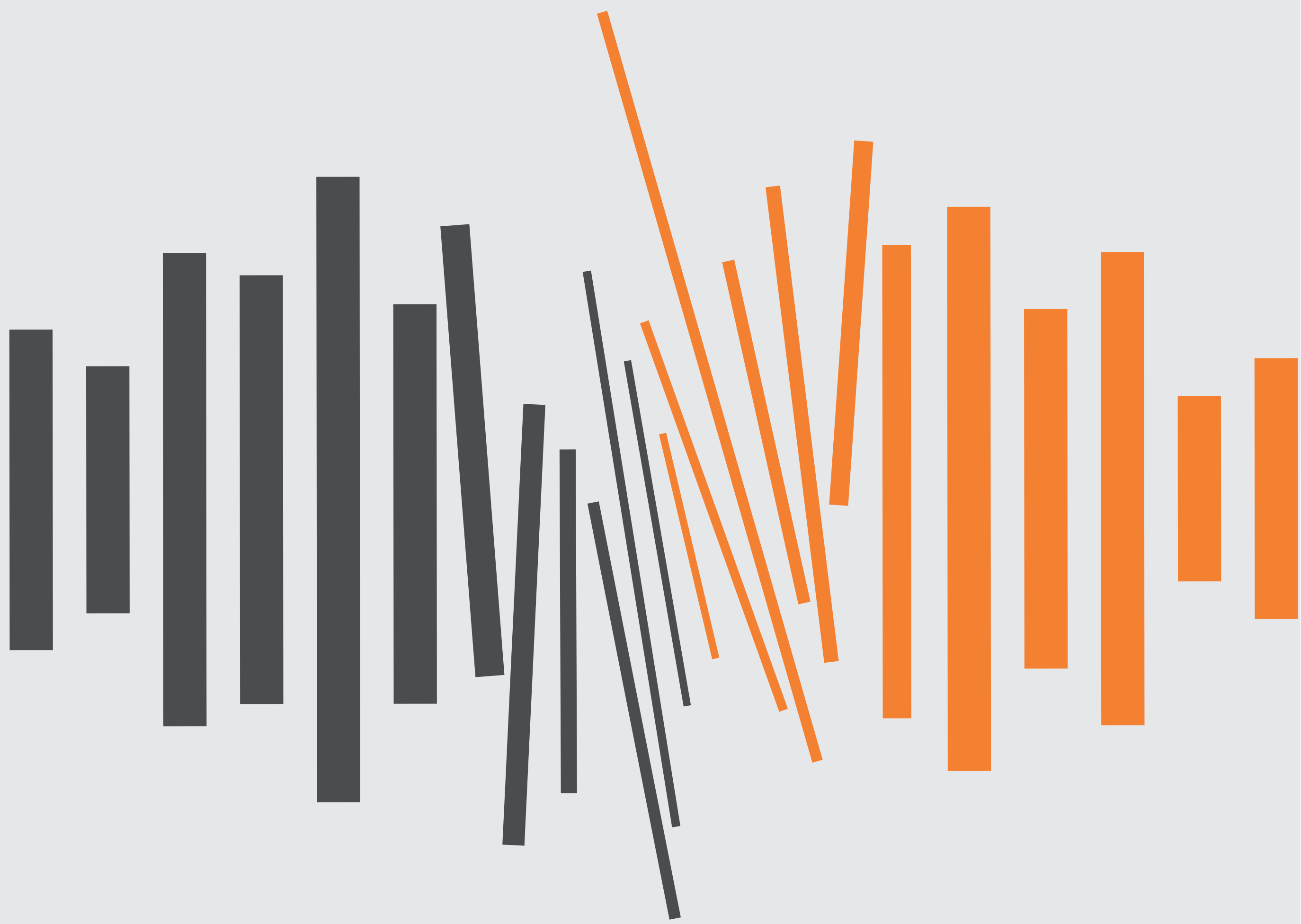
Q3 2018

Seismic Shifts
The Future of Investment Research



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90% OF INSTITUTIONAL INVESTORS IN THE STUDY SAY PROPRIETARY IN-HOUSE RESEARCH IS THEIR MAIN INPUT TO THE RESEARCH PROCESS

ACTIVE MANAGERS WILL NEED TO EMBRACE NEW, ALTERNATIVE DATA SOURCES, NEW TECHNOLOGIES, AND UPGRADE THEIR SKILL SETS TO APPLY THESE TOOLS EFFECTIVELY

Executive Summary

An array of factors, including an information explosion, new regulations, new technologies, and evolving commercial models, are coalescing to bring about significant change in the investment research landscape. In this study, commissioned by Thomson Reuters, Greenwich Associates interviewed 30 CIOs, portfolio managers and investment analysts to explore how the investment research market will change over the next decade.

