



## THE POWER OF PENSION PORTFOLIOS IN THE AGE OF AI

### CASE STUDY:

#### **BlackRock's Aladdin® and eFront®**

#### Managing pension portfolio data across public and private markets

As pension funds navigate an increasingly complex investment landscape, the ability to manage vast amounts of data across public and private markets has become table stakes. Leveraging advanced technologies to analyze this data enables funds to make more informed decisions and optimize their investment strategies across asset classes.

Recognizing these challenges, Aladdin® and eFront® technology are showcased in the **CFA Institute's** whitepaper, **Pensions in the Age of Artificial Intelligence**, as critical tools for institutional investors—uncovering deeper insights, managing data at scale, and integrating automation to drive smarter decisions.

### BACKGROUND

In the not-too-distant past, pensions were able to focus on investing, and the data management side of the equation was considered a support function. Today, however, the world is more complex, more interconnected, and more data-centric. As a result, a pension fund now needs to have a very broad array of expertise, ranging from LDI to public and private market investing to data management.

Through the Aladdin platform, BlackRock provides technology solutions to more than 1,000 clients. Aladdin, through eFront and a view of the whole portfolio, has been able to help pensions uncover deeper insights from their data, manage that data at scale, and bring together private asset data and public asset data—helping funds manage risk, make better decisions on behalf of their constituencies, and take advantage of emerging technologies, such as GenAI.

## IMPLEMENTATION

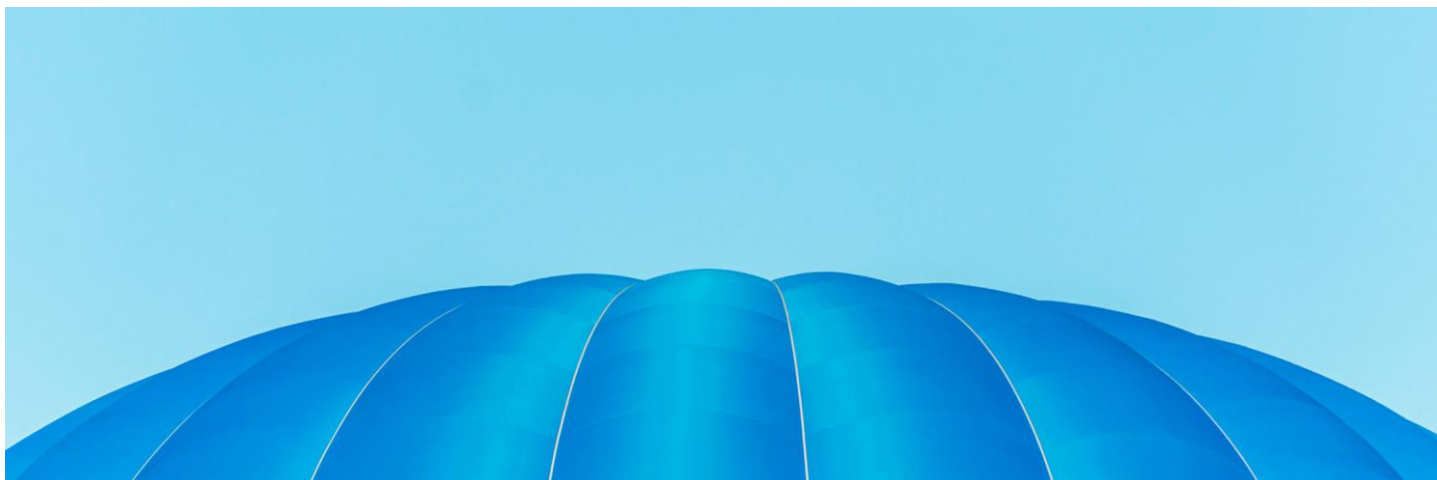
### **BlackRock incorporates AI technologies through Aladdin and eFront Insight.**

Aladdin® is a tech platform that unifies the investment process for pension funds. The platform gives a single, consolidated view of the whole portfolio, whether the fund is managing assets in-house or overseeing third-party managers. As capital markets evolve and allocations in private markets increase, access to granular, accurate data is essential to making informed investment decisions.

