



FUTUREPROOFING OPERATIONS

THE EVOLVING ROLE OF THE HEDGE FUND COO

EXECUTIVE SUMMARY

As hedge funds grapple with an assortment of fee pressures, regulatory burdens, and squeezed resources, the allure of automation seems greater than ever as tech solutions continue to advance at a breakneck pace.

This latest Hedgeweek Insight Report offers an in-depth exploration of how managers' business infrastructure and operations are changing as a result of greater automation, and how this process is recasting the role and remit of the hedge fund chief operating officer.

Specifically, it details how a growing need for efficiency, safety, security and cost savings is driving this rewiring, and considers how an ever-lengthening list of trends – including cybersecurity, regulation and data – is impacting the ops agenda.

Amid ongoing industry institutionalisation, the report also weighs up how COOs have emerged as key figures within hedge fund firms, and weighs up the way they are balancing outsourcing trends with the need to maintain closer oversight over critical business functions.

With hedge funds' business operations seemingly in a perennial state of flux, the report offers a timely examination of the industry's engine rooms, gauging the extent of automation across various business functions at asset managers of all shapes and sizes, and detailing the key drivers and trends behind this march of the machines.

HUGH LEASK
REPORT AUTHOR

CONTENTS

KEY FINDINGS	3
CHAPTER 1 - AUTOMATION	4
CHAPTER 2 - REMIT	13
CHAPTER 3 - TRENDS	21
CHAPTER 4 - OUTSOURCING	29

METHODOLOGY

The insights gathered here are drawn from a Hedgeweek survey of over 50 hedge fund managers across the globe, as well as a series of in-depth interviews with industry specialists and further ongoing background research.

KEY FINDINGS

1

Security, efficiency and cost-savings power automation shift

Hedge funds of all shapes and sizes are now automating more of their processes, predominantly in the core aspects of trades – allocations, limits and trade matching functions - with larger managers of \$1 billion in assets or more leading the way. The ability to complete tasks quickly and efficiently is the most popular reason for automation, followed by safe and secure execution, and long-term cost savings.

2

The role of the hedge fund COO has narrowed

While the remit and profile of the hedge fund COO remains broad, especially at smaller firms, it has narrowed. Among the COOs surveyed by HedgeWeek, more than half described their current role as a 'true blend' of people, process, technology and vendor management. However, among the same group, 70% said this was the case two years ago, suggesting some have seen their role become more focused.

3

Regulatory risk and cybersecurity challenges loom large

With more hedge funds moving their systems to the cloud, and as regulatory upheaval and cyber-risk continue to pose headaches, hedge fund COOs are increasingly alert to the battery of challenges confronting their firms. As enhanced technology and software brings fresh hack and leak risk, and regulators look to turn cyber-transparency from voluntary to mandatory, cybersecurity is now a critical issue for COOs, with some 40% turning to automation as a way of futureproofing their businesses.

4

Despite the rise of outsourcing, managers are maintaining in-house oversight

Business infrastructure models remain mixed across the manager spectrum: more than a third of emerging managers' ops are now mainly cloud-based, with a fifth having a primarily outsourced ops infrastructure, while larger funds tend to maintain traditional in-house stack-based systems. However, most hedge funds generally favour maintaining closer oversight over certain key processes, eschewing the fully outsourced COO model for an ever-present 'big picture' in-house check on certain functions.



A LONG-TERM PLUS

As hedge funds' business functions grow in complexity, more managers are turning to technology in order to execute a growing number of tasks

New research conducted for this report highlights the extent of automation across hedge funds' back- and middle-office business operations, with hedge funds across strategy sizes increasingly tapping into technology to handle the core components of a trade, predominantly at the allocation, risk, and reconciliation stages.

Leading the way are those firms managing assets of \$1 billion or more, who are adopting automation more extensively than those with AuMs of under \$1 billion, Hedgeweek data shows (see Fig. 1.1). A majority – 57% – of \$1 billion+ hedge funds surveyed have now fully automated their trade allocation functions, with the same percentage having also fully automated their trade limits/restrictions functions. Research shows that 44% of \$1 billion+ funds have fully automated reconciliation, and 43% have also fully automated their risk attribution and trade monitoring processes.