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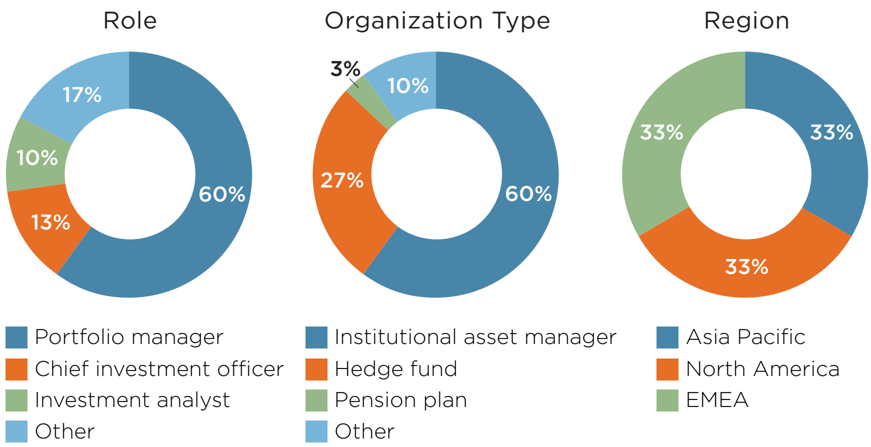
METHODOLOGY

Between March and May 2018, Greenwich Associates interviewed 30 CIOs, portfolio managers, and investment analysts across North America, Europe and Asia. Respondents, representing asset managers, hedge funds and pension plans, were asked a number of quantitative and qualitative questions about how they think investment research will evolve over the next five to 10 years. Study methodology developed by Greenwich Associates in cooperation with Thomson Reuters.

RESPONDENTS



Note: May not total 100% due to rounding. Based on 30 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Introduction

The investment research market has not changed much over the last 40 years. Brokerage analysts collect and analyze financial company information and industry data, listen to and question corporate management, and build a variety of valuation models. They synthesize this information into investment research, which is pushed out to investors and money managers. These brokerage firms are then compensated through commissions on orders executed by the trading desk. While some of the technologies and techniques used may have evolved, the core investment research process has not changed significantly.

There is a notable shift underway, however. MiFID II regulations in Europe are mandating an unbundling of research from trading, increasing transparency on the investment research process and meaning that these services will be budgeted, evaluated and consumed separately from other services offered by investment banks. In addition, a number of other factors, including an information explosion, new technologies and evolving commercial models, will be reshaping the investment research landscape over the next five to 10 years.

MiFID II regulations in Europe, mandating an unbundling of research from trading, are expected to reverberate around the globe.

Research Will Stand Alone

Historically, asset managers paid for access to investment research through trading commissions with their brokers. This has long been recognized as a less than ideal approach, due to the lack of price transparency and the conflicts that can arise between meeting research obligations and achieving best execution.

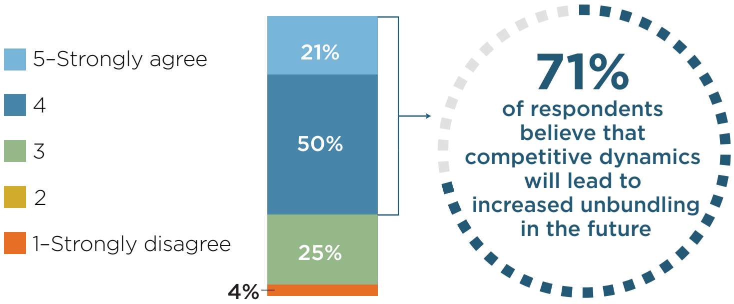
Commission sharing arrangements (CSAs) and client commission arrangements (CCAs) were proposed as a solution, allowing a buy-side firm to accrue commissions with one broker that could be used to pay for research from another.

These tools, however, did not fully unbundle research and trading. In 2011, European regulators began reviewing the practice and working on a solution to fully sever the link. The resulting MiFID II regulations came into force for European investment firms in January 2018.

Although the regulations apply only in the European Union, the impact is expected to reverberate around the globe. Large multinational asset managers with operations in Europe will gravitate to the stricter regime, rather than maintain separate business models in different regions. Even asset managers with no footprint in the EU may feel the urge to “soft comply,” in order to remain competitive in a global asset-gathering market.

SENTIMENT TOWARD FUTURE RESEARCH UNBUNDLING

Within five to 10 years, competitive dynamics will lead to increased unbundling, even in regions not covered by MiFID II regulations.



