

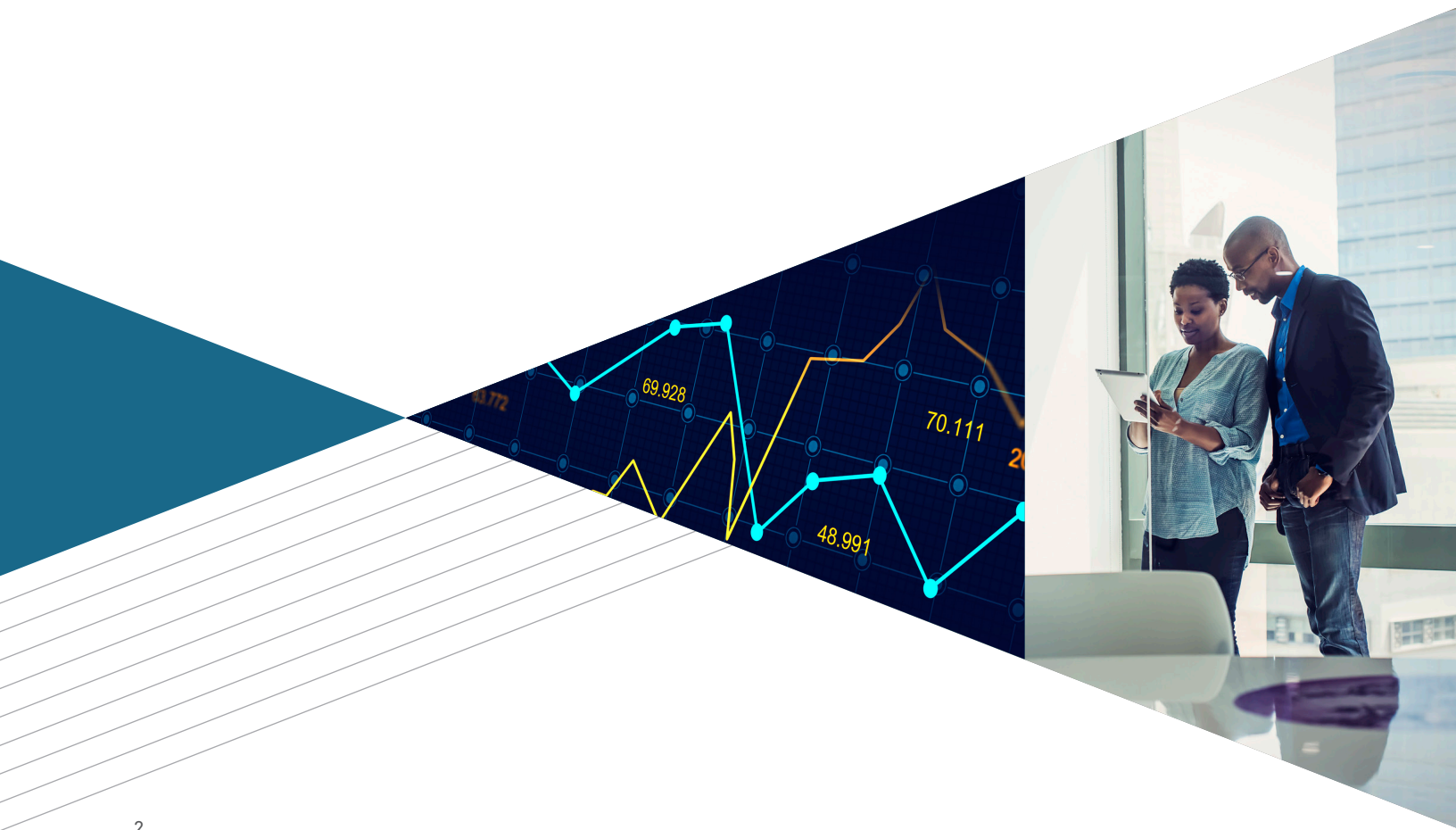
From Alternative *to Mainstream*

Going and Growing Digital

The background features a dark teal gradient. In the lower half, there are several overlapping geometric shapes: a large light grey triangle on the left, a smaller orange triangle pointing right in the center, and a large white triangle at the bottom. A dynamic digital data stream of glowing blue and cyan lines curves across the bottom right, suggesting a path or flow.

Table of Contents

Foreword	3
Chapter 3: Going and Growing Digital	4
The Cloud Is the Foundation	6
The Unseen Value in Data	8
Outsourcing Unlocks Opportunity	14
Conclusion	16



Foreword

Earlier in 2021, BNY Mellon surveyed 100 institutional investors and 100 alternative asset managers about their current and future alternative asset allocations and their views on various sub-asset classes. We conducted this research in conjunction with Mergermarket. We also interviewed alternative asset managers on their current and future priorities to provide a perspective on whether the two sides are moving in the same direction.¹

The resulting report, *From Alternative to Mainstream*, reveals alternatives as an increasing component of investors' efforts to diversify their portfolios, minimize volatility and seek out resilience and increased returns.

In the first two chapters of *From Alternative to Mainstream*, we provided in-depth data and analysis on alternative asset classes ([Chapter 1: Alternatives Ascending](#)) and asset managers' strategic priorities for pursuing growth ([Chapter 2: Getting Ready for Growth](#)). In this next chapter, we explore the critical role played by data, technology and outsourcing as alternatives move to the mainstream.

¹Note: This report is the latest study on alternative investments from BNY Mellon. The first was in 2016, *Split Decisions* and the second, *Race for Assets*, was conducted in 2017. These studies portray an investor base clamoring for alternatives as a means of generating strong returns at a time of continued low interest rates and yield.

Chapter 3:

Going and Growing Digital

Data, technology and outsourcing are the future of asset management. These imperatives will reshape alternatives as they move towards the mainstream.

The Digital Shift

Digital transformation is sweeping across industries the world over. Alternative asset management is no exception. Well before the pandemic, many alternative asset managers started shifting towards digital and data management systems to drive efficiencies and innovation. In our research, we focused on why both short-term and long-term pressures make the adoption of new technologies more urgent than ever.

Nevertheless, paper-based systems remain commonplace in some parts of the alternatives universe, such as real estate. It is still not unusual for private equity firms to rely on spreadsheets for data management and analysis. Many of our survey respondents highlight the urgency of adopting new technologies, with the pandemic only increasing the pressure to digitalize.

