



MODERN INVESTMENT PROCESS MANAGEMENT:

A Centralized Framework for Optimal Decision-Making

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Executive summary

The fundamental investment industry is undergoing profound changes, necessitating a reevaluation of traditional tools and processes. Investment teams, typically reliant on a mix of qualitative and quantitative data, legacy tools, and fragmented workflows, are finding consistent alpha and repeatable returns increasingly difficult to achieve in this modern era. Compounding this issue, institutional capital allocations are often prioritized to funds that are leveraging modern technology to attract top talent and help drive consistent returns. This is due to institutional investors' focus toward risk reduction and maximizing alpha generation. Legacy tools and processes such as Microsoft Excel, Google Drive and Outlook, the main tools of fundamental investors, are at the core of the challenge as they fall meaningfully short in providing the necessary workflow integration, analytics and data management advancements that investors need to succeed in today's world.

The few technology-forward investment firms that are embracing modern investment process management (IPM) solutions are thriving, but many others still hesitate due to perceived complexity, fear of change, and high costs. However, secure, flexible, and cost-effective solutions are now available, driving the buy-side community towards centralization and digital transformation to enhance investment processes, improve consistency and generate alpha. Modern IPM platforms provide scalability, centralized data management, purpose-built databases, customizable workflows, enhanced collaboration, rapid implementation, and cost savings. They complement Excel, maximizing its impact. This high ROI transition is no longer exclusive to large firms; it's accessible to all.

By embracing an IPM platform, investors are more competitive, have greater efficiencies, achieve better outcomes, and importantly, have enterprise-level systems and processes that drive institutional capital and talent their way. Explore why this approach makes practical sense and why these solutions are destined to be adopted by all fundamental funds.

Greg McCall, EDS

Co-founder and President

Introduction

The investment landscape is constantly evolving, and traditional tools and processes are struggling to keep up with the demands of modern investors. Fundamental investment teams who rely on a mosaic of qualitative and quantitative data, are facing challenges effectively managing their investment process. While legacy solutions, such as Microsoft Excel, Word and Outlook, have been the go-to tools for decades (and will continue to play a role), they lack advancements in workflow integration, analytics and data management. As a result, investment teams often resort to fragmented workflows and storing critical intelligence in various systems such as Google Drive, Outlook, or Evernote. This decentralization leads to inefficiencies, increased risk, limited collaboration and missed opportunities.

The core challenge lies in the fact that even with advanced customization, traditional tools used as the foundation of an ecosystem do not provide fundamental investors with the highest probability of success. The few tech-forward funds that have embraced modern solutions, fostering more productive and successful teams, understand the need for digital transformation and are thriving in the market. However, many investment firms have the age-old misconception that replicating such “tech-forward” capabilities comes with complexity and high costs, and is a daunting task. This is no longer the case, as secure, flexible, purpose-built solutions are commercially available with little complexity, short deployment times, and are priced at a fraction of the cost of previous solutions.

Craving better, but stuck in the ‘80s

In the almost 40 years since Microsoft rose to popularity, the tools haven’t changed much, with Excel as the workhorse for investment teams and the quantitative data they interact with daily. On the qualitative side (notes, meetings, earnings, investment theses, tearsheets, etc.), there has been some advancement with solutions, such as OneNote, Teams and Evernote, but these still lack critical features and functionality, including data integration, dynamic updates, database management, robust formatting, notifications, artificial intelligence (AI) and decision-support analytics. Data management can be as fragmented as there are users – e.g., one may store notes and models in Google Drive, while another uses Outlook, a third prefers Evernote, and so on. The result is the content lacks effective distribution and access internally (i.e., transparency and collaboration), so its full potential is not realized. To be fair, there are modern products in the marketplace, but even those can be expensive, complex to implement, are little more than a shared drive, lack full real-time database integration, and importantly, only address a specific workflow – a small portion of the mental mosaic, if you will – causing the systems to become further compartmentalized.

Those that have successfully leaned into technology over the past 20 years have generally built it themselves at great cost and complexity, but with very positive end results such as higher AUM, greater and more consistent performance, increased team collaboration and greater stability of their investment base (see McKinsey & Company report [“Achieving digital alpha in asset management”](#)).

For example, a key component of a traditional manager is shared Excel dashboards (e.g., competitive (comp), portfolio and industry tearsheets) for decision-making. While these are flexible enough to meet requirements, these dashboards are often complex to maintain and error prone, especially if internal financial model data is included. There is no underlying database or contextual support such as notes and/or model changes, so they also tend to be purely static providing little insight into trends. Therefore, managers need to constantly seek out other sources when making investment decisions, which wastes time, especially when there are multiple ideas to choose from. Essentially, since they don’t have any historical context (i.e., how estimates/forecasts and data has changed), the risk of making an incomplete decision is elevated.