Note: Based on 28 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

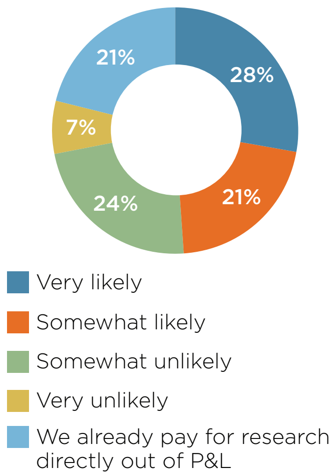
This approach is reflected in our study, where 71% of investment professionals expect to see increased unbundling globally.

Similarly, 70% are now paying for investment research out of firm resources—or expect to in five to 10 years. This is in contrast to the current system, whereby research fees are often bundled with trading commissions.

Taken together, these data points strongly suggest that investment research will evolve into a more stand-alone business for banks and independent research providers, with the costs more likely borne by the asset management firms than the end investor.

This represents a fundamental change in the overall business model for investment research. Institutional investors will be less beholden to large brokers for their research and will be more focused on the value offered by their research providers. In addition, asset management firms will likely rely more on internal research teams than paying for external research. As larger asset managers are more able to absorb these costs, they will gain further competitive advantage.

LIKELIHOOD OF PAYING FOR RESEARCH OUT OF P&L IN THE FUTURE



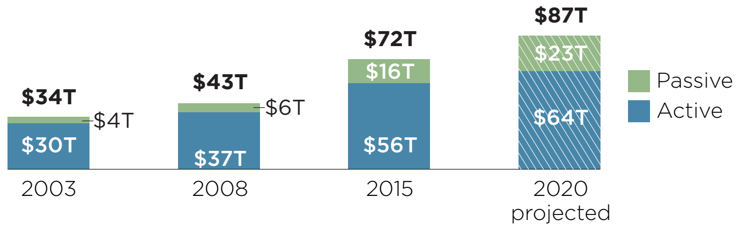
Note: May not total 100% due to rounding. Based on 29 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Passive and Active Compete for Assets

There is no doubt that passive investment strategies have been taking a larger slice of global investment assets. In 2008, 86% of global institutional assets were invested in actively managed accounts. By 2015, that share had dropped to 78%.

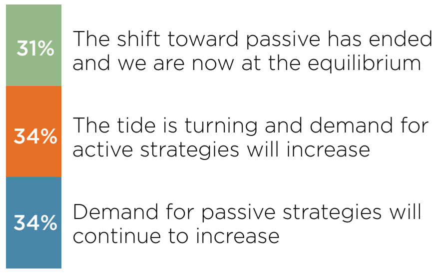
Participants in our study, however, have varying opinions about the ratio of active to passive going forward. In roughly equal proportions, they tell us that passive will increase, active will increase, and that the mix will not change. While there is clearly uncertainty about investor preferences in the future, the competition for raising assets will remain strong and active performance, driven by investment research, will be a key deciding factor.

