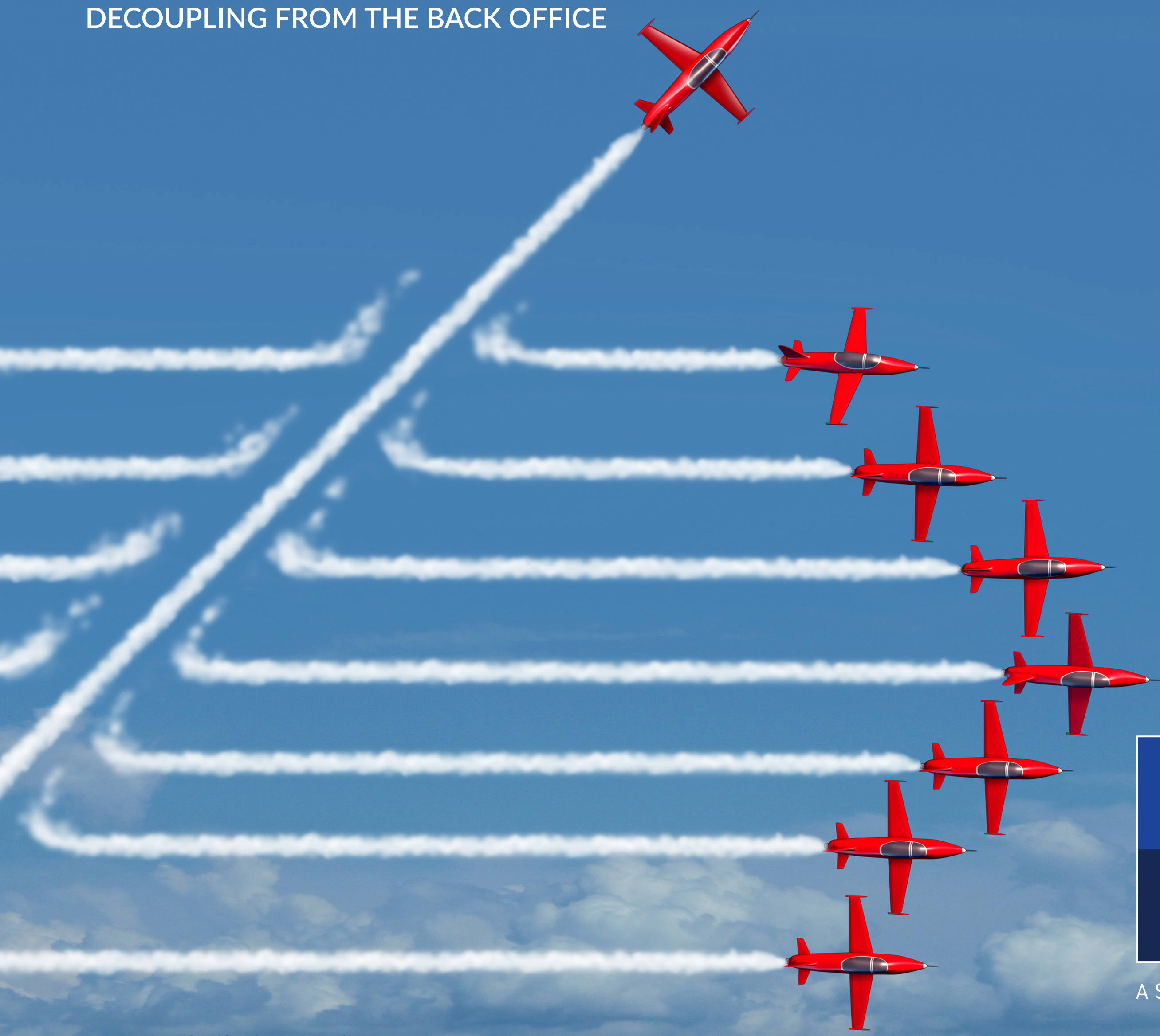
VIEWPOINTS

A Charles River Conversation

Managing Funds by Strategy

DECOUPLING FROM THE BACK OFFICE



Charles River

A State Street Company

IN RESPONSE TO COMPETITION FROM LOW FEE, PASSIVELY MANAGED FUNDS, GLOBAL INVESTMENT FIRMS

are launching innovative new products designed to preserve wealth, minimize volatility or meet other investment objectives. Managing these products in a cost effective manner requires a fundamental re-think of front, middle and back office technology.

