Building intelligent systems for modern investment management

Anthony Kruger
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BlackRock Systematic Active Equity (SAE)

Innovation
at scale

BlackRock.

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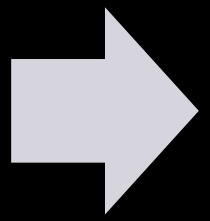
Investing

Gather information on companies and the economy

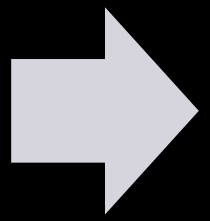


Make judgements on what to buy and sell

Source: BlackRock 31 December 2025, for Illustrative purposes

Systematic Investing

Gather information on companies and the economy ***at scale***



Utilize AI to optimize decisions on what to buy and sell, and when

Source: BlackRock 31 December 2025, for Illustrative purposes

We ask the same questions as any traditional investment manager

Which stocks or bonds have strong fundamentals?

Are exposed to attractive macro themes?

Offer positive sentiment?

Source: BlackRock 31 December 2025, for Illustrative purposes

Investment intuition fueled by data and technology

1

We turn information into insight

Information is everywhere… we make use of data to inform real-time investment insights

2

We make use of proprietary technology

Our tech stack amplifies the speed, scale, and granularity of what we can measure

3

We seek to provide solutions engineered for client outcomes

Systematic approach could enable precision in targeting portfolio outcomes

Source: 1 Exploding topics – Data generated per day, accessed January 2025

Source: 2 MIT Sloan – Tapping the power of unstructured data, accessed January 2025.

Source: 3 BlackRock Systematic, as of September 30, 2025.

The world has changed

Systematic investing

How data and AI are transforming investing

Key elements of investment management such as **stock selection**, **portfolio construction** and **thematic investing** are being disrupted by advancements in AI

Natural Language Processing

analyse securities at scale

Broker Sentiment

27 million documents in PDF, some 100+ pages long

6,500 docs/day

Across 2,100 brokers

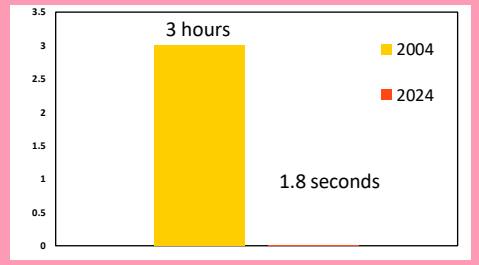
115,700 distinct authors

47 languages

Advanced Machine Learning Tools

construct portfolios at scale

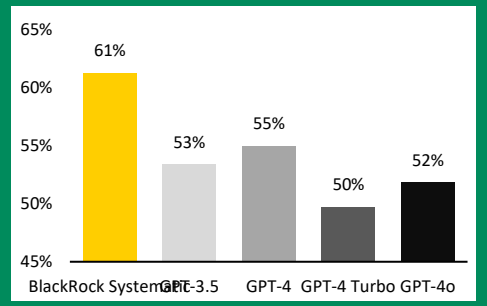
Time needed for 5 year daily global equity simulation



Large Language Models

more accurate prediction of post earning market reactions

Model Accuracy



Source: BlackRock 31 December 2025, for Illustrative purposes, subject to change.