GLOBAL AUM—ACTIVE VS. PASSIVE



Source: Greenwich Associates 2016 BCG Global Asset Management Study

FUTURE INVESTOR PREFERENCE FOR ACTIVE/PASSIVE

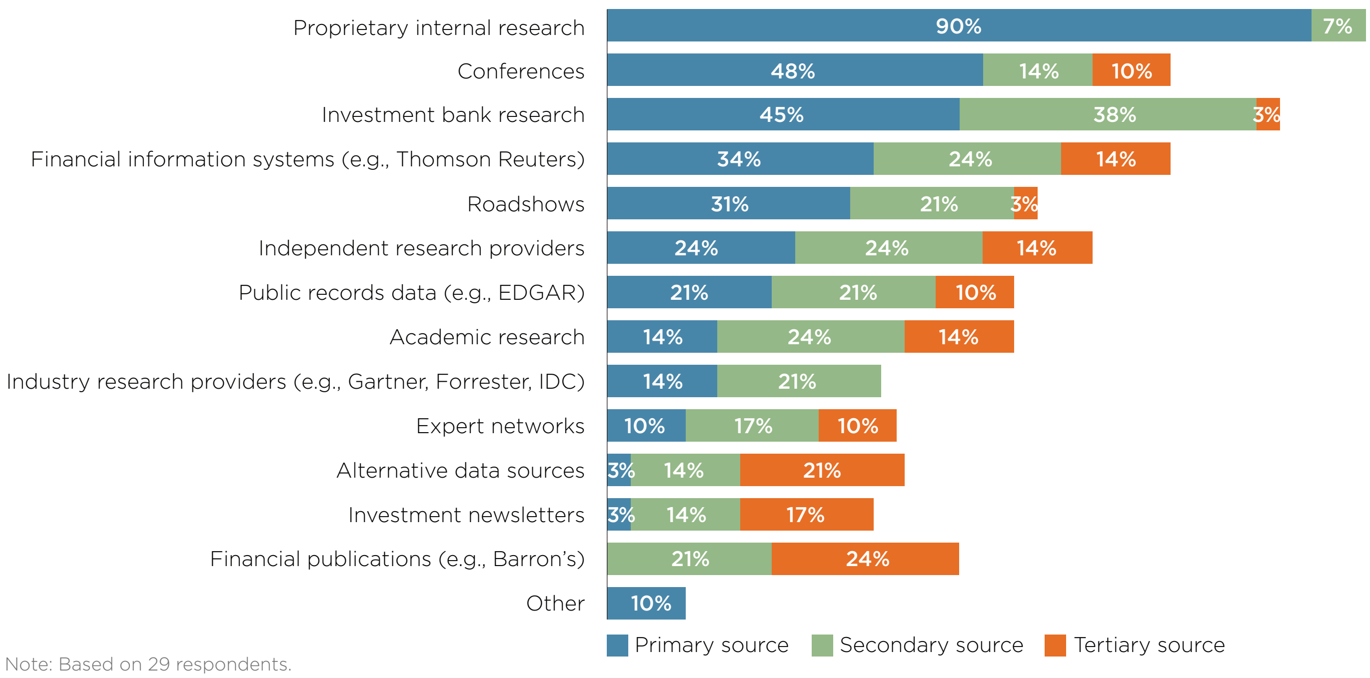


Note: May not total 100% due to rounding.
Based on 29 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Sources of Investment Research

Institutional investors are already relying less on investment bank research, with 9 out of 10 telling us that proprietary in-house analysis is their primary input to the research process. Investment bank research is the third most important research source. It is also seen as an important secondary source, however, and is likely an important component of the in-house research an asset manager conducts.

SOURCES OF INVESTMENT RESEARCH

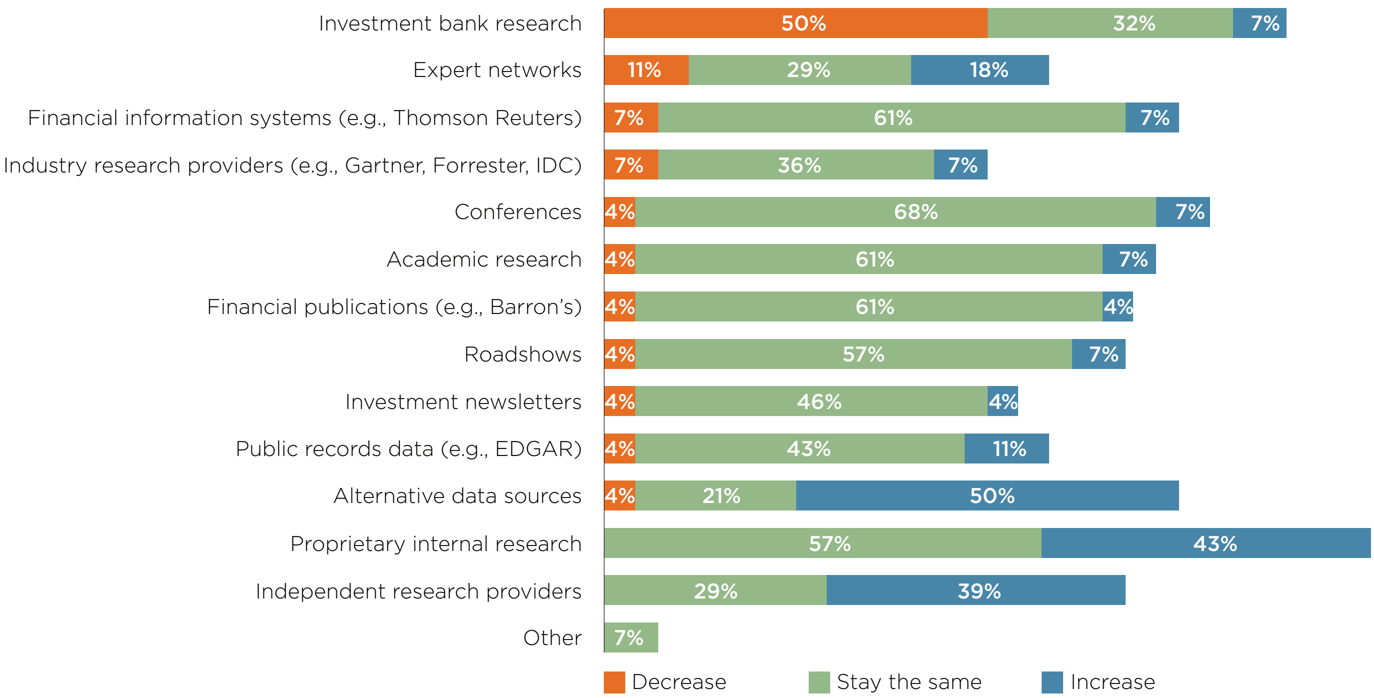


Note: Based on 29 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

It is interesting to note that research sources such as conferences and financial information systems are also seen as essential tools, being ranked No. 2 and No. 4 respectively. In different ways, both sources act as effective mechanisms for distributing information and are clearly valued by investors. Other sources, such as expert networks, investment newsletters and alternative data sources, are not seen as important primary sources of research today.