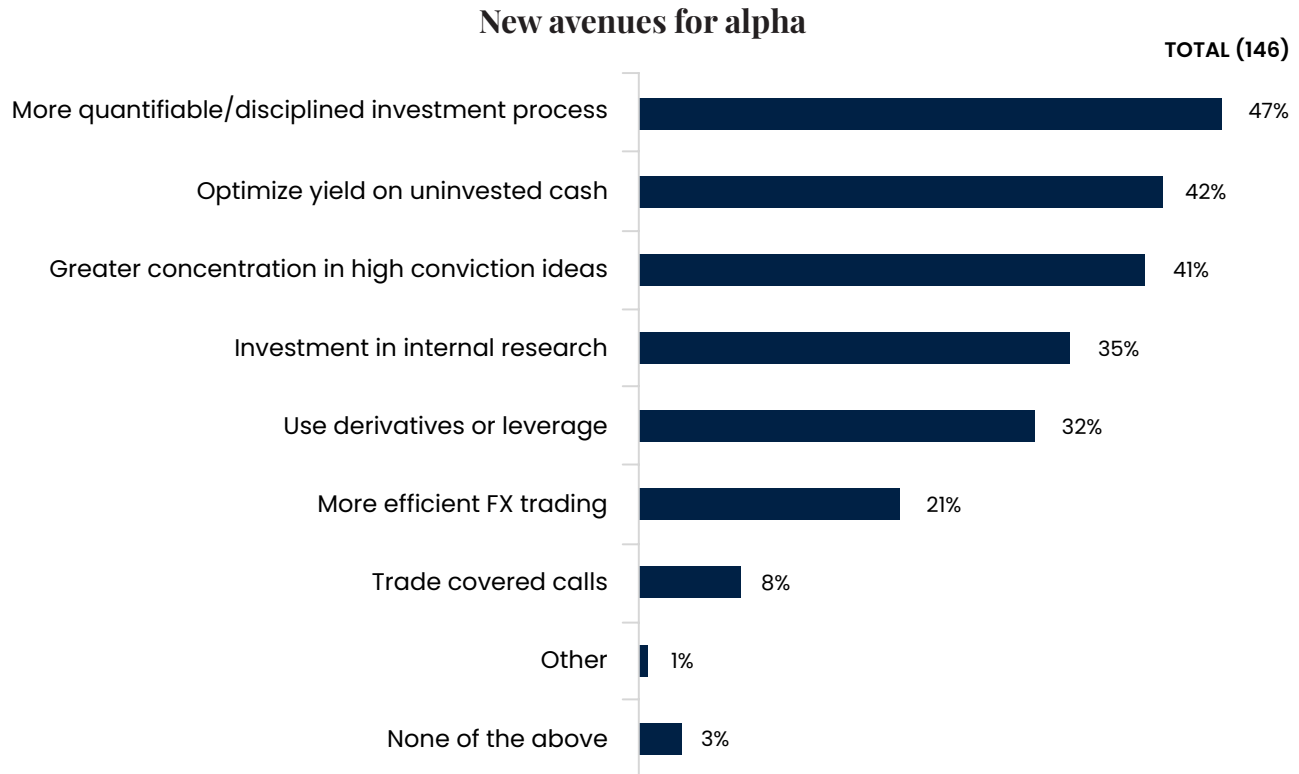
The main benefit from existing solutions remains powerful though; it works and is tailored to each individual. Most managers fully understand (and will say so) that their investment process could be more productive, resources (meaning people and intelligence) more useful, and that opportunities/risks likely fall through the cracks, but it works and there is little appetite to learn something new and risk upsetting the team and process, particularly when they have little to no time to begin with. The greatest fear of all is change, as change messes with something that works.

“They are outperforming the industry in asset growth, operating efficiency, and profitability. Yet, as asset managers know only too well, sources of alpha rapidly erode without continued innovation. The question for executives therefore is not whether to invest in new digital capabilities, but how to do so in the most effective way possible.”

— McKinsey & Company article

Modernizing the investment process

There is a fundamental shift in mindset within the buy-side community, where we’re seeing a significant increase in appetite for adopting a digital transformation. Not only are investors realizing the need for embracing modern technology, but they also believe it will help generate alpha. In a paper published by Coalition Greenwich and Northern Trust entitled “[The Evolving Asset Management Landscape: Only the Fittest Will Thrive](#)”, they presented results from a survey of 150 global asset managers around their strategic goals. One of the questions asked was “Given performance pressures, what avenues for achieving alpha have you considered?”. The number one response at 47% was developing “a more quantifiable/disciplined investment process.”