Early Natural Language Processing Capabilities

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Ladies and gentlemen, thank you for standing by, and welcome to the 21st Century Fox 2Q 2014 Earnings Release Teleconference Call. At this time, all participants are in a listen-only mode. Later, we will conduct a question-and-answer session with instructions being given at that time. <mark type="Operator Instructions" /> And as a reminder, today's call will be recorded.
I would now like to turn the conference over to your host, Mr. Reed Nolte, Senior Vice President, Investor Relations. Sir, the floor is yours. Please go ahead.
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Thank you very much, Steve. Hello, everyone, and welcome to our second quarter fiscal 2014 earnings conference call. On the call today are Chase Carey, President and Chief Operating Officer; James Murdoch, Deputy Chief Operating Officer; and John Nallen, our Chief Financial Officer.
First, we will give some prepared remarks on the most recent quarter and we will be happy to take questions from the investment community. This call may include certain forward-looking information with respect to 21st Century Fox's business and strategy. Actual results could differ materially from what is said. The company's Form 10-Q for the three months ended December 31, 2013, identifies risks and uncertainties that could cause actual results to differ and these statements are qualified by the cautionary statements contained in such filings.
Additionally, this call will include certain non-GAAP financial measurements. The definition and a reconciliation of such measures can be found in our earnings release and in our 10-Q filing.
Finally, please note that certain financial measures used in this call such as segment operating income before depreciation and amortization, often referred to as EBITDA and adjusted earnings per share, are expressed on a non-GAAP basis. The GAAP to non-GAAP reconciliation of these non-GAAP measures is included in our earnings release.
Also note that the historical results for periods prior to June 28, 2013, described in the press release and on this call have been adjusted to reflect the separation that was completed at the end of fiscal 2013.
And with that, I'm pleased to turn it over to John.
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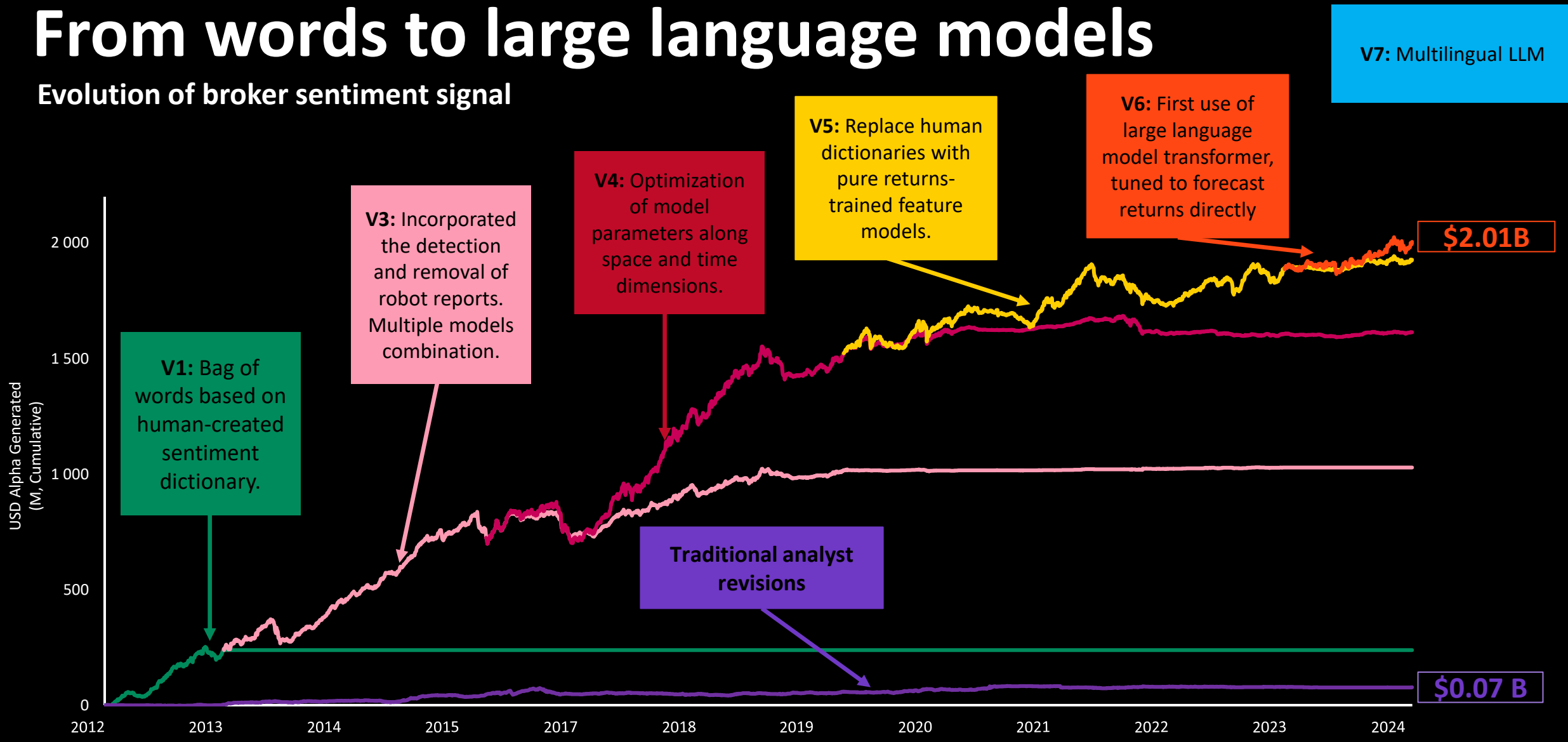
Thanks, Reed, and good morning, everyone. As you will have seen in today's earnings release, our financial results continue to reflect strong top-line revenue growth. We reported second quarter fiscal 2014 revenues for the total company of $8.2 billion, which is up 15% compared to the second quarter a year ago. Approximately 40% of this growth is organic with the balance reflecting the inclusion of revenues from our newly consolidated businesses namely Sky Deutschland and our required cable sports channels.
