The Next Generation Operating Model: How Data, AI, and Automation Are Transforming Investment Operating Models

A COMPETITIVE IMPERATIVE FOR MODERN INVESTMENT ORGANIZATIONS

The modern business landscape is experiencing an unprecedented shift fueled by digital transformation, data proliferation, and artificial intelligence (AI). Organizations that fail to evolve risk obsolescence where data-driven decision-making, automation, and advanced analytics define competitive advantage.

At the core of this transformation lies the Next Generation Operating Model (NGOM), a framework that leverages modern data architectures, AI-driven augmentation, and dynamic interoperability to enable greater agility, efficiency, and scalability. The NGOM is not merely about streamlining operations; it is about reshaping the way businesses operate, innovate, and grow.

THE THREE KEY BENEFITS OF MODERNIZATION:

Agility and Scalability

Ability to respond quickly to market changes, client needs, and regulatory requirements. Scalability to support growth in assets under management (AUM) without linear cost increases.

Operational Efficiency

Streamlined processes and reduced manual intervention with AI and automation to lower costs and enhance speed.

Data-Driven Decision Making

Leveraging robust data platforms to generate insights, optimize portfolios, and enhance client services.

Companies that embrace this new paradigm unlock enhanced decision-making, accelerated product innovation, and seamless business processes. Those who hesitate face increasing challenges: siloed data, manual workflows, rigid processes, and legacy architectures that slow progress and stifle innovation.

THE INVESTMENT MANAGEMENT INDUSTRY'S TRANSFORMATION

Investment management firms, for example, have historically relied on legacy infrastructure with manually aggregated spreadsheets, fragmented data ecosystems, and inefficient workflows. These limitations result in wasted analyst time, delayed insights, and high operational costs.

However, firms that modernize their operating models see dramatic improvements. By implementing cloud-based data architectures, AI-driven analytics, and automated workflows, leading asset managers and hedge funds can optimize portfolio decisions, generate investment insights faster, and scale operations without linear cost increases.

This shift is not unique to financial services—every industry, from healthcare to manufacturing, must rethink its operating model to stay ahead in the digital and AI age.

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THE VISION OF A NEW DATA ARCHITECTURE - FROM FRAGMENTED DATA TO A UNIFIED, INTELLIGENT DATA ECOSYSTEM

One of the biggest challenges organizations face today is poor data management—fragmented, inconsistent, and difficult-to-access data that hinders innovation and decision-making.

Modern data architecture aims to eliminate these barriers by creating a single, integrated data ecosystem that seamlessly connects internal and external sources.

COMPONENTS OF AN INTELLIGENT DATA ECOSYSTEM

Cloud-Enabled Data Platforms

Organizations are moving to scalable cloud platforms such as Snowflake and Databricks in Microsoft Azure and Amazon Web Service (AWS), enabling real-time data sharing, advanced analytics, and seamless access across geographies.

Lakehouse Architectures

Combining the best of data lakes (scalability) and data warehouses (structured querying), lakehouse architectures provide flexibility and efficiency for handling structured and unstructured data.

Master Data Management (MDM)

A well-structured MDM system ensures that data across an enterprise is consistent, accurate, and governed, reducing risks associated with regulatory compliance and operational inefficiencies.

Renewed Focus on Data Governance

Data products and data ownership to support operational efficiency, improved analytics at scale, AI application integration, and adoption.

Data, Analytics, and KPI-driven Operational Control Frameworks

Provide comprehensive operational instrumentation about the health, volume, activity, and processing of the entire data and operational ecosystem, including dynamic, real-time, and historical metrics dashboards, AI-integrated metrics synthesis, interpretation, alerting, and outlier remediation activities.

AI-Driven Data Pipelines

Advanced AI models automate data ingestion, classification, and quality management, reducing human intervention and improving data reliability.

USE CASE: AI-DRIVEN INVESTMENT DATA PLATFORMS

Investment firms leveraging modern architectures integrate market data from vendors such as Bloomberg, LSEG, FactSet, and MSCI into a unified data fabric. AI models can enhance this data in unlimited ways by identifying market trends, performing sentiment analysis on unstructured data, generating new insights, and optimizing asset allocations, to name a few. Notable vendors advancing and offering modern data and analytics platforms include Arcesium Aquata and Opterra, RIMES Matrix, SimCorp Investment Analytics Platform, Blackrock Aladdin Data Cloud, Clearwater Analytics, State Street Alpha, and BNY Data Vault.

For example, a hedge fund utilizing a lakehouse solution with Snowflake can:

- Ingest reference and real-time market feeds and alternative data (e.g., security and instrument data, market data, fund manager, and investment analytics).
- Use AI models to analyze financial sentiment in company earnings transcripts.
- Run predictive analytics on investment scenarios, helping portfolio managers make faster, data-backed decisions.

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ENHANCING HUMAN CAPABILITIES THROUGH AUGMENTED INNOVATION - THE RISE OF AI-ENABLED WORKFLOWS AND DECISION-MAKING

Historically, human expertise has driven business decisions, but the volume of data and complexity of modern markets exceed human cognitive limits. Integrating AI Assistants, AI Agents, and ultimately Artificial General Intelligence Entities (AGIEs) redefines how work will be done.