Q23: Given performance pressures, what avenues for achieving alpha have you considered?

With the availability of modern, flexible technology, a modular approach has emerged that addresses the challenges faced by fundamental investors and offers a comprehensive solution – an investment process management (IPM) platform. An IPM platform streamlines and enhances the investment process by centralizing data, adopting purpose-built databases, and customizing investment cycle workflows. Implementing this modular, yet holistic methodology allows investment teams to have a much broader sandbox to extract deeper insights for their investment decision-making, as well as drive continuous improvements. Investors today can reimagine how they leverage technology on their own terms, quickly and with strong payback. To be clear, this is not new. Well-established and successful firms such as Citadel, Point72, Maverick Capital, Coatue and others have spent millions and years leveraging technology to scale their firms, validating the need for a digital transformation.

Modern platforms raise the probability of success, without a rise in risk or significant costs. Most importantly, a modern investment process management solution ensures research and intelligence is effectively reflected in investment decision-making and provides a feedback loop to continuously improve the process. There is no better way to scale a fund than to understand where you succeed, which opportunities have the best rewards/risk and where the blind spots are. Operating solely within Excel or with multiple rigid solutions makes this goal very difficult to attain, which is why historically only the biggest firms with the means to make it happen have leveraged modern technology to its fullest extent. Today, these benefits are widely available to small startups, hedge funds and large asset managers alike.

Overcoming the challenge of adoption is a real threat, but modern solutions are tailored to each firm and individual, increasing productivity from day one with little training and complexity. Team members can work in it fully, and those who want to stay within their current applications are able to, as modern solutions will take their data and bring it into a centralized ecosystem automatically.

Realistically, Excel is not going away, and in fact, a modern solution enhances its impact. The key is to leverage Excel by capturing the most valuable content to maximize its power to the investment process, and thus, to the success of the fund.

The heart of an IPM solution

The cloud is king

Whether you choose Amazon Web Services (AWS), Azure or Google Compute as your cloud provider, modern platforms operate in a scalable cloud environment. Going cloud native generates high performance, high data accessibility, robust security, workflow flexibility and low costs. A robust group of security, authentication and performance vendors are readily available to supplement your chosen provider within your ecosystem. Modern investment process management (IPM) software providers manage all the cloud vendors, on behalf of the clients.

The advanced database

Capturing, cataloging and analyzing historical information is a critical piece of the modern solution. Without a history of decisions, forecasts, models, content, positions, etc., it is difficult to make substantial improvements, but equally important, do it in a low-friction, automated way that creates no drag on the team. Fortunately, there are many database providers in the cloud, with Snowflake being one of the more popular. These database environments are high performance as well, meaning millions or billions of calculations on the fly, in seconds. Think risk management – teams become much more proactive vs. reactive when able to uncover risks more efficiently.

Transforming data to visuals

Modern solutions leverage the advantages of visualization software providers, such as Tableau, Spotfire or PowerBI, to provide a robust, configurable, and low-cost workflow development environment that can be easily adapted to each user. This is critical, as users do not want to change what they do or how they do it. There are no square pegs in round holes anymore – it must fit perfectly, or no one will use it.

The modern dashboard

Replacing Excel with a database-backed, intuitive and visually appealing decision-making environment is a major enhancement. With all the power of Excel and beyond, investment teams can bring all their data together, including internal, external, quantitative, and qualitative data, into a rich, dynamic environment – charting, conditional formatting, math anywhere, notes, financial models, one-click into deeper content, etc. These dashboards support much more informed, robust decision-making, reducing the probability of errors.

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The body of an IPM solution

Centralized data management

An IPM platform allows investment teams to store and access all relevant data in one centralized location. This eliminates the need for multiple systems, reducing the risk of data inconsistencies, duplication, and version control issues – moving all internal, external, qualitative and quantitative data into a single system and providing investment and operational teams easy access to all content (historical, as well) for the purposes of optimizing the investment process. This is also more efficient for the organization, as funds do not need to be in the data management business while solutions exist that are more secure, higher performance, less error prone and less costly.

Purpose-built databases

IPM platforms offer purpose-built databases designed specifically for investment management. These databases provide efficient data organization, dynamic updates, and robust analytics capabilities, enabling teams to make better-informed decisions based on real-time information.