Total segment EBITDA for the second quarter was $1.54 billion, a 4% reduction compared to the $1.61 billion reported a year ago. This year's results reflect solid underlying cable channel growth, continued strength in retransmission consent revenues and a strong TV production performance. These increases were more than offset by lower contributions from our film business and weaker ratings for The X Factor, as well as the impact of the investments in our new cable channels and the consolidation of Sky Deutschland's EBITDA losses. In aggregate, the impact of acquisitions and new channel launches reduced our reported EBITDA growth by approximately 6%. Additionally, unfavorable foreign exchange movements reduced the growth by a further 1%.
From a bottom-line perspective, we reported income from continuing operations attributable to stockholders of $982 million as compared to the $1.06 billion reported in the second quarter a year ago. Excluding the net income effects in both years of amounts reflected in other net and our gains from participating in BSkyB share repurchase program, second quarter adjusted EPS was $0.33 this year versus $0.35 in the prior year.
Now, let me provide some additional context on the performance of a few of our businesses, and let's start with the Cable Networks. Overall, total segment revenues in the second quarter increased 14% from last year, highlighted by a 17% increase in affiliate revenues and 7% advertising growth. The 17% affiliate revenue growth was led by higher rates across our channels. Domestic affiliate fees increased 15% primarily from higher average rates led by the RSN's FX and Fox News, as well as our new channels, FS1 and FXX. Increased revenues related to the impact of last year's NHL lockout and the inclusion of SportsTime Ohio also contributed to the growth.
Our reported international affiliate fees were up 22%. Within this overall increase, affiliate fees at the non-sports channels at FIC and STAR, grew 16% in local currency terms. The balance of the affiliate fee increase was from the international sports channel, which was partially offset by unfavorable currency movements.
Second quarter advertising revenue growth reflects domestic advertising increases of 7%, led by double-digit gains at the FX channels and the RSNs, which were partially offset by political related advertising declines at Fox News. At the international channels, advertising revenue increased 9%. Within this overall increase, local currency advertising at the FIC and STAR non-sports channels grew at the same 9% rate. The increase generated by our sports channels was offset by the overall negative impact of foreign currency.