Charles River convened a panel discussion with product specialists Alun Cutler and Steve Milanowycz to explore this topic and the role that technology vendors play in helping asset managers launch and manage new investment products.

ALUN CUTLER

Director, EMEA Product Management
Charles River Development

Alun identifies product enhancements, 3rd party solutions and market drivers. Previously, Alun was a senior business consultant for Charles River, responsible for meeting EMEA client requirements and assisting implementation consultants with workflow design and integration needs. Prior to joining Charles River, Alun held sales and consultant positions at Misys and SunGard Data Systems, served as a fund administrator for Morgan Grenfell Asset Management, and was a derivatives trader at the Nippon Credit Bank.

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STEVE MILANOWYCZ

Director, Product Management
Charles River Development

Steven drives the development of Portfolio Management applications and the partner ecosystem for Charles River, leveraging extensive knowledge of business drivers and the relationship to product design requirements. Previously, Steve was a sales engineer, leading pre-sales efforts at Charles River. Prior to joining Charles River, Steven was a business analyst at DST International, and an investment consultant at UBS PaineWebber. Steven holds a BS in Finance from Lehigh University - College of Business and Economics.

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What are some key challenges facing fund managers in the current environment?

AC There's been a huge increase in regulation. MiFID II was a massive European regulation that ended up having significant global impact. Recently, GDPR has come into force, and expanded SEC reporting requirements are next. These drive up compliance costs for asset managers, who are unable to pass these costs on to their investors because they're also facing competition from low cost passive investment funds.

Additionally, we're seeing an increase in mergers and acquisitions between fund managers, enabling them to consolidate technology stacks and staff to lower their cost base, while trying to increase assets under management.

What additional challenges are you seeing?

SM We've had a global equity bull market since 2008 and a 35 year bull run in bonds. Many experts think that that might come to an end. Against that backdrop, investment managers are developing products that dampen volatility, preserve wealth, and fit their client's investment profile from a risk/return standpoint. All that, while also fending off passive management.

What are some of the strategic initiatives that leading fund managers are launching in response to these challenges?

SM Many of our largest clients are determining how far they can scale their infrastructure. As they move into new markets and deliver new investment products, they want to do this in a way that allows their portfolio managers and traders to do more with less.

That entails having the technology in place to trade what they need to trade in the relevant markets, manage the risk on those assets, and be able to look through complex fund structures and manage exposures wherever necessary. Beyond that, firms need to stay on top of liquidity constraints and emerging regulations in the new markets and exchanges that they are interacting with.

Are institutional investors demanding greater visibility into exposures and performance, given the complexity associated with some of these new products?

AC Unlike traditional balanced funds which are fairly transparent, there is greater diversification into complex and opaque investment products. That's potentially increasing risk for investors. Investors want to know where that risk lies, so firms require the ability to look through these structures at any level of granularity, aggregate exposures, and clearly communicate risk and performance to their clients. That's an important part of an active manager's value proposition.

The diversity of product offerings is helping firms grow AUM by meeting investor's goals in very specific ways. These products may be designed for wealth preservation, gaining a targeted return or perhaps taking on more risk to achieve potentially higher returns. Firms need to manage this diversity and provide sufficient detail to clients in order to retain assets and clients.

> **"INVESTORS WANT TO KNOW WHERE RISK LIES, SO FIRMS REQUIRE THE ABILITY TO LOOK THROUGH STRUCTURES AT ANY LEVEL OF GRANULARITY, AGGREGATE EXPOSURES, AND CLEARLY COMMUNICATE RISK AND PERFORMANCE TO THEIR CLIENTS."**

Can you give us an example of these new products?

SM Firms are creating increasingly sophisticated investment solutions involving multiple asset classes and mandates. An example is a fund with allocations to equities, emerging markets and inflation linked bonds, with currency and duration hedges layered over that. Firms are creating and launching these funds to meet their investor's goals within a defined investment horizon.

Risk has become front and center in the buy side investment process, especially since 2008. How has portfolio risk management changed?

