At the tipping point
Disruption and the pace of change in the alternative asset management industry
2018 Global Alternative Fund Survey
At the tipping point: disruption and the pace of change in the alternative asset management industry
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Sweeping change has taken hold of the financial services industry: robotics and artificial intelligence (AI) are fundamentally changing the relationship that financial institutions have with end users, the vast proliferation of data is changing the way that institutions ultimately make business decisions, and the skill sets that are needed to drive the business forward are changing the mindsets of those who occupy the corner office, fundamentally changing the way that they conduct business. With this as a backdrop, it is a certainty that the pace of change will continue to gain momentum. And as with other segments of the financial services landscape, the alternative fund industry now finds itself at that defining moment as well – a tipping point in its evolution where disruptive technology represents a virtual signpost on the road to future success.

In the current environment, alternative asset managers have been busy evaluating how rapid technological innovation, changing demographics, convergence of industries and other factors have been and will continue to reshape their business.

The asset managers who are out in front are those that are developing a strategy to embrace technology, becoming more nimble and efficient. Businesses who understand that their customers have unique demands and expectations are becoming successful in maintaining and growing relationships. Employers who recognize that millennials comprising today’s workforce want different experiences and benefits than those sought out by Gen X before them are able to attract and retain best-in-class talent. Ultimately, those firms that are able to juggle all of these disruptive dynamics are thriving. And those that have ignored many of these trends, hoping that each would be a passing phase, are waking up to the reality that they are playing catch-up in the race to understand and address how disruption is reshaping nearly every facet of the asset management industry.

We hope the observations and findings of this, EY 12th annual Global Alternative Fund Survey, will help contribute to an ongoing and healthy dialogue that promotes the continued development and advancement of the global alternative fund industry. This year’s survey uniquely sought out the points of view of both hedge fund and private equity managers, as well as institutional investors who allocate to both asset classes as well as broadly across alternatives. We would like to express gratitude to those managers and investors who provided thought-provoking viewpoints into the direction and development of this survey, as well as offer thanks and appreciation to the more than 200 managers and 60 investors who gave their time and insight to provide such robust results.

We believe this combination of perspectives provides invaluable observations that will continue to drive the industry forward.

Key observations

This year’s survey continues to explore specific disruptions that are impacting all asset managers. Private equity and hedge fund managers alike are finding their investor base is challenging what products fit best within their portfolio and, in many cases, no longer want a “one size fits all” solution. Investors’ desire for customization and diversification is causing managers to reevaluate their product offerings. Technology is having a profound impact in both the front and back office. The ability to embrace big data, robotics and AI is becoming increasingly important, and in some instances, a core requirement for managers to differentiate themselves in an increasingly crowded field. Talent profiles at asset managers continue to rapidly change as managers seek individuals with more diverse skill sets and backgrounds to help them transition forward with several of the priorities being driven by product proliferation as well as implementation of new technology throughout the organization. Embedded in each of these themes is the fact that in many respects, convergence is occurring among managers in different corners of the alternatives industry. Whether it be competing product offerings, utilization of similar technology or demand for the same talent, hedge funds and private equity funds, as well as other alternative managers, are more frequently stepping on each other’s turf, resulting in the entire alternatives community competing against each other.

Asset growth

Similar to last year, raising assets continued to be the top strategic priority for hedge funds and private equity funds alike. As investor allocations have become harder to secure, managers are adapting in many ways. Flagship fund offerings continue to be the cornerstone of an asset
manager’s business, but diversification into new products is how managers are meeting more diverse investor needs and expanding wallet share. The lines differentiating a hedge fund from a private equity manager continue to fade as each is increasingly tapping into investor desire for nontraditional offerings such as private credit, real estate and real assets. Customization of offerings remains critical as investors continue to signal that they want a more active partnership with their managers where they, the allocator, have a seat at the table when it comes to designing portfolios with specific outcomes in mind or aligning fee structures that are palatable to the manager and investor. Lastly, regardless of strategy, big data and advanced technology are being deployed across the industry. The frontier that was once primarily dominated just by quantitative managers is now open to all as the alternatives industry recognizes the power and potential benefits that can be reaped by investing in technology and processes to thrive in this digital era.

**Talent management**

A ripple effect of the proliferation of technology and product diversification throughout the industry is a need for managers to evaluate their talent pool and verify that they are recruiting and retaining individuals with the skill sets needed in this new environment. Data scientists, programmers and technology specialists need to be leveraged throughout the organization to support and lead finance professionals who traditionally were the backbone of an asset management organization. Firms also recognize the need for increased gender and cultural diversity to bring fresh perspectives and leadership. Such changes have resulted in talent profiles being targeted by asset managers that are far different than a generation ago. Competition for this talent remains robust, not just between asset managers but more broadly among other financial service organizations, FinTechs and a variety of other start-ups.

**Innovation in the operating model**

AI and robotics are not limited to front-office applications. In fact, at an almost equally accelerated pace, these technologies are being deployed in the middle and back office at asset managers. Successful implementation can yield a number of benefits, such as more timely and accurate processing of data; advanced visualization and reporting capabilities to management; and re-deployment of talent from low-value, repetitive tasks to more strategic areas of the operations. In order to properly scale the business for further growth, and meet investor expectations that the operations are institutional in nature to support the business, investing in technology is now a prerequisite.

**Alternatives at a tipping point**

Today’s alternatives industry is dramatically different from just a decade ago, and the pace of change being caused by these disruptive factors is only going to continue to grow exponentially. Managers with the foresight to get out ahead of the curve are finding that navigating this new landscape has been less stressful than those managers who have not been as innovative and forward-thinking. Make no mistake, similar disruptions as those playing out in the alternatives landscape have blown through other industries completely reshaping the competitive landscape and even wiping out household name organizations who were not fast enough to adapt. The time for asset managers to react is quickly approaching midnight, as further change and innovation will only accelerate forward, providing significant opportunities to adopters while hindering those left behind.
Strategic priorities
A mid a shifting industry landscape, alternative asset managers continue to juggle a number of pressing strategic business issues, many of which are being influenced, or outright driven by, disruption within the industry. Seismic shifts in technology capabilities, investor expectations related to product offerings and evolving talent profile needs are no longer forward-looking items to address – these are front and center for all alternative managers to deal with today. In many respects, the most common individual strategic priorities identified by managers are all intertwined. With most managers focused on asset growth, the successful combination of employing technology to drive investment returns in the front office while embracing new technologies and outsourcing capabilities in the back office should create an ideal landscape in which alternative investment managers can thrive. However, infrastructure is needed to support these new tools, and the right talent model is critical to implementing and harnessing the power of today’s technology. Next-generation technology is also becoming a solution to the challenges that managers are facing both in combating margin pressure and in developing an institutional quality middle and back office that investors are coming to expect. These issues, challenges and opportunities are not necessarily new; what is becoming clear is that it is no longer possible for managers to defer on addressing them as the pace of change and evolution continues to accelerate.
Asset growth and talent management top the list of alternative fund managers’ strategic priorities

Asset growth continues to be paramount for the success of individual managers and the industry as a whole. Given unique market conditions and evolving investor demands that are shifting more towards customization and outcome-specific products, fundraising for many managers has never been more competitive or challenging. The fact that it remains the top priority comes as no surprise, as it contributes to the successful financial results of managers, which is necessary to provide funding to accomplish many of the other secondary and tertiary priorities referenced here.

Talent management as a clear second priority is a change from prior years. Evolving product development and disruptive technology are changing how both the front and back office are managed and are forcing managers to re-evaluate their talent model to confirm that their people have the right skills to be successful in this digital era.

Interestingly, the priorities between hedge fund and private equity managers are almost identical. After growth and talent, each see cost management and operational efficiency as their next most prominent areas of focus. This alignment speaks to the fact that each is facing the same issues as their business models continue to converge.
Investor allocations to alternatives remain stable, with hedge funds currently leading the way.