Reference to the names of each company mentioned in this communication is merely for explaining the investment strategy, and should not be construed as investment advice or investment recommendation of those companies.
Source: BlackRock 31 December 2025. Excerpt from 20th Century Fox Earnings Call Transcript 2Q 2014, for illustrative purposes. The above illustrates early SAE NLP capabilities.

From words to large language models

Evolution of broker sentiment signal



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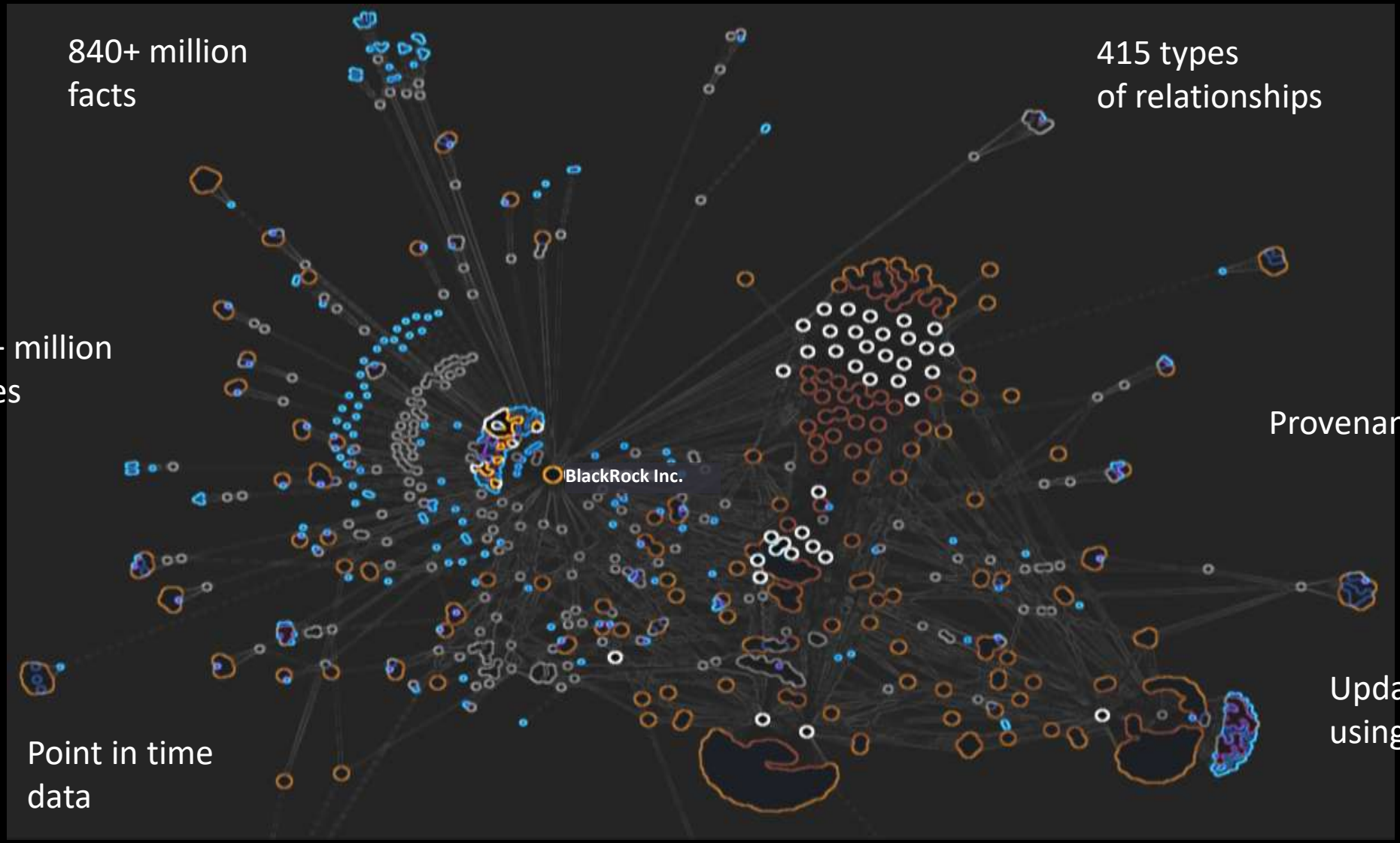
Source: BlackRock as of 31 March 2025. Estimate derived from holdings attribution analysis.

