



Nine Trends Defining Financial Data Management in 2023 and Beyond

While it's impossible to know exactly what to expect for the future of the data management and governance industry, research and experience combines to yield what we believe will be the top trends over the coming years. These trends will shape the technology, operations, and performance of nearly every firm in the investment industry in some way.

Every investment organization is pursuing digital alpha – attempting to solve information asymmetry by providing their professionals with opportunity and risk discovery insights. Adopting some of these trends can give investment companies a leg-up on their competition, enabling efficient access to data and analytics across the organization.

Right now, the investment industry is faced with the logarithmic growth of data. Previously, investment firms dealt with gigabytes of data per day; now, they must ingest, normalize, and analyze terabytes and up to petabytes of data per day. The quantity and variety of data pose challenges for every firm. The cost of sourcing, managing, and distributing data is one of the largest costs an investment manager faces, second only to the cost of human capital.

Challenges managing this data may be due to legacy systems, on-premises data stores that cannot handle unstructured data efficiently, or a hybrid data environment that maintains data silos in the business and does not give trade desks and analysts flexibility and scalability. As your company moves up the data maturity model, the emerging trends we've identified can help establish the next steps and milestones for a roadmap. No matter where you are in your data management and governance maturity, it's advisable to look forward to trends to understand and mitigate or capitalize on the impact they could have on your business.

HERE ARE THE NINE TRENDS THAT WE BELIEVE WILL SHAPE THE FUTURE OF THE INVESTMENT DATA MANAGEMENT INDUSTRY:

1. Cloud-Based Data Management:

Investment management firms will continue to adopt cloud-based data management solutions, taking advantage of the scalability, cost-effectiveness, and accessibility offered by the cloud. Full cloud and hybrid models will be most prevalent in investment firms in the next three years. Movement to the cloud will be balanced with on-premises virtual clouds that remain necessary due to regulatory requirements of the industry.

2. The Emergence of Data Lake Architectures in Cloud and Hybrid Environments:

Modern data lakes and lake hybrids will continue implementing the best features of data lakes and data warehouses. Investment management firms will increase adoption of data lakes, enabling them to store, process, and analyze large and complex data sets more effectively and balance cloud-based capabilities with on-premises data stores for highly sensitive or regulated data. This will be especially valuable to accommodate the large amount of unstructured data used for analytics and forecasting. Data lake scalability and efficiency will provide the basis for advanced data analytics, machine learning, and artificial intelligence.

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HERE ARE THE NINE TRENDS THAT WE BELIEVE WILL SHAPE THE FUTURE OF THE INVESTMENT DATA MANAGEMENT INDUSTRY (cont.):

3. Real-Time Data Processing:

As more firms utilize traditional and non-traditional sources of real-time data, they will increase their ability to process the data, allowing them to respond effectively to market changes and make informed investment decisions in real time. More real-time data will be available from untraditional sources, which will provide insights into the investment decision-making process if challenges to store and analyze the data are met. New platforms and systems will rise to help firms gain the edge in utilizing this data.

4. Integration of Alternative Data Sources:

Investment management firms will continue to adopt a broader range of data sources, including alternative data, to gain insights and inform investment decisions. This blend of structured and unstructured data, the high volume of this data, and the complexity of analysis needed will pose challenges for firms. Firms will turn to trends #1, 2, and 3 to address this. This approach will lead to a more comprehensive and diverse view of the market and the ability to monitor model inputs and outputs with greater certainty.

5. Increased Use of Artificial Intelligence (AI) and Machine Learning (ML):

Investment management firms will adopt AI and ML to improve data analysis and drive investment decisions. Globally, artificial intelligence in fintech is expected to reach USD 41.16 billion by 2030¹, growing at a CAGR of 16.5% from 2022 to 2030². The application of this technology promises a bright future, as we have seen from AI-driven toolsets like ChatGPT, Bard, and Bing. These tools demonstrate methods to harness and assemble vast amounts of data into useful information with an easy-to-access methodology. Tools like these may unlock vast sets of data at firms to enable users to generate insights and strategies. This will lead to more accurate and practical risk assessment and portfolio optimization. Firms will seek to license existing AI or develop their own ML or AI models with hired or in-house developed specialized teams.