For nearly a decade, equity security valuations have thrived in a bull market, resulting in a proliferation of passive products that have boasted strong performance track records. Despite the comparison of performance across strategies and resulting questions as to whether alternative assets remain in favor with investors, allocations to alternative strategies remains robust and stable. The investors within this survey (excluding fund of fund respondents) indicated that, on average, they have almost a quarter of their assets allocated to alternatives, which is relatively unchanged from 2016.

Investors maintain a diverse portfolio of alternatives, with the current lion’s share going to hedge funds, private equity and real estate. Private credit is a smaller, but rapidly growing component of investors’ portfolios. It also is an asset class that is often an intersection between traditional hedge fund and private equity managers, with each attempting to extend its investment capabilities and operational infrastructure to tap into investor appetite for these products.

While the current weighting reflects the largest exposure to hedge fund managers, investors appear to be challenging their allocations and, in many instances, rebalancing among several asset classes, with private equity appearing to be gaining the most ground.
Continuing a multiyear trend, the vast majority of investors expect to keep their allocations to hedge funds flat. However, by a 3:1 ratio, those who do report expected changes are more likely to forecast decreases rather than increases within their hedge fund allocations. This negative outlook has likely been influenced by a number of factors, but the hedge fund industry’s continued lackluster performance relative to perceived high costs, combined with hedge funds comprising such a large percentage of investors’ existing portfolios, is top of mind for many.

When analyzing actual flows, hedge fund managers of all sizes reported net flows for the past 12 months that were far below their budgets. While they did not come close to achieving their budgeted inflows, the largest managers, those over US$10b, were attracting the most capital as they leveraged their broad and diverse product offerings to raise funds. Many midsize and smaller managers are playing a zero-sum game against each other, resulting in some managers winning at the expense of others.
Investors and managers alike see significant opportunities in private equity

Unlike hedge fund managers, private equity managers currently have tailwinds propelling their fundraising efforts. One-third of investors expect to increase their allocations to private equity in the coming years, while only 1 in 10 foresee reductions. Recent performance has benefited the asset class, but the nature of the products – uncorrelated returns, exposures that are more difficult to replicate via other assets, longer term alignment of the investor and manager’s financial incentives, to name a few – are increasingly desired by many investors.

Private equity managers expect to capitalize on this increasing investor demand to accomplish their strategic priority of asset growth. 2017 and 2018 resulted in record amounts of fundraising, and managers’ expectations for 2019 are equally bullish. Two in three who are launching new funds expect their new funds to be larger than the last fund they raised, while only 14% anticipate smaller capital raises. As private equity managers, particularly smaller and midsized, generally raise new funds less often than hedge funds, these managers see it as critical that each new fundraise be larger than the last in order to achieve their goal of asset growth.

If you are planning to raise a fund in the next year, will the fund be equal to, smaller or larger than your last fund raised?

- Larger: 60% (2017), 65% (2018)
- Equal: 27% (2017), 20% (2018)
- Smaller: 13% (2017), 14% (2018)
Investor disruption – many seek more active partnership with their managers

One of the more interesting trends that has been playing out for years and continues to evolve is how investors source investment opportunities and interact with their managers.

In the pre-Madoff era, funds of funds were a favored distribution model. As institutional investors became increasingly more sophisticated with their alternatives investing, they found they were easily able to cut out the middleman and be direct limited partners with managers. However, this relationship generally granted them no rights or influence over their investee funds’ activities.

With increasing frequency, investors expect to be more active partners with their managers. Whether through a separately managed account (SMA), co-investments or unique rights within a commingled product, investors express a desire to influence the investment and operational decisions of the manager.

Looking ahead, this trend shows no signs of slowing as investors expect future decreases in the use of fund of funds and passive limited partnership interests. A disruptive shift is emerging where a significant portion of investors expect to increase their active involvement in limited partnerships or access the asset classes directly rather than investing with external managers. In response to this trend, managers are working closely with investors by developing products that fit their specific needs.

<table>
<thead>
<tr>
<th>Alternative Asset Class</th>
<th>Fund of funds</th>
<th>Passive limited partners*</th>
<th>Active limited partners**</th>
<th>Direct/in-house investments***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge funds</td>
<td>45%</td>
<td>24%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Private equity</td>
<td>45%</td>
<td>26%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Private credit</td>
<td>38%</td>
<td>24%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Real estate</td>
<td>45%</td>
<td>26%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Real assets</td>
<td>31%</td>
<td>19%</td>
<td>17%</td>
<td></td>
</tr>
</tbody>
</table>

* Passive limited partners are investors who invest and are not involved in any decisions related to the investment program or operations of the fund.
** Active limited partners are investors who participate in investment or operating decisions alongside fund management.
*** Replicate the strategy internally without the use of external management.
Private equity managers are more likely to utilize new product development to grow assets

As investors increasingly demand tailor-made solutions for their specific investing needs, the receptiveness from private equity managers has outpaced their hedge fund peers. Almost 60% of private equity managers say they are utilizing new product offerings to some degree to grow assets. This contrasts with hedge fund managers, where a majority, 55%, say they focus solely on their existing strategy to grow their asset base.

The demand for new products is causing a convergence between hedge fund and private equity managers. The fierce competition for assets has resulted in two formerly distinct types of managers offering competing products to the same customer. As a result, new product development results in hedge and private equity managers competing in the same middle ground of alternative products. Other alternative offerings such as illiquid credit, real estate and real assets are in play for both sets of managers. Competition even extends to each other’s primary offering as a number of hedge fund managers offer private equity products and vice versa.

New offerings pose challenges – operational support, talent expertise, conflicts with other products – however, those managers who are identifying the opportunities and investing in their business to support these new products are reaping benefits.

In your quest to grow assets, which of the following is your primary focus?

- Increasing assets in existing strategies/product offerings
- Equally focused on increasing assets in existing strategies/products as well as new offerings
- Launching new strategies/product offerings

Hedge funds:
- 55% Increasing assets in existing strategies/product offerings
- 12% Equally focused on increasing assets in existing strategies/products as well as new offerings
- 33% Launching new strategies/product offerings

Private equity:
- 41% Increasing assets in existing strategies/product offerings
- 13% Equally focused on increasing assets in existing strategies/products as well as new offerings
- 46% Launching new strategies/product offerings
Private equity managers outpace hedge fund managers in various nontraditional offerings; convergence is occurring within private credit and others

While hedge funds and private equity funds continue to be the cornerstones of investors’ alternatives portfolios, investors allocate to a myriad of products. Illiquid credit and real estate continue to grow in importance and are now significant contributors to two-thirds of investors’ portfolios.

Whether it be credit, real estate, real assets, business development companies (BDCs) or venture capital, investor capital is eager for these exposures, and private equity managers are significantly outpacing hedge fund managers in bringing these products to the market.

From a talent and infrastructure perspective, many of these offerings lend themselves more to a private equity manager’s area of expertise. However, hedge funds, particularly in private credit, are going head-to-head with private equity managers as investor demand continues to grow. In fact, 50% of the largest hedge fund managers have a private credit offering, and a third are offering real estate or real asset products. The largest hedge fund managers continue to push toward a more diversified product offering mix that is aligned with investor needs, while smaller and midsize managers are likely to focus solely on their core strategy.