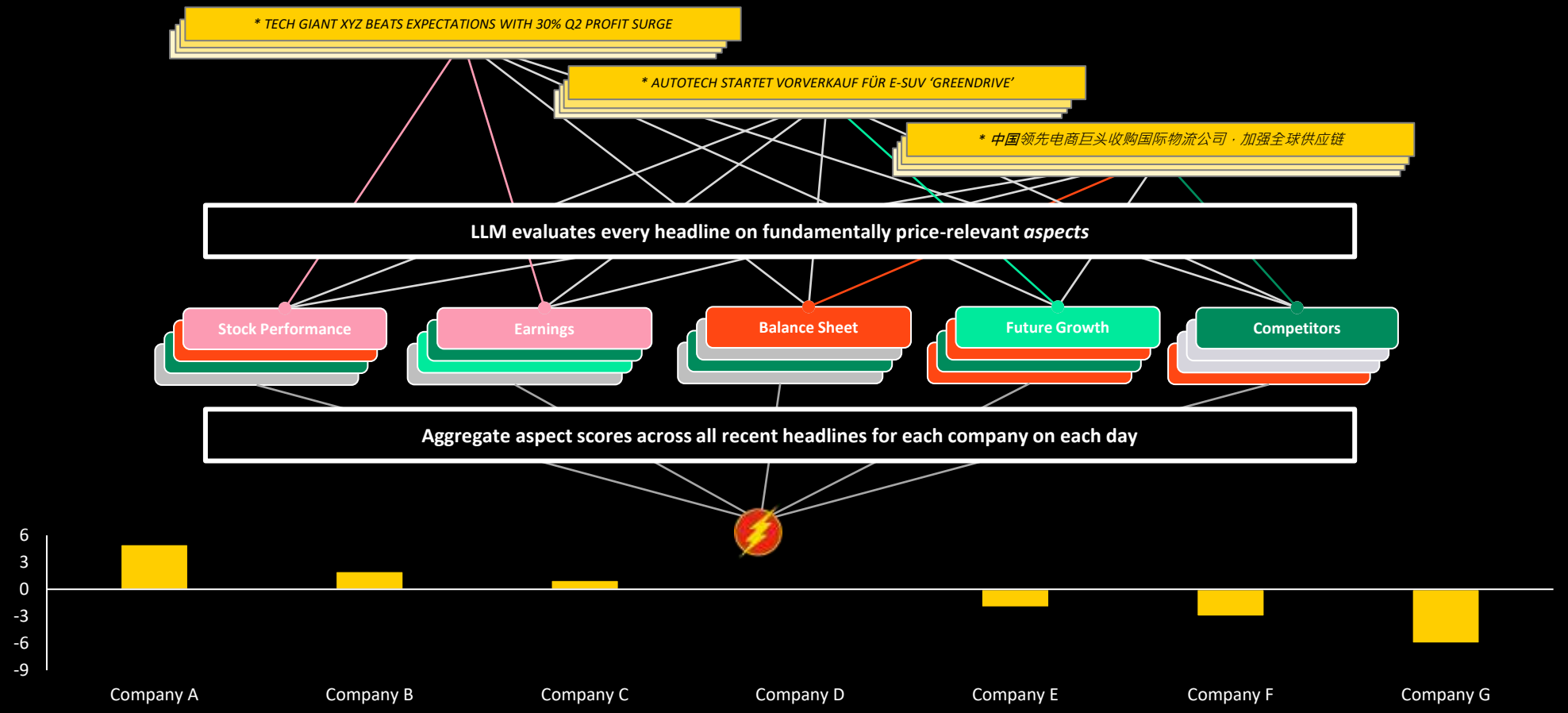
Proprietary Knowledge Graph



Source: BlackRock 31 December 2025, for Illustrative purposes

Case study 1:
Using AI to decode breaking news

AI-Driven Fundamental News Analysis



500,000+
Headlines processed each year

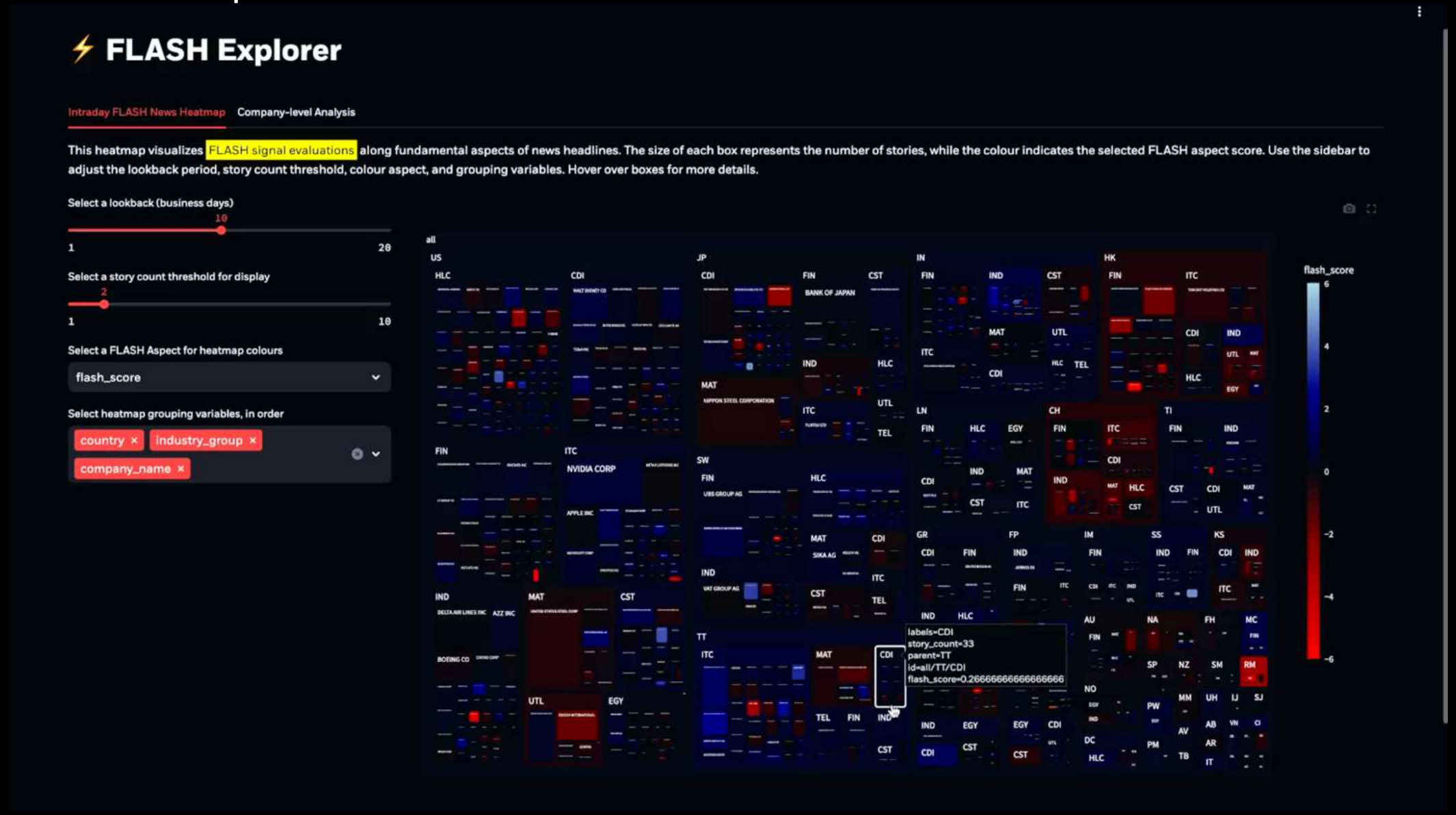
AI Classified
To filter for impact

Intraday
Processing to maximise alpha

Multilingual
Headlines to capture local insights

There is no guarantee that research capabilities will contribute to a positive investment outcome.
Source: BlackRock 31 December 2025. For illustrative purposes only and should not be considered an investment recommendation or advice.