Looking to the future, however, the research landscape will look very different. Half of respondents expect to decrease their reliance on investment bank research. At the same time, 43% expect to further increase their reliance on proprietary in-house research, and 39% anticipate being more reliant on independent research providers. Also notable is that 50% intend to increase usage of alternative data sets.

EXPECTED CHANGE IN SOURCES OF INVESTMENT RESEARCH

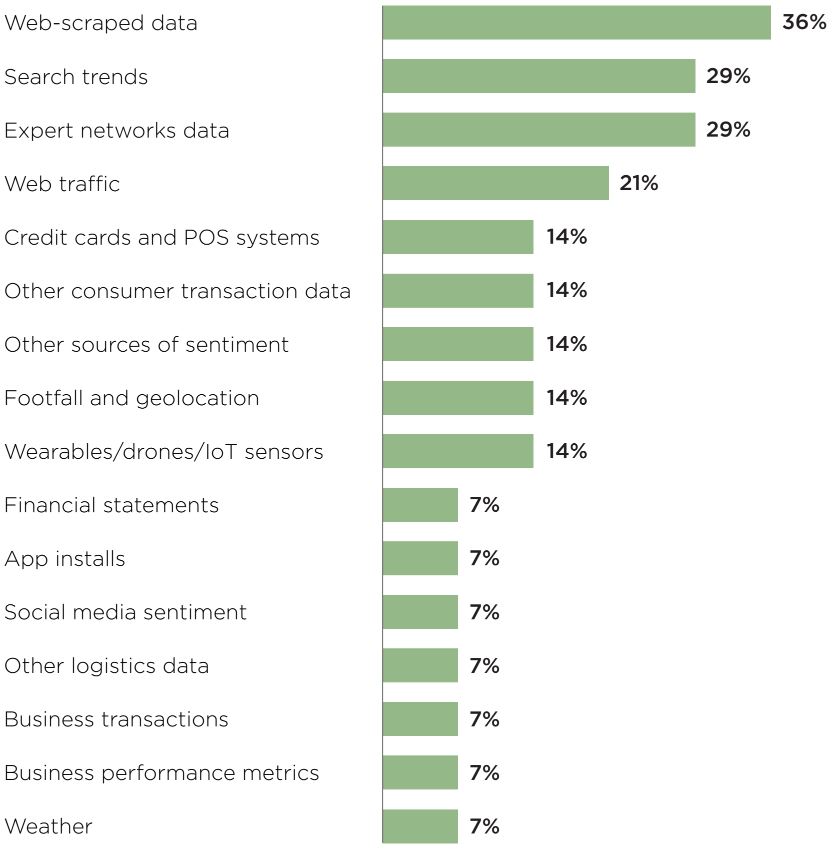


Note: Based on 28 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Alternative Data

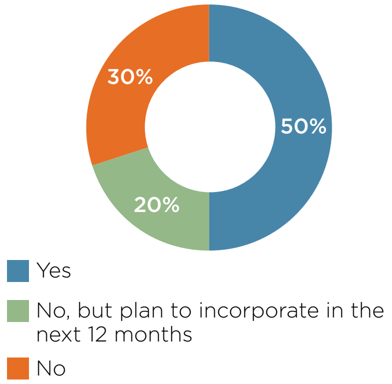
Alternative data are unique data sets that, by themselves or in conjunction with traditional market data, could provide additional insight and competitive advantage. Hedge funds and asset managers are increasingly utilizing alternative data sets to help them gain alpha and differentiate themselves from the competition. In addition, financial information providers are now integrating these sources into their applications and data feeds.

ALTERNATIVE DATA SETS CURRENTLY USED



Note: Based on 14 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

CURRENT IMPLEMENTATION OF ALTERNATIVE DATA



Note: Based on 30 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Seventy percent of investment professionals in our study are either currently using alternative data or plan to in the next 12 months. Web-scraped data is the most common type used, as many websites contain valuable information about corporate activity. For example, by tracking prices and inventory on public retail websites, it is possible to ascertain the performance of brands and companies. While some companies aggregate this data and resell it, others employ their own teams to collect the data using their proprietary technology or publicly available software.