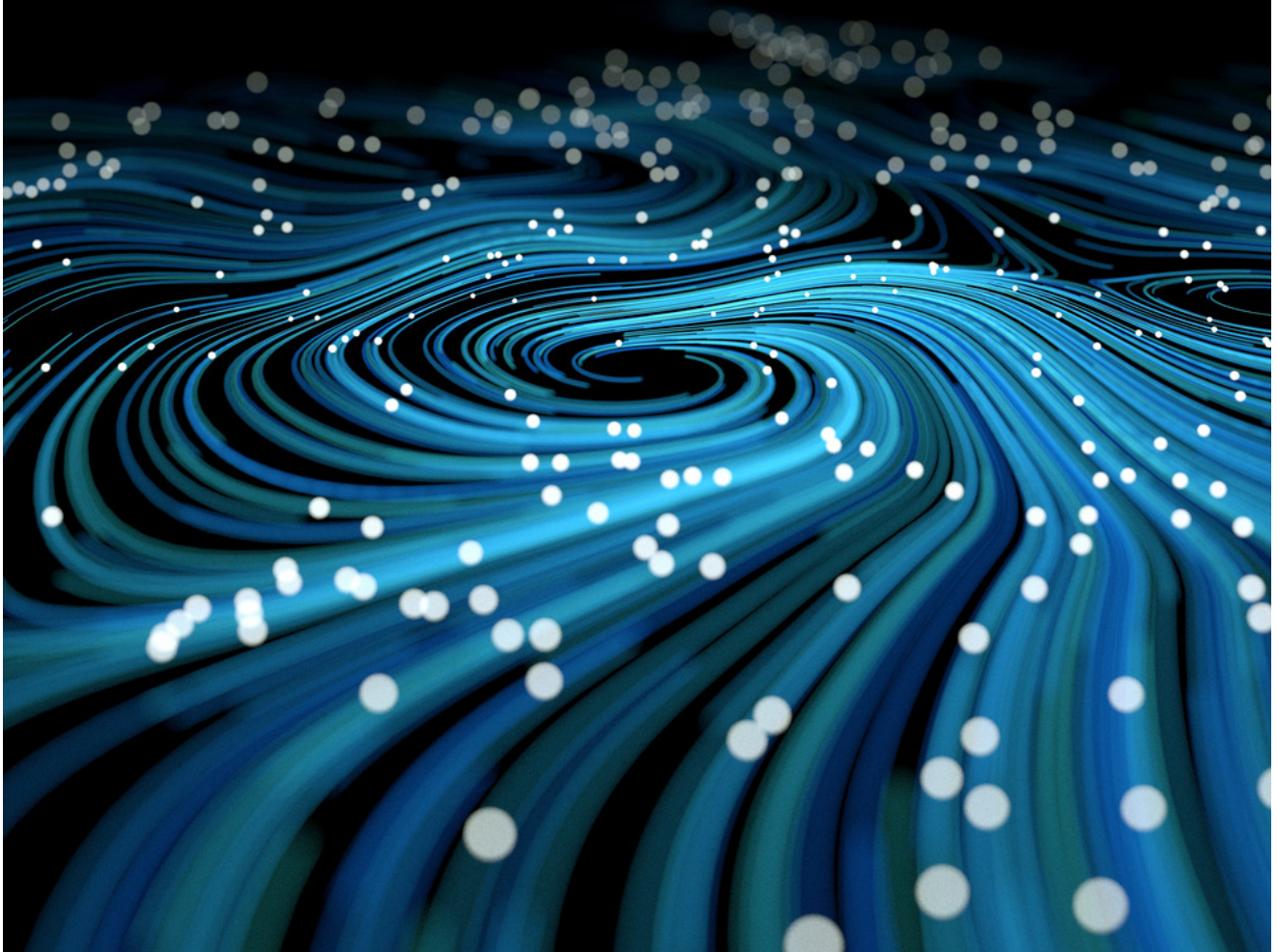
For instance, in situations where physical or “wet” signatures were once the norm, such as filing tax-related forms, digital signatures are now taking over, driven by restrictions on travel and in-person contact. Regulators are expected to expand the use of e-signatures and even make such changes permanent.

More broadly, mastering digital technologies is essential to industry priorities, especially by reducing operating model costs, creating a data management model to support growth and supporting risk management analysis.²

² See Chapter 2: *Getting Ready for Growth* for further context on these and other strategic priorities.

“The pace of digital innovation has increased substantially. With many firms in the sector opting for digital transformation strategies, it has become evident that we cannot do without these up-to-date systems.”

—Managing Director (Real Estate Fund), United States



The Cloud Is *the Foundation*

Alternative asset managers have several types of technology on their minds, ranging from cloud computing to more nascent technologies such as blockchain and robotics. Staying on top of developing technology is crucial.

Our parallel study of the broader asset management industry³ finds that increasing adoption of cloud-based solutions is the first step towards digitalization. Almost all respondents in that survey (96%) said they believe cloud computing will drive digital and operational transformation in their organizations.

Quotes from participants in our alternative assets study echo that finding. Cloud computing can serve as a point of departure for organizations as they add new digital services or products and wean themselves off paper-based processes or spreadsheet-based analytics. More broadly, it becomes the foundation for smoother collaboration between staff, a major benefit for large and multinational organizations.

“Innovation has become a huge part of the digital environment. For any purpose or transaction, having the latest digital technology is important for the competitive edge to show.”

—Investment Director, United Kingdom

³ <https://www.bnymellon.com/us/en/insights/asset-management-transformation-is-already-here/survey-research-series-overview.html>



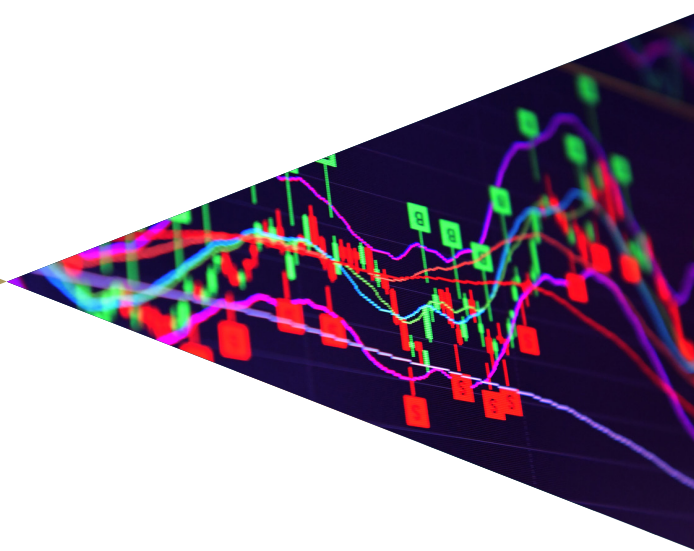
“Cloud technology gives the option of incorporating and aggregating different types of data sets—including unstructured data—and this is particularly valuable to alternative asset managers.”

