While investment managers face many large-scale risks, managing investment risk, such as VAR, is of particular interest to the front office. Investors expect anytime/anywhere access to data, so managers must rethink the way they work with counterparties, such as administrators, attorneys, auditors, prime brokers, and custodians. As managers strive to keep up with investors’ expectations, new sources of analytics and technology are driving the ability for the front office to make precise decisions.
Equally vital to success is the proper management of operational risk. The ability to swiftly and accurately process, retain, and report investment data is core to the business. If investment data is inaccurate (trades, positions, prices, performance, etc.), the manager risks many things, including making poor investment decisions, providing overvalued position reports, and inaccurately billing investors.

The bottom line is that the investment process is fraught with risk - from the front office (trading) to the back office (investor reporting).

A key, overlooked component of operational risk is the middle office process. Middle office process failures incur countless consequences, including regulatory fines, blows to reputation, lost or delayed investment opportunities, and costly infrastructure maintenance.

In this guide, we’ll define the middle office, detail two instances of process failure that resulted in fines, and provide solutions to help you manage your middle office operations.

We will also examine the pros and cons of hosted vs. outsourced in-house technology.

**I. The Middle Office Today**

The middle office has toiled in relative obscurity between the glamorous front office and more staid back office.

What is the middle office and where does it fit in today’s operating investment infrastructure?

The middle office can be defined as: “everything that happens after the execution of the trade”. Risk management, performance measurement, data transparency, and robust intra-day reporting are all part of a potentially complex middle office process.

The process has 5 steps:

1. Electronic data is fed from a trading system, either immediately upon execution, periodically during the day, or in summary form at the end of the day;

2. The settlement process (affirm, confirm, settlement) tracks corresponding activity with trade counterparties;

3. Trade reconciling items are identified and resolved;

4. Securities are priced and valued [NOTE: If OTC instruments are traded, this can be complex. If there is corresponding collateral on the trade, then the process must be managed, and includes an ongoing valuation process. Based on valuation, if collateral is not sufficient, then additional collateral (securities or cash) will need to be transferred, so there is a cash management (wire process) requirement.];

5. Trade data is then delivered to the back office, which manages the position information and client reporting process.
The middle office is also the source of historic trade data. An accurate, comprehensive history of all securities that have been traded is valuable to a manager. If a manager trades only equities, the pricing history is readily available from pricing sources. If the manager trades loans or bank debt facilities, then an accurate, detailed history – along with comprehensive attributes – is required.

The middle office is clearly an important component of the investment data management process. However, if not effectively managed, middle office errors can have some serious consequences.

The ever-increasing complexity of the middle office has caused some well-publicized headaches for investment management firms. Below, we detail two high-profile examples of middle office failures.

II. Middle Office Process Failures

A Failure to Reconcile = Fines and Concerned Investors

Reconciliation is at the core of the middle office process. However, it is often treated as an afterthought and only becomes an issue when something breaks. Waiting for reconciliation to break before correcting issues puts your firm at risk. Reconciliation errors lead to false portfolio valuations, incorrect profit and loss statements, risk calculations, and customer fee billings.

Recently, a reconciliation problem with a large manager drew the attention of the US Commodity Futures Trading Commission (CFTC). The issue concerned the ineffective reconciliation of fees charged (versus calculated) from trades from two exchanges (the CME and the Chicago Board of Trade). The incorrect fees were billed back to the firm's clients, resulting in inflated charges. The CFTC imposed a $1.2 million fine, cited the manager for "poor supervision and lack of oversight", and stated the procedures were "not fit for purpose" and "fundamentally flawed".

Middle Office Operations at a Glance
While some details were never made public, the warning to the industry was clear: there are no acceptable excuses when it comes to errors in reconciliation processes. Investors have no patience for these errors, either. The increasingly competitive environment means they are free to take their business to more diligent managers.

**Failure of the Valuation Process = Overvaluation, Excess Fees and Large SEC Fine**

Following the Madoff scandal, the SEC launched the “Aberrational Performance Inquiry Initiative” to analyze the performance data of registered hedge fund advisors to identify hedge funds with suspicious returns.

The inquiry identified a large manager who had recorded a cumulative $160 million overvaluation over a period of two years on an interest in a coal mining company it held. It is fairly common for alternative managers to invest in these complex semi-liquid or illiquid assets (defined as Level Three by the SEC).

What was the damage? The overvaluation resulted in almost $8 million in excess management fees charged to investors.

What caused the overvaluation? The SEC review determined that fraud did not play a part, but there had been a breakdown in valuation policy procedures. According to the report, the middle office operations specialists had reason to believe the initial valuation of the coal mine was outdated and no longer valid, but failed to properly communicate this to the pricing committee. There was a costly communication breakdown and no one knew who should take responsibility. In the end, the SEC fined the fund $9 million.