Search trends and expert networks are the next most popular types of alternative data. Search trends can help an investor understand if a new product is resonating in the market or, conversely, if a negative news story could impact financial performance. Expert networks allow portfolio managers and analysts to get access to highly domain-specific information by speaking directly with experts in the sector they are studying.

Alternative data is primarily used as an input into an investment process, rather than as a tool to identify new opportunities. In other words, it more often augments existing models, as opposed to being used for an entirely new one. For about 20% of investors, alternative data is also used to help with timing of the trade.

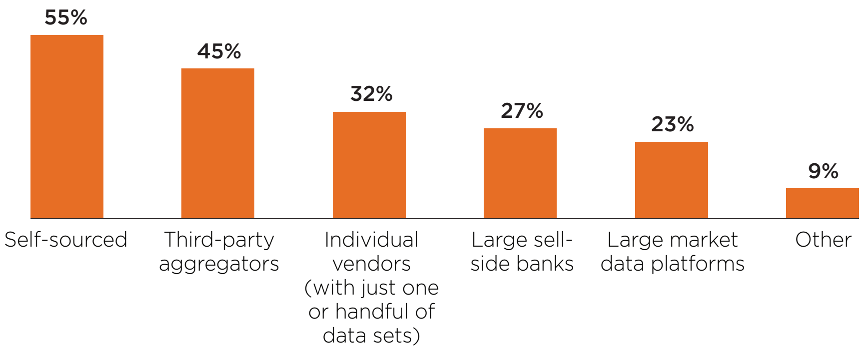
> **"For me, in the internet sector, I use alternative data because it's consumer-focused… it is beneficial for companies that touch the end consumer."**
>
> ~ Investment analyst, U.S.-based asset manager

HOW ALTERNATIVE DATA IS APPLIED TO THE INVESTMENT RESEARCH PROCESS

Note: Based on 14 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Investment professionals primarily access alternative data by sourcing the data themselves (e.g., search trends) or via a third-party aggregator (e.g., Quandl, Neudata). About a third have direct relationships with alternative data suppliers, and about a quarter access the data via their market data terminal or sell-side banks.

SOURCE OF ALTERNATIVE DATA



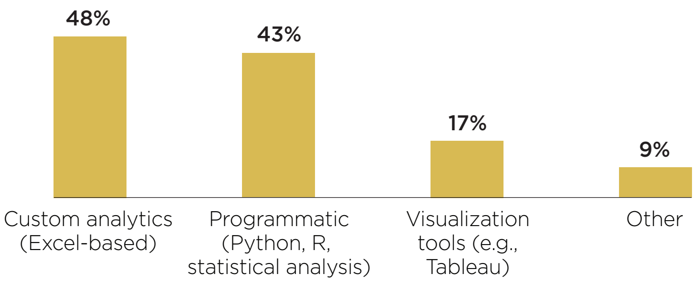
Note: Based on 22 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

"Usefulness of alternative data varies pretty widely for investment insights, at least in these early stages."

~ Investment analyst, U.S.-based research provider

How alternative data is analyzed depends mainly on the investment approach. The more quantitative firms tend to use programmatic techniques, whereas fundamental active managers use custom analytics or Excel.

METHOD OF GATHERING INSIGHTS



Note: Based on 23 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Alternative data is a relatively new element to institutional investing, and respondents often indicated that they were just using it to confirm or challenge existing theories for specific companies.

"The best value from alternative data is in value for company-specific ideas."

~ Portfolio manager, European-based private bank

Looking to the future, a majority of firms expect to integrate alternative data more tightly with their investment process and expand the number of data sets they use. Many firms also expect to increase budgets for alternative data sets.

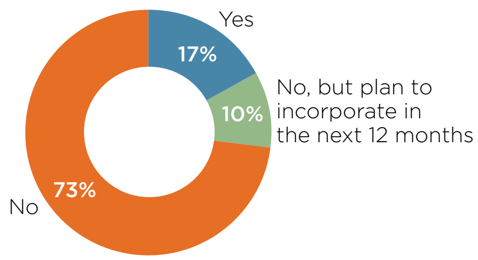
Of course, alternative data won't be alternative forever. As firms using alternative data achieve a competitive advantage, it will lead to increased usage in the market. At the same time, more companies will start producing it, and more vendors will sell it. Eventually, this data will become as standard as an earnings statement. Or as a portfolio manager from a U.S. hedge fund told us: **"The end result: We expect that all data will be commoditized, and it will be reflected in the market prices."**

Artificial Intelligence

Improvements in technology and data science over the last five years or so have led to advances in artificial intelligence (AI) techniques, such as machine learning, deep learning and natural language processing. (See previous Greenwich Research for more information on these techniques[1]). AI has now been commercialized and is widely prevalent in our daily lives, from digital assistants to online translation tools. AI is also beginning to find a place within institutional investing.