*—Frances Barney,
CFA, Head of Global
Risk Solutions, BNY Mellon*

The Unseen Value *in Data*

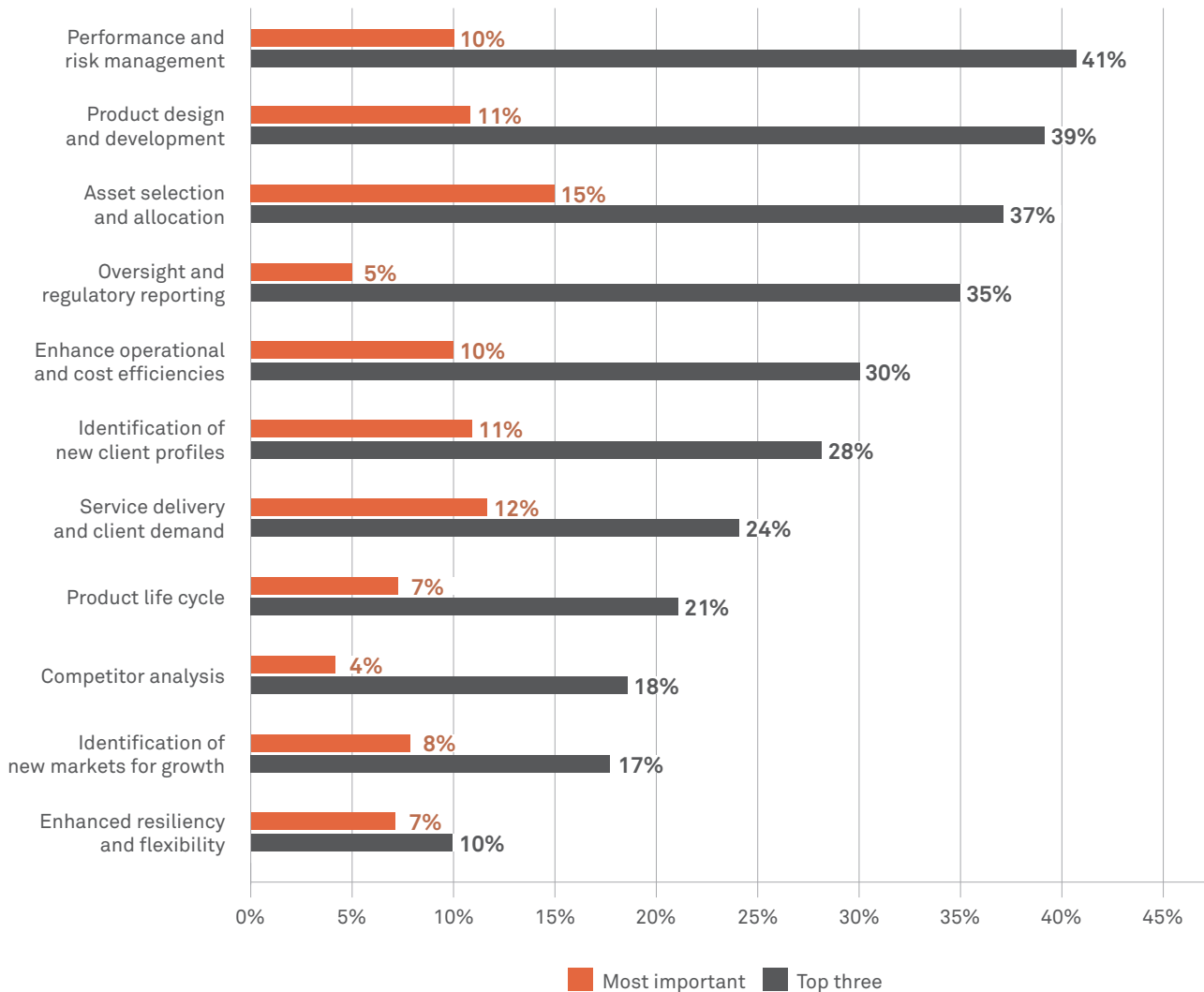
As we found in our broader asset management study², asset managers are trying to harness digital technologies to support a data-centric world while growing and serving their investors with agility. Data is also critical to their performance and risk management and asset selection and allocation functions.

The same is true for alternative asset managers, especially as alternatives continue on their path towards the mainstream. Among alternative asset managers, the top three use cases for data and analytics are performance and risk management, product design and development and asset selection and allocation. These use cases are all core competencies integral to generating returns for investors.



² See Chapter 2: *Getting Ready for Growth* for further context on these and other strategic priorities.

What are your top use cases for deploying data and analytics?



“Data analytics offer asset managers enormous opportunities to streamline their business end-to-end, drive investment performance and assess risk. They will make workflows faster and offer better ways of measuring success from the front right through to the back office.”

**—Kenny King, Managing Director, Asset Servicing,
Global Head of Alternatives, BNY Mellon**

It is increasingly important to ensure that data is accessible across an entire enterprise as alternative asset managers work to derive the greatest value from the data they hold. Wider access, or data democratization, represents a sea change in how organizations distribute data, both within their enterprise and in communications with clients. It requires not only technology solutions but also cultural evolution within organizations.

Still, while the benefits of democratizing data are clear, alternative asset managers have no illusions. Creating the right architecture will be challenging.

Reflecting themes that are common across asset management³, the most-cited obstacle to effective data management for alternative asset managers is the difficulty of aggregating data across fragmented systems, with 48% of survey respondents placing it in their top three challenges (see chart on page 11). In today's environment, there are a plethora of systems used across different fund management functions. This issue is often even more acute in alternatives, where many platforms are necessarily bespoke or specialist.