While automation is less comprehensive among smaller and mid-sized hedge funds, many managers in this space are nevertheless already on the journey towards increasing implementation. Specifically, close to 60% of \$250-999 million hedge funds, and almost a third of managers with \$250 million or less, have now fully automated their trade matching functions. On trade allocation, one-third of hedge funds with \$250-300 million managers have fully automated, while the same can be said for 39% of managers with under \$250 million in assets.

In contrast, managers appear to be less keen to automate more sensitive processes surrounding cash payments and margin, as well as compliance and mandate disclosures, with automation markedly less widespread in such functions.

So what are the main drivers of this tech advance within the industry's engine rooms? Hedge fund COOs on the frontline observe how part of the push stems from a growing need for efficiency in this era of lower fees, with technology seen as key to helping to reduce time and resources across a range of business functions, while also allowing under-the-hood operations to be completed more safely and securely.

"There are certainly upfront costs, and it can take time to implement – but once it's up and running, those costs are hugely outweighed by the benefits," says Chris Scarlata, COO and CFO, New Holland Capital, adding that automation affords COOs a "considerable comfort level" and a "long-term plus for the budget."

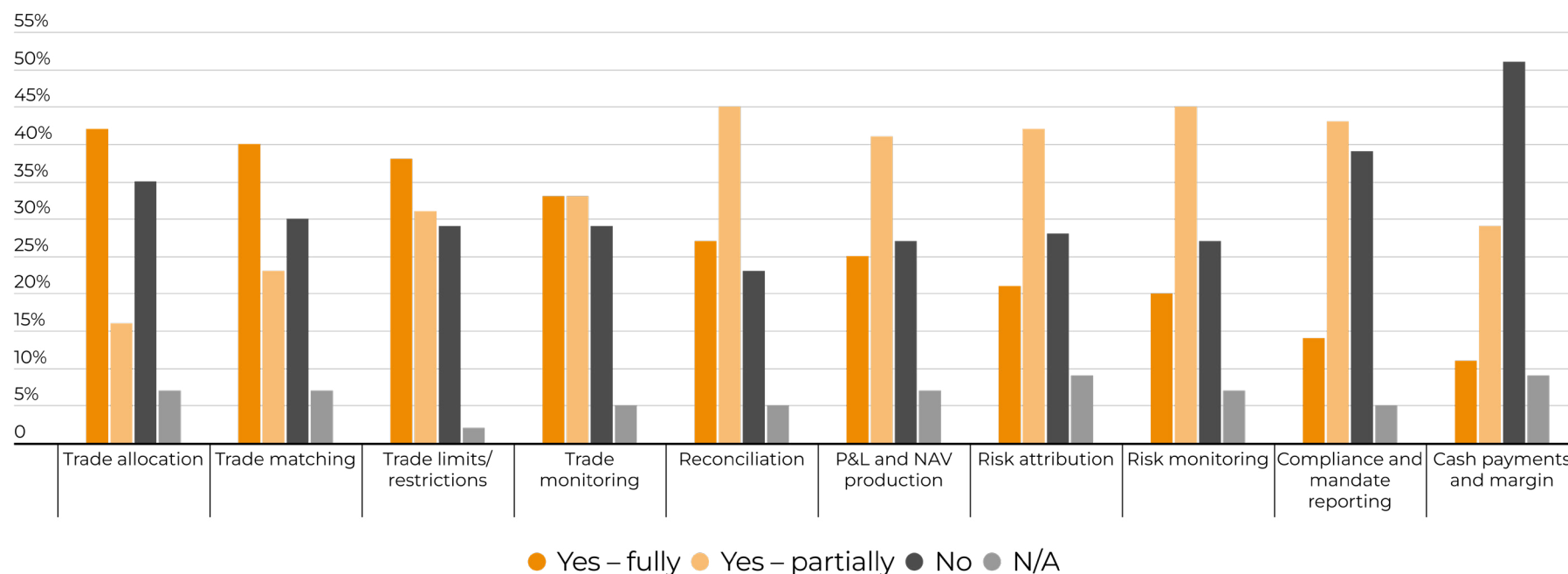
Nicholas Pepe, managing partner and

chief operating officer at Mill Hill Capital, says the prevalence of compressed fees in the asset management industry means it is now critical for managers to run the most efficient businesses across the board, in order to strengthen competitiveness on fees, and help drive better net returns.