Demo: FLASH Explorer



Source: BlackRock 31 December 2025. For illustrative purposes only and should not be considered an investment recommendation or advice. There is no guarantee that research capabilities will contribute to a positive investment outcome.

Case study 2:

The Thematic Robot

SAE's Thematic Robot helps to get ahead of the market themes

The Thematic Robot unites human, machine and data through the repeatable and scalable identification, trading and timing of market themes

01.

Dynamic approach, leveraging data and technology

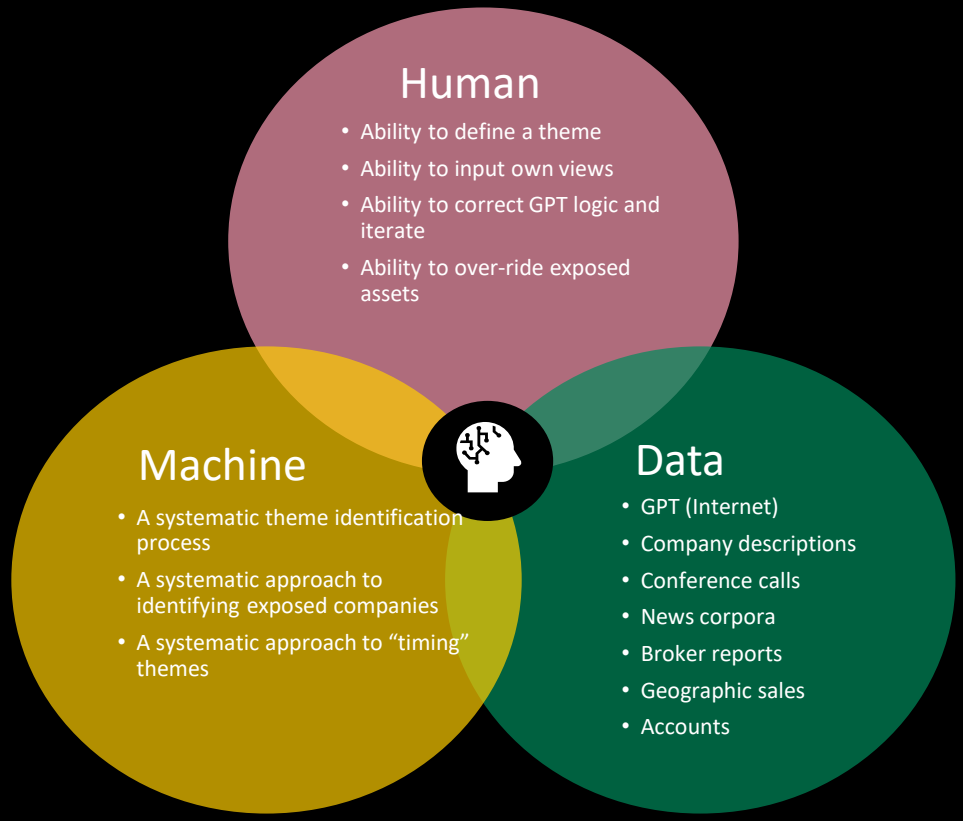
02.

Human intuition a "tiller for the *boat*"

03.

Scalability and repeatability of the Robot helps to build custom stock baskets for any market theme

Thematic Robot = Human + Data + Machine



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Robot Demo: Tariffs

Import Robot

```
%%capture
import os
import sys
import pandas as pd
sys.path.insert(0, '/GAAL/tdufour/repos/llm_sandbox/python')
```

Python

```
from blackrock.tactical_robot.core import TacticalRobot
```

Python

```
pd.set_option('display.max_colwidth', 0)
```

Python

Set up Basket Parameters

```
p = {
    "situation": "The escalation of tariffs imposed by the US government meant to favor companies manufacturing and selling domestically. \
        The tariffs on goods entering the US could affect all countries, but are expected to affect trade from China the most. \
            The cost of exchanging goods across international borders is expected to rise significantly, \
                disproportionately affecting companies whose products rely on complex global supply chains.",
```

There is no guarantee that research capabilities will contribute to a positive investment outcome.

