

The difference between  
theoretical and feasible is **action**



Make it better



Make it faster



Make it stronger

# Making the customer experience better

ATTRACT,  
ENGAGE, RETAIN

MAKE IT  
PERSONAL

PREDICT CUSTOMER  
NEEDS...AND DELIVER

## Making the customer experience better

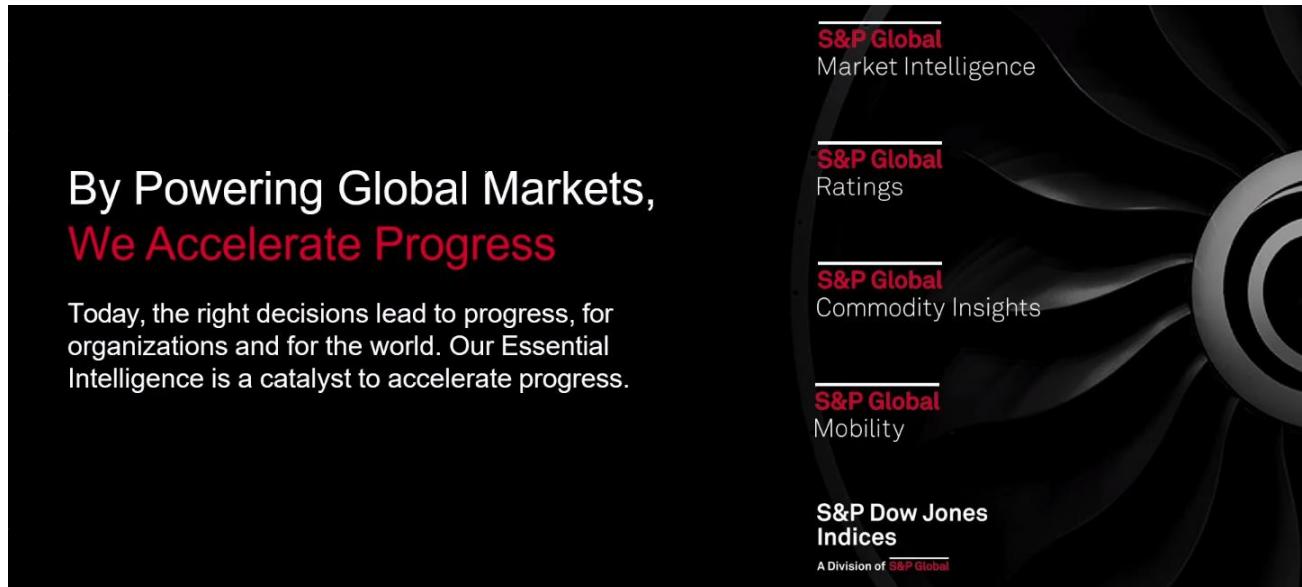


AWS  
re:Invent

INNOVATION TALKS

# Sally Moore

EVP, Global Head of Strategy,  
M&A and Partnerships, S&P Global



# By Powering Global Markets, We Accelerate Progress

Today, the right decisions lead to progress, for organizations and for the world. Our Essential Intelligence is a catalyst to accelerate progress.