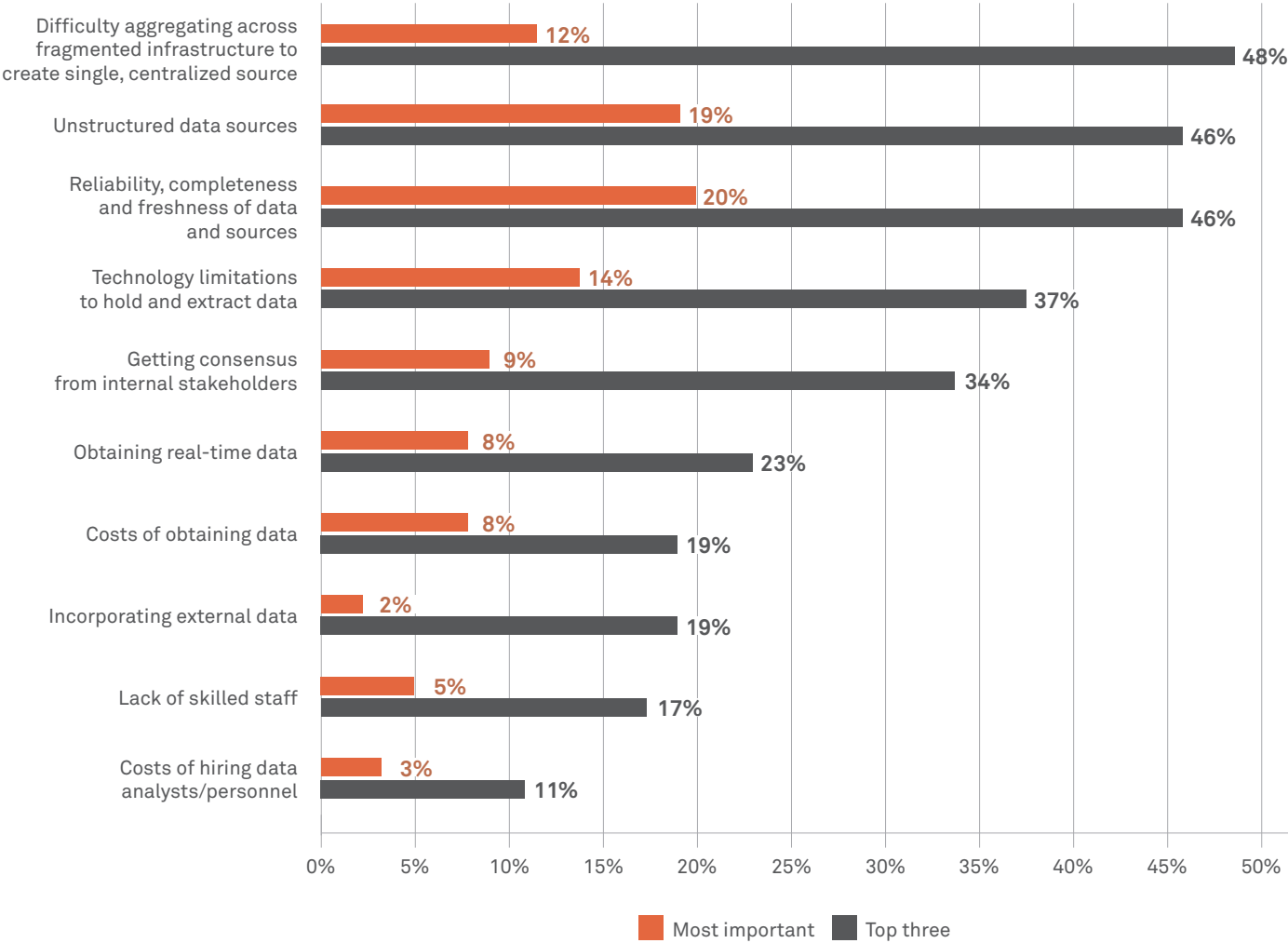
Unstructured data sources and the reliability, completeness and freshness of data are also obstacles to effective data management, with 46% of managers rating both as top three issues (see chart on page 11). Again, alternative asset managers are likely to struggle more than most with this, given that private equity, private debt and real estate rely heavily on unstructured data.

³ <https://www.bnymellon.com/us/en/insights/asset-management-transformation-is-already-here/survey-research-series-overview.html>

“Having a single source of truth is the most important factor in generating data on which we can base decisions. Unless this is present, the data processing and analytical results are not applicable. Data management platforms are also not consistent—they don’t offer the ways of analyzing data we require.”

—Partner (Private Equity Fund), United States

Which of the following are the main barriers to managing data (i.e. collect, store, clean) effectively?

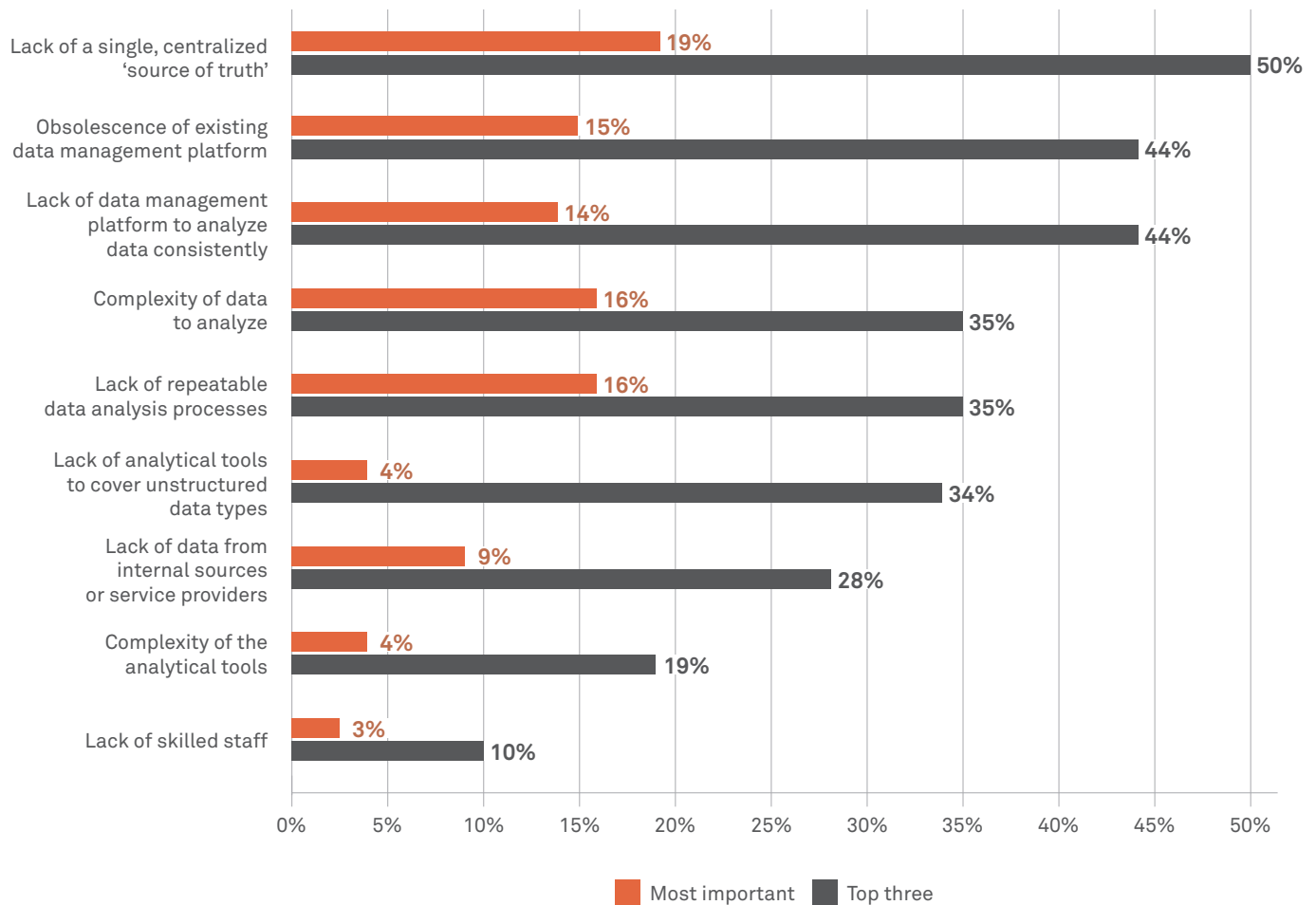


When it comes to extracting meaningful insights from data, alternative asset managers face similar challenges, constraining their ability to make data-driven decisions. Again, lack of a single, centralized source of truth is the biggest such challenge, with half placing it in their top three. They also face issues of obsolescence in their existing data management platform (see chart on page 13).