"We definitely have a big focus on streamlining, and that's getting easier

and easier to do with the advent of new technology," Pepe tells *Hedgework*. "We recently underwent a fairly comprehensive process, revamping a lot of our operations and ensuring a lot of our trades were processed straight through, and we see that the time, effort, and potential for mistakes is minimised by utilising the enhanced technology afforded to us in this new era of trading."

Figure 1.1 Extent that key operational processes have been automated by hedge fund firms

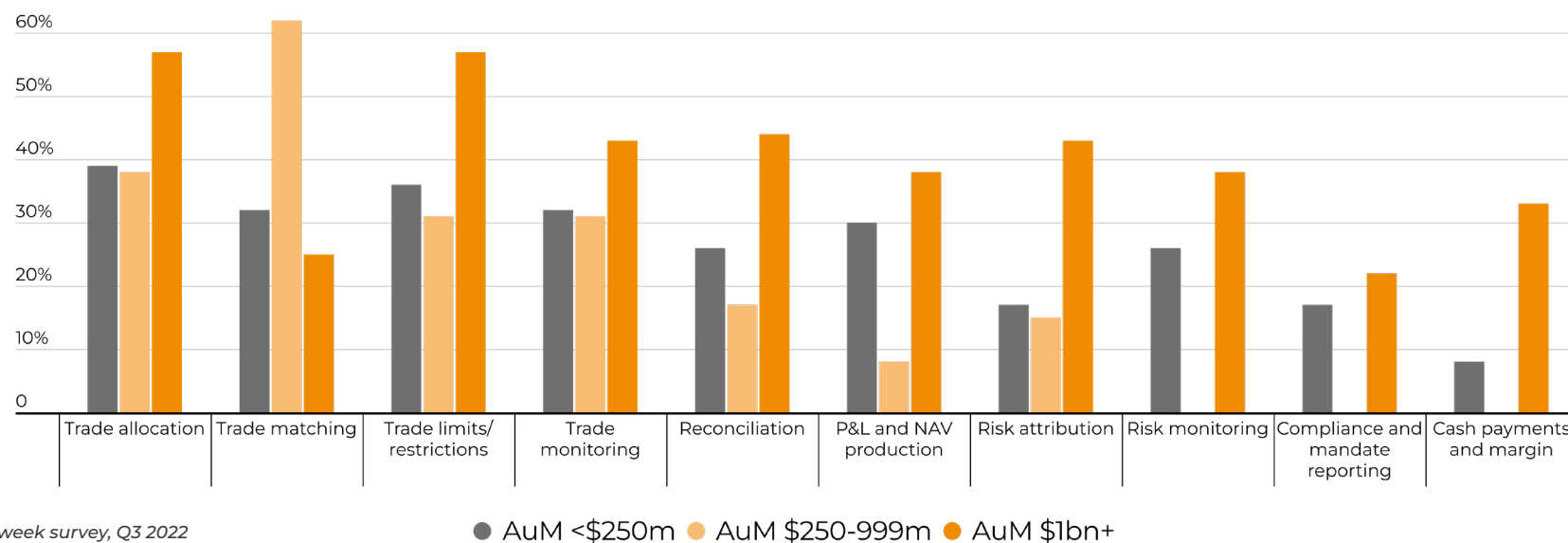


Source: *Hedgework* survey, Q3 2022

“

There are certainly upfront costs, and it can take time to implement – but once it's up and running, those costs are hugely outweighed by the benefits

Chris Scarlata, COO and CFO, New Holland Capital

Figure 1.2 Proportion of hedge fund firms to fully automate key operational processes – by firm AuM

Source: Hedgeweek survey, Q3 2022

Overhaul

Overall, 50% of all hedge funds surveyed by Hedgeweek say long-term cost savings are one of the top three reasons to automate. But even more point to the ability to complete tasks in a safe and secure way (58%) and ensure tasks are executed quickly and efficiently (78%).

Delving deeper, while saving money over the long term is proving a major factor for the switch to automation among larger managers, smaller and mid-sized firms ability to better

execute tasks quickly, efficiently and more safely appears to be just as important for smaller and mid-sized managers (see Fig. 1.5).

Asked about the top three motivations behind their decision to automate, the ability to complete tasks quickly and efficiently was the most common reason among smaller (<\$250 million) and medium-sized (\$250-999 million) managers, followed by completing tasks in a more safe and secure way, and

long-term cost-saving. Meanwhile, for bigger hedge funds with assets of more than \$1 billion, completing tasks in a safe and secure way, and saving money over the long-term, appears to be the bigger driver.