## Investing for the future

**100+ years**  
of history spanning key industries

>35,000  
employees across the globe

>10,000  
data scientists & content specialists

**5,000**  
unique and proprietary data sets

>100K  
customers in 190 countries



**TRANSFORMING  
MARKETS**

TECHNOLOGY  
INNOVATION

**Connecting global scale and deep market understanding to deliver customer value**

## Our Strategy

Grow & Innovate

Data & Technology

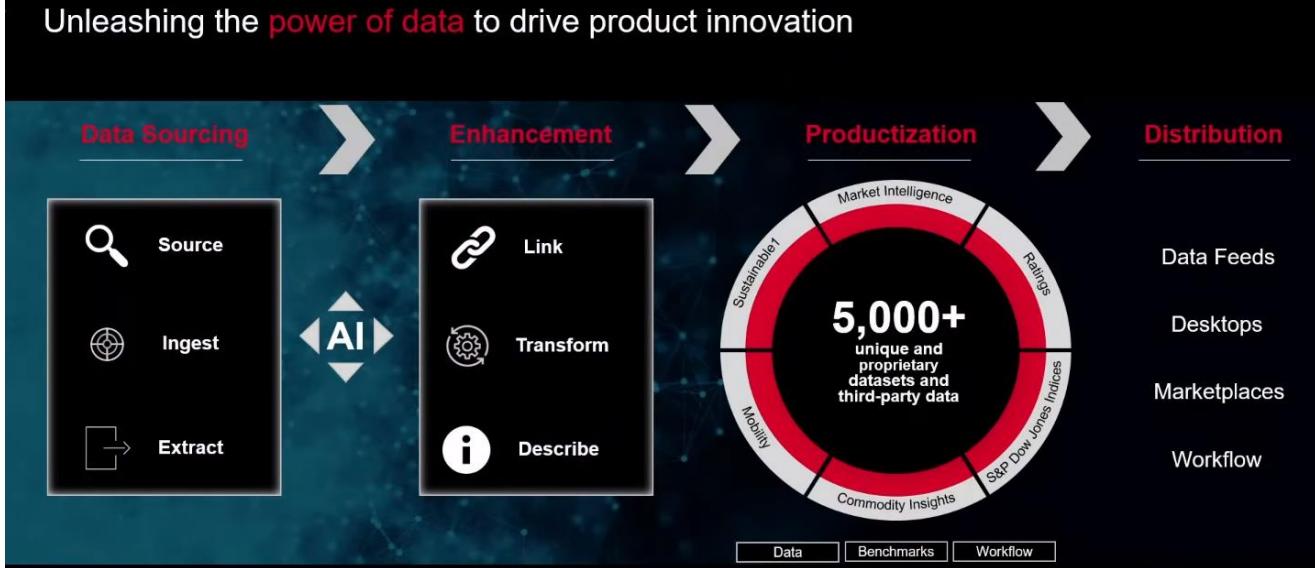
Customer at the Core

Lead & Inspire

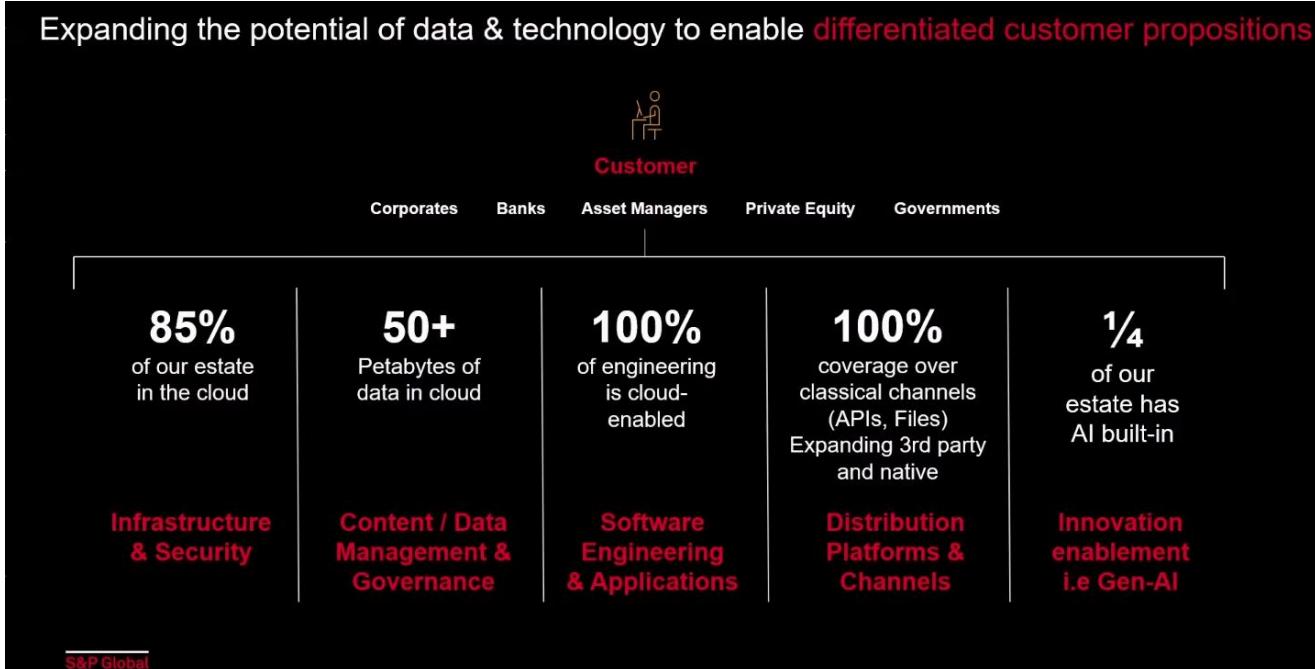
Execute & Deliver



## Unleashing the power of data to drive product innovation



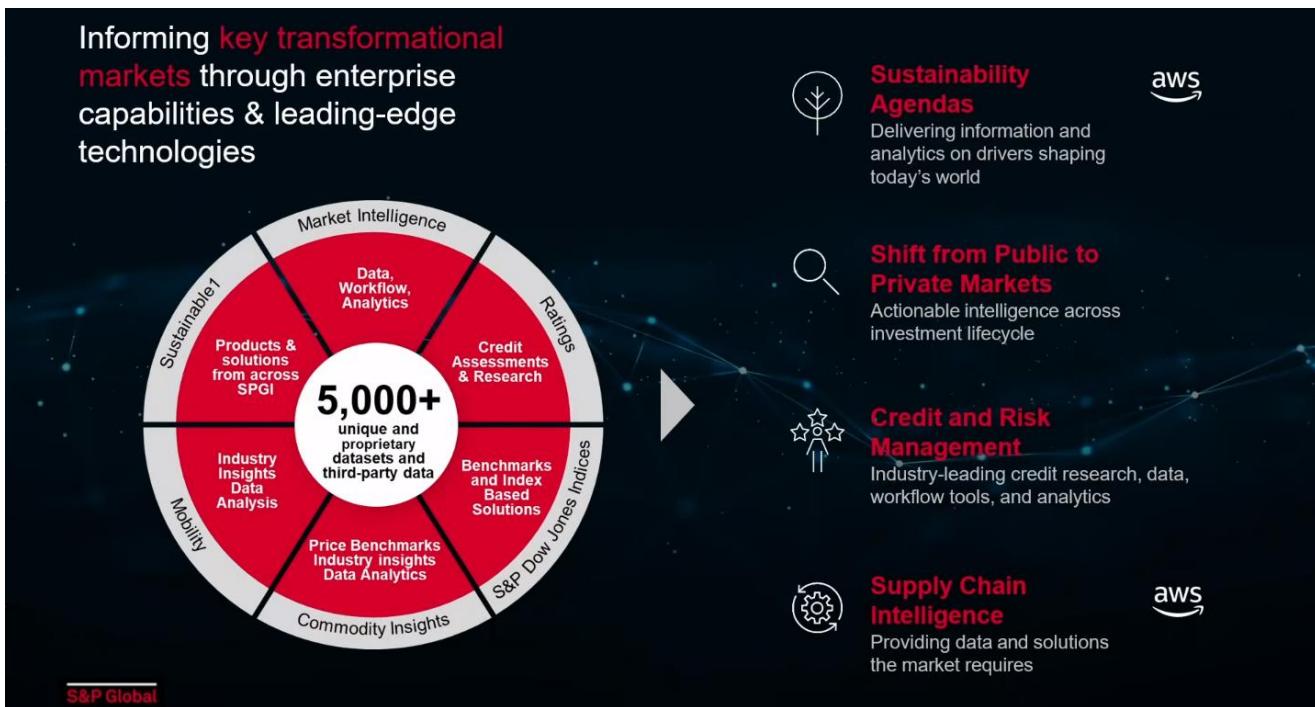
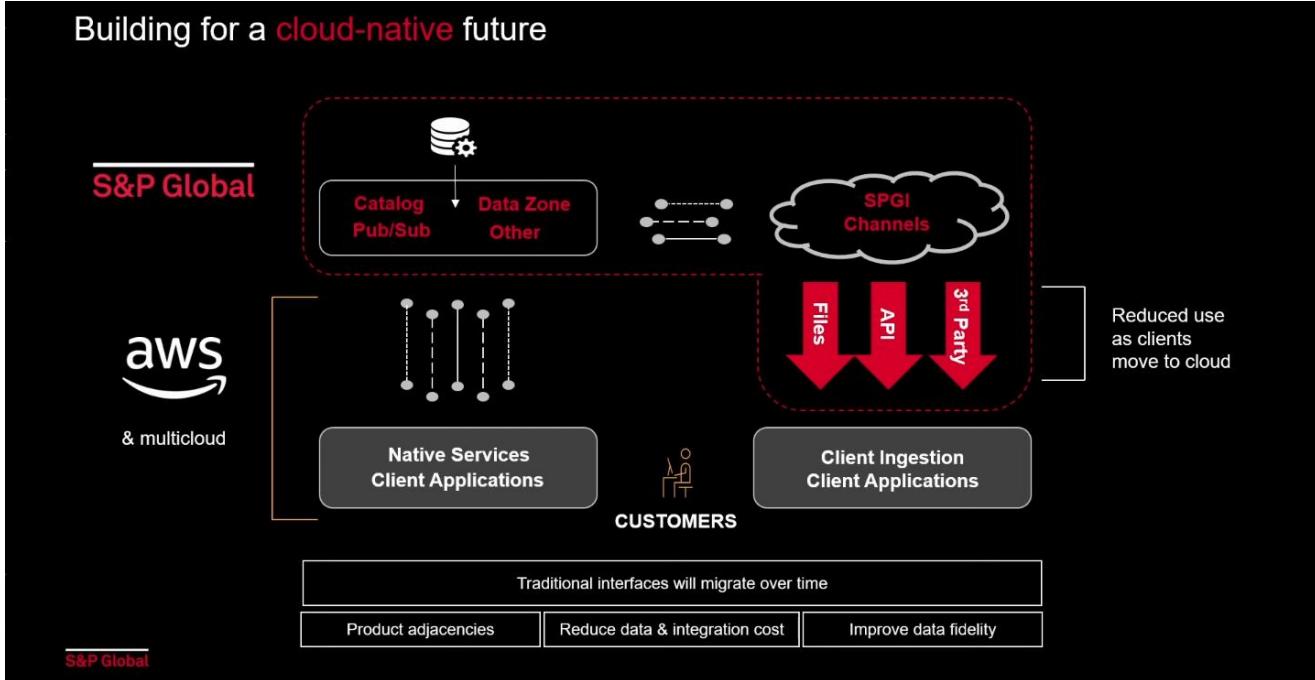
Expanding the potential of data & technology to enable differentiated customer propositions



S&P Global

A look ahead...

## Building for a **cloud-native** future



## Generative AI: fueling new value creation

50+ GenAI POCs



Accelerators /  
LABS

KENSHO

Technology  
Partners

## Productivity

Process optimization  
Document processing  
Summarization



## Customer experience

Chatbots  
Virtual assistants  
Content Personalization



## New Insight

Data to insights  
Differentiated solutions  
Predictive analytics



## ChatIQ



A primary source of efficient data retrieval and workflow acceleration

- Built on Capital IQ Pro: ~325K users
- A flexible **one-stop workflow tool**
- Smart search results, key documents, summaries, visualizations
- Iterative client experience with generative AI specialist tools integrated in the platform

Examples of  
functions

- Analyze markets
- Discover documents
- Find M&A & investment targets



# Turning information into insights faster

TAKE "BIG DATA" FROM CONCEPT TO REALITY

IMPLEMENT MACHINE LEARNING AT SCALE

MAKE INFORMED DECISION MAKING EASIER

# Turning information into insights faster



BBVA

Betterment

Bloomberg

BMO

BRIDGEWATER

Broadridge

DEUTSCHE BÖRSE GROUP

EQUIFAX

Fannie Mae

FINRA

Goldman  
Sachs

Jefferies

JPMORGAN CHASE &amp; CO.