Through **Aladdin**® technology, clients can access a real-time investment book of record covering the entire investment management process and accurately view risk across internally and externally managed assets with automated, integrated data for analysis, oversight, and management needs. BlackRock's cloud-native approach and strategic partnership with Microsoft Azure OpenAI Service has enabled it to further develop its AI-powered capabilities. Using generative AI, Aladdin Copilot serves to strengthen connectivity across the Aladdin platform, surfacing answers to support key business decisions in real time. It can respond to specific client questions using natural

language while maintaining a walled garden when it comes to client data.

The **eFront**® **Insight** tool is designed for limited partners in private funds. It helps investors, such as pension funds, manage their data in private markets—from private equity and debt to real estate and infrastructure— by extracting valuable information from structured and unstructured documents in their investment environment. Quarterly financial reports, capital account statements, and Excel files housing schedules of investments can be centralized and processed to allow pensions to understand what they own, how it is performing, and how that performance compares to benchmarks. The tool allows private market investors to identify key exposures that arise in a changing market environment. Late in 2023, BlackRock released an eFront copilot, also built on Azure OpenAI, that enables clients to access quick analytics and key metrics and transform prompts into data visualizations of exposures, performance, and risk. To maintain data privacy and risk controls, the copilot contains content filtering and parameters to limit risk of hallucination, misinformation, or inappropriate outputs and will not give investment advice or respond to questions outside eFront Insight boundaries.



## RESULTS

BlackRock's Aladdin technology has allowed institutional investor clients to access updated, accurate, and holistic information regarding investment positions, exposures, and liquidity. Fundamentally, pensions cannot adequately understand their investment risk without understanding the data. BlackRock continues to build its Aladdin and eFront capabilities across public and private asset classes to enable institutional investors to spend less time reconciling systems and aligning datasets and more time deriving insights and driving outcomes

(BlackRock 2024). Transitioning to a cloud-native approach that uses generative AI will unlock further computational potential and analytic efficiency as Aladdin's copilot ecosystem continues to grow (BlackRock 2024).

Ultimately, success for funds is going to be driven by the ability to navigate complex datasets from diverse locations while managing increasingly complex instruments, emerging technologies, and longer-term outcomes.



## ABOUT ALADDIN

Aladdin® is a technology platform used by asset managers and owners including banks, financial institutions, pensions, corporations, insurers, and wealth managers. The Aladdin platform unifies the investment management process, providing a common data language within an organization to enable scale, provide insights, and support business transformation. Through eFront® technology, alternative investment data management is covered to meet the needs of alternative investment professionals worldwide and across all major alternative asset classes. From fundraising, fund administration and reporting to data services and analytics, the platform provides capabilities to support decision making and investment oversight.

Aladdin® and eFront® platforms bring together public and private asset class data to create an industry-recognized whole portfolio solution for investment professionals globally. Find out more at [www.blackrock.com/aladdin](http://www.blackrock.com/aladdin) | [request@blackrock.com](mailto:request@blackrock.com)

This material is provided for informational purposes only and is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The opinions expressed are subject to change at any time without notice. The information and opinions contained in this material are derived from proprietary and nonproprietary sources deemed by BlackRock to be reliable, are not necessarily all-inclusive and are not guaranteed as to accuracy. Performance and risk calculations, including those incorporated into Aladdin technology, are based on assumptions, historical correlations, and other factors (such as inputs provided by the Aladdin users) and are not assured to predict future results. All graphs and screenshots are for illustrative purposes only. BlackRock's Aladdin platform is a financial technology platform designed for institutional, wholesale, qualified, and professional investor/client use only and is not intended for end investor use. Aladdin users undertake sole responsibility and liability for investment or other decisions related to the technology's calculations and for compliance with applicable laws and regulations. The technology should not be viewed or construed by any Aladdin users, or their customers or clients, as providing investment advice or investment recommendations to any parties. This material should not be construed as a representation or guarantee that use of Aladdin technology will satisfy your legal or regulatory, or tax or accounting, obligations. BlackRock, as provider of the technology, does not assume any responsibility or liability for your compliance with applicable regulations or laws, or tax or accounting obligations. For additional information on any of the descriptions contained herein, please contact your Aladdin Relationship Management representative. BlackRock may modify or discontinue any functionality or service component described herein at any time without prior advance notice to you.