Given the more bespoke systems that alternatives require, alternative asset managers also flag as challenges the lack of a data management platform to analyze data consistently and the dearth of analytical tools that cover unstructured data types.



Which of the following are the main barriers to extracting meaningful insight from your data?

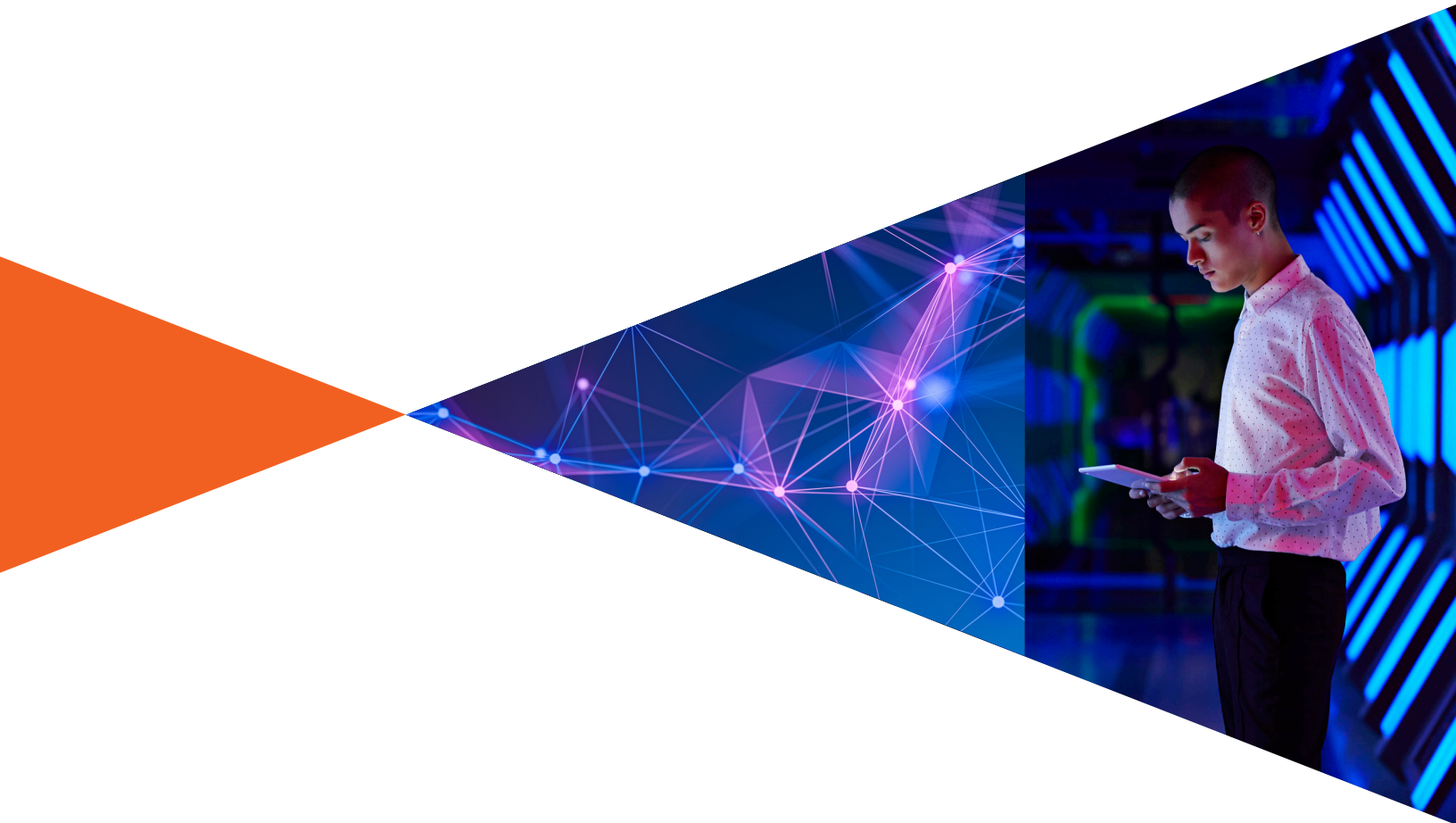


“There are multiple barriers that affect extraction of useful information. Integrating new platforms and solutions into our existing data platform takes time and expertise to complete.”

—Managing Director, Private Equity Fund, South Korea

Unwinding these challenges will require building a single repository of information that simplifies retrieval and gives the right people access to the right information. Common technology solutions include data warehousing or so-called data lakes, which store and manage raw data from multiple sources and in multiple formats, including unstructured data.

However, conversion risks can be high, and the process far from pain-free. A clear view of what the organization is trying to accomplish and access to the right resources and partners are essential to smooth the path.



Outsourcing *Unlocks Opportunity*

Alternative sub-asset classes are at differing points in their outsourcing evolution.

New governance requirements after the Madoff scandal in 2008 drove hedge funds toward more outsourced models earlier than other alternative asset managers. Private equity and real estate, meanwhile, have traditionally kept more functions in-house. However, as they branch out into more complex products, look to scale up and, in some instances, reduce costs, managers of those two sub-asset classes increasingly see outsourcing as a way of removing some of the pain points associated with setup and ongoing operations.

Among those looking to expand their outsourcing relationships, most are looking at risk, compliance and performance monitoring. This development may reflect the concerns around keeping pace with changing regulation that we covered in the previous chapter of this research series².