JPX



MOODY'S

Morgan Stanley

MORNINGSTAR

MUFG

Munich RE

Paytm

Resolution Life

Robinhood

ROCKET  
Mortgage

Sun Life

THOMSON REUTERS

Trumid

USAA

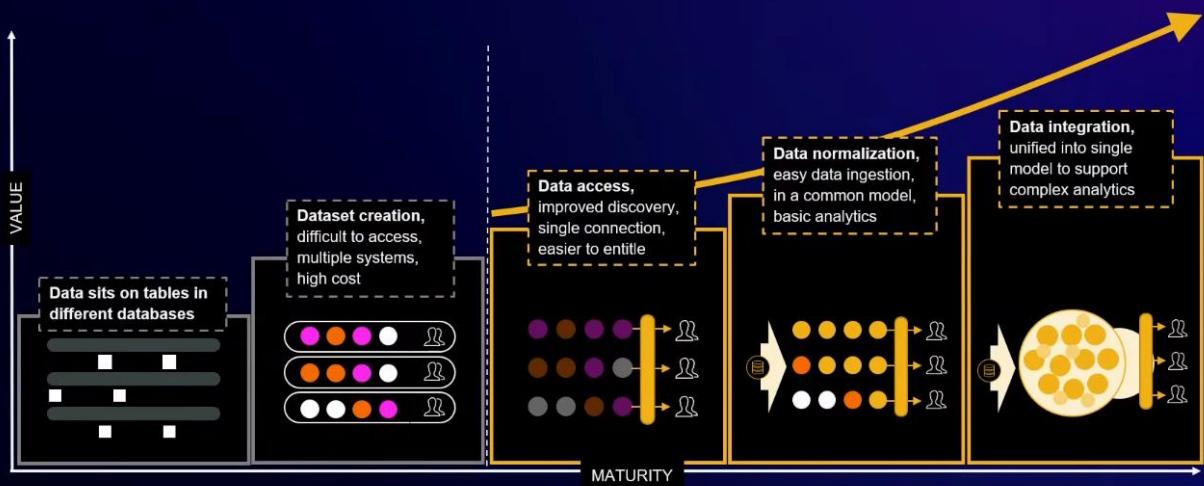
Vanguard

INNOVATION TALKS

## Gerard Francis

Head of Fusion Data Solutions, JPMorgan Chase & Co.

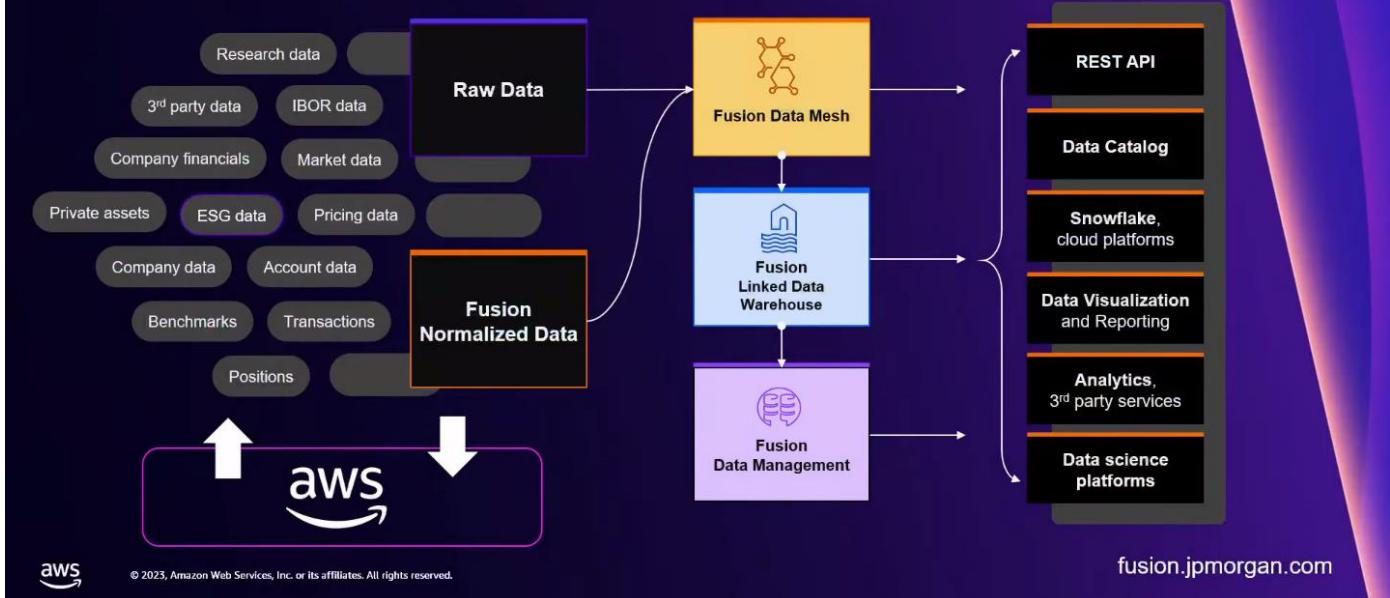
### How institutional investors are evolving their data and analytics capabilities