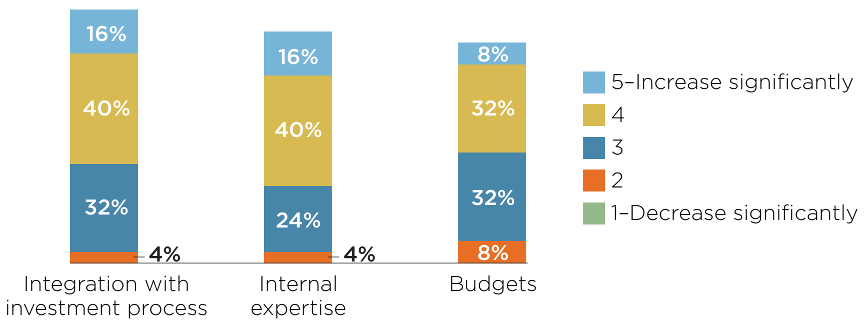
While only 17% of firms are currently using AI as part of their investment process, our data suggests a marked increase over the next few years: 56% of firms expect to increase the level of integration with the investment process and recruit additional internal expertise. In addition, 40% expect to increase budgets for AI.

CURRENTLY USING AI



Note: Based on 30 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

EXPECTED FUTURE USAGE OF AI



Note: Based on 25 responses.
Source: Greenwich Associates 2018 Future of Investment Research Study

Investors mainly see AI having the biggest impact in analyzing data, news and content.

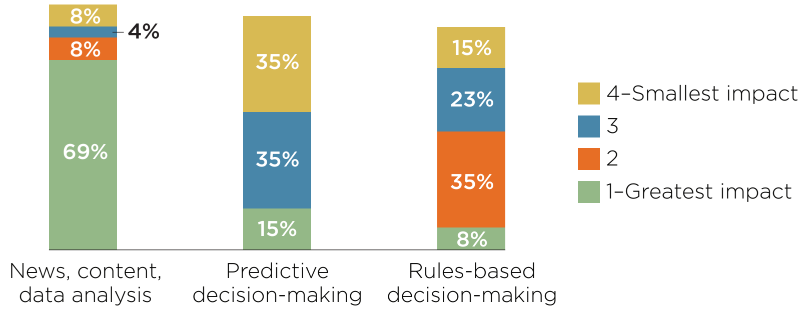
1 https://www.greenwich.com/asset-management/meet-your-robot-broker-ai-institutional-finance-0

Investors mainly see AI having the biggest impact in analyzing data, news and content. Indeed, this is where it is having the greatest impact now. As we look to the future, however, we should expect the technology to continue to improve as more development teams become adept at using it and as more data is made available to feed the algorithms. This will lead to applications of the technology that foster vastly improved decision-making ability.

"We will need to incorporate AI, machine learning, big data, and automation."

~ Portfolio manager, Asia-based asset manager

GREATEST IMPACT ON INVESTMENT RESEARCH PROCESS



Note: Based on 26 responses.
Source: Greenwich Associates 2018 Future of Investment Research Study

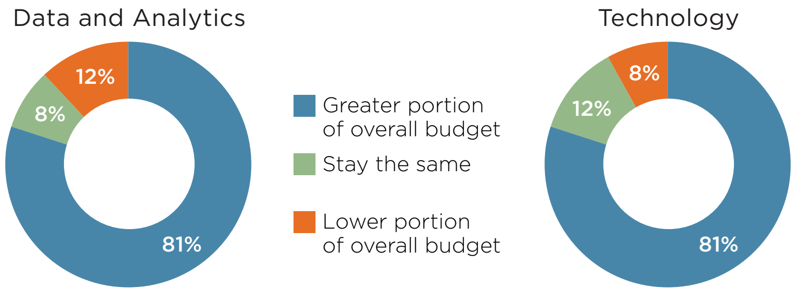
Data Driven, People Powered

In light of these expectations, it is perhaps not surprising that data science skills are projected to be the most sought-after job skills over the next five to 10 years, closely followed by AI expertise. An MBA or a PhD in quantitative finance—two of the most respected and popular disciplines in financial services today—will be considered relatively less important.