Hedge fund ops professionals note how certain reporting processes that previously took almost a full day are being cut down to around half an hour as a result of automation.

Scarlata – who oversees New Holland’s operational due diligence when investigating potential investments in the hedge fund space, focusing on non-investment capabilities and structures – points to one hedge fund COO who overhauled their firm’s reporting process using data warehouses. The move allowed the firm to significantly cut down on time and resources to produce reports while also mitigating manual errors.

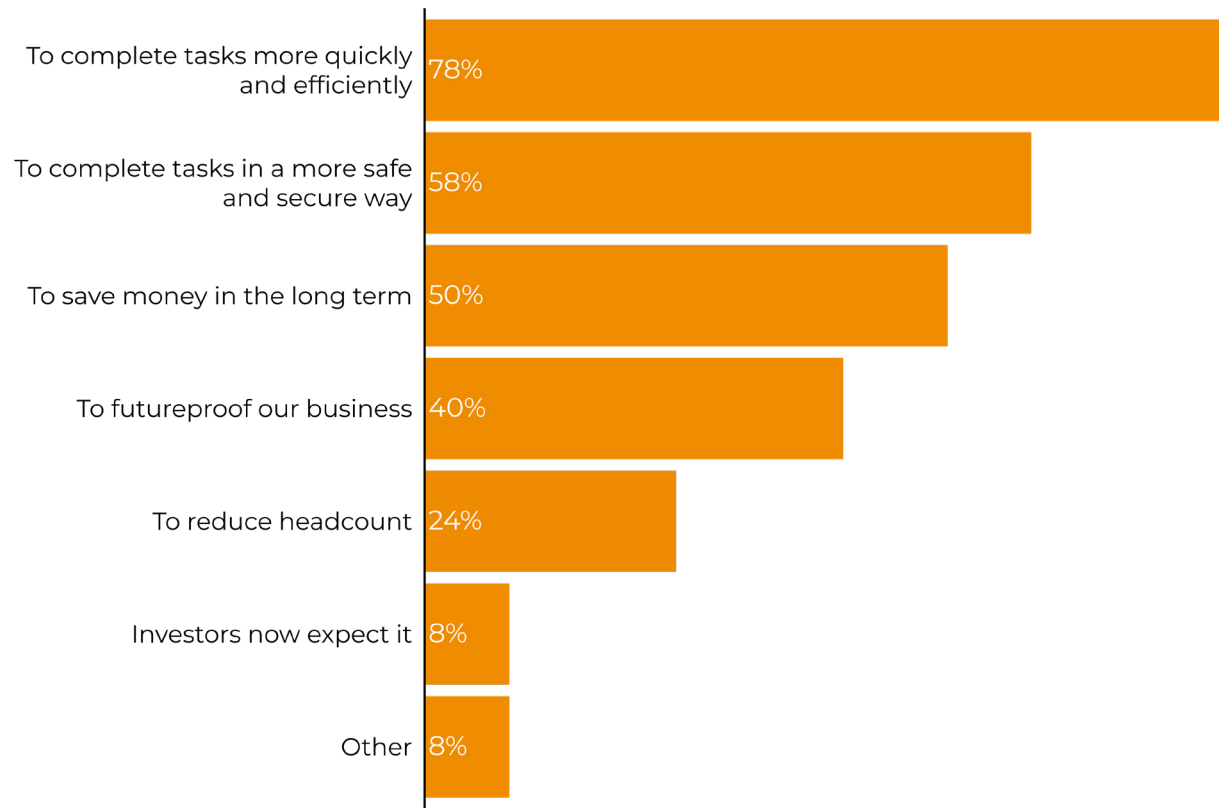
“Reporting has become an increasingly large burden for COOs, and this COO had the tools and the people around him understanding it,” Scarlata says.

“So even though he may not have known how to spin up a SQL database or architect the data structure that was going to serve the firm, he knew enough to ask the right questions and best coordinate between all the groups – the compliance people, the investment side, the investors – to determine the output needed from creating the data warehouse.”

Nicholas Pepe meanwhile says the effort going into booking, settling and reconciling cash differences at the trade level has improved as a result of tech implementation, with a marked shift in trade processing and settlement and reconciliation process over the past four of five years.