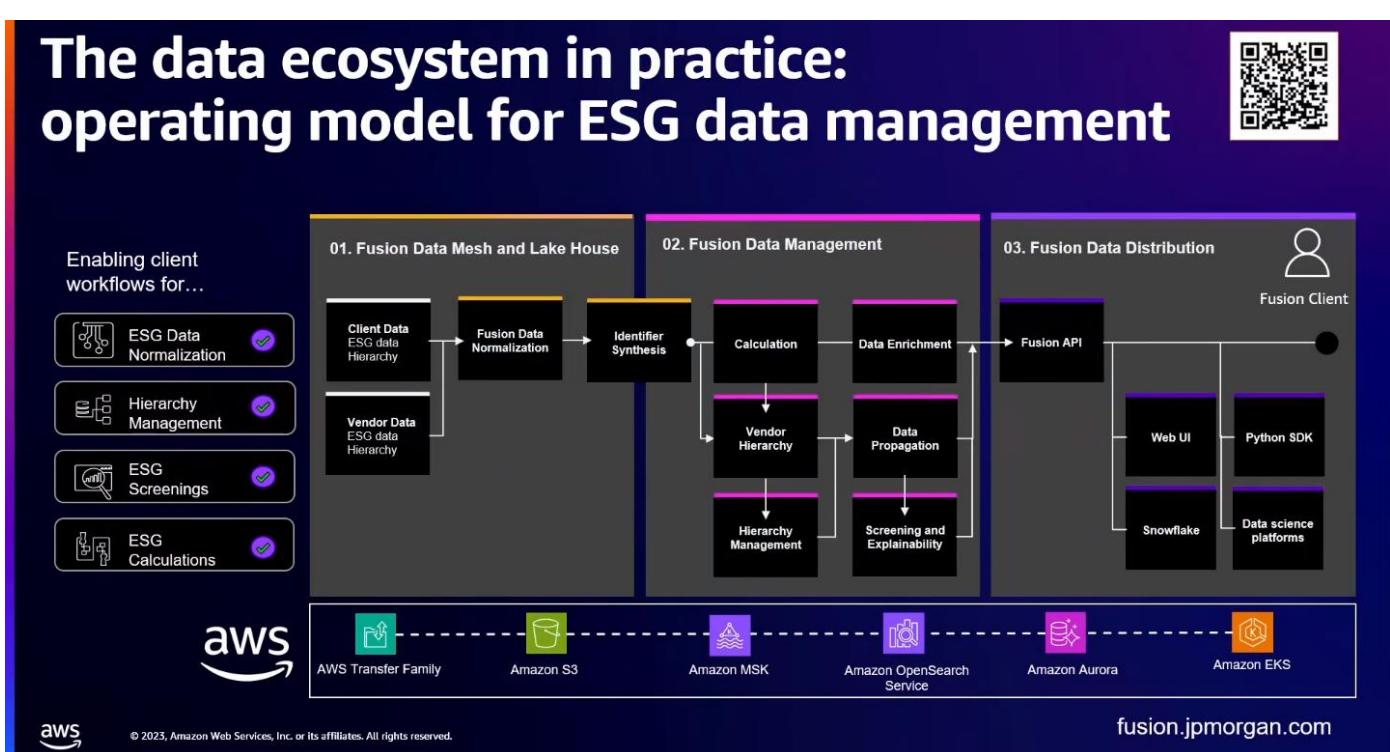
© 2023, Amazon Web Services, Inc. or its affiliates. All rights reserved.

[fusion.jpmorgan.com](https://fusion.jpmorgan.com)

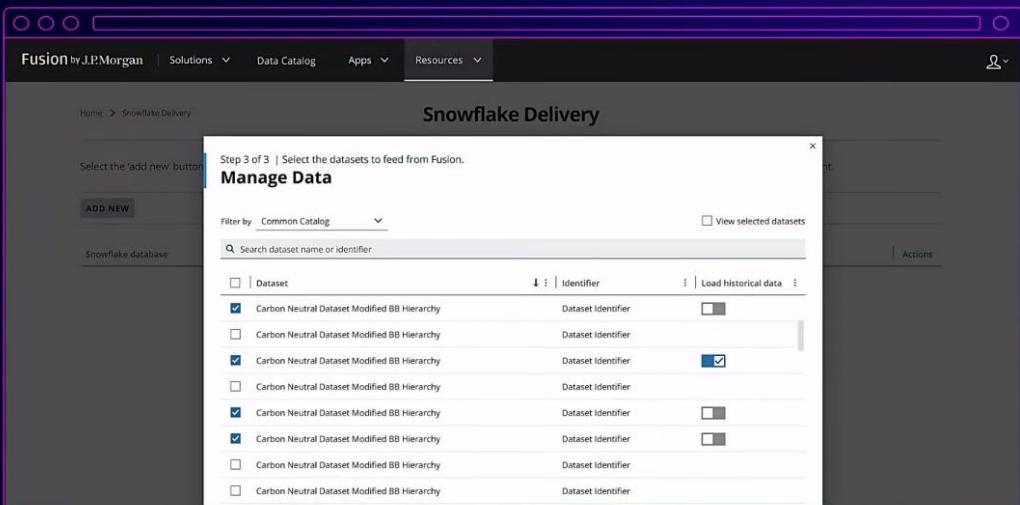
# Our approach: creating a unified and scalable data ecosystem



