisition may be clear, but the path to achieving them is far less so. Technology and operational issues play a pivotal role in determining whether a deal delivers the desired outcomes to the satisfaction of all parties. Anticipating and addressing those issues from the outset will make for a smoother, more successful transition.

About SS&C: Proven Transition Experience

SS&C is a leading provider of technology-powered solutions and services to the investment management and insurance industries worldwide. We have experience in assisting hundreds of enterprises through mergers, acquisitions, and large-scale transitions, including operational lift-outs involving as many as 500 employees. Our company itself is also an example of growth through acquisition, having acquired dozens of companies and lines of business over three and a half decades.

SS&C is the world's largest fund administrator, the largest mutual fund transfer agent, and a leader in technology and operations outsourcing. Our services are powered by a cloud-based technology infrastructure that incorporates today's most advanced technologies – artificial intelligence, machine learning, robotic process automation, natural language processing, and data analytics.

Explore our full range of capabilities at ssctech.com.

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