



# Applying Innovation in Investment Management

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In recent years banks, in general, have taken major strides to take advantage of various innovation, emerging technologies and data science tools. In several cases this has been greatly accelerated by various technology labs and startups. On the flip side, because banks have always been heavily regulated, this has also meant large-scale testing and validation processes have been necessary which has delayed even more assertive digital system advances.

Examples of innovation success stories include Application Programming Interfaces (APIs) which define and facilitate interactions between multiple software intermediaries, enabling banks to make real-time payments. Banks have made good use of APIs and have seen success in adoption by their partners and clients.<sup>1</sup>

On the flip side, for other innovation-led initiatives which involve multiple sides, technology is still nascent, and the business may lack regulatory clarity. In these circumstances the journey has not been straight-forward. The adoption of Distributed Ledger Technology, used as the foundation for Blockchain for example, has remained at the stage of PoC, trials and limited launches.<sup>2</sup>

## Invest management firms are playing catch-up



Investment management firms are on a similar transformation path today, currently seeking to take advantage of various emerging technologies that can improve their operations and simultaneously provide cost effective strategies, while allowing for the extraction of incredibly valuable business-leading insights.

An example of an area which certainly needs innovation is Know Your Customer (KYC) account opening. Large payers have started to apply technology, such as Artificial Intelligence and other innovative start-up firms' technology, in this area.<sup>3</sup> Most banks have been out front, already implementing mainstream KYC provisions.

Asset management and investment management firms are recognizing the critical importance of data and systems availability on cloud to enable seamless data access for their counterparties, clients and partners.<sup>4</sup>

## Why do asset management firms need to embrace innovation?



The investment world is facing multiple challenges as it prepares for not only the current environment but for the world of the future. These are not the usual challenges that regulations have posed over the last several years. They are facing unprecedented risk and volatility. Several thematic investment themes have emerged, such as Environmental, Social and Governance (ESG). All of this is being tested against the goal of generating returns, while minimizing the risks arising out of market volatility. In addition, investors are demanding access to more frequent and more granular data when it comes to analyzing investment decisions and returns.

Along with the many real-life pressures on the investment management industry comes the additional need to conduct even more frequent

analysis of various investments. That very often requires these firms to collect, secure, analyze and best utilize vast datasets. This often leads to the tangible need for scalable and cloud-based operating platforms.

In addition, the increased appetite for ESG investments--including assessing how climate-change can affect different investments--has led to the necessity for firms to access and leverage new datasets and appropriate models for continuously assessing the impact.<sup>5</sup> Moreover, in light of changing market conditions, Real Estate securities and assembled portfolios could greatly benefit from more granular and more frequent analysis.<sup>6</sup>

## What are the constraints?

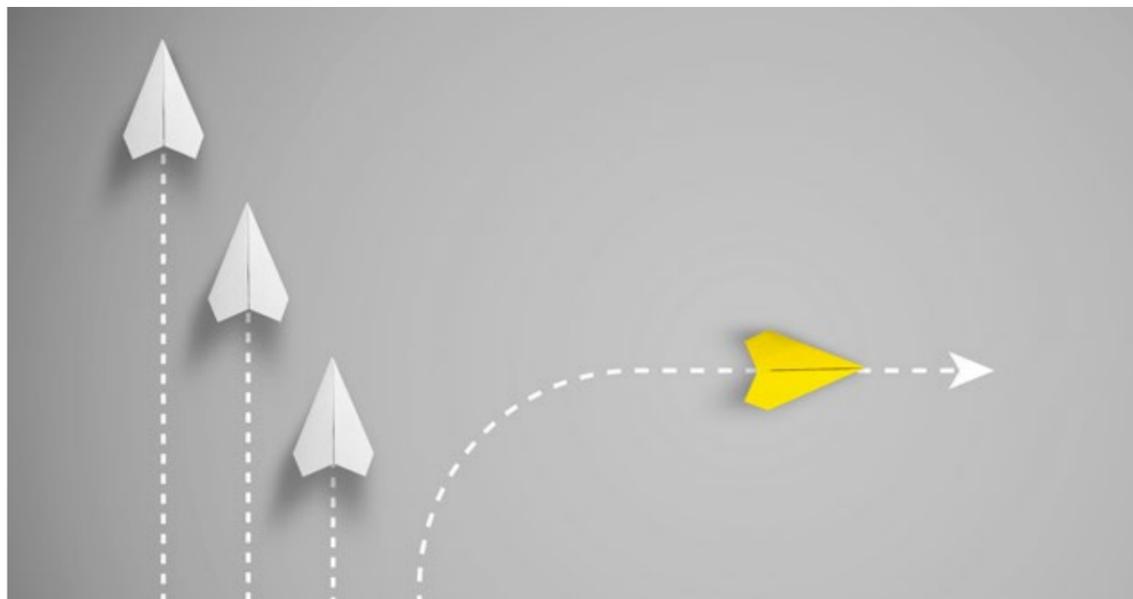


Investment Management firms are typically several years behind when it comes to refreshing their own systems, platforms and operating technologies. In fact, in many cases:

- Their systems are several years old/decades and are often black-boxes
- Their journey to the cloud, in general, is lagging the sell side
- There is a pervasive lack of having firm-wide data lakes which allow for the handling of newer data sources
- Data science-based workbenches are not advanced, or have not yet been implemented

## How can investment management firms take advantage of applied innovation?

These are some of the most critical elements for firms to tackle when they necessarily undertake and progress their innovation journey:



- Ensure proper data management through managed access, APIs, data lakes, and tools like neo4J which can provide graph-based resolution of cross-referencing entities, and other key data elements
- Allow cloud enablement through Confidential compute, Azure and other cloud operating platforms, assessed to meet the firm's unique needs
- Implement the right data science tools, which will become necessary for model development, and an array of other investment and process-related methodologies. There are a host of data science platforms which are now capable of providing end-to-end model lifecycle management
- Facilitate and streamline inputs from various data providers as new-generation data providers can now enable the ability to process unstructured data – a number of NLP based tools have now been put into production by large data vendors – both large data vendors as well as promising new entrants
- Assess and accommodate varied data privacy aspects with differential privacy standards and policies, as needed. LeapYear is emerging as a great option when it comes to differential privacy among participants, be it a consortium or inter-firm transactions needing a common view

## The opportunity for innovation is here



Leaders within investment management companies have the opportunity to provide an advanced toolkit for their business and help them grow, while managing multiple risks given the advances in emerging tech and data. They need to be able to quickly utilize, test and deploy newer data sources, tools and systems, all with an eye toward their operational needs and capabilities that will ensure their readiness for the future.



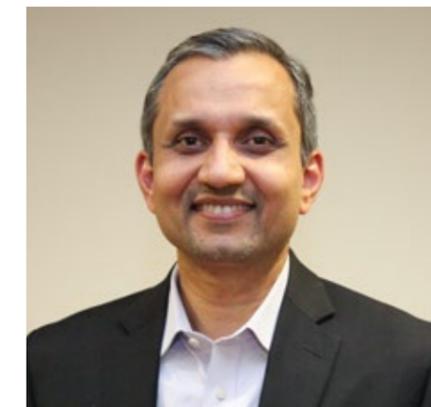
To learn more about Investment Management and the innovative work we are doing for the buy side industry, please follow our Podcast channel – **FinSights from FinLabs.**

[Click here to listen to the Podcast](#)

### Resources:

1. <https://www.americanbanker.com/news/why-citi-wells-jpmorgan-are-seeing-a-spike-in-api-calls>
2. <https://www.newswire.ca/news-releases/national-bank-of-canada-nbc-and-jp-morgan-test-blockchain-technology-with-nbc-debt-issuance-in-the-us-financial-markets-680356913.html>
3. <https://www.reuters.com/article/us-jpmorgan-blackrock-saphyre/jpmorgan-and-blackrock-tap-ai-startup-to-automate-opening-custody-accounts-idUSKBN2661V1>
4. <https://www.reuters.com/article/us-blackrock-aladdin-microsoft/blackrocks-aladdin-investment-management-platform-to-be-hosted-on-microsofts-cloud-idUSKBN21P35X>
5. <https://www.pionline.com/esg/nuveen-ramps-climate-research-corporate-engagement>
6. <https://www.wsj.com/articles/for-pensions-valuing-real-estate-is-tough-covid-19-brings-new-hurdles-11594379215>

## About the Author



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Sandeep Kumar is a proven business operations strategist and technology expert with over 30 years' experience in capital markets consulting. He has worked with some of the world's largest buy- and sell-side firms to design and implement transformative, global technology solutions that enhance operating models, streamline data capabilities and increase revenue. Sandeep has been instrumental in the conception of Synechron's blockchain accelerators which streamline operations, simplify complex data synchronization and consolidate fragmented business functions and in Synechron's artificial intelligence accelerators helping clients to understand how they can bring techniques like NLP (natural language processing), RPA (robotic process automation), and machine learning into their businesses. Sandeep is currently spearheading our next Accelerator Program focused on solving the challenges of the Buy-side industry.

Sandeep is an alumni of the prestigious Birla Institute of Technology and Science, Pilani, India.

# Global Footprint



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