“We have built a really healthy tech infrastructure here,” Pepe says of the firm’s automation experience.

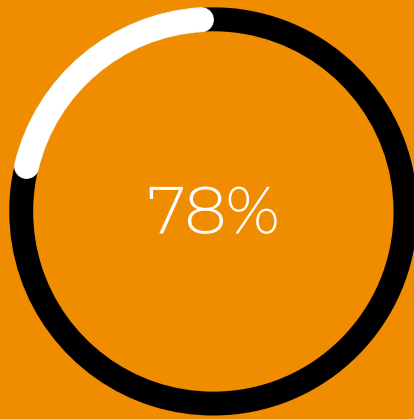
Figure 1.3 Top reasons hedge fund firms are automating operational processes



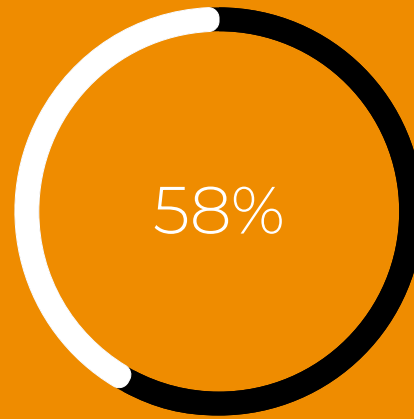
Analyst note: Survey respondents were asked to select their top three reasons for automating operational processes generally. Source: Hedgeweek survey, Q3 2022

KEY FINDINGS

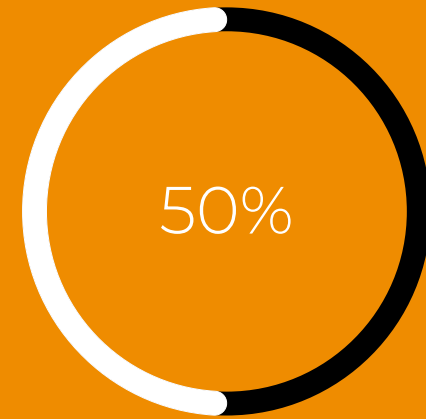
Cost, efficiency and security are the top 3 drivers of ops automation



78% of all hedge funds surveyed said ensuring tasks are completed quickly and efficiently is a reason to automate

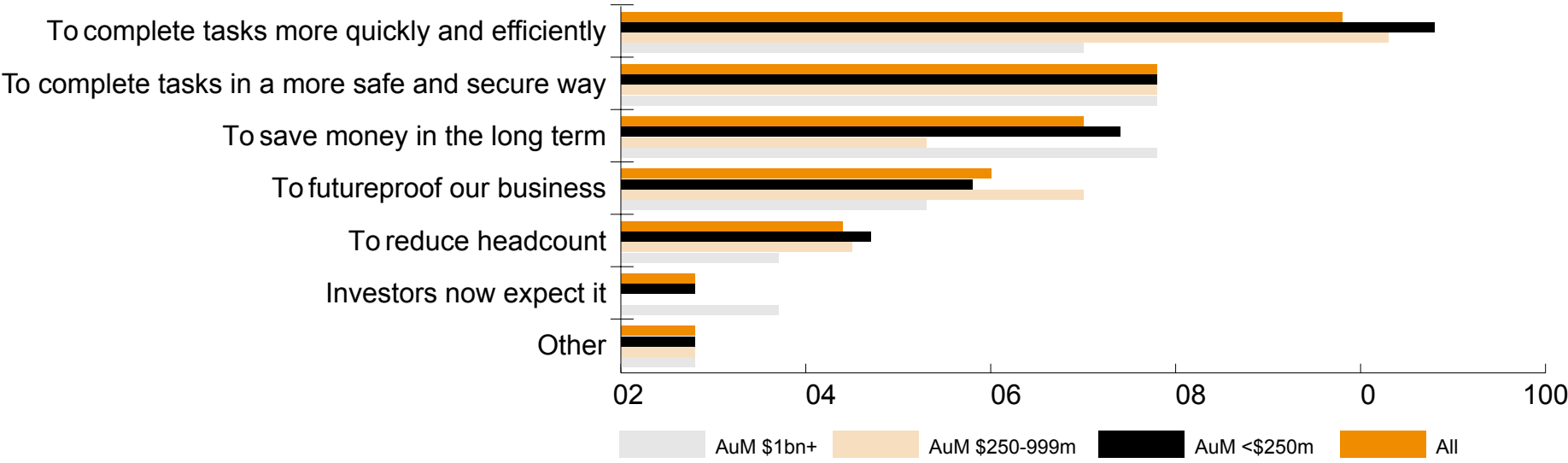


58% of all hedge funds surveyed said ensuring tasks are completed in a safe and secure way is a reason to automate