### All alternative funds

<table>
<thead>
<tr>
<th>Product/Offering</th>
<th>Hedge funds</th>
<th>Private equity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge funds</td>
<td>21%</td>
<td>28%</td>
<td>100%</td>
</tr>
<tr>
<td>Private equity</td>
<td>35%</td>
<td>46%</td>
<td>100%</td>
</tr>
<tr>
<td>Private credit</td>
<td>0%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Best idea fund(s)</td>
<td>16%</td>
<td>14%</td>
<td>30%</td>
</tr>
<tr>
<td>Socially responsible funds</td>
<td>15%</td>
<td>25%</td>
<td>40%</td>
</tr>
<tr>
<td>Real estate</td>
<td>13%</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td>Real assets</td>
<td>11%</td>
<td>23%</td>
<td>34%</td>
</tr>
<tr>
<td>BDCs or other permanent capital vehicles</td>
<td>6%</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>Venture capital</td>
<td>25%</td>
<td>25%</td>
<td>50%</td>
</tr>
</tbody>
</table>

### Investors

<table>
<thead>
<tr>
<th>Product/Offering</th>
<th>Hedge funds</th>
<th>Private equity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge funds</td>
<td>21%</td>
<td>28%</td>
<td>86%</td>
</tr>
<tr>
<td>Private equity</td>
<td>35%</td>
<td>46%</td>
<td>77%</td>
</tr>
<tr>
<td>Private credit</td>
<td>0%</td>
<td>21%</td>
<td>62%</td>
</tr>
<tr>
<td>Best idea fund(s)</td>
<td>16%</td>
<td>14%</td>
<td>41%</td>
</tr>
<tr>
<td>Socially responsible funds</td>
<td>15%</td>
<td>25%</td>
<td>28%</td>
</tr>
<tr>
<td>Real estate</td>
<td>13%</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>Real assets</td>
<td>11%</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>BDCs or other permanent capital vehicles</td>
<td>6%</td>
<td>25%</td>
<td>40%</td>
</tr>
<tr>
<td>Venture capital</td>
<td>25%</td>
<td>25%</td>
<td>66%</td>
</tr>
</tbody>
</table>

While hedge funds and private equity funds continue to be the cornerstones of investors’ alternatives portfolios, investors allocate to a myriad of products. Illiquid credit and real estate continue to grow in importance and are now significant contributors to two-thirds of investors’ portfolios. Whether it be credit, real estate, real assets, business development companies (BDCs) or venture capital, investor capital is eager for these exposures, and private equity managers are significantly outpacing hedge fund managers in bringing these products to the market.

From a talent and infrastructure perspective, many of these offerings lend themselves more to a private equity manager’s area of expertise. However, hedge funds, particularly in private credit, are going head to head with private equity managers as investor demand continues to grow. In fact, 50% of the largest hedge fund managers have a private credit offering, and a third are offering real estate or real asset products. The largest hedge fund managers continue to push toward a more diversified product offering mix that is aligned with investor needs, while smaller and midsize managers are likely to focus solely on their core strategy.
Hedge funds benefiting from demand for separately managed accounts and customized exposures

### Hedge funds

Which of the following separately managed account fund types or classes within funds do you currently offer or plan to offer in the next two years?

<table>
<thead>
<tr>
<th>Fund Type</th>
<th>Currently Offer</th>
<th>Plan to Offer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds with customized fees and liquidity terms</td>
<td>50%</td>
<td>55%</td>
</tr>
<tr>
<td>2016</td>
<td>41%</td>
<td>45%</td>
</tr>
<tr>
<td>Funds with customized portfolio exposures</td>
<td>27%</td>
<td>36%</td>
</tr>
<tr>
<td>2016</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>Funds with customized transparency/reporting</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>2016</td>
<td>14%</td>
<td>16%</td>
</tr>
</tbody>
</table>

### Investors

In which of the following types of separately managed hedge funds or classes within hedge funds do you currently invest? How do you expect that to change over the next two years?

<table>
<thead>
<tr>
<th>Fund Type</th>
<th>Currently Invest</th>
<th>Expected Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds with customized fees and liquidity terms</td>
<td>48%</td>
<td>65%</td>
</tr>
<tr>
<td>2018</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>Funds with customized portfolio exposures</td>
<td>39%</td>
<td>57%</td>
</tr>
<tr>
<td>2018</td>
<td>36%</td>
<td>7%</td>
</tr>
<tr>
<td>Funds with customized transparency/reporting</td>
<td>33%</td>
<td>58%</td>
</tr>
<tr>
<td>2018</td>
<td>42%</td>
<td>58%</td>
</tr>
</tbody>
</table>

While private equity funds are outpacing hedge fund managers in nontraditional product offerings, hedge funds are responding to increasing investor demand for customization by continuing to offer SMAs and funds of one. Managers indicated that, on average, 25% of their firms’ assets are within these products. This is set to increase as roughly 20% of investors say they expect larger future allocations to SMAs.

In terms of product evolution, customization of fees and liquidity had a large head start as the original key consideration for SMAs. Customized portfolio exposure was not widely deployed until recently, yet its popularity and growth have it quickly approaching the top means that managers and investors are using to achieve investor-specific bespoke solutions.

Earlier we documented investors’ desire to be more active partners with their managers. SMAs offer exactly that. Whether it be increased transparency, tailored fees and liquidity, or a customized investment mandate, it remains clear that investors expect their managers to remain flexible and willing to negotiate these structures. Being able to offer tailored individual offerings versus a standard commingled offering continues to become more important to a large number of allocators.
Separately managed accounts present numerous operational challenges

The benefits of SMAs need to be weighed relative to the internal strains on infrastructure and scrutiny on conflicts of interest.

Hedge fund and private equity managers alike identified the increased operational burden of SMAs as a significant issue. Processes and technology often require investment to support the new products, particularly in the middle and back office. One reason certain managers have been slower to adopt SMAs – and in particular, SMAs with customized portfolio exposures – is that they see a potential conflict of interests with their commingled vehicles. Trade and expense allocation policies must be robust while the manager juggles multiple products that hopefully will not cannibalize each other.

Private equity managers are slightly more concerned than hedge fund managers with SMA economics. This may be tied to the fact that private equity managers are more likely to offer reduced fees for SMAs. Thirty-five percent say they offer no fee breaks, but of the remainder, 26% offer a 60 basis point or greater reduction. This contrasts with hedge managers, of whom almost half offer no discount to management fees and only 11% offer a discount of 60 basis points or more.

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Hedge fund</th>
<th>Private equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased operational burden</td>
<td>58%</td>
<td>58%</td>
</tr>
<tr>
<td>Perceived conflict of interest with commingled vehicles</td>
<td>36%</td>
<td>45%</td>
</tr>
<tr>
<td>Customized and increased investor reporting transparency expectations</td>
<td>21%</td>
<td>31%</td>
</tr>
<tr>
<td>Unfavorable economics</td>
<td>16%</td>
<td>35%</td>
</tr>
<tr>
<td>Concentrated investor exposure</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Identifying investors who are interested in the offering</td>
<td>7%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Hedge funds

Private equity
“We have ambition for becoming a meaningful and significant asset management player for our clients by providing more customizable solutions.”

Hedge fund, North America, over US$10b
At the tipping point: disruption and the pace of change in the alternative asset management industry

Front-office technology
While disruption is occurring everywhere within alternative asset managers’ operations, perhaps nowhere is it more noticeable than in the front office, where technology and data are profoundly changing how asset managers execute their strategy.

Various studies estimate that 90% of the data in the world has only been created in the last two years. Harnessing this information to identify investment opportunities and create investment theses is paramount to successful investment programs.

Artificial intelligence and machine learning are more often being used by managers across asset classes and investment strategies to make actual investment decisions. Automation of various facets of the investment process is being embraced, and managers who are able to complement their operations with these tools are gaining significant competitive advantages.
The impact of artificial intelligence on front-office models is significant

In the past year, we saw 200% growth in the use of artificial intelligence (AI) in the front office among hedge fund managers and almost 100% growth in the proportion that expect to use AI in the near future. Quantitative managers have been on the forefront of this technology for years, but managers of all strategies have been building capabilities and taking advantage of next-generation trading systems and tools.

Hedge funds have embraced these capabilities more quickly as their investment strategy of analyzing large volumes of securities and economic data lends itself more to leveraging software and machine learning as part of the trade analysis and execution process. Further, hedge fund managers are more likely to have been further along on the technology continuum. Over their life cycle, most were able to forgo basic tools such as spreadsheets years ago and have been using off-the-shelf and proprietary technology.