SM Incorporating risk modeling as part of portfolio construction and management is key to ensuring that the risk/return profile is going to meet investor goals. That includes managing exposures in real-time and looking at the risk decomposition from a factor standpoint to determine whether the portfolio's asset mix is resulting in unexpected exposures. Additionally, it's important to ensure that assets are valued using a consistent analytic and pricing framework, especially assets that aren't directly managed by the firm.

What about other aspects of risk — namely regulatory, reputational and operational risk?

AC Unlike an equity position that can be unwound quickly if a manager overinvests, derivatives positions tend to create more exposure and be less liquid. Firms must have stringent controls in place to prevent trading errors and to meet their regulatory obligations. From a technology standpoint, this requires compliance, trading and portfolio and risk management to be on a single platform. Managing large derivatives positions in spreadsheets is no longer viable, the operational risk is far too great. No one wants these positions blowing up, because it will likely be in the press and there will inevitably be regulatory sanctions. The follow-on reputational risk can lead to skittish investors pulling their assets from the firm.

What are firms doing to streamline, consolidate and cut technology costs in response to margin compression?

SM Innovative fund managers are using technology platforms that scale and allow them to trade whatever they need to trade, package their assets in a way that makes sense, and seamlessly integrate their IP, such as proprietary risk models in the platform.

Firms have traditionally taken one of two approaches. There's the best-of-breed approach where firms stitch together a number of disparate point solutions across their front and middle office. That introduces significant integration and maintenance costs and leaves firms open to "key person" and other operational risk. If those systems use different data sources it can also lead to inconsistent pricing and analytics.

The second approach is purchasing a black box system offering a one-size-fits-all solution. This is problematic in that it prevents firms from incorporating bespoke models and data sources into the platform, or extending the technology to align with their investment process. We feel the best approach is a single, cloud-based technology stack based on a common data foundation that promotes standards and best practices yet offers an open architecture that allows for extensibility. This provides firms with the agility and flexibility to respond to market, product and regulatory changes quickly, unencumbered by technology constraints.

Adding to what was said about best-of-breed systems, why are they problematic?

AC System integration is the biggest problem. If firms are using client and regulatory reporting systems built on data sources different than their trading and portfolio management solutions it becomes difficult if not impossible to guarantee consistency and adequately manage risk. Also, there are significant costs every time one of these systems is upgraded. Interfaces and mappings need to be revalidated, different data sources may have to be integrated, and significant architectural changes for the underlying technology stack may be involved. So having multiple siloed systems introduces huge inconsistencies and integration headaches.

We're seeing an increasing number of firms move to an enterprise-level platform. Aside from avoiding integration issues, firms benefit from an accurate and timely view of exposures, end-to-end compliance and consistent data and analytics across all instruments and asset classes. This also helps firms eliminate manual workarounds and spreadsheets, reducing inefficiencies and operational risk.

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Firms still seem too tightly coupled to their back office accounting systems. Can you discuss some of the problems that creates?

AC An accounting system really serves the needs of the investor, not the investment manager. It provides performance reports and fee calculations, things like that. If a manager creates an innovative product that can be sliced into multiple pieces, the investment-centric view is very different. The manager might want to manage equity, fixed income, derivatives and other slices independently rather than as one giant fund. Having this ability is also key to proper cash management and performance attribution, in order to understand where and when the strategy and its components underperform.

The accounting system really just sees one legal entity structure, and provides that detail out to the end investor. We are now seeing the separation of those pieces into an investment-centric view versus an accounting-centric view.

SM Working from an investment-centric standpoint provides fund managers with the ability to deploy cash as dictated by their strategy, unencumbered by their accounting system.

This is especially important for firms launching funds that actively track strategies by region or by investment style. Investment managers may also farm out assets for which they lack expertise, such as a traditional equity manager outsourcing funds to a third party with expertise in emerging markets. The manager needs to view exposures across both internally and externally managed assets, track performance, run compliance, and make sure they're not overexposed to a certain asset class, geography or sector. They also need to apply hedges when applicable.

Without an investment-centric view, it's difficult in not impossible for a manager to bring these type of funds to market, and efficiently manage and scale those products.

The ability to manage funds by strategy seems to be one of the main drivers uncoupling firms from their back office. What advantages does that provide?