## The data ecosystem in practice: operating model for ESG data management



# Extract and consume the data directly at any point using REST API, Jupyter Notebooks, or Snowflake

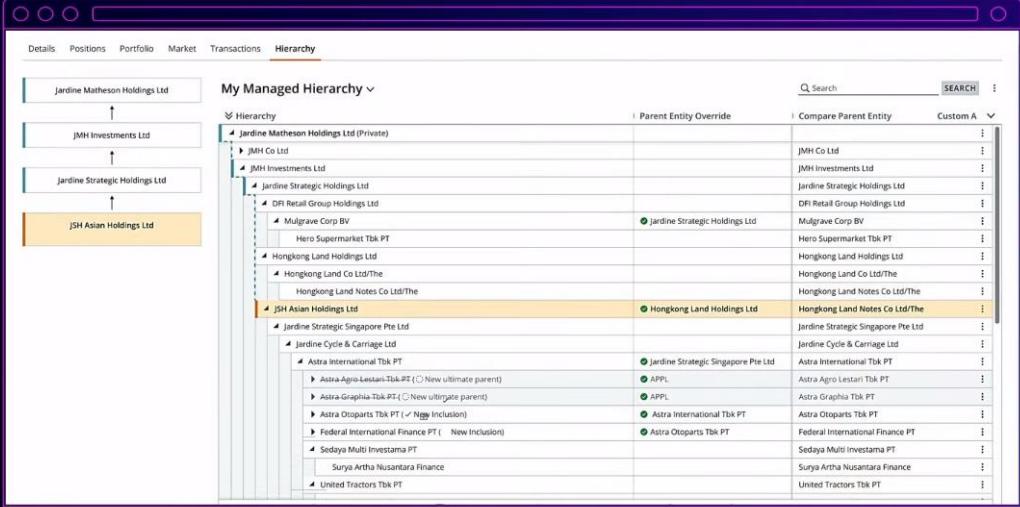


The screenshot shows the 'Snowflake Delivery' step 3 of 3. The user is selecting datasets to feed into Fusion. A list of datasets is shown, with several checkboxes checked for 'Carbon Neutral Dataset Modified BB Hierarchy'. The interface includes a search bar, filter dropdowns, and a 'View selected datasets' button.

© 2023, Amazon Web Services, Inc. or its affiliates. All rights reserved.

[fusion.jpmorgan.com](https://fusion.jpmorgan.com)

## Deep dive into the relevant corporate hierarchies or create your own with Hierarchy Management



The screenshot shows the 'Hierarchy' tab. On the left, a tree view titled 'My Managed Hierarchy' shows the structure of managed entities. On the right, a table provides details for 'Parent Entity Override' across various entities, such as JMH Co Ltd, JMH Investments Ltd, and Hongkong Land Holdings Ltd.

© 2023, Amazon Web Services, Inc. or its affiliates. All rights reserved.

[fusion.jpmorgan.com](https://fusion.jpmorgan.com)

# Define your investible universe and manage multiple rules easily with ESG Screening



The screenshot shows the 'New Universe' configuration screen. On the left, there's a 'Properties' panel with fields for 'Display name (Required)' (set to 'New Universe') and 'Fusion class' (set to 'Company'). Below that is a 'Description' field with a character count of 0/200. On the right, the 'Screening Rules' section is open, showing a table with columns for 'And / Attributes', 'Operator', 'Type', and 'Results'. The table contains several rows of screening logic, such as 'Country = Equals United States of America' and 'Scope 2 Greenhouse Emissions > Greater than 0'. A date range selector for 'Company Incorporation Date' is also visible.

# Build custom metrics using your own parameters with ESG Calculations

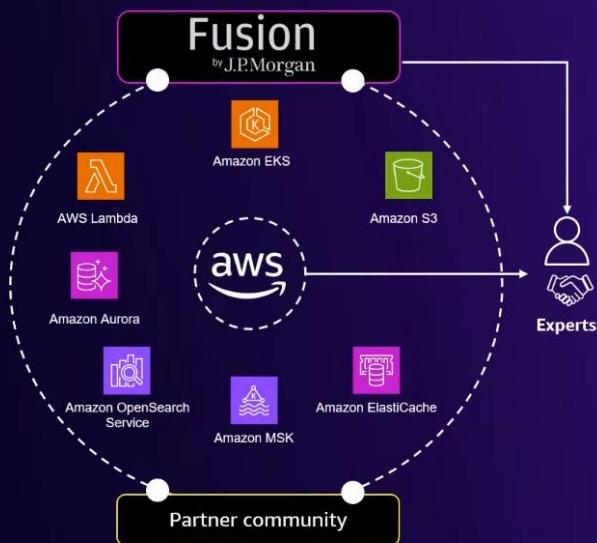


The screenshot shows the 'VENDOR CARBON INTENSITY GAS EMISSIONS' configuration screen. On the left, there's a 'Fusion Class (Required)' dropdown set to 'Company' and a 'Template' dropdown set to 'Waterfall Logic'. Below that is a 'Available Resources' section with a search bar. The main area features a 'Waterfall Logic' editor with three steps: 'Begin with Vendor Scope 1', 'Then Vendor Scope 2', and 'Then Vendor B Scope 1 Carbon'. To the right, a detailed configuration panel for 'Attribute: Vendor Scope 2' is displayed, containing fields for 'Title' (Vendor Scope 2), 'Identifier' (vendor\_scope\_2\_string), 'Description' (Tons), 'Data Type' (String), 'Fusion Class' (Company), 'Domain' (J.P. Morgan), 'Attribute Level' (Normalized), and 'Data Publisher' (J.P. Morgan Fusion).

# Why AWS for Fusion by J.P. Morgan?



## A reliable, trusted collaborator at the nucleus of the Fusion Platform



© 2023, Amazon Web Services, Inc. or its affiliates. All rights reserved.

[fusion.jpmorgan.com](https://fusion.jpmorgan.com)

# See it in action

[fusion.jpmorgan.com](https://fusion.jpmorgan.com)



< > G https://fusion.jpmorgan.com

⋮

Fusion by J.P.Morgan

Solutions

Data Catalog

FUSION LOGIN

## Securities Services Data Mesh

Access your Custody, Fund Accounting and Middle Office data via API and Snowflake.