By contrast, most private equity managers have not yet identified business cases to justify investing in AI. We expect that as the technology becomes more tailored for the industry and private equity managers become more comfortable with its functional ability, we will see exponential growth as we are currently witnessing with hedge fund managers. However, for the time being, many private equity managers continue to move along their technology journey and are only just moving beyond the use of basic tools like spreadsheets.
Use of big data continues to proliferate

All alternative funds

How would you describe your organization’s current state in using next-generation data (e.g., social media sentiment vs. market data) to support the investment process?

The majority of hedge funds either use or are evaluating “next-gen” data for use cases in their investing – a material increase from two years ago. During 2018, only 30% of hedge fund managers did not expect to use next-gen data in their investment process, a decline from almost 50% who made that statement just two years ago. The explosion in the volume of data that is available and the number of market participants utilizing it have begun to change how many hedge funds think of this information. For many firms in the industry, what next-gen data was a few years ago is now just data.

Private equity managers are further behind in their use of next-gen data, as the use cases for private equity may be more limited. Currently, nearly half of private equity managers do not use, and do not expect to use, next-gen data in the future. However, like the shift that gradually occurred for hedge fund managers, we expect private equity to follow suit. We are starting to see larger private equity managers make investments in this space, utilizing big data to help identify investment opportunities and provide analysis into pricing trends that are ultimately guiding acquisition negotiations.
Next-gen data is increasingly available from traditional market data vendors – a trend that can have the unintended consequence of accelerating the commoditization of data sources that were novel just a few years ago. In addition, vendors specializing in alternative data, both structured and unstructured, are gaining traction.

Many managers see the greatest value in data sets that are coming directly from specific sources: satellite imagery firms, credit card processors, etc. There is added value, which often makes this data more expensive, in information that has not yet been widely disseminated by the broader market. However, the procurement of this data may raise regulatory and compliance concerns around the ownership and rights of usage.

The challenge for managers using this data remains: how can you read signals within the data that will result in alpha generating trading activities?

Nearly 60% of hedge funds who use next-generation data are doing so to support their fundamental approach. The adoption rate among private equity managers is lower, but increasing as these managers continue to progress on the digital journey.
As managers invest in AI and the utilization of next-generation data, data engineering and data science are becoming even more critical.

Hedge fund and private equity managers alike are investing in technology to support the harmonization, storage and management of data, as well as investing in advanced analytics, modeling and visualization tools.

As a consequence of managers outsourcing various functions, many now find themselves distanced from their data sets, with the service provider maintaining primary responsibility and ownership. We are now seeing a push by managers to recapture control of their data as they realize the immense potential and value of utilizing data in different ways.

By nature, the biggest managers have both the need – based on size/volume of data – as well as the opportunity via resources and budget, to be leading the way in these investments. However, managers of all sizes and strategies are trying to make impactful investments so that their business is not left behind as leveraging data as a competitive advantage becomes ever more critical.
Investors believe advanced technology and data in the front office are important ... but few have been able to quantify the benefits

As the industry becomes more familiar with the use cases of artificial intelligence and alternative data, investors are increasingly coming to expect that asset managers will leverage it. Many view these tools as attractive complements to the manager’s existing investment process which can lead to alpha generation ... although few investors can actually prove it.

Investors reported that 30% of their 2018 allocations are to managers using next-generation investment tools or data with an expectation that these allocations will grow to over 40% in the next two years. Investors are continuing to trend in the direction of expecting AI or alternative data to be used, and where it is not, managers may need to justify the rationale.

Those managers who are not embracing these techniques need to ask if they and their investors are comfortable with the status quo or if there are potential benefits.

Interestingly, while nearly half of investors believe it is critical for their managers to use AI or next-gen data, and one in four investors would pay more for a manager using emerging technologies, only 11% have evaluated the impact of these technologies on performance. Challenges certainly exist in isolating performance just from these tools; however, it is striking that as this becomes closer to a prerequisite for investment, few are able to quantify attribution.

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**Investors**

How important is it that your fund managers use next-generation data and artificial intelligence to support their investment process?

<table>
<thead>
<tr>
<th></th>
<th>Criticality</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next-generation data</td>
<td>43%</td>
<td>33%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>45%</td>
<td>31%</td>
</tr>
</tbody>
</table>

**Investors**

Have you done any performance attribution analysis to understand the impact of next-generation data and artificial intelligence on the performance of your fund managers?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>11%</td>
<td>89%</td>
<td></td>
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</table>
One of the most interesting economic topics during 2018 has been the proliferation of cryptocurrencies. The dramatic rise (and fall) of valuations and trading volume captured everyone’s interest and begged the question as to how these assets may be utilized by alternative managers within their portfolio. Notwithstanding the fact that a number of smaller, new entrants to the market may have the sole strategy of trading cryptocurrencies, most of the managers in our study expressed that they were treading cautiously. Only 1 in 10 indicated they were active or planned to become active in trading these products.

This adoption rate is comparable to investors, of whom only 12% expressed having current or future exposure to cryptocurrencies through their external managers.

Cryptocurrencies, like any nascent asset class, present known and unknown operational, financial, regulatory and other risks and challenges. As solutions are developed to mitigate risks and the market achieves a greater understanding of these assets, it will be interesting to see whether alternative managers attempt to incorporate cryptocurrencies within their portfolios.
At the tipping point: disruption and the pace of change in the alternative asset management industry

"Investment management firms are chosen by investors to look after their money purely on the quality of the enhanced asset management services that they offer. It really is 90% driven by the talent of the team. Very few sophisticated investors nowadays - and we mostly target institutional investors (endowments and pension funds and the like) - are satisfied with only looking at the PM and the CIO. They really do dig deeply into the entire team and look to speak to the entire team on a regular basis. So the absolute basis of the business is the quality of the talent."

Hedge fund, Europe, under US$2b

Talent is paramount for growth
The immense demand for talent — and, specifically, for people with different skill sets than traditional pure finance backgrounds — coupled with a rapidly different generational profile of talent with different desires, are landing a one-two punch that is significantly disrupting alternative asset manager talent programs.

Across the front, middle and back office, alternative asset managers recognize the need to be hiring individuals who have the ability to interact with the advanced technology solutions that are being used. Data scientists, engineers and programmers are just some of the nontraditional backgrounds that more frequently are supporting, working alongside and leading managers’ operations.

As a result of the changing talent needs, attracting and retaining talent has never been more difficult — or more important — to a manager’s short- and long-term success.
Alternative fund managers are keenly focused on talent management as they attempt to respond to and gain a competitive edge as a result of changing business dynamics. Technology advancements, product development expansion, and the realization that different and diverse points of view will drive better investment decisions are just some of the reasons for this massive pivot about how managers think about their people. This trend is playing itself out in both the front and back office, where nearly half of managers reported that they have changed the profile of talent they are looking to hire relative to 5 to 10 years ago.

Whereas in the past there was a heavy bias, almost a prerequisite, toward hiring individuals with a finance background out of specific universities or with comparable asset management experience, the current landscape has managers scouring many more pipelines for talent. Technology and data have become some of the most in-demand, and hardest-to-attract, skill sets on the street.
Managers are seeking diversity and data/analytics expertise

All alternative funds

Relative to 5 to 10 years ago, how has the “profile” (e.g., educational background, past experience, diversity) of the employees you have evaluated/interviewed/hired changed?

<table>
<thead>
<tr>
<th>Hedge funds</th>
<th>Private equity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aimed to increase the gender diversity of our workforce</strong></td>
<td></td>
</tr>
<tr>
<td>Front-office roles</td>
<td>Middle-/back-office roles</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sought out candidates with more data/analytics education or experience</strong></td>
<td></td>
</tr>
<tr>
<td>Front-office roles</td>
<td>Middle-/back-office roles</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aimed to increase the cultural diversity of our workforce</strong></td>
<td></td>
</tr>
<tr>
<td>Front-office roles</td>
<td>Middle-/back-office roles</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sought out candidates with coding/programming skills</strong></td>
<td></td>
</tr>
<tr>
<td>Front-office roles</td>
<td>Middle-/back-office roles</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sought out candidates with non-finance backgrounds</strong></td>
<td></td>
</tr>
<tr>
<td>Front-office roles</td>
<td>Middle-/back-office roles</td>
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</table>

As they evolve their workforce, hedge fund and private equity managers have slightly different priorities.