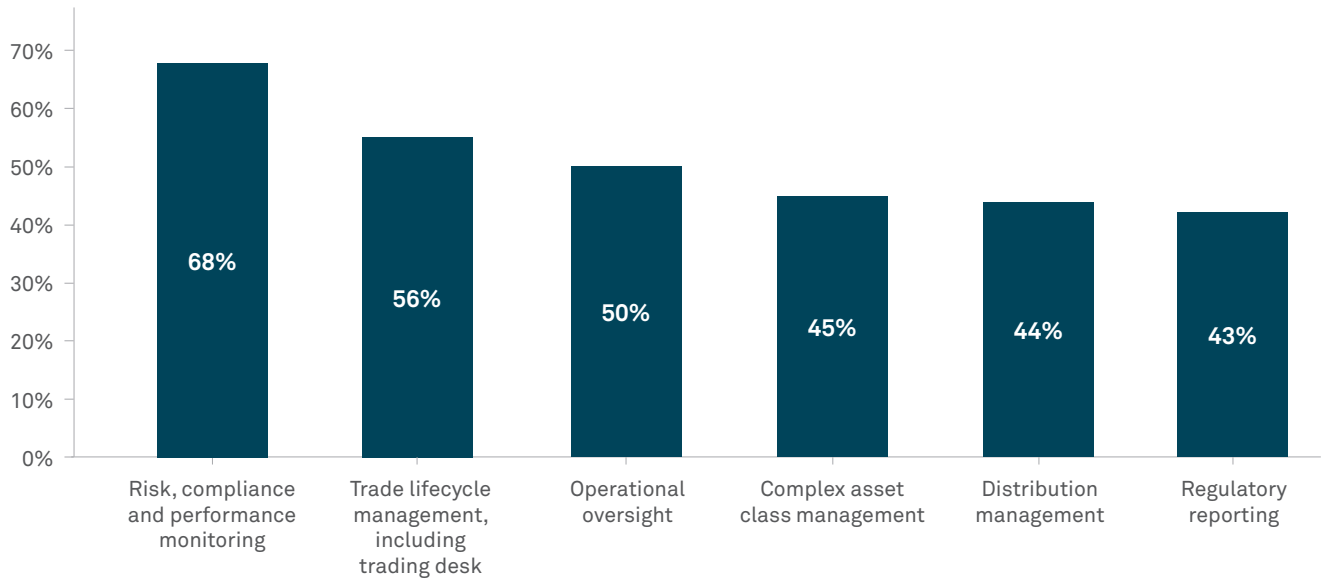
Trade life cycle management, including trading desk, is the second most popular option for outsourcing. Most of these needs are naturally likely to be relevant for hedge funds, which are increasingly looking at shifting traditionally front-office functions to the back and middle office as they focus on enhancing investment performance.

“With the increased opportunities to outsource and lower operations costs, we have to think about what functions we would be ready to take out of house.”

—Managing Director (Real Estate Fund), United States

² See Chapter 2: *Getting Ready for Growth* for further context on these and other strategic priorities.

If you are planning to explore or expand your relationships, in which areas of business are you most likely to outsource?



The move toward digitalization and data management will likely trigger an additional wave of outsourcing across alternatives. As we noted above, performance and risk management are the top use cases for deploying data and analytics technology.

“The industry is changing fast, and there are more opportunities to outsource processes that we lack the time or talent to manage internally.”

—Managing Director, Private Equity Fund, Australia

“Outsourcing in private markets is often less about removing cost and more about futureproofing to deal with increasing fund complexity by having access to the right technology, providing asset managers with the ability to launch new product and target new geographies.”

*—Dermot Finnegan, Global Head of Private Markets
Fund Administration, BNY Mellon*



Conclusion

Data, technology and outsourcing are the future of asset management for alternatives as well as the broader industry, and mastering digital technologies is essential to managers' priorities.

In the quest for growth and increased AUM, alternative managers will need to adapt with a sharpened focus on data management, analytics and digitalization. Only the fittest will survive by establishing the right architecture for the future.

Three key takeaways emerged from our research:

- The pandemic has increased the pressure to digitalize.
- Among alternative asset managers, the top three use cases for data and analytics are performance and risk management, product design and development, and asset selection and allocation.
- The biggest obstacle to effective data management is the difficulty of aggregating data across fragmented systems.

Coming Attractions

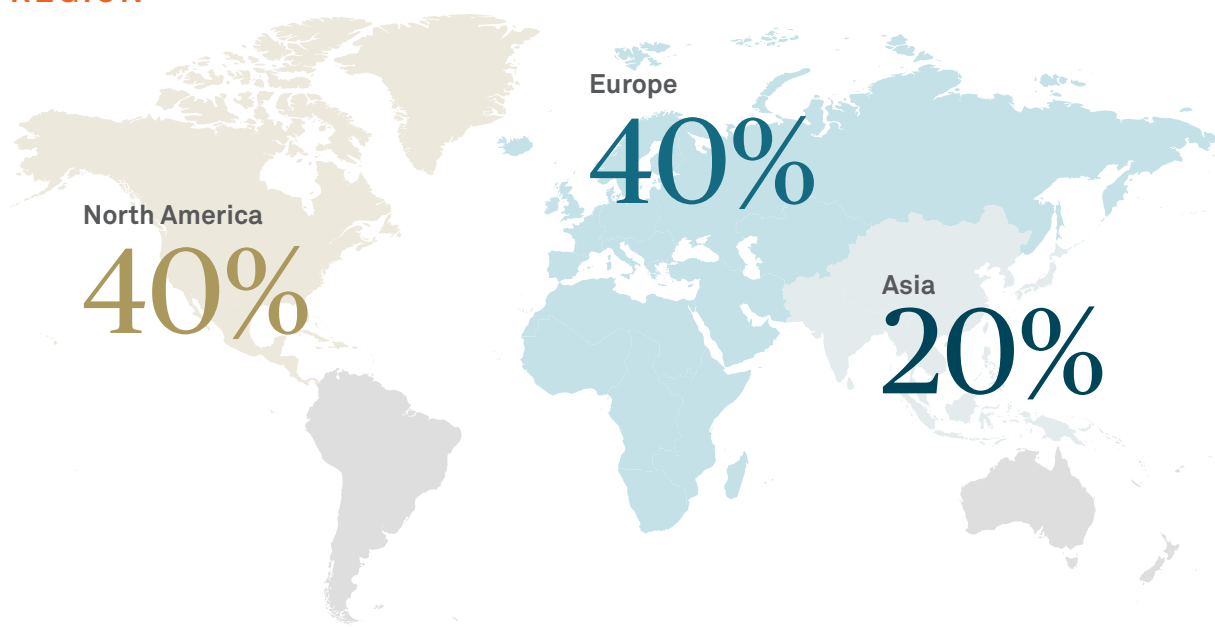
In the forthcoming final chapter of *From Alternative to Mainstream*, “Looking Toward the Future,” we will examine the new products, channels and sources of capital transforming the industry, and highlight areas where managers expect the next big market opportunities.