AC It provides unprecedented flexibility for managers launching new strategies and for managers that outsource to third party specialists. Managers can view assets, exposures and performance holistically, without having to work through the constraints of most accounting systems.

It also enables managers to apply derivative overlays more efficiently when they have money to put to work. Moving money in and out of physical assets like stocks and bonds is expensive and costly. If a manager anticipates a short term move, it's far easier to construct a currency or derivatives overlay that moves assets between the strategies from an exposure standpoint without moving money in and out of physical assets. This results in better rates of return for investors by reducing portfolio turnover and fund administration costs.

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How do firms deal with an accounting system or a back office outsourcer that doesn't support a fund's required level of granularity?

SM This a huge challenge. We've seen firms do this successfully only with an investment book of record (IBOR) that enables disintermediation between the back office and front office. The IBOR provides accurate cash and positions in real-time to the front office and allows global investment firms to "pass the book" across geographically dispersed trading desks at the end of each trading day.

In many cases, funds use pooled instruments, such as ETFs, mutual funds and funds-of-funds. Firms need to manage the exposure to underlying assets and track risk, especially for assets they don't manage directly.

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An enterprise investment platform allows firms to look through those pooled assets and aggregate them consistently and accurately. It also helps ensure that valuations are based on consistent pricing and analytics.

It sounds like there are several opportunities for outsourcing. Where does outsourcing make the most sense?

SM Our clients are good at managing money, growing assets, controlling risk, and servicing their investors. Managing a back office no longer aligns with their target operating model. An investment book of record makes back office outsourcing viable without adding cost. It also enables timelier risk management, since positions and exposures are always current. Most importantly, it provides the front office with an investment centric, rather than an accounting-based view of their holdings, so traders and portfolio managers have key information readily available.

Beyond that, firms using cloud-based investment platforms can outsource day to day management to the technology vendor. This provides firms with timely access to the latest trading, risk and portfolio management capabilities, and support for new geographies and instruments. Outsourcing also reduces a firm's data management overhead, with the vendor performing ongoing validation and troubleshooting.

In short, outsourcing allows firms can focus on managing money instead of managing technology.

Derivatives make it easy to gain synthetic exposure quickly and effectively, without purchasing physical assets. We are certainly seeing heavy derivatives use in Europe, which is driving a lot of the regulatory initiatives.

From your perspective in EMEA, how pervasive are the challenges we discussed on a global basis and what are some of the regional nuances?

AC I think the challenges are common across the globe. Managers are trying to create innovative structures to make money for their clients, and are building internal capacity to manage more money. That's fairly common globally. It doesn't matter which market you're in at this point. You do get regional nuances because of different accounting regulations. In some respects, that lends itself well to back office outsourcing because it requires very specialized knowledge on a country by country basis.

There's also the regulatory side of it. MiFID II was a very European-centric regulation, but it had knock-on effects globally. Regulators are watching the growing use of derivatives and illiquid instruments to construct new investment products and increase returns via leverage in the current yield-constrained environment.

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From a technology perspective, what changes lie ahead for the buy-side front to back office?

SM We envision the back office increasingly being replaced by a universal book of records. This would allow firms to manage position data and exceptions, and conduct reconciliation that makes sense and and aims to produce more accurate data for the front office.

Once that's in place, the front and middle office lines blur even more. Activities like collateral management now become more of a portfolio manager's considerations. Not necessarily their job, but they help manage that process in a way that helpse reduce costs and also helps support alpha generation.

> "AUTOMATION WILL CONTINUE TO GROW IN IMPORTANCE AS FIRMS LOOK FOR ADDITIONAL COST SAVINGS. BEING ABLE TO AUTOMATE RECONCILIATION WITH LITTLE IF ANY HEADCOUNT WOULD BE A SIGNIFICANT BREAKTHROUGH."

Automation will continue to grow in importance as firms look for additional cost savings. Being able to automate reconciliation with little if any headcount would be a significant breakthrough. The buy-side firm of the future will run incredibly lean, with minimal headcount, and the ability to scale as clients, assets and account volumes grow.

NEXT STEPS:

Read more about our Fund Management and Risk Analytics solutions. Contact us to schedule a demo or visit crd.com.