Hedge funds, where data and analytics are more heavily utilized as part of the trading process, are seeking out candidates with data analytics experience, as well as those with coding or programming skills. This is also true in the middle and back office where robotics and automation are yielding material gains in efficiency and people are increasingly less responsible for performing routine tasks but, rather, need to be able to program and interact with the technology performing these functions.

Private equity managers, on the other hand, are most focused on gender and cultural diversity, particularly in the front office. These firms view a more diverse organization as critical to being able to better source, evaluate and manage new investment opportunities.

Broadly speaking, these differences in approach make sense. The investment approach for hedge fund managers tends to have a larger data and technology component to it, whereas private equity continues to be slightly more people oriented in the sense of traditional deal flow and valuation analysis.

Like hedge funds, private equity managers are seeking data and analytics competencies in the middle and back office. Both groups of managers are dealing with a challenge in that they believe nearly a quarter of their current middle- and back-office personnel do not have the necessary technological literacy to be successful in their current roles in a more digital future business. Their hiring focus in this area is intended to address these shortcomings.
Contract workers are seen as an increasingly viable solution to complement a full-time workforce

As firms grapple with the increasing costs of hiring and retaining talent, many are looking for cost-efficient ways to scale up or down rapidly depending on business needs. Given the cost and potential disruptions caused by hiring and downsizing, alternative managers are increasingly turning towards contract employees to fill skill and resource gaps in operational roles. This trend has been enabled by the increasing use of technology, which has reduced the need for legacy “institutional” knowledge among their employees.

This trend also aligns with a changing workforce where more employees, particularly younger generations, want flexibility, mobility and freedom to explore different projects that are of interest to them. These contract roles allow workers to take control of their careers and seek assignments to expand their horizons and skill sets. Managers expect to take advantage of this educated pool of freelance talent in ways that would have been unheard of several years ago.

Hedge funds

How do you anticipate your firm’s ratio of contract employees to full-time equivalent employees will change in the next three to five years?
Despite significant shifts in targeted talent profiles, a majority of managers do not have formal talent programs in place.

**All alternative funds**

Do you have a formal talent management program (e.g., dedicated resources overseeing talent function, structured recruiting and retention strategies, coaching and development programs, benefits analysis and implementation)?

**Hedge funds**

- Yes: 39%
- No: 61%

**Private equity**

- Yes: 46%
- No: 54%

Despite the significant prioritization that managers are placing on talent management as a business strategy, as well as the rapidly changing demographics of the talent composition within the alternatives industry, a majority of managers responded that they still do not have a formal talent management program.

Competition for talent is fierce, and with managers increasingly creating more diverse organizations comprising individuals with different cultural, educational and professional backgrounds, formalizing the talent program will be critical to establishing organizational objectives for attracting and retaining best-in-class talent.

Past methods of dealing with talent informally on a one-off basis will no longer work with the workforce of the future. Managers should be adopting a more holistic approach to employee retention, leveraging the right combination of benefits, professional development, incentives and culture across all levels of the organization.
Investors are laser focused on talent programs as part of investment due diligence

A fully developed talent management program is also critical because it is a high priority to investors. Nearly 8 out of 10 investors request information about their manager’s talent management program during due diligence. And more than two-thirds of investors state that having a talent management program has a critically important influence on their investment decision.

While factors such as fees, liquidity and investment strategy are all components to an investor’s decision-making process, the top two criteria cited by investors were (1) quality of the fund management team and (2) anticipated future performance, which is directly correlated to the people and process the manager has in place to run the business.

Even as technology plays an increasingly critical role in a fund manager’s operations, there is no substitute for quality people to drive and grow the business. Investors have an expectation that their managers have talent programs to develop future leaders, increase diversity of skill sets and perspectives, and maintain employee satisfaction to minimize disruption caused by turnover.
A common misconception may be that investors only care about the current leadership teams at their external managers. On the contrary, evaluating future leadership is becoming more important to investors as they make investment decisions. Eighty-two percent of investors indicated that evaluating future investment professionals is important, and almost 80% responded the same for the future business leaders of the organization.

Investors are looking to minimize the risk that arises from relying on a singular key person. They have more confidence investing in firms that have a robust and deep bench of talent.

Further, managers and investors alike understand the shifting skill sets that are necessary to succeed in today’s digital environment. It is often the next generation of talent that has a comprehensive understanding of the emerging data and technology capabilities that are disrupting the industry. Grooming these individuals to one day take on leadership roles is increasingly critical to the long-term viability of a manager’s operations.

### Investors

How important is evaluating the next generation of managers’ leadership and investment professionals when deciding to invest in a hedge fund manager?

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th></th>
<th>2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating next generation of senior executives (C-suite)</td>
<td>61%</td>
<td>17%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Evaluating future investment professionals</td>
<td>67%</td>
<td>15%</td>
<td>18%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th></th>
<th>2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating next generation of senior executives (C-suite)</td>
<td>48%</td>
<td>24%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Evaluating future investment professionals</td>
<td>58%</td>
<td>27%</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>
Innovation in response to fee pressure
One of the most common challenges of the alternatives industry is that the cost of running a successful business remains high and, particularly in periods of subpar performance, investors continue to place extra scrutiny on the expenses that funds are bearing. Managers are tasked with designing an institutional-grade operating model that can support today’s highly complex alternatives landscape while doing so in the most cost-efficient manner possible.

The innovation and disruption impacting the non-investment operating model are nearly as dramatic as what is playing out in the front office. Managers are innovating operations that both pass the rigor of due diligence prerequisites as well as the manager’s own needs, while also being scalable and aligning fees with investors. Customized fee models are being deployed that deviate significantly from the “2 and 20” model that is widely referenced in media reports but that is less used in practice. Technology is being used to perform tasks that would have required a small army of people in the past. Outsourcing capabilities from service providers continue to become more sophisticated. All of these levers provide opportunities for managers to combat fee pressure while modernizing operations that are responsive to this technologically advanced era.
Investors want alternative managers to embrace innovation focused on cost management

Investors are clear where they would like managers to focus: cost management. Fee pressure and the analysis of performance relative to cost continue to dominate many of the industry conversations. While many of the other priorities here have an indirect impact on investor returns, costs have a direct correlation. As such, it is not surprising that a majority of allocators want their managers to be more innovative in cost management, with nearly 50% indicating this should be the top priority.

After costs, investors have a number of areas they would like their managers to focus. The importance of talent and leadership succession was largely covered earlier in this report. With the advancements that have been made in client reporting outside of the alternatives industry, investors are coming to expect that managers provide them with new tools to keep abreast of fund performance and exposures.

Further, adoption of technology is viewed as a critical priority. Investors would like to see further enhancement within the front and back office leveraging today’s cutting-edge tools and technology.

Investors

In which of the following areas would you most like to see your alternative fund managers become more “innovative” to positively benefit the business?