Appendix: *Methodology*

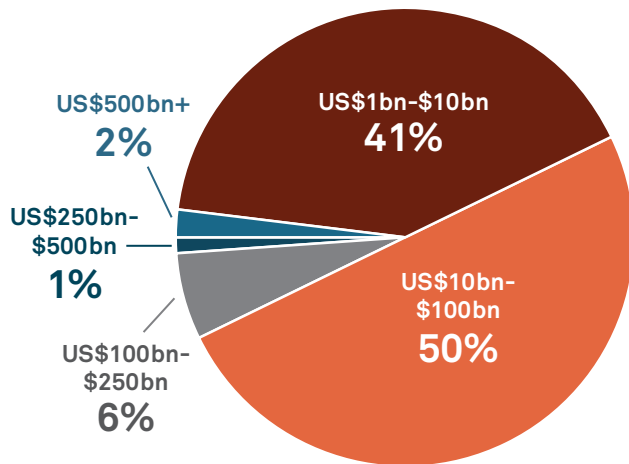
In Q3 and early Q4 of 2020, Mergermarket surveyed 100 alternative asset managers and 100 institutional investors from the US, EMEA and Asia-Pacific regions to gain insights into key trends in the alternative assets space. C-level and senior executives (job titles: Chief Executive Officer, Chief Investment Officer, Managing Partner, Partner, Managing Director and Investment Director) from alternative asset managers with AUM from US\$1 billion to US\$500 billion participated in the survey. C-level and senior executives (job titles: Chief Financial Officer, Chief Investment Officer, Managing Partner, Partner, Managing Director, Finance Director, Investment Director and Head of Investment) from institutional investors with AUM of US\$1 billion to US\$500 billion participated in the survey. All responses are anonymous. Data is presented in aggregate.

REGION

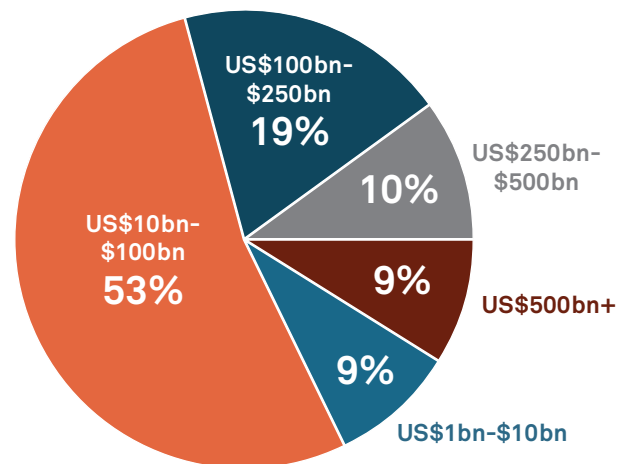


ASSETS UNDER MANAGEMENT

Alternative Asset Managers



Institutional Investors



ASSET MANAGER BREAKDOWN

Hedge fund

25%

Private equity fund

25%

Credit/private debt fund

20%

Real estate fund

20%

Multi-asset fund

10%

INSTITUTIONAL INVESTOR BREAKDOWN

Investment manager/
Fund-of-fund manager

30%

Pension fund/
Trustee

30%

Insurance company

20%

Endowment/
Foundation

10%

Sovereign wealth fund

10%

About BNY Mellon

BNY Mellon is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment and wealth management and investment services in 35 countries. As of Sept. 30, 2021, BNY Mellon had \$45.3 trillion in assets under custody and/or administration, and \$2.3 trillion in assets under management. BNY Mellon can act as a single point of contact for clients looking to create, trade, hold, manage, service, distribute or restructure investments. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation (NYSE: BK). Additional information is available on www.bnymellon.com. Follow us on Twitter @BNYMellon or visit our newsroom at www.bnymellon.com/newsroom for the latest company news.

Mergermarket, an Acuris company

Mergermarket is an unparalleled, independent mergers & acquisitions (M&A) proprietary intelligence tool. Unlike any other service of its kind, Mergermarket provides a complete overview of the M&A market by offering both a forward-looking intelligence database and a historical deals database, achieving real revenues for Mergermarket clients. For more information, visit mergermarket.com.

Acuris powers business growth for financial and professional services firms worldwide. Through subscription-based digital services and a wide range of industry-leading events, we provide unique, high-value content that enables our customers to make decisions based on high-quality research and analysis. Acuris' sector specialists and expert analysts interpret data and intelligence to deliver fresh insights that create business opportunities for our customers. We're trusted by many of the world's principal advisory firms, investment banks, law firms, hedge funds, private equity firms and corporates, who rely on our brands to help them understand specialist markets. For more information, visit www.acuris.com.



bnymellon.com

BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may be used to reference the corporation as a whole and/or its various subsidiaries generally. This material does not constitute a recommendation by BNY Mellon of any kind. The information herein is not intended to provide tax, legal, investment, accounting, financial or other professional advice on any matter, and should not be used or relied upon as such. The views expressed within this material are those of the contributors and not necessarily those of BNY Mellon. BNY Mellon has not independently verified the information contained in this material and makes no representation as to the accuracy, completeness, timeliness, merchantability or fitness for a specific purpose of the information provided in this material. BNY Mellon assumes no direct or consequential liability for any errors in or reliance upon this material.

The Bank of New York Mellon, a banking corporation organized pursuant to the laws of the State of New York, whose registered office is at 240 Greenwich St, NY, NY 10286, USA. The Bank of New York Mellon is supervised and regulated by the New York State Department of Financial Services and the US Federal Reserve and is authorized by the Prudential Regulation Authority (PRA).

The Bank of New York Mellon operates in the UK through its London branch (UK companies house numbers FC005522 and BR000818) at One Canada Square, London E14 5AL and is subject to regulation by the Financial Conduct Authority (FCA) at 12 Endeavour Square, London, E20 1JN, UK and limited regulation by the Prudential Regulation Authority at Bank of England, Threadneedle St, London, EC2R 8AH, UK. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request.

The Bank of New York Mellon SA/NV, a Belgian limited liability company, registered in the RPM Brussels with company number 0806.743.159, whose registered office is at 46 Rue Montoyerstraat, B-1000 Brussels, Belgium, authorized and regulated as a significant credit institution by the European Central Bank (ECB) at Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany, and the National Bank of Belgium (NBB) at Boulevard de Berlaimont/de Berlaimontlaan 14, 1000 Brussels, Belgium, under the Single Supervisory Mechanism and by the Belgian Financial Services and Markets Authority (FSMA) at Rue du Congrès/Congresstraat 12-14, 1000 Brussels, Belgium for conduct of business rules, and is a subsidiary of The Bank of New York Mellon.

The Bank of New York Mellon SA/NV operates in Ireland through its Dublin branch at Riverside II, Sir John Rogerson's Quay Grand Canal Dock, Dublin 2, D02KV60, Ireland and is registered with the Companies Registration Office in Ireland No. 907126 & with VAT No. IE 9578054E. The Bank of New York Mellon SA/NV, Dublin Branch is subject to limited additional regulation by the Central Bank of Ireland at New Wapping Street, North Wall Quay, Dublin 1, D01 F7X3, Ireland for conduct of business rules and registered with the Companies Registration Office in Ireland No. 907126 & with VAT No. IE 9578054E.