LEARN MORE >



## Sustainable Investment Data Solutions

Consistent ESG data from multiple sources. Screening, Hierarchy Management, Calculations.

LEARN MORE >



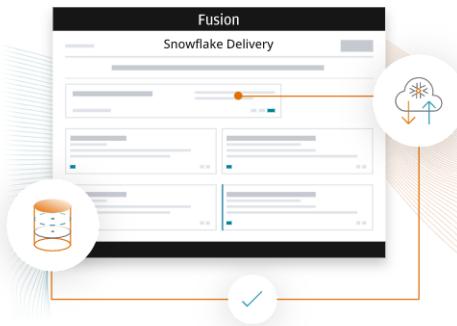
Fusion is a cloud-native data solution for institutional investors, providing end-to-end data management, analytics, and reporting across the investment lifecycle. Seamlessly integrate and combine data from multiple sources into a single data model that delivers the benefits of scale and reduced costs, along with the ability to more easily unlock timely analysis and insights.



[video transcript]

*"We have found the Fusion platform to provide a stable, modern and reliable way to connect into the J.P. Morgan's Securities Services data universe. We were able to establish secure connectivity between Fusion and our proprietary code base within hours. Storebrand is looking forward to expanding the use of Fusion as the platform extends to new areas."*

Storebrand Asset Management



## Access the Securities Services data you need anytime, anywhere.

Retrieve critical investment data from J.P. Morgan's Custody, Fund Accounting and Middle Office services, using modern distribution channels, including the Fusion API, SDK, Snowflake and Jupyter Notebook. Fusion streamlines the data journey, so you can extract more value from your data and deliver better results.

REST API   Python Library   Java SDK   Python SDK   Jupyter Notebooks  
Snowflake Tables   Developer Toolkit   App Notifications

[LEARN MORE >](#)

## Complete the gaps in your ESG data with Hierarchy Management.

When managing Sustainable Investment data, propagation of metrics across a company hierarchy is a common practice. However depending on the use case, the rules for hierarchy-based metric propagation vary.

Fusion provides a controlled framework to both manage different hierarchies and propagate metrics based on the appropriate hierarchy.

| Entity Name                     | Parent Entity Name          |
|---------------------------------|-----------------------------|
| Jardine Matheson Holdings Ltd   | jardine Matheson Holding... |
| JMH Investments Ltd             | jardine Matheson Holding... |
| Jardine Strategic Holdings      | jardine Matheson Holding... |
| DR Retail Group Holdings        | jardine Matheson Holding... |
| Mandarin Oriental International | Mandarin Oriental Hotel     |
| Hongkong Land Holdings          | jardine Ma                  |
| JSW Asian Holdings              | jardine Ma                  |
| Jardine Cycle & Carriage        | jardine Ma                  |
| Astra International Tbk PT      | jardine Matheson Holding... |

[LEARN MORE >](#)

### Learn more

View sample data sets and notebooks and learn more about data providers

[ENTER YOUR EMAIL](#)



**CONTACT US**

**Talk to our team about your data needs**

First Name *(Required)*

---

Last Name *(Required)*

---

Corporate Email *(Required)*

---

Role *(Required)*

---

Country *(Required)*

---

How can we help? *(Required)*

---

Country *(Required)*

---

How can we help? *(Required)*

---

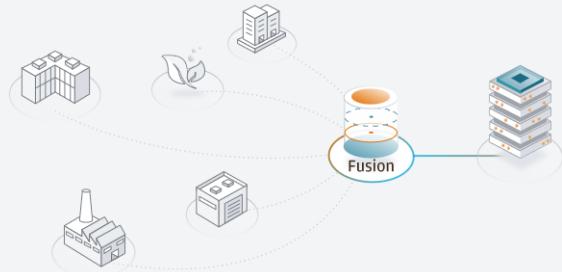
*(Required)*

By submitting this form, I confirm that I am an Institutional or Professional Client and agree to be contacted by J.P. Morgan. I have read the privacy policy and agree to the terms of use.

**SUBMIT**

Need help? Contact [fusion@jpmorgan.com](mailto:fusion@jpmorgan.com)

