



Building a high-velocity back office: Investing in data and technology



Markets are changing rapidly, and that means there is greater pressure on the back office to keep up. In the second article from our "Building a high-velocity back office" series, we ask investors that are several years into data and digital change programs for insights on how to get data management right.

Robust data management is a prerequisite for digital transformation. Our recent survey of 300 investment institutions¹ found that securities selection and asset allocation analysis are just two of the benefits investors need and expect from their digital transformation. However, many institutions have neglected the data foundation needed to give them the most timely, accurate insights into portfolio decisions. Indeed, our research revealed that only two out of 10 institutional investors are at the advanced phase of digital transformation.

This article explores how back-office teams can equip the front office to make better investment decisions by investing in data and digital platforms.

To understand how improving data and technology capabilities in the back office supports investment performance and overall business growth, we thought case studies would be illustrative. We spoke with leaders from two institutional investment firms — American Family Insurance and a large U.S.-based investment management firm that wishes to remain anonymous about their paths to digital transformation.



¹The respondents included asset managers, asset owners and insurance companies from the Americas, Europe, the Middle East and Africa (EMEA), and Asia Pacific (APAC)

American Family Investments' business transformation improves agility, enabling quicker and more informed decision-making

Data is transforming the operations of American Family Investments, a subsidiary of American Family Insurance Group. Vincent Pasqualicchio, the COO of American Family Investments, said it all started with a major business transformation in 2016. With a focus on people, processes, technology and data, the investment organization initially aimed to deploy an integrated investment platform, spanning from the front to the back office. The program included the implementation of a scalable operating platform, robust data management, strong investment compliance, efficient business processes and comprehensive risk management.

"We wanted to empower our associates to make better investment decisions and better manage risk," said Pasqualicchio. "To do that we had to find a way to improve our investment operations and how we react to market changes in an effective way."

With a solid foundation in place, the company has now set their sights on improving data capabilities and implementing emerging technologies.

The goals

The focus on data and emerging technologies stems from a need to leverage data analytics and AI to analyze market trends and to make market data-driven investment decisions.

This enhances the ability to manage risk by implementing risk models that assess and mitigate risk and adapt to changing market conditions more effectively. The initiative also helps to improve operational efficiency by streamlining workflows and processes.

"What it comes down to is that we need to be quicker to market," said Pasqualicchio. "We wanted to establish a solid data foundation and empower our company and our people with data and analytics. Speed to market is also critical, so we need agility and scalability."

Back-office teams started by establishing a robust data framework with appropriate data governance measures. American Family Investments first identified data domains and their owners and stewards. They also focused on cloud infrastructure, data platforms and predictive analytic tools. "These are key building blocks for our robust data framework," explained Pasqualicchio.

For Pasqualicchio it was critical to address: "What's the 'golden source'? How do we make sure we can trust the data?" There was also an emphasis on ensuring the new data platform would integrate smoothly with investment systems.

The challenges

The challenges for American Family Investments included manually intensive business processes, difficulty accessing data, data governance and availability of digital tools and capabilities. "We had the opportunity to build out our environment from the ground up," said Pasqualicchio.

New technology solutions were selected and implemented, and people and processes were put in place.

But this starting point had an upside: “Creating a new investment architecture from scratch allowed us to design a customized framework that seamlessly integrates front to back-office functionality with robust risk management, streamlined process and cutting-edge technology,” Pasqualicchio explained.

Executive-level sponsorship has been pivotal to sustaining momentum, added Pasqualicchio. “You also need sponsorship across the organization,” he said. “That’s critical. It’s the missing piece in a lot of data programs that come up short.” Constant monitoring is also important: defining appropriate goals and objectives along with key performance metrics at the start allows the organization to measure success throughout a change program. That is paired with an agile culture that empowers teams to course-correct and rethink their approach if the evidence shows pivoting is necessary.

The measures of success

“We want an organization that has a passion to succeed, not a fear of failure,” said Pasqualicchio. “People need to trust senior leadership that there won’t be negative consequences for taking calculated risks — or pivoting when we need to.”

Success is evaluated against clear measurable metrics that reflect the company’s strategic goals and operational effectiveness. Pasqualicchio said this has been positive, but the process is ongoing. “We have a constant and never-ending search for improvements,” he said. “We’re always asking, ‘Do we have the right platforms? Are we providing the business with robust data and advance tools? Are we helping our associates to develop the right skills?’ That’s something we live every day.”

“Creating a new investment architecture from scratch allowed us to design a customized framework that seamlessly integrates front to back-office functionality with robust risk management, streamlined process and cutting-edge technology.”

Vincent Pasqualicchio, COO
American Family Investments

How data and technology are creating a business advantage for a leading investment management firm

The problem

A global investment management firm, specializing in value investing, began its data management journey five years ago. The firm's leadership observed that the more the business grew, the more difficult it became for traders and portfolio managers to source robust information such as attribution data or historical lineage around a stock. Worse still,

they were relying on multiple data sources that gave them conflicting information.