<table>
<thead>
<tr>
<th>Area</th>
<th>Top priority</th>
<th>Top three priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost management/ rationalization</td>
<td>46%</td>
<td>71%</td>
</tr>
<tr>
<td>Talent management</td>
<td>14%</td>
<td>36%</td>
</tr>
<tr>
<td>Improved investor reporting</td>
<td>7%</td>
<td>36%</td>
</tr>
<tr>
<td>Succession planning</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>Front-office technology transformation</td>
<td>3%</td>
<td>18%</td>
</tr>
<tr>
<td>Tax structuring and planning in light of tax reform</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>Asset growth/ attracting capital</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>Enhancing middle-/ back-office processes</td>
<td>3%</td>
<td>17%</td>
</tr>
</tbody>
</table>
**Investor satisfaction with fees is not improving**

<table>
<thead>
<tr>
<th>Year</th>
<th>Very satisfied</th>
<th>Neutral</th>
<th>Not satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>21%</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>2017</td>
<td>24%</td>
<td>48%</td>
<td>28%</td>
</tr>
<tr>
<td>2016</td>
<td>22%</td>
<td>40%</td>
<td>38%</td>
</tr>
<tr>
<td>2015</td>
<td>19%</td>
<td>46%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Likely exacerbated by strong market performance among non-alternatives and alternatives performance (particularly among hedge funds) that has varied but broadly been mediocre, there has been no improvement in investor sentiment toward the fees they pay their alternative fund managers. Nearly 40% of investors say they are not satisfied at all with the fees of the industry. This comes even after years of industry concessions on fees, some of which have been influenced by the preponderance of lower-cost alternatives that continue to resonate well with many in the investor community.

When asked what the most important expense drivers were in their decision to invest with a manager, investors said roughly 45% of the decision was driven by management fees and 30% of the decision was driven by performance fees. Trading and operating costs made up the remainder.

The reality is that investors recognize they have significant amounts of leverage and likely will continue challenging fees, particularly when performance may not be justifying such high expenses. It remains as critical as ever that managers have transparent dialogue with investors related to the costs of running the business and negotiate fairly to obtain fees to support the business. Investors tend to have a reasonable perspective — not wanting the management fee to be a profit center but also not wanting to pay so little in expenses that the manager cannot support an appropriate infrastructure to run the business.
Among hedge funds, managers and investors do monitor expenses relative to peer strategy groups. Hedge fund managers reported the expense ratios included here for their respective flagship funds.

Variables outside of investment strategy (trading volume, leverage, NAV of the fund, capital structure, etc.) will also influence expense ratios, but it is worth noting that long/short equity tends to be the least expensive product. This makes sense as these strategies tend to be the least complex and the most replicable from other passive products with lower fee models.

It is also worth noting that there was no significant movement in expense ratio information year over year among strategies, reflecting that managers generally were successful in holding the line on expenses.

While there have been several high-profile examples of fee cutting within the industry, these tend to occur less frequently than one would think. Less than 20% of investors reported that they had managers cut previously agreed-upon fees in the past two years.

Given the sensitivity around expenses, it is imperative that managers have transparent conversations with investors related to the various expenses that are incurred in running their business. Often investors don’t have a full appreciation for a manager’s specific cost considerations, and upfront, candid conversations can better educate the investor and reduce challenges to managers’ fee arrangements.
Fee structures are rapidly evolving

Amid investor dissatisfaction with traditional flat fee models, many managers are responding via customization of fee structures that are more palatable to investors. Nearly 60% of hedge fund and private equity managers alike have adopted, or are considering, some nontraditional fee offering in an attempt to attract investor capital.

Of those managers utilizing nontraditional fee structures, the most common approach for both groups is implementing a hurdle rate before charging performance. Whether the hurdle is a fixed percentage or pegged against a benchmark, managers appear open to designing the incentive fee in a manner that more closely compensates managers for alpha generation. The similarities in approach between hedge funds and private equity diverge after this top response.

Hedge fund managers are secondarily more likely to favor tiered management fees based on assets under management (AUM). For open-ended products that may grow significant assets, this makes sense, as the costs (as a percentage of AUM) tend to decline as AUM grows. As such, reductions in the management fee can occur while still supporting the infrastructure of the business.

The more favored private equity structures tend to focus on the performance fee either in the form of hurdles or performance fee clawbacks. Private equity managers are also more likely to deploy expense cap arrangements that lock in a maximum expense load that can be passed through, providing more certainty around the cost of the fund to an investor.
The response from investors for these nontraditional, customized fee structures has been positive. Investors continue to focus on alignment of interests and find structures that incentivize performance most appealing. Nearly 8 out of 10 investors have hurdles in place with their managers, and 45% indicated that this is their most preferable structure of all those listed.

Depending on the investor and the manager’s needs, any number of alternative structures may be appealing and appropriate. Tiered fees based on commitment, fund AUM or fund performance are increasingly common.

What may be interesting is the two structures utilized the least. The “1 or 30” model has been highly reported on and discussed in theory, but not yet widely adopted. Also, few investors appear to favor a pass-through model. While fees continue to be a point of contention among managers and investors, the industry is not pushing for an abandonment of that model in lieu of full pass-through.
Margin erosion is affecting one-third of the industry, slightly more so among private equity managers.

The pressures facing alternative fund managers are well-known—fee pressure, challenging fundraising and growing expenses, to name a few. This environment is straining the economics of almost every manager. Despite these headwinds, 33% of hedge fund managers and 28% of private equity managers reported that their margins have improved over the last two years. Nearly an equal number reported margin compression, with private equity managers slightly more likely to fall into that category.

We asked managers how they would categorize the actions they have taken to push back on margin compression. Hedge fund managers were more likely to respond on having pursued longer-term, strategic actions such as investments in technology to streamline operations or more heavily leveraging outsource providers. These levers, while often requiring up-front investment and broader organizational commitment and resources, often result in both higher efficiency and lower cost in the long run.

Private equity managers are more balanced between long-term actions like those described above and shorter-term tactical actions such as looking at headcount reductions or vendor repricing to address margin pressures. These tactical actions tend to yield immediate benefits but often don’t contribute to the longer-term scalability of the business.

All alternative funds
Over the past two years, how have the margins of your management company changed?

All alternative funds
How would you categorize the actions you have taken to mitigate margin erosion?
Hedge fund and private equity managers alike are investing in technology solutions across the back and middle office. Despite managers being at different stages in the evolution of their technology life cycle, all are seeing the improvements that are possible via technology. Managers are realizing more timely and accurate reporting as compared to legacy processes that leveraged less sophisticated tools and required more manual intervention.

While both groups of managers are investing in technology, the sophistication of the technology varies. As illustrated on the following page, hedge fund managers are investing in next-generation technology that will drive automation via the use of robotics and AI. Private equity managers are more likely to be at an earlier stage in their technology transformation journey. Many are just beginning to move away from spreadsheets and other rudimentary tools to systems and technology that would be comparable to that which hedge fund managers may have been using for many years.

Superior technology viewed as a panacea to helping margins and driving higher-quality operations

All alternative funds

In which of the following functional areas did you recently make, or are you planning to make, technology investments in the past two years?

- Compliance and regulatory reporting
  - Hedge funds: 74%
  - Private equity: 56%

- Investor servicing
  - Hedge funds: 62%
  - Private equity: 54%

- Fund accounting
  - Hedge funds: 66%
  - Private equity: 51%

- Middle office (including treasury)
  - Hedge funds: 64%
  - Private equity: 41%

- Tax
  - Hedge funds: 25%
  - Private equity: 22%
Hedge fund managers lead in using robotics and AI in the middle and back office

There has been significant growth in the proportion of hedge fund managers that leverage robotics to perform routine, repetitive tasks in the middle and back office. In 2017, just 10% of hedge fund managers reported that they had invested in robotics or AI. This year a third of hedge managers have implemented robotics and 1 in 10 is utilizing AI.

The benefits are significant. Technology is able to confirm trades, reconcile positions, automate regulatory reporting filings, etc. Once implemented, the tools can work continuously and limit the amount of manual, low-value work performed by people at the manager, freeing these individuals up to perform more value-add activities. The tools and technology are no longer the "wave of the future" so much as the current reality and one of the most impactful means in which managers can scale their operations to support growth and product diversification.
Robotics have had the largest impact on middle-office processes, but use cases also include fund accounting, compliance and regulatory reporting, and investor servicing.

Of the hedge fund managers who have invested in robotics, 86% reported they are using these tools to benefit the middle office. Middle office is prime for these tools based on the high volume of daily tasks associated with settling, confirming, reconciling and valuing assets. Many of these tasks can be programmed to be performed by technology such that people are no longer responsible for performing the administrative elements of the tasks – downloading files, comparing data, formatting schedules – and are more focused on timely resolution of discrepancies and outliers within the reports.