50% of all hedge funds surveyed said long-term cost savings is a reason to automate

Figure 1.4 Top reasons hedge fund firms are automating operational processes – by firm AuM



Analyst note: Survey respondents were asked to select their top three reasons for automating operational processes generally. Source: Hedgeweek survey, Q3 2022

Pivot

Industry professionals also note how the move towards automated systems helps ease the key person risks that hedge funds faced in the past.

“If you suddenly lose, for example, an ops person, or an accounting person, if the process is already automated then other people can more easily step in their place,” explains

Scarlata. “There is lower risk arising from individuals leaving the firm; with automation, you don’t have to worry about redundancy and replacements as much as you did in the past

when it was just all manual.”
The sustained push for automation, particularly among bigger hedge fund players, may also

be explained by the fact that many larger and more established managers built their infrastructure in their formative years and are now playing catch-up with regards to tech and systems.

“They built their infrastructure in the old world and they had to pivot and shift. In some ways, the lift was a much bigger tax on those organisations,” Scarlata says.

So is the increased use of technology helping to level the playing field – at least at the operations level – between resource-rich hedge fund behemoths and smaller boutique managers with tighter budgets?

“Over the last few years, we have been doing a lot more with emerging managers, and we have seen that in some ways it’s a lot easier for them to launch, because there is a lot more off-the-shelf technology, and they are able to bring in a COO that can manage all the different facets of getting them up and running, but also outsource selectively,” says Scarlata.

He adds: “It’s a logical way to get up and running much quicker, allowing them to focus internally on their trading, reporting, and their data warehouses, and utilise certain middle- and back-office services that have become more commoditised.

“Every COO will tell us that the investment in technology is worth it; that the pain they often go through figuring it out is definitely a tax on the organisation, and it takes some time and investment. But once it’s done, the shop can scale in ways that it couldn’t before.”

Pepe says: “Previously, what was possible for the much larger asset managers compared to smaller ones was a much bigger divide. Now, though, if you’re willing to spend the money, you can basically get almost anything you want, which is a major difference from the past.”

Detail

Turning to the potential challenges or hurdles confronting COOs looking to streamline their operations, industry experts acknowledge there is ultimately no ‘one-size-fits-all’ approach to automation, noting some strategies and models are less adaptable to automation or outsourcing than others.

Specifically, certain hedge fund firms may have a more vanilla operational infrastructure, trading a small number of mid-to-large cap equities long and short, for instance, this means that control functions can easily be embedded and automated. In contrast, more complex strategies involving trading many different types of OTC products may be less readily adaptable to tech-led processes. Indeed, Hedgeweek’s research found that around one in four managers believe a major reason for not automating is that they have automated as much as they currently need to as a business.

“You could have 30 different hedge fund firms and not one of them will be the same in terms of infrastructure, in terms of risks, in terms of focus, in terms of what the COO is doing on a daily basis. That is one of the major challenges,” says Phillip Chapple, COO, Monterone Partners.

“
“The devil is,
as always, in the
detail.”

Chapple notes how COOs ultimately look to improve control and develop an infrastructure where risk is reduced and ensure processes and functions run as easily and smoothly as possible. On the flipside, however, there is always a risk of unforeseen consequences.

“When you’re looking at these processes you’re really trying to determine if there is a net gain. There’s no point in putting something in place for the sake of it, and it ends up actually reducing control,” he explains.

“As you grow as a firm, you will potentially add different pieces of technology as you find

different providers with different products. How do they talk to each other? How do you reconcile between these different systems? They are all moving at different paces, and they all do slightly different things. Where these systems don’t work is where they actually create more work than they are worth, or they’re not properly wired in.

“You can’t afford to spend money or implement things that don’t work, but until it’s up and running, and really working, there is always an element of not knowing whether something will be effective.”