In both examples, industry compliance experts faulted the middle office for not protecting the fund and its investors with a clearly defined valuation policy and process.

To avert a potential middle office crisis, fund managers should establish independent pricing committees composed of trading and portfolio management experts to review an array of pricing sources to establish a value for these difficult-to-value assets.

**III. Industry Regulators Focus on Middle Office Risk**

Regulators are aware of these issues. In fact, in 2014, the International Securities Association for Institutional Trade Communication (ISITC) added the middle office to its focus.

Due to regulatory changes triggered in 2014 by Dodd-Frank, ISITC is concerned that the increased complexity and escalating volumes (over-the-counter derivatives and commodities), coupled with a largely manual process, pose significant operational risks.

In response to these concerns, ISITC has organized a middle office working group comprised of industry professionals. Its mandate is to standardize work flows and create best practices to eliminate operational risks and costs. If standardized procedures are accepted by the industry, firms will be forced to modernize the middle office. This working group joins the existing reference data, settlements, derivative processing, and reconciliations groups.
IV. Capability Gaps in the Middle Office and Exposure to Operational Risk

Investment strategy decisions are made based on opportunities, not operational challenges.

Trading discussions and decisions involve senior management (portfolio managers and analysts), not the middle and back office teams. That said, the decisions made by the front office can have a significant impact on these teams and their infrastructures.

When a manager decides to adopt a new investment strategy, such as investing in complex instruments (i.e., bank debt, swaps, or loans), it creates a set of new operational challenges.

An investment manager’s decision to select a new strategy should not be impeded by the lack of operational support for the new complex asset class. Alternatively, the back office should not incur additional technology and expertise costs every time a new asset class is adopted by the front office.

If you are a manager looking to move seamlessly into new strategies with an efficient middle office, you need to look at the solution delivery options available to you. Here are some of those options and their associated risks:
Buy – Manager purchases commercially-available technology. Pros: acquisition of a world-class, proven solution, built by experts specifically for middle office needs. Cons: cost of purchase and associated implementation, ongoing maintenance, and additional staff costs. Risks: expensive capital commitment, long and arduous deployment, and if the solution is not a good fit (or is outdated by launch), further costs for enhancements.

Build – Firm uses internal resources to build the solution. Pros: full control of the deployment (to specification) and the future of the solution. Cons: the costs of using internal technical and business expertise to build capability, and ongoing maintenance. Risks: lack of expertise, deployment delays (by the time it is deployed it may be outdated as the market, regulatory environment, and technology have moved), manager needs software expertise and must keep abreast of future market, regulatory, and technology changes.

Rent – Outsource the process, or components of the process, to a third party. Pros: avoid a large, risky capital investment, access existing expertise, and deploy the solution quickly for the least cost. Cons: provider is responsible for keeping up with market and regulatory changes, cost of the contracted fee. Risks: perceived lack of control and data access (transparency).

Summary

Clearly, when the middle office fails, there is risk of exposure and serious consequences. There may be costly fines, and potentially devastating blows to reputation.

Alternative investment managers should dedicate their technological resources to strategic differentiators rather than commodity capabilities. Buying or building out middle office moves the focus of these managers away from their core competencies. Upgrading the middle office by either purchasing or updating vendor-available technology or building internally is expensive, time consuming, and risky.

Now is the time to move away from in-house solutions to an outsourced model.

To date, middle office outsourcing has lagged behind back office outsourcing (according to a recent survey, in the alternatives market, approximately 90% of fund accounting, transfer agency, and custody use some form of back office outsourcing). Today, less than 20% of US managers are outsourcing middle office processes. This is in contrast to a recent survey that estimated 80% of UK managers outsource as least part of their middle office process.

Why does it lag? Many managers are anxious to hand over this responsibility which is often viewed as a core capability. While US managers have fallen behind their European counterparts in terms of outsourcing the middle office, recent investor scrutiny and technology and service innovations in this field point to major changes in the future.
Investment managers must do the following:

1. Modernize core middle office processes: transform manual processes and legacy technology to enable market agility, create data transparency, and facilitate a better investor experience;

2. Embrace outsourcing and integrated electronic solutions (Cloud). Alternative investment managers can start small, outsourcing one aspect of the middle office (i.e. collateral management) and gradually migrate more processes to an outsourced model;

3. Focus on investors: create a unified, secure investor experience that enables transparency from the front to the back office;

4. Move to real-time analytics and reporting, so the front office can make decisions in real-time, adopt new strategies, and focus on growth.

At SS&C GlobeOp we have the technology, expertise and track record to address middle office needs. We can manage all or part of the process so you can do what you do best: focus on your investors.