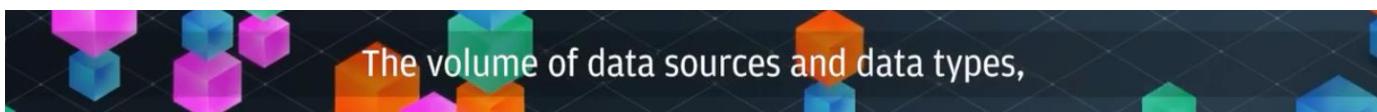
Registered trademarks



J.P.Morgan



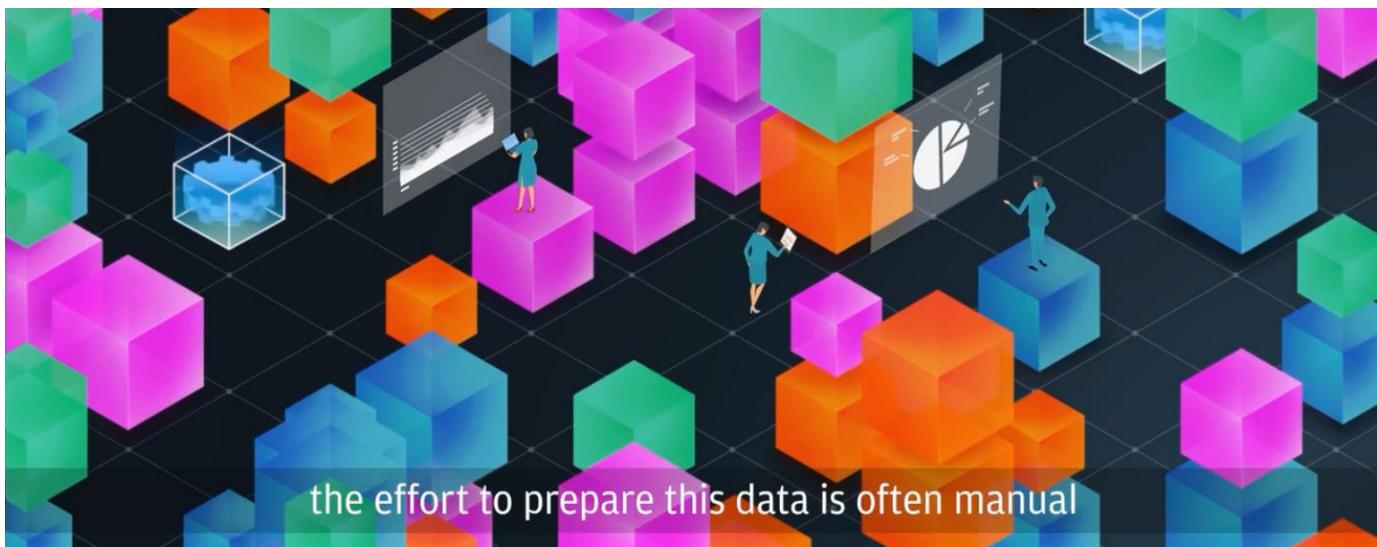
is critical to solving the challenges,



The volume of data sources and data types,



meet regulatory demands and service investors,



the effort to prepare this data is often manual



Introducing Fusion by J.P. Morgan,

our next generation cloud data platform,



that delivers data management and reporting solutions,

across the investment life cycle.



and combine it into a common data representation,

ready to be consumed anywhere, anytime, and in any format,

without additional data preparation.

The new data catalog enables you to easily discover data,

that is immediately usable,



Fusion supports an open architecture,

with flexible distribution,



including partnerships with cloud and data providers,

all managed by J.P. Morgan data experts.

Improve decision-making and gain efficiencies,

with expanded access to the data you need,

at the highest quality and consistency you expect,



while reducing the cost to organize and manage that data.



Discover a unified data experience with Fusion.

# Fusion

by J.P.Morgan

[www.jpmorgan.com/fusion](http://www.jpmorgan.com/fusion)

J.P. Morgan is a marketing name for the Securities Services businesses of JPMorgan Chase Bank, N.A. and its affiliates worldwide.

JPMorgan Chase Bank, N.A., organized under the laws of U.S.A. with limited liability is regulated by the Office of the Comptroller of the Currency in the U.S.A., as well as the regulations of the countries in which it or its affiliates undertake regulated activities. For additional regulatory disclosures regarding J.P. Morgan entities, please consult: [www.jpmorgan.com/disclosures](http://www.jpmorgan.com/disclosures).

These materials have been prepared exclusively for the internal use of the J.P. Morgan's clients and prospective client to whom it is addressed (including the clients' affiliates, the "Company") in order to assist the Company in evaluating, on a preliminary basis, certain products or services that may be provided by J.P. Morgan. These materials have been provided for discussion purposes only and are incomplete without reference to, and should be viewed solely in conjunction with, the oral briefing provided by J.P. Morgan. These materials may not be disclosed, published, disseminated or used for any other purpose without the prior written consent of J.P. Morgan.

If the recipient of this communication is in Switzerland, the information provided in this [document/material/website] is for information purposes only and does not constitute an offer, a solicitation, or a recommendation, to purchase any financial instruments. Where applicable, the information provided in this [document/material/website] constitutes an advertisement (within the meaning of art. 69 of the Swiss Financial Services Act ("FinSA")) for the financial services referred to herein.

The statements in this presentation are confidential and proprietary to J.P. Morgan and are not intended to be legally binding. In preparing this presentation, J.P. Morgan has relied upon and assumed, without independent verification, the accuracy and completeness of all information available from public sources. Neither J.P. Morgan nor any of its directors, officers, employees or agents shall incur any responsibility or liability whatsoever to the Company or any other party in respect of the contents of this document or any matters referred to in, or discussed as a result of, this presentation. J.P. Morgan makes no representations as to the legal, regulatory, tax or accounting implications of the matters referred to in this document. J.P. Morgan may hold a position or act as market maker in the financial instruments of any issuer discussed herein or act as advisor or lender to such issuer.

The products and services described in this document are offered by JPMorgan Chase Bank, N.A. or its affiliates subject to applicable laws and regulations and service terms. Not all products and services are available in all locations. Eligibility for particular products and services will be determined by JPMorgan Chase Bank, N.A. and/or its affiliates.

©2022 JPMorgan Chase & Co. All rights reserved.

# Making mission-critical applications stronger



## Making mission-critical applications stronger



# Tal Cohen

President of Market Platforms, Nasdaq

## Our cloud journey

Pre-2020

2020-2021

2022 and beyond

**Early exploration  
Full conviction**

**Accelerating  
modernization**

**Industry-wide  
transformation**

## Center of Gravity



Market  
infrastructure



Surveillance



Regulatory tech



Trade  
management



Anti-financial  
Crime



Data and  
analytics

# Unleash the power of AI



On the business



In the product