KEY ADVANCEMENTS IN AI-ENHANCED HUMAN CAPABILITIES

AI-Assisted Decision Making

AI in investment management firms provides real-time insights, scenario analysis, and risk assessments to human decision-makers.

Automated Workflows

AI-driven automation eliminates manual, repetitive tasks, allowing professionals to focus on high-value strategic work.

Natural Language Processing (NLP) AI Assistants

These tools allow executives, analysts, and employees to query datasets using natural language instead of complex coding.

Generative AI and AI Agents

AI agents curate reports, draft responses, and generate forecasts based on real-time market conditions.

AI-ENHANCED HUMAN CAPABILITIES EXAMPLE: AI-AUGMENTED FINANCIAL ANALYSTS

A wealth management firm utilizing AI-augmented financial analysts would see drastic improvements in productivity. Instead of spending hours manually compiling client portfolio reports, analysts can leverage AI Assistants to:

- Instantly generate reports using natural language prompts.
- Run scenario simulations based on economic indicators.
- Provide clients with personalized recommendations, improving engagement and client satisfaction.

This approach frees human experts to focus on strategic advising rather than data manipulation, thereby improving service quality and reducing operational costs.

DYNAMIC INTEROPERABILITY: THE NEW COMPETITIVE IMPERATIVE - SEAMLESS SYSTEM INTEGRATION FOR REAL-TIME DATA SHARING

Dynamic interoperability refers to an ecosystem where disparate systems, applications, and data sources work together seamlessly—eliminating bottlenecks and enabling real-time insights.

Traditional IT architecture creates fragmented data silos, where different departments and functions struggle to access or share information. Next-generation architectures break down these barriers by:

Leveraging API-First and Event-Driven Architectures

Systems communicate via APIs in real-time rather than through batch processes.

Cloud-Native Data Fabrics

Data fabrics unify structured and unstructured data across different platforms.

AI-Orchestrated Interoperability

AI dynamically negotiates data access between different entities, ensuring seamless integration.

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DYNAMIC INTEROPERABILITY EXAMPLE: SNOWFLAKE-ENABLED DATA SHARING IN FINANCIAL SERVICES

A global investment bank transitions from legacy SFTP-based file transfers to real-time Snowflake data sharing. This transformation:

- Eliminates batch processing delays, ensuring up-to-date financial insights.
- Enhances regulatory compliance by providing auditable, real-time reporting.
- Increases collaboration with external data providers (e.g., Bloomberg, FactSet, MSCI, LSEG, S&P Global) through a unified data marketplace.

Organizations adopt dynamic interoperability to create a scalable, real-time decision-making ecosystem that fosters agility and innovation.

THE NEXT GENERATION OPERATING MODEL: A COMPETITIVE NECESSITY

Modernizing the operating model is not just about cost efficiency; it is a fundamental requirement for long-term competitive survival. Organizations that invest in data, AI, and automation will:

- Reduce operational risks through AI-powered governance.
- Improve agility and adaptability in a volatile business environment.
- Enable scalable growth without linear cost increases.

By contrast, firms failing to drive wholistic data architecture and operating model transformation or clinging to outdated, manual processes will struggle to innovate and compete. The road ahead is clear; firms must embrace AI, automation, and modern data architectures to transform and modernize their operating models to lead in the next era of business.

HOW MERADIA IS ADAPTING AND ADVANCING THE INDUSTRY?

Meradia is leading the charge in operational transformation, working with our clients to boost their efficiency. We've hosted AI roundtables to bring industry-leading expertise from MIT CSAIL together with investment management professionals and teamed up with top vendors like BNY, Accelex, SimCorp, and FundGuard to create high-quality content on the latest industry trends. As proud members of the Snowflake Partner Network, we're committed to education that ensures our clients can fully harness the power of modern data technologies. Our holistic approach to transformation enhances operational efficiency and growth at scale. Meradia is available to assist you with your transformation journey. Please contact us at info@meradia.com for further information.

Brian Buzzelli will be speaking at WBR's FIMA USA 2025, where he will examine the next-gen operating model. This event is a chance for industry leaders to learn about the latest in data management, AI integration, and automation. For more details on the event and session, visit this link: https://meradia.com/event/fima-usa-2025/.

Brian Buzzelli is an accomplished leader in financial data management with more than 29 years of experience in the financial services and asset management industry. He has a deep background in data strategy, quality, architecture, governance, and data management operations. Brian has championed data quality and pre-use data validation, allowing investment and operation professionals to focus on their core responsibilities. His innovative approach drives a data-driven culture, treating data as an asset that involves leveraging manufacturing techniques to engineer a robust data quality control framework, ensuring accuracy and precision. Brian's strategic focus revolves around driving data and architecture transformation in investment management operations, simplifying data architecture, reducing operational risk, and increasing overall operational efficiency.

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