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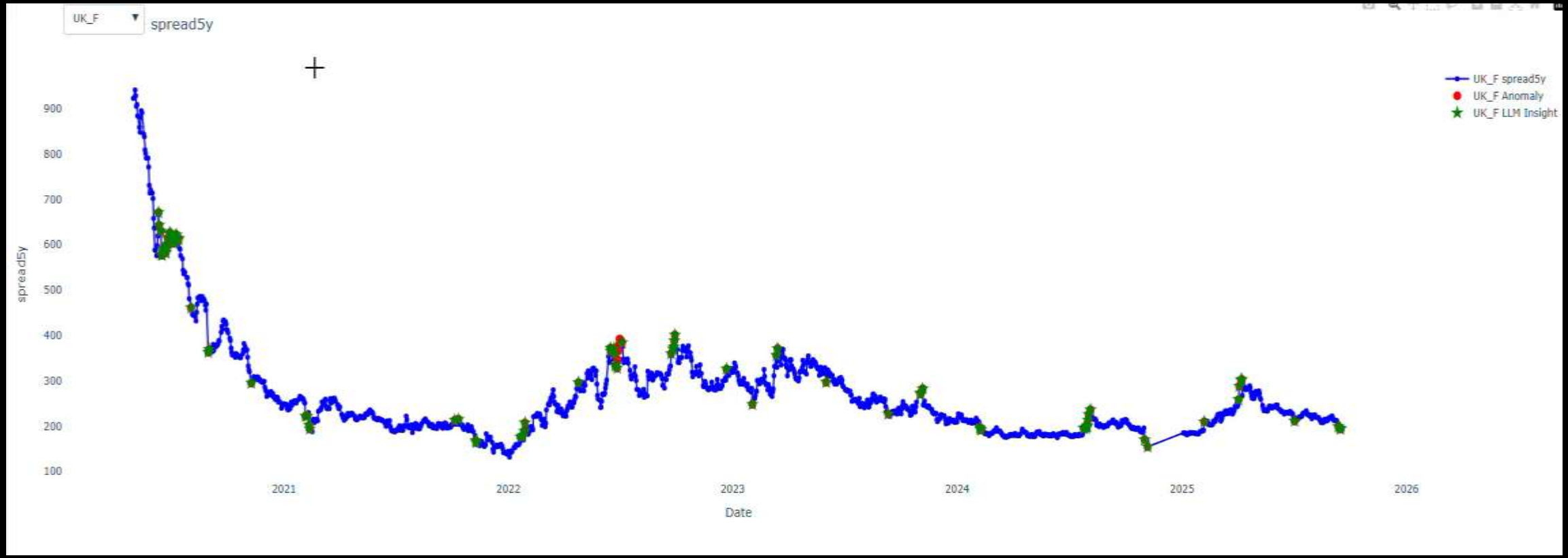
Case study 3:
Using AI to detect credit spread anomalies

Detecting and Trading Credit Spread Reversals with LLMs



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One philosophy, many applications

Differentiated, cost-efficient and risk-managed strategies

CORE ALPHA

Seek to outperform broad markets

Lower tracking error core building blocks, and dynamic factor and thematic rotation strategies

ALTERNATIVES

Diversification with uncorrelated alpha

Seeking pure alpha for diversification and consistent returns across market environments