This sentiment was captured well by a portfolio manager at an Asia-based asset manager reflecting on how the role of a portfolio manager will change: **"We will need to incorporate AI, machine learning, big data, and automation."**

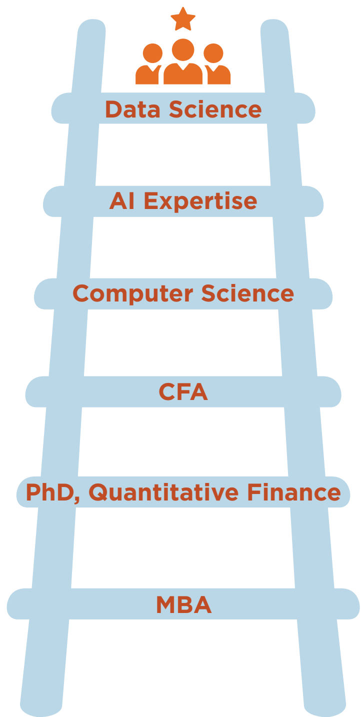
Increased reliance on and demand for data, analytics and technology skills will, in turn, lead to increased budget allocations in the future, as expected by over 80% of study participants.

EXPECTED FUTURE BUDGET ALLOCATIONS



Note: May not total 100% due to rounding. Based on 26 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

EXPECTED INCREASE IN DEMAND FOR SKILL SETS

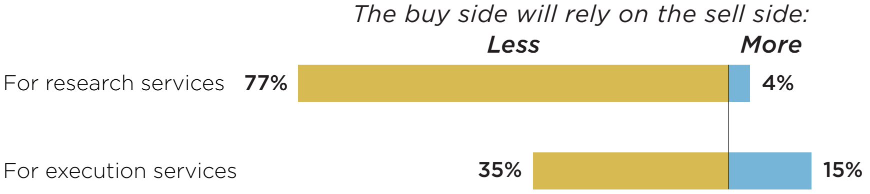


Note: Based on 26 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

Changing Research Market Impacts Sell-Side Relationship

The investment research landscape will clearly look very different in the next decade. Research will be a more stand-alone business, and asset managers will do more of it in-house. To remain competitive against the tide of passive flows, active managers will need to embrace new, alternative data sources, new technologies such as machine learning, and upgrade their skill sets to apply these tools effectively.

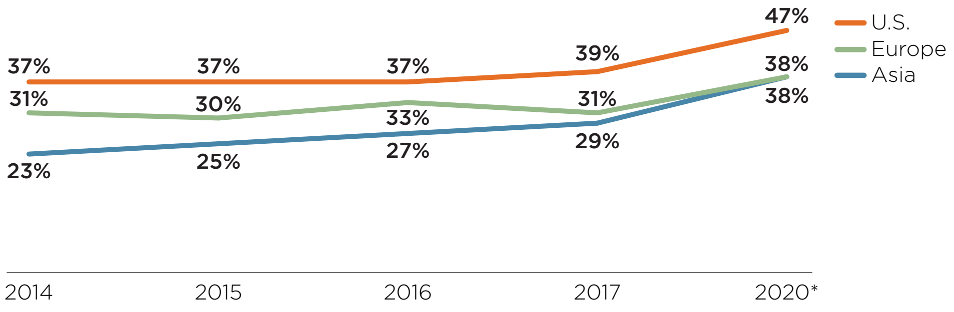
BUY SIDE/SELL SIDE RELIANCE



Note: Based on 26 respondents.
Source: Greenwich Associates 2018 Future of Investment Research Study

These factors lead us to conclude that institutional investors will rely less on the sell side in the future. Over three-quarters of investment professionals in our study agree that they will use the sell side less for research, which many believe will lead to reduced reliance won brokers for execution services. This last point can already be seen in Greenwich Associates data showing that the proportion of self-directed trading has been increasing and is expected to continue to do so.

INSTITUTIONAL EQUITY TRADING VIA SELF-DIRECTED CHANNELS



Note: *2020 data is “expected.” Based on 303 respondents in the U.S. in 2014, 292 in 2015, 300 in 2016, and 285 in 2017. Based on 191 respondents in Europe in 2014, 178 in 2015, 169 in 2016, and 160 in 2017. Based on 110 respondents in Asia in 2014, 123 in 2015, 127 in 2016, and 111 in 2017.
Source: Greenwich Associates 2018 U.S., European and Asian Equity Investors Studies

Conclusion

The future of investment research looks radically different from the construct that has existed for the last 40 years. The regulatory, technological and competitive dynamics at play will create threats and opportunities for market participants in every part of the spectrum.

Asset managers will need to evolve their business models so that they have the necessary human and technological capital to take more control of their investment research process. Financial information systems and other vendors have an opportunity to assist the asset management industry in this transition by making sure portfolio managers and investment analysts have the necessary data and tools at their fingertips.

Investment professionals themselves will need to upgrade their skill sets to ensure their relevance in this new investment paradigm. And investment banks will need to radically rethink their business models and prepare for a world where asset managers are increasingly bringing research and execution functions in-house.

This study was commissioned by Thomson Reuters.

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