The Bank of New York Mellon SA/NV is trading in Germany as The Bank of New York Mellon SA/NV, Asset Servicing, Niederlassung Frankfurt am Main, and has its registered office at MesseTurm, Friedrich-Ebert-Anlage 49, 60327 Frankfurt am Main, Germany. It is subject to limited additional regulation by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany) under registration number 122721.

The Bank of New York Mellon SA/NV operates in the Netherlands through its Amsterdam branch at Strawinskylaan 337, WTC Building, Amsterdam, 1077 XX, the Netherlands. The Bank of New York Mellon SA/NV, Amsterdam Branch is subject to limited additional supervision by the Dutch Central Bank ('De Nederlandsche Bank' or 'DNB') on integrity issues only (registration number 34363596). DNB holds office at Westeinde 1, 1017 ZN Amsterdam, the Netherlands.

The Bank of New York Mellon SA/NV operates in Luxembourg through its Luxembourg branch at 2-4 rue Eugene Ruppert, Vertigo Building – Polaris, L- 2453, Luxembourg. The Bank of New York Mellon SA/NV, Luxembourg Branch is subject to limited additional regulation by the Commission de Surveillance du Secteur Financier at 283, route d'Arlon, L-1150 Luxembourg for conduct of business rules, and in its role as UCITS/AIF depositary and central administration agent.

The Bank of New York Mellon SA/NV operates in France through its Paris branch at 7 Rue Scribe, Paris, Paris 75009, France. The Bank of New York Mellon SA/NV, Paris Branch is subject to limited additional regulation by Secrétariat Général de l'Autorité de Contrôle Prudentiel et de Contrôle de Banques (DCB 1), Service 2, 61, Rue Taitbout, 75436 Paris Cedex 09, France (registration number (SIREN) Nr. 538 228 420 RCS Paris - CIB 13733).

The Bank of New York Mellon SA/NV operates in Italy through its Milan branch at Via Mike Bongiorno no. 13, Diamantino building, 5th floor, Milan, 20124, Italy. The Bank of New York Mellon SA/NV, Milan Branch is subject to limited additional regulation by Banca d'Italia - Sede di Milano at Divisione Supervisione Banche, Via Cordusio no. 5, 20123 Milano, Italy (registration number 03351).

BNY Mellon Fund Services (Ireland) Designated Activity Company is registered in Ireland No 218007, VAT No. IE8218007 W with a registered office at One Dockland Central, Guild Street, IFSC, Dublin 1. BNY Mellon Fund Services (Ireland) Designated Activity Company is regulated by the Central Bank of Ireland.

The Bank of New York Mellon (International) Limited is registered in England & Wales with Company No. 03236121 with its Registered Office at One Canada Square, London E14 5AL. The Bank of New York Mellon (International) Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

Regulatory information in relation to the above BNY Mellon entities operating out of Europe can be accessed at the following website: <https://www.bnymellon.com/RID>.

The Bank of New York Mellon has various subsidiaries, affiliates, branches and representative offices in the Asia-Pacific Region which are subject to regulation by the relevant local regulator in that jurisdiction. Details about the extent of our regulation and applicable regulators in the Asia-Pacific Region are available from us on request. Among others, The Bank of New York Mellon, Singapore Branch is subject to regulation by the Monetary Authority of Singapore. The Bank of New York Mellon, Hong Kong Branch (a banking corporation organized and existing under the laws of the State of New York with limited liability) is subject to regulation by the Hong Kong Monetary Authority and the Securities & Futures Commission of Hong Kong. The Bank of New York Mellon, Shanghai and Beijing branches are subject to regulation by the China Banking and Insurance Regulatory Commission. The Bank of New York Mellon, Seoul Branch is subject to regulation by the Financial Services Commission, the Financial Supervisory Service and The Bank of Korea.

The Bank of New York Mellon is regulated by the Australian Prudential Regulation Authority and also holds an Australian Financial Services Licence No. 527917 issued by the Australian Securities and Investments Commission to provide financial services to wholesale clients in Australia.

The Bank of New York Mellon Securities Company Japan Ltd, subject to supervision by the Financial Services Agency of Japan, acts as intermediary in Japan for The Bank of New York Mellon and its affiliates, with its registered office at Marunouchi Trust Tower Main, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-1005, Japan.

If this material is distributed in, or from, the Dubai International Financial Centre ("DIFC"), it is communicated by The Bank of New York Mellon, DIFC Branch, regulated by the DFSA and located at DIFC, The Exchange Building 5 North, Level 6, Room 601, P.O. Box 506723, Dubai, UAE, on behalf of The Bank of New York Mellon, which is a wholly-owned subsidiary of The Bank of New York Mellon Corporation. This material is intended for Professional Clients and Market Counterparties only and no other person should act upon it.

Past performance is not a guide to future performance of any instrument, transaction or financial structure and a loss of original capital may occur. Calls and communications with BNY Mellon may be recorded, for regulatory and other reasons.

Disclosures in relation to certain other BNY Mellon group entities can be accessed at the following website: <http://disclaimer.bnymellon.com/eu.htm>.

This document and the statements contained herein, are not an offer or solicitation to buy or sell any products (including financial products) or services or to participate in any particular strategy mentioned and should not be construed as such. This material is intended for wholesale/professional clients (or the equivalent only), is not intended for use by retail clients and no other person should act upon it. Persons who do not have professional experience in matters relating to investments should not rely on this material. BNY Mellon will only provide the relevant investment services to investment professionals.

Not all products and services are offered in all countries.

If distributed in the UK, this material is a financial promotion. If distributed in the EU, this material is a marketing communication.

This material, which may be considered advertising, is for general information purposes only and is not intended to provide legal, tax, accounting, investment, financial or other professional advice on any matter. This material does not constitute a recommendation or advice by BNY Mellon of any kind. Use of our products and services is subject to various regulations and regulatory oversight. You should discuss this material with appropriate advisors in the context of your circumstances before acting in any manner on this material or agreeing to use any of the referenced products or services and make your own independent assessment (based on such advice) as to whether the referenced products or services are appropriate or suitable for you. This material may not be comprehensive or up to date and there is no undertaking as to the accuracy, timeliness, completeness or fitness for a particular purpose of information given. BNY Mellon will not be responsible for updating any information contained within this material and opinions and information contained herein are subject to change without notice. BNY Mellon assumes no direct or consequential liability for any errors in or reliance upon this material.

This material may not be distributed or used for the purpose of providing any referenced products or services or making any offers or solicitations in any jurisdiction or in any circumstances in which such products, services, offers or solicitations are unlawful or not authorized, or where there would be, by virtue of such distribution, new or additional registration requirements.

© 2021 The Bank of New York Mellon Corporation. All rights reserved.

AS_AIS_386_4170_WPAP__OMNI_Alts_0421