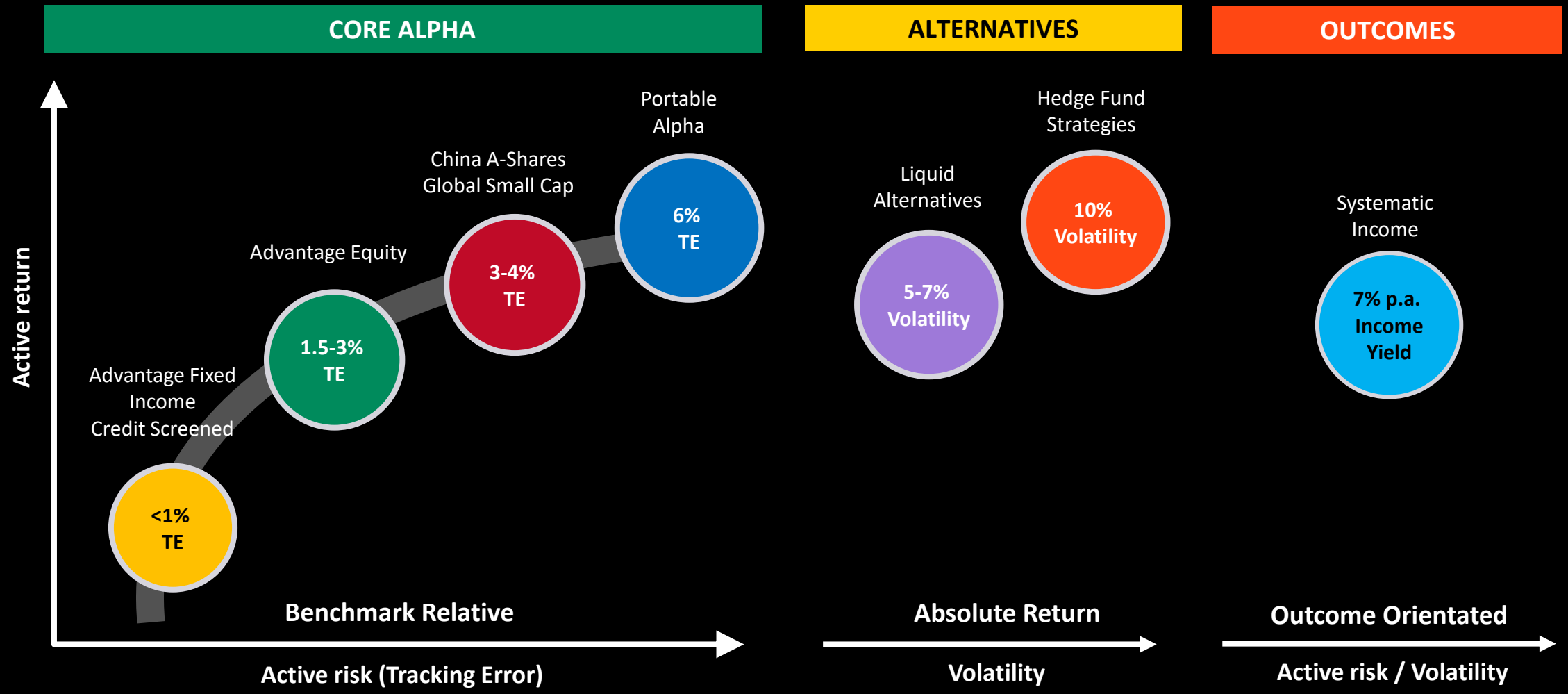
OUTCOMES

Aim to achieve specific outcomes

- Income
- Shariah
- ESG / Sustainability
- Defensive

There is no guarantee that a positive investment outcome will be achieved. Risk management cannot fully eliminate the risk of investment loss. Diversification and asset allocation may not fully protect you from market risk.
Source: BlackRock, as of 31 December 2025. For illustrative purposes only and subject to change.

Systematic strategy types



This information demonstrates, in part, the firm's Risk/Return analysis. This material is provided for informational purposes only and is not intended to be investment advice or a recommendation to take any particular investment action. Risk and return targets can be changed at the discretion of the investment manager, and there is no guarantee the target will be met.
Source: BlackRock. As at 31 December 2025. For illustrative purposes only.

with

Human ~~against~~ machine

Deep expertise

Differentiated insights

Diverse thought

Vast scale

US$390bn

in assets under management*

40+

years of investing*

220+

Portfolio Managers, Analysts, Researchers, and Technologists*

*Across equity, fixed income, multi-asset, and alternatives. As of 31 December 2025 Source: BlackRock Systematic.

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CBDH0125A/S-4150398-20/26

Deep expertise

Differentiated insights

Diverse thought

Vast scale

1000+

Alpha signals

300+

Alternative data sources

50+

new alpha signals each year*

*Average annual number of signals added over past 12 years. As of 31 December 2025. Source: BlackRock Systematic.

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CBDH0125A/S-4150398-21/26

Deep expertise

Differentiated insights

Diverse thought

Vast scale

50%

Of the team with degrees outside of finance/economics

25+

Languages spoken

20+

Nationalities represented

*Across equity, fixed income, multi-asset, and alternatives. As of 31 December 2025 Source: BlackRock Systematic.

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CBDH0125A/S-4150398-22/26

Deep expertise

Differentiated insights

Diverse thought

Vast scale

15,000+

Global equities

3000+

Global credit issuers

45+

Global developed and emerging markets

*Across equity, fixed income, multi-asset, and alternatives. As of 31 December 2025. Source: BlackRock Systematic.

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CBDH0125A/S-4150398-23/26

In the age of AI, Systematic investing is becoming mainstream – this is "Next Gen Active"

Risk Warnings

Capital at risk. The value of investments and the income from them can fall as well as rise and are not guaranteed. Investors may not get back the amount originally invested.

Past performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy.

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