6. Advancements in Data Science Advances Increase Requirements To Know Coding Languages:

Data Science will continue to advance rapidly due to the increasing proliferation of open-source Python and SQL packages and the convergence of the two languages and other coding packages available to citizen data scientists. Combined with the democratization of data and self-serve access, data scientists can deploy codes rapidly, train ML models to automate tasks, and use AI to increase productivity, establish better operational efficiency, and identify more effective strategies for reducing or hedging risks or seeking active returns. As data science advances, so will requirements of staff to develop skills in SQL/Python/R. These skills will be widely required across front-to-back business teams, as Excel has been for the past 25 years. Front offices will continue to require more and more ML/AI abilities to keep up with ever increasing data volumes and demand with even shorter margins for turnaround of "trusted" data.

7. Expansion of Data Governance:

As the data within investment firms expands from a linear to logarithmic rate, so too will the need to govern it. Investment management firms will expand their data governance programs, ensuring that data is adequately managed, governed, and protected throughout its lifecycle. This will be based on growing regulatory pressure and the emergence of data governance technologies that will enable governance to scale efficiently. Automation will aid in scaling. Data catalogs, graphs, taxonomies, and ontologies are some tools that will enable data governance to progress. Companies will devote more time, staff, and technology to developing and maintaining them. These tools will be vital to enable ongoing artificial intelligence and machine learning.

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8. Third-Party Systems With Expanded Offerings, More Integrations, and Overlapping Capabilities:

Vendor platform providers will continue to offer comprehensive systems with core capabilities and new add-on capabilities, working to serve as single platforms for clients from trade management to performance reporting. These capabilities will be less mature in-house add-on capabilities or acquisitions/partnerships that combine more mature products for delivery.

9. Data Will Remain as One of the Highest Expenses in Investment Firms:

Data will remain among the most valuable assets for investment managers, asset owners, OCIOs, and providers. Data costs will continue to rise due to annual increases and the expansion of the data acquired by firms. A report published by the Association for Financial Markets in Europe stated that costs for just fixed income data for both display and not display data have risen from 2017 to 2021 by 50% during that period, where equity costs increased by 25%³. Price increases factor similar to an increase in demand for data as the two strongest drivers. There seems no end to this trend, unless regulations slow the fee increase driver.

It will take a strong operation to extract, refine and prepare it to generate insights, decisions, and strategies. Data owners must factor these trends into their strategic plans and budgets to capitalize on growth, efficiency, and innovation.

ADDRESSING CHALLENGES RELATED TO TREND ADOPTION

You may be moving forward with some or all these trends, and facing challenges due to lack of available resources, or necessary knowledge or experience. Meradia can fill these gaps. With our exclusive focus on the investment industry, we have decades of experience and knowledge available to help you assess maturity levels of your different systems, conduct readiness assessments for transformations, and assist in vendor selection, implementation, and change management. We help our clients avoid mistakes and planning errors that have impacts on their desired outcomes. We specialize in front-to-back investment operations in all aspects of data, performance, and investment operations for asset managers, wealth managers, asset owners, OCIOs, and industry providers.

REFERENCES

¹From [Artificial Intelligence In Fintech Market Worth \\$41.16 Billion By 2030](https://www.grandviewresearch.com) (grandviewresearch.com)

²From [ai-and-big-data-in-investments.pdf](https://www.cfainstitute.org) (cfainstitute.org)

³From [The Rising Cost of European Fixed Income Market Data](https://www.afme.eu) | AFME



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brings a well-rounded data management perspective to Meradia's global portfolio of clients. Throughout his career, Andrew has supported constituents across the investment management industry, including retail investors, advisors, wholesale teams and institutional investors. He is a seasoned investment professional with diverse experience in business and entrepreneurship, possessing strong acumen of front office operations, data governance and management, and retail client journeys. Andrew's passion for helping people and driving outcomes aligns with Meradia's principles of Perspective, Passion and Impact.

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