The business realized that it needed to change how its back office organized, stored and collected data such that traders and portfolio managers could better and more

confidently access relevant data to improve front-office activities.

The investment firm's COO remembers how it started. "What kickstarted this journey was the business saying: "This is crazy. I can't get solid answers to my clients and prospects. It's slowing sales and client service."

The solution

This front-office problem needed a back-office solution. The investment management firm's CEO appointed external consultants to diagnose the problems, and they identified a root cause: the company had no "golden source" — also known as a master source or master version — of critical data on securities, issuers and investment lineage.

The analysis precipitated the firm's move to a hub-and-spoke model for collating information. Back-office teams fed external and internal information into the hub, which would then be validated and delivered to relevant parties.



“The hub, which is managed by the back office, normalizes and validates the information, essentially forming the correct answer,” explains the company’s COO. “That goes to the data warehouse, and then down to the systems where people in the front office need the information.”

The challenges

The process of managing their data in this way raised several challenges. The first was about hiring the right talent in the back office to effectively complete this project. “I underestimated how hard it is to upskill internal resources that aren’t data specialists,” says the COO. “And I underestimated the skills necessary to code inside this engine that we created.”

The investment management firm was lucky in that the consultancy it initially worked with to help implement the new data systems was purchased by an audit firm. This meant that the experts who made up the core of the data management team decided to leave their

original company and work for the investment firm. “As the saying goes: Sometimes it’s better to be lucky than smart,” he says. “Had that not happened, I’m not sure we’d be where we are.”

Another challenge was how to improve data governance, which the COO describes as a 24/7 requirement of the back office. And then there was the need to build the back-office team’s collective understanding of interdependencies within the business.

“Once you build this ecosystem, you are connected in a systematic way,” says the COO. “So the system’s efficiency is vital to the businesses operations.” Some technical problems are inevitable, so to reduce the impact of any disruptions, personnel need to be able to problem-solve quickly and understand the downstream effects.

“When you become more reliant on automation and good data,” says the COO, “you need to have people in the back office ready to keep it healthy and running.”

“Once you build this ecosystem, you are connected in a systematic way. So the system’s efficiency is vital to the businesses operations.”

COO

At a large U.S. investment management firm

The benefits

Elevating its back-office data infrastructure has helped the leading investment management company in three important ways:

1. It received fewer complaints from traders and portfolio managers and better internal satisfaction with data availability and reliability.
2. The new systems have built-in automated alerts which have helped to reduce risks, for instance by enabling compliance with relevant regulations across different jurisdictions.
3. There's a growing need to customize portfolios. For example, a customer may want to build a global strategy portfolio, but exclude a particular region. In the past, such a change would require manually editing, managing and reconciling the portfolio data to meet the client's requirements. Now, the company's data infrastructure can power AI and analysis tools, which has enabled the firm to meet its customers' varied demands in a scalable way without generating large amounts of resource-intensive manual work.

"Where I sit as COO, it's important to understand that the operating model of today has four pillars: people, process, technology and data. The data piece is easily overlooked, which is a mistake. It should be a functional area of focus because it facilitates all the other factors in the operating model," the COO says. "That's clear from our transformation journey. We're using the back-office infrastructure we created to facilitate real business advantage."

Six steps to data success

These two examples demonstrate that back-office investments in data and technology can enable the front office to make better investment decisions and provide an overall improved client experience. Several lessons for the back office can be drawn from their experience:

1. **Make skills a priority:** Certain skillsets are needed to collect, manage and analyze data as well as test and implement new technology. Any digital transformation is doomed to failure without the right human capabilities.
2. **Promote an agile culture:** Mistakes are inevitable. Investments in specific new systems will undoubtedly need to be scrapped, and data governance adjusted on multiple occasions. The key is to establish a culture where initiatives can be abandoned or altered without reprisal for the individuals involved.
3. **Lead from the top:** Transforming how the back office manages data requires budget, coordination across multiple teams and potentially a change in culture. Such initiatives have a higher chance of success if they are embraced and driven by the top of the organization (e.g., the CEO).
4. **Understand how the front office uses data:** It's not enough for the back office to create a reliable source of data for the front office – it also needs to understand which data is being used most frequently and for what purpose. Only with this information can the back office adequately focus investment in maintaining data flows.
5. **Define objectives at the outset and measure success:** Measuring the success of back-office initiatives against pre-defined criteria as they progress helps maintain motivation and identify areas for improvement.
6. **Start small and scale rapidly:** Modernizing the back office's approach to managing data is a long-term project. The scale of the work required often leads to paralysis. Rather than starting with a bang, don't be afraid to start small and build on the value you've created.

*For more on building a high-velocity back office, read the first article in our series,
[A view from consultants](#)*



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