In the **U.S. and Canada**, this material is intended for institutional investors. **In the UK**, this material is for professional clients (as defined by the Financial Conduct Authority or MiFID Rules) and qualified investors only and should not be relied upon by any other persons. Please refer to the Financial Conduct Authority website for a list of authorised activities conducted by BlackRock. **In the EEA**, this material is for professional clients, professional investors, qualified clients and qualified investors. **For qualified investors in Switzerland:** This information is marketing material. This material shall be exclusively made available to, and directed at, qualified investors as defined in Article 10 (3) of the CISA of 23 June 2006, as amended, at the exclusion of qualified investors with an opting-out pursuant to Art. 5 (1) of the Swiss Federal Act on Financial Services ("FinSA"). For information on art. 8 / 9 Financial Services Act (FinSA) and on your client segmentation under art. 4 FinSA, please see the following website: [www.blackrock.com/finsa](http://www.blackrock.com/finsa). **In Singapore**, this is for use only with institutional investors as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. In the provision of any of the services described herein, neither BlackRock (nor any of its affiliates) will be acting in a capacity as investment adviser or broker-dealer nor will it be performing the functions of an organized market or exchange (and has not been recognized as doing so by the Monetary Authority of Singapore). **In Hong Kong**, the technology and the material is for distribution to "Professional Investors" (as defined in the Securities and Futures Ordinance (Cap.571 of the laws of Hong Kong) and any rules made under that ordinance.) and should not be relied upon by any other persons or redistributed to retail clients in Hong Kong. **In Japan**, this is for Professional Investors only (Professional Investor is defined in Financial Instruments and Exchange Act). **In Australia**, issued by BlackRock Investment Management (Australia) Limited ABN 13 006 165 975 AFSL 230 523 (BIMAL) for the exclusive use of the recipient who warrants by receipt of this material that they are a wholesale client and not a retail client as those terms are defined under the Australian Corporations Act 2001 (Cth). **In Brunei, Indonesia and Malaysia**, this material is issued for Institutional Investors only. **In Latin America**, for institutional investors and financial intermediaries only (not for public distribution). No securities regulator within Latin America has confirmed the accuracy of any information contained herein. Please note that **IN MEXICO**, the provision of investment management and investment advisory services ("**Investment Services**") is a regulated activity, subject to strict rules, and performed under the supervision of the Mexican National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, the "**CNBV**"). BlackRock does not provide, and it shall not be deemed that it provides through Aladdin and eFront technology, any personalized investment advice to the recipient of this document, by reason of its use or otherwise. These materials are shared for information purposes only, do not constitute investment advice, and are being shared in the understanding that the addressee is an Institutional or Qualified investor as defined under Mexican Securities (Ley del Mercado de Valores). Each potential investor shall make its own investment decision based on their own analysis of the available information. Please note that by receiving these materials, it shall be construed as a representation by the receiver that it is an Institutional or Qualified investor as defined under Mexican law. BlackRock México Operadora, S.A. de C.V., Sociedad Operadora de Fondos de Inversión ("**BlackRock México Operadora**") is a Mexican subsidiary of BlackRock, Inc., authorized by the CNBV as a Mutual Fund Manager (Operadora de Fondos), and as such, authorized to manage Mexican mutual funds, ETFs and provide Investment Services. For more information on the Investment Services offered by BlackRock Mexico, please review our Investment Services Guide available in [www.blackrock.com/mx](http://www.blackrock.com/mx). **In South Africa**, a provider who provides products or services to a client other than financial products or financial services, must disclose to the client the fact that the additional products or services are not regulated under the Act and therefore the client is not afforded the same protections in respect of those additional products or services that may apply in respect of the provision of financial products or services in terms of the Act. This document is for information purposes only and does not constitute an offer or invitation to anyone to invest in any BlackRock funds and has not been prepared in connection with any such offer.

Issued by BlackRock Investment Management (UK) Limited, authorised and regulated by the Financial Conduct Authority. Registered office: 12 Throgmorton Avenue, London, EC2N 2DL. Tel: + 44 (0)20 7743 3000. Registered in England and Wales No. 02020394. For your protection telephone calls are usually recorded. Please refer to the Financial Conduct Authority website for a list of authorised activities conducted by BlackRock. Please be advised that BlackRock Investment Management (UK) Limited is an authorised Financial Services provider with the South African Financial Services Conduct Authority, FSP No. 43288.