Without a purpose-built database, it is challenging to drive continuous improvements, due to:

1. Investment and financial model inputs/data that are overwritten with Excel, as it does not store and visualize the history of your changes.
2. Qualitative data (theses, notes, emails) that is fragmented across different systems.
3. Investment decisions (including the intelligence that went into making that decision) that are not accurately captured, stored, and analyzed to understand what is driving success and blind spots. This challenge only gets worse as AUM and teams grow.

Customizable workflows

An IPM platform allows investment teams to design and implement customized workflows tailored to their specific investment process. This ensures that the platform aligns with the team's existing processes and adapts to their evolving needs, maximizing efficiency and productivity. Each investor is unique and distinct in the way they choose their investments and manage their portfolios. Modern technology can match the favored workstreams and common investment language of clients. We can't overestimate the risk of failure that occurs if the system is not configurable and productive from day one.

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Enhanced collaboration, accountability and transparency

Teamwork is critical for investment teams to succeed. An IPM platform facilitates this collaboration by enabling real-time sharing of information, research notes, and models within the team. This enhances teamwork and transparency, drives accountability, reduces communication gaps, and promotes knowledge sharing.

Rapid implementation and low-friction of adoption

Cloud-native, secure IPM platforms offer a rapid implementation process with minimal disruption to existing workflows. The platform can be configured and integrated with existing tools and systems, enabling investment teams to start realizing the benefits quickly. Important to note, modern solutions work with existing solutions, meaning change is not forced on users.

Cost savings and “best practices” compliance

By adopting an IPM platform, investment firms can achieve cost savings by reducing reliance on outdated tools, minimizing manual processes, and optimizing resource and vendor allocation. The platform's scalability and flexibility eliminate the need for costly infrastructure investments and ongoing maintenance. In addition, as regulatory and compliance requirements/risks increase, a centralized ecosystem ensures firmwide content is secure and managed responsibly.

Applying practice in the real world

To illustrate real-life examples, let's assume a traditional manager uses metrics and processes for their investment decision-making, such as:

1. Return on Investment (ROI) forecasts, be it through Price Targets, Discounted Cashflow (DCF), Intrinsic Value, IRR, etc. This ROI is often a result of other workflows, such as fundamental research, valuation analysis and risk tolerances.
2. Financial modeling to support forecasts (revenues, earnings, etc.).
3. Storytelling to build the bridge from the current price to the future price. Fundamental investors pull together a "mental mosaic" of qualitative and quantitative data, across multiple sources to make investment decisions.

Fundamental investors rely on several core workflows throughout their investment process. Let's review the challenges of the antiquated set up versus a modern approach.

The core workflows of fundamental investors

Idea Generation

Traditional investment process

There are many ways managers come up with ideas, but all go through a process to prioritize, screen for and/or rank for inclusion into the portfolio. Excel factors prominently, but its limitations make it challenging to aggregate inputs, isolate opportunities, and compare ideas effectively. Present day teams also have more data sources and markets move faster, further complicating effective decision-making.

Why choose a modern IPM solution?

Moving idea selection into a robust platform creates more accurate idea hit rates. Modern platforms provide:

1. Robust visualization, so important intelligence and data pops out.
2. Time-series tracking (i.e., database) to better understand idea quality and underlying trends.
3. Back-testing/feedback loop to help managers evolve idea targeting and determine which inputs are most valuable.

Combined with automated data inclusion and low maintenance, modern solutions also save time and ensure content is updated and error free.

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Research Management (RMS)

Traditional investment process

Modern markets move fast and more data needs to be aggregated, up-to-date, organized and sorted to make effective decisions – the price of failure is high. Storing and managing critical data such as research notes, models and broker reports, not to mention market and other data has traditionally involved a static repository of multiple folders, applications, shared drives, and/or email systems. While taking notes is straightforward, there isn't much emphasis on how to fully leverage this content (arguably the most important data you have) or learn from it.

Why choose a modern IPM solution?

A modern RMS enhances decision-making by centralizing multiple data sources, updated in real time with format and organization flexibility, historical analytics and even artificial intelligence (AI). It combines qualitative, quantitative, internal and third-party data into templated and freeform notes so investment teams can work collaboratively and make the best decisions possible. Not only do managers save significant time during the research process, but they are able to make more informed, and thus, more effective decisions.

"A modern RMS enhances decision-making by centralizing multiple data sources, updated in real time with format and organization flexibility, historical analytics and even artificial intelligence (AI)."