A number of managers see robotics as allowing them to turn “cost centers” into “profit centers.” As one manager notes, “We think we can turn the cost center (the middle office) into a revenue-producing unit as we think we can use robotics to support the treasury group to make better informed financing decisions, which will result in making money for our firm.”

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**All alternative funds**

If investing in robotics, in which specific areas have you evaluated/implemented robotics?

- **Middle office (including treasury)**: 86%
- **Fund accounting**: 59%
- **Compliance and regulatory reporting**: 52%
- **Investor servicing**: 43%
- **Tax**: 18%

**Total**:
A challenge that many identify in attempting to embrace next-generation technology is the education necessary to fully understand their capabilities of their technology. Many managers still need to take the first step in understanding this unknown. Two-thirds of those managers who are not currently utilizing robotics indicated they have minimal to no knowledge of what offerings are even available. The lack of awareness increases slightly when managers are asked what they understand their service providers can perform with robotics. Hopefully these results are seen as a call to action, and those managers who are behind the knowledge curve take steps to raise their awareness and enable more informed decisions for their organizations.

The fact that only 40% of those managers who have implemented robotics believe they are fully aware of technology capabilities demonstrates the learning curve that is associated with this technology. As the tools become more sophisticated, the onus falls on the manager to have people in place who can monitor developments and confirm that the manager is making informed decisions to benefit the business.
Aside from investing in technology, the other most common “strategic” action that managers reported to fight margin compression has been to more heavily leverage outsource providers for various middle- and back-office responsibilities. Hedge fund managers pioneered using administrators for fund accounting purposes and are now moving on to other functions such as investor servicing and middle office.

Private equity managers have been slower to embrace outsourcing, partially due to less sophisticated private equity outsourcing capabilities. More recently, robust solutions are coming to market for these managers, and an increasing number are moving away from owning functions such as fund accounting in-house and are handing off responsibilities to a vendor. The fact that 55% are outsourcing fund accounting is a large step forward compared to past years.

The benefits are significant. External vendors tend to have advanced technology and more resources that can be leveraged to the benefit of the manager, saving time and costs. As manager and investor comfort grows with third-party involvement in certain core tasks such as maintaining books and records, increasingly, other areas of the operations such as treasury, middle office and investor servicing are being analyzed to outsource as well.
Many managers pass through the costs of their outsource provider

A common question that many managers ask when exploring the use of outsource solutions is how to treat the costs. The answer will depend on the manager’s specific offering documents and expense policy, but many managers report passing through these costs to the funds.

It is widely accepted in the industry that the fund accounting services (e.g., striking an NAV) performed by an administrator are acceptable to pass through. Similarly, a majority of managers also pass through tax reporting — although private equity managers tend to do so at a higher percentage.

More recent areas of the business that are being outsourced — middle office and investor servicing — are not as cut and dried as a majority of managers treat these as fund expenses, although a larger percentage compared to fund accounting do report that they bear these costs internally. This cost treatment also reflects the scrutiny that investors have been placing on any new expense types being moved to the funds. Earlier iterations of outsourcing (e.g., fund accounting) and their expense treatment occurred during an era when the investor focus on expenses was not nearly as detailed as it is today.
Strategic, long-term actions are more successful in protecting margins

It feels like an intuitive finding, but the data is clear. Those managers who indicated that they were taking strategic, long-term actions are more likely to report that their margins increased in the past two years.

Only 19% of those managers who indicated they were taking tactical, short-term actions increased margins as compared to 62% who indicated margins decreased. This contrasts with managers who took strategic actions of whom 32% reported margin increases and only 36% had margin compression.

Margins are influenced based on both top-line revenue growth as well as cost management, all while making necessary investments to support the overall growth of the business. With resources less abundant for most managers, business leaders need to critically analyze their operations and take actions to best prepare the organization for both the current and future landscape. Acknowledging that the industry is being disrupted and taking advantage of newfound opportunities will best position innovative and forward-looking managers to deal with challenges and competition.

All alternative funds

Over the past two years, how have the margins of the management company changed?
"Robotics and AI have replaced a lot of assembly work where someone was spending an hour in the morning downloading reports from different sources and copying and pasting them into a report. This has decreased the amount of time and it’s less prone to error. Honestly, it also was not very interesting work, so I think our people appreciate not having to do it anymore."

Hedge fund, North America, over US$10b

"Robotics has led to the reduction of menial tasks for staff. The model for most small hedge funds is to have a relatively small headcount that is high quality, generalist, and just capable of taking on new tasks and solving new problems. If you employ high quality people and pay them well, you don’t want them wasting their time on repetitive, menial tasks. To the extent that it’s possible, you ought to automate those types of processes to elevate your people."

Hedge fund, Europe, under US$2b

"The investment in our investment process will be transformative as it will create better investments. The investments in the middle and back office are more around efficiencies, which has a capped amount of potential while the front-office investment has an uncapped amount of potential."

Hedge fund, North America, over US$10b

"We are focused on data. We realize the value in being able to provide more intelligence on historical data and being able to assess historical performance to determine how it will influence future decisions and directions."

Hedge fund, Asia, under US$2b
“Right now the big are getting bigger and small ones are slowly disappearing. AI in the front office is going to see an increasing use of quant methods and you’re still going to see AUM grow in the alternative space. Convergence is happening and alternatives are going to start to not be known as alternatives, but just as another asset class.”

Hedge Fund, North America, over US$10b
“The use of data science, even for fundamental-based investing, it is very interesting. Data science is a tool to help us fundamentally invest. It is not a replacement for our investment professionals, and we think AI and robotics are going to add to headcount. We have not figured out how to make money off it yet, but if we miss the wave, we are going to miss a big opportunity.”

Hedge fund, North America, over US$10b

“The alternative fund industry is going to grow significantly over the next five years. People are going to move away from equities, and investors are going to expand their longevity outlook and invest with a longer time horizon in mind.”

Pension and endowment, Europe

“Right now, we are concerned with changing investor preferences. Investor demand has been shifting toward PE, which can come at the expense of hedge fund AUM. We continue to think about how we will diversify and compete in the future.”

Hedge fund, North America, US$2–US$10b

“There will be a return to alternatives as the market becomes more volatile, and investors place a greater premium on protection of capital. I believe certainly there will be a downturn in next five years, so I believe there will be increased appetite for alternatives in the next five years.”

Fund of funds, North America

“Most sophisticated investors know this is not the case; however, with some investors thinking that they can get through an ETF what traditionally a hedge fund has been offering, then hedge fund managers are in trouble. At least until this steady bull market ceases. Managers need to innovate and offer products that fit our needs.”

Pension and endowment, North America
Fund managers and investors are aligned with how they perceive the future risks facing the industry. Changing investor preferences is the top response among all constituents. This report has covered this trend in detail, but investors currently hold significant leverage, and managers who do not keep up with shifting allocator needs and expectations are destined to face significant asset challenges and could potentially see a rapid erosion of their capital base.

There remains no shortage of other risks that individually, let alone in aggregate, can derail an individual manager or the entire industry. Many risks such as regulatory and reputational are repetitive of past years and something managers will always be monitoring. Other risks such as liquidity and counterparty failure have generally subsided since the last crisis based on effective risk management. Other risks such as talent attrition and technology advancements are more current developments that the industry is grappling with.

The alternatives industry is no different than any other industry undergoing rapid disruption in that managers and investors alike need to be assessing both the current and future landscape, while not forgetting past failures, to ensure the long-term health of the industry.