Portfolio Construction and Management (idea selection and position sizing)

Traditional investment process

Investment selection is generally structured, based on a fund's philosophy, but sizing a position properly is less so – often a combination of ROI, risk and confidence – all of which are inexact, and importantly, these decisions are based on forecasts (educated guesses) and experience. In addition to the increasing number of inputs going into selection/sizing, added market volatility and exposure to non-alpha (uncontrollable) factors makes the cost of errors more significant. This is why it is critical to understand your forecasting accuracy, as well as optimizing the size of your winners, which is challenging if Excel is your main tool.

Why choose a modern IPM solution?

There is no “perfect” position size. When you are wrong, it is too big and when you are right, you wish it was bigger. That said, it is common that a small percentage of positions account for a large percentage of gains. Sizing is important, and modern solutions introduce portfolio dashboards and analytics, backed by a modern database and robust rules/math flexibility, that take position sizing/exposure constraints such as ROI, conviction, probability trees and scenarios, risk and exposure, and other constraints into a more robust environment. This helps managers better understand and size (or at least think about) positions based on the impact (and history) of these variables – and importantly, making sure we are betting on the right members of our team).

A few examples include:

1. Recognizing positions that are over-weighted relative to others, exposing investments that are “long in the tooth”.
2. Identifying all types of mismatches in the portfolio, from risk to confidence to ROI, etc. A well-organized dashboard will help teams become more proactive by driving increased transparency and collaboration. It will also expose strengths and weaknesses, driving stronger accountability.
3. Investments that highlight high confidence and opportunity stand out more dramatically, thus can be upsized more effectively. Greater success betting on your winners is a major advantage of a modern solution.

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Risk Management (exposure, risk decomposition, factor performance)

Traditional investment process

Managing the risk of your portfolio is increasingly a big differentiator among fund managers. Traditional approaches in Excel, or other rigid systems lack the real-time, historical and scenario analytics that modern investors need to make informed decisions and manage risk effectively. Historically, this meant balancing a few factors, such as valuation, growth, financial metrics and volatility within the portfolio. Today, managers need to monitor many more factors, to clearly understand where risk, return and alpha are coming from -- to be less reactive and more proactive to potential risks. Excel is not powerful or flexible enough to match each unique fund, and dedicated software (along with dedicated data teams and personnel) can be expensive and complex.

Why choose a modern IPM solution?

Integrating risk analysis/management directly into the investment process is what makes modern risk solutions so powerful. Specialized risk professionals no longer look over your shoulder, and expensive, custom-built software is no longer an aspiring technical goal. Modern solutions make it easy and affordable for even the most fundamental of investors to quickly understand the variables that are outside of their control, helping them become more proactive vs. reactive in their decision-making.

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Performance Attribution

Traditional investment process

Traditional tools and resources such as your prime broker, terminal and/or Excel provide a basic overview of where your returns are coming from. However, these tools lack the depth to dig below the surface to optimize decision-making. For example, how do you configure Excel to accurately track the % of “hits” by your team, both the average and the % of big winners? Without a database, investors are stuck with a general overview versus a more accurate picture of where success and blind spots come from.

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Why choose a modern IPM solution?

Beyond straight performance calculations, success and failure is measured differently by every manager – by analyst, geography, strategy, theme, position type, size, sector, etc. In addition, unique metrics, such as batting/slugging averages, hit rates, and client investor metrics are unique, so flexibility is important. Modern platforms are easy to use and can be integrated directly into the investment process.

By embedding successes/failures directly in decision-making dashboards (knowing how well you’ve done, before you pull the trigger), Modern solutions help reduce the amount of garbage in your portfolio.

Conclusion

The investment landscape is evolving rapidly, and fundamental investors need to adapt to stay competitive. By embracing a modern IPM solution, investment teams can overcome the challenges posed by outdated tools and fragmented data management. A cloud native IPM platform centralizes data, adopts purpose-built databases, and customizes workflows, providing numerous benefits, including increased productivity, improved decision-making, enhanced collaboration, rapid implementation and cost savings.

It is time for investment firms to reimagine their technology stack and leverage modern IPM platforms to drive continuous improvements. By digitizing their investment processes, investment teams can unlock new efficiencies, generate better outcomes (greater AUM and top talent), and achieve a sustainable competitive advantage in today’s fast-paced and data-driven investment landscape.

About EDS

EDS is a global investment process management solutions provider empowering fundamental investors to maximize returns through greater insights and productivity by aggregating data sources and refining workflows to govern investment decisions. It provides a fully configurable, measurable and scalable platform with purpose-built analytics to support the entire investment lifecycle, including idea generation, research management, portfolio construction and analytics, risk management, performance attribution and ESG. Visit us at www.equitydatascience.com.

Disclaimer: This white paper provides insights into modern investment process management but should not be considered as financial advice or an endorsement of any specific IPM platform or company.