**All alternative funds**

**What do you believe are the greatest risks (excluding performance) facing your organization?**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Hedge funds</th>
<th>Private equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing investor preferences/needs</td>
<td>56%</td>
<td>50%</td>
</tr>
<tr>
<td>Regulatory risk</td>
<td>43%</td>
<td>44%</td>
</tr>
<tr>
<td>Talent (i.e., personnel) attrition</td>
<td>42%</td>
<td>50%</td>
</tr>
<tr>
<td>Lack of growth</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>Reputational risk</td>
<td>24%</td>
<td>23%</td>
</tr>
<tr>
<td>Falling behind on technological advances</td>
<td>18%</td>
<td>0%</td>
</tr>
<tr>
<td>Increased demand for passively managed products</td>
<td>0%</td>
<td>18%</td>
</tr>
<tr>
<td>Operational risk</td>
<td>18%</td>
<td>27%</td>
</tr>
<tr>
<td>Counterparty risk</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>8%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Investors**

**What do you believe are the greatest risks (excluding performance) facing your alternative managers?**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing investor preference/needs</td>
<td>44%</td>
</tr>
<tr>
<td>Talent (i.e., personnel) attrition</td>
<td>32%</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>30%</td>
</tr>
<tr>
<td>Lack of growth</td>
<td>27%</td>
</tr>
<tr>
<td>Regulatory risk</td>
<td>24%</td>
</tr>
<tr>
<td>Reputational risk</td>
<td>21%</td>
</tr>
<tr>
<td>Operational risk</td>
<td>14%</td>
</tr>
<tr>
<td>Counterparty risk</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Total**
“I see continued fee compression and continued changes in investor preferences. There will be a continued discussion around passive versus active management. Investors will be seeking bespoke product offerings that are customized to their specific needs.”

Hedge fund, North America, US$2b–US$10b
At the tipping point: disruption and the pace of change in the alternative asset management industry

Demographics and methodology
The purpose of this study is to record the views and opinions of alternative fund managers and institutional investors globally.

Managers and investors were asked to comment on how disruption and innovation are reshaping the alternatives industry. Specific topics included strategic priorities; fundraising, new product development; convergence; the impact of advanced technology and alternative data on the front, middle and back office; the changing talent management landscape; cost management; and future views on the industry.

From July to September 2018, Greenwich Associates conducted:

- 102 interviews with hedge funds representing over US$1.1t in assets under management and 103 interviews with private equity firms representing nearly US$2.2t in assets under management
- 65 interviews with institutional investors (funds of funds, pension funds, endowments and foundations) representing over US$2.7t in assets under management
At the tipping point: disruption and the pace of change in the alternative asset management industry

### Hedge funds

Which of the following fund strategies does your firm offer to clients?

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity long/short</td>
<td>47%</td>
</tr>
<tr>
<td>Credit</td>
<td>29%</td>
</tr>
<tr>
<td>Multi-strategy</td>
<td>26%</td>
</tr>
<tr>
<td>Global macro</td>
<td>20%</td>
</tr>
<tr>
<td>Distressed securities</td>
<td>15%</td>
</tr>
<tr>
<td>Quantitative</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>18%</td>
</tr>
</tbody>
</table>

If you have more than one fund, which of these best describes the strategy of your “flagship” fund?

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity long/short</td>
<td>33%</td>
</tr>
<tr>
<td>Multi-strategy</td>
<td>20%</td>
</tr>
<tr>
<td>Credit</td>
<td>17%</td>
</tr>
<tr>
<td>Global macro</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
</tr>
<tr>
<td>Quantitative</td>
<td>6%</td>
</tr>
<tr>
<td>Distressed securities</td>
<td>2%</td>
</tr>
</tbody>
</table>

2018
**Private equity respondent demographics**

**Private equity**

What is the number of unique limited partners across your fund complex?

<table>
<thead>
<tr>
<th>Number of Limited Partners</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–50</td>
<td>14%</td>
</tr>
<tr>
<td>51–100</td>
<td>16%</td>
</tr>
<tr>
<td>101–200</td>
<td>28%</td>
</tr>
<tr>
<td>201–400</td>
<td>14%</td>
</tr>
<tr>
<td>401+</td>
<td>28%</td>
</tr>
</tbody>
</table>

In what year did your firm's most recent fund close?

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 2015</td>
<td>7%</td>
</tr>
<tr>
<td>2015</td>
<td>11%</td>
</tr>
<tr>
<td>2016</td>
<td>12%</td>
</tr>
<tr>
<td>2017</td>
<td>26%</td>
</tr>
<tr>
<td>2018</td>
<td>44%</td>
</tr>
</tbody>
</table>
### EY Americas

**Bahamas**
- Tiffany Norris-Pilcher
  - tiffany.norris@bs.ey.com
  - +1 242 502 6044

**Bermuda**
- Bill Bailey
  - bill.bailey1@bm.ey.com
  - +1 441 294 5319
- Jessel Mendes
  - jessel.mendes@bm.ey.com
  - +1 441 294 5571

**Brazil**
- Ana Lourenco
  - analuiza.lourenco@br.ey.com
  - +55 11 2573 4898

**British Virgin Islands**
- Roy Bailey
  - roy.bailey1@vg.ey.com
  - +1 284 852 5467
- Mike Mannisto
  - mike.mannisto@ky.ey.com
  - +1 345 814 9003

**Canada**
- Gary Chin
  - gary.chin@ca.ey.com
  - +1 416 943 3427

**Cayman Islands**
- Fraser Whale
  - fraser.t.whale@ca.ey.com
  - +1 416 943 3353

**Curacao**
- Alex Johnson
  - alex.johnson1@ey.com
  - +1 617 585 1930

**US (Boston)**
- Kyle Burrell
  - kyle.burrell@ey.com
  - +1 617 375 1331
- Robert Glassman
  - robert.glassman@ey.com
  - +1 617 375 2382

**US (Charlotte)**
- Jeffrey Short
  - jeffrey.short@ey.com
  - +1 345 814 9004

**US (Chicago)**
- Michael O’Donnell
  - michael.odonnell@ey.com
  - +1 213 977 5858

**US (Dallas)**
- John Kavanaugh
  - john.kavanaugh@ey.com
  - +1 214 240 7490

**US (Minneapolis)**
- Adrienne Main
  - adrienne.main@ey.com
  - +1 214 754 3226

**US (New York)**
- Joseph Bianco
  - joseph.bianco@ey.com
  - +1 212 773 3807

**US (Philadelphia)**
- Adeel Jivraj
  - adeel.jivraj@ey.com
  - +1 215 841 0615

**US (San Francisco)**
- Paul Kangall
  - paul.kangall@ey.com
  - +1 415 894 8056

**US (Stamford)**
- Seda Livian
  - seda.livian@ey.com
  - +1 212 773 1168
- George Saffayeh
  - george.saffayeh@ey.com
  - +1 212 773 2430
- William Stoffel
  - william.stoffel@ey.com
  - +1 212 773 3141
- Petter Wendel
  - petter.wendel@ey.com
  - +1 201 551 5013

**Cayman Islands**
- Tiffany Norris-Pilcher
  - tiffany.norris@bs.ey.com
  - +1 242 502 6044

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  - michael.odonnell@ey.com
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  - john.kavanaugh@ey.com
  - +1 214 240 7490

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  - adrienne.main@ey.com
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**US (New York)**
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  - joseph.bianco@ey.com
  - +1 212 773 3807

**US (Philadelphia)**
- Adeel Jivraj
  - adeel.jivraj@ey.com
  - +1 215 841 0615

**US (San Francisco)**
- Paul Kangall
  - paul.kangall@ey.com
  - +1 415 894 8056
- Michel Kapulica
  - michel.kapulica@ey.com
  - +1 415 894 8605
- Mark Olsen
  - mark.olsen@ey.com
  - +1 415 894 8348

**US (Stamford)**
- Seda Livian
  - seda.livian@ey.com
  - +1 212 773 1168
- George Saffayeh
  - george.saffayeh@ey.com
  - +1 212 773 2430
- William Stoffel
  - william.stoffel@ey.com
  - +1 212 773 3141
- Petter Wendel
  - petter.wendel@ey.com
  - +1 201 551 5013

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