KEY TAKEAWAYS

The drive towards automated ops within the industry is powered mainly by a desire to execute processes in a more timely, efficient and secure way, though long-term cost savings for managers is another key factor in the switch

Larger hedge funds are opting to automate in a more comprehensive way than smaller firms, but research data indicates managers of all AuM sizes are turning to tech, particularly within their trade allocation, trade limits and reconciliation processes

Some investment strategies are more readily suited to automation than others, and COOs sound a note of caution when it comes to retaining control over an assortment of automated systems



A HIGHER PROFILE

Against a constantly evolving backdrop of advancing technology, heightened regulatory barriers, and increasingly complex business operations, the nature and profile of the hedge fund chief operational officer has transformed over the past decade

The scope of the hedge fund COO's remit is expanding, and their day-to-day duties are increasing, which in turn is changing how the role slots into the broader hedge fund business today. Traditionally a predominantly operations-focused individual familiar with the back- and middle-office and handling trades, industry participants say COOs at cutting-edge hedge fund firms are now becoming critical figures within the overall model.

This is partly due to the changing nature of the hedge fund space itself. In contrast with other industries and sectors, the business landscape within financial services - and hedge funds in particular - never stands still, with automation just one of many major drivers of change, market participants say.

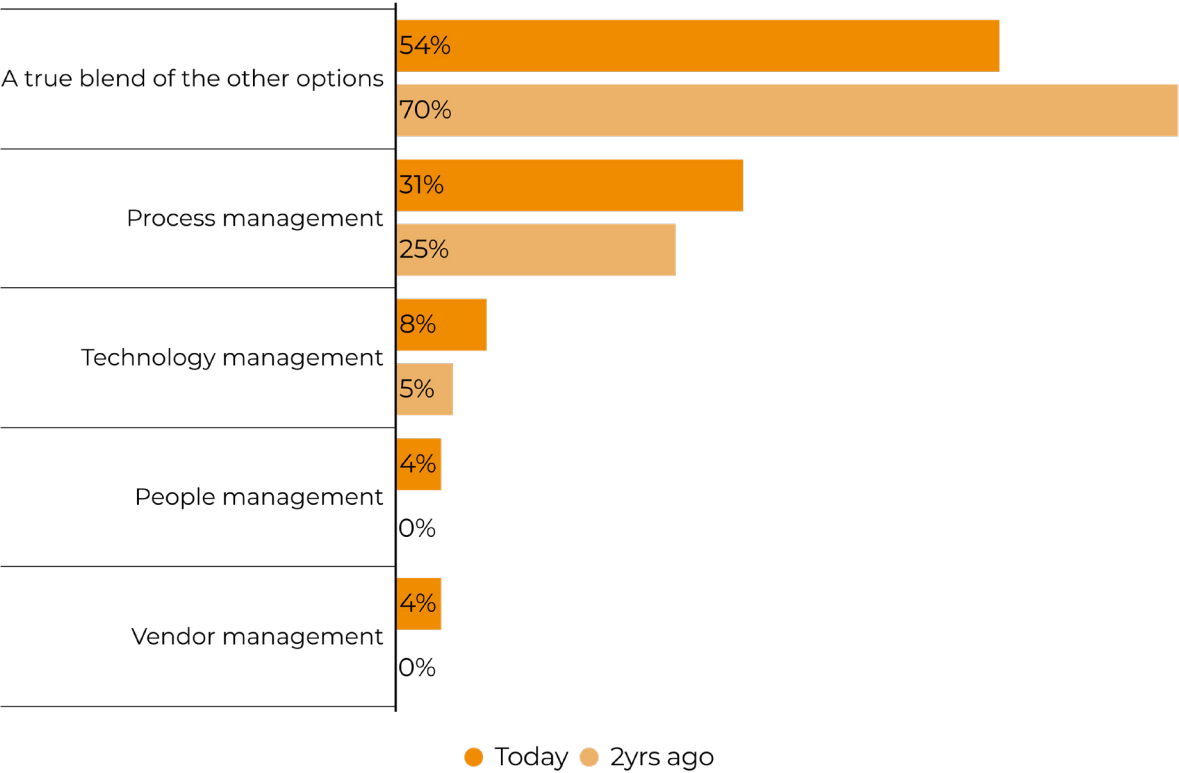
"There is never a normal business-as-usual state. There are always focus points, there are always 'to-dos'," says Phillip Chapple,

chief operating officer, Monterone Partners. “If it’s not market events that are changing risk, it’s regulatory changes, or new systems and automation, or how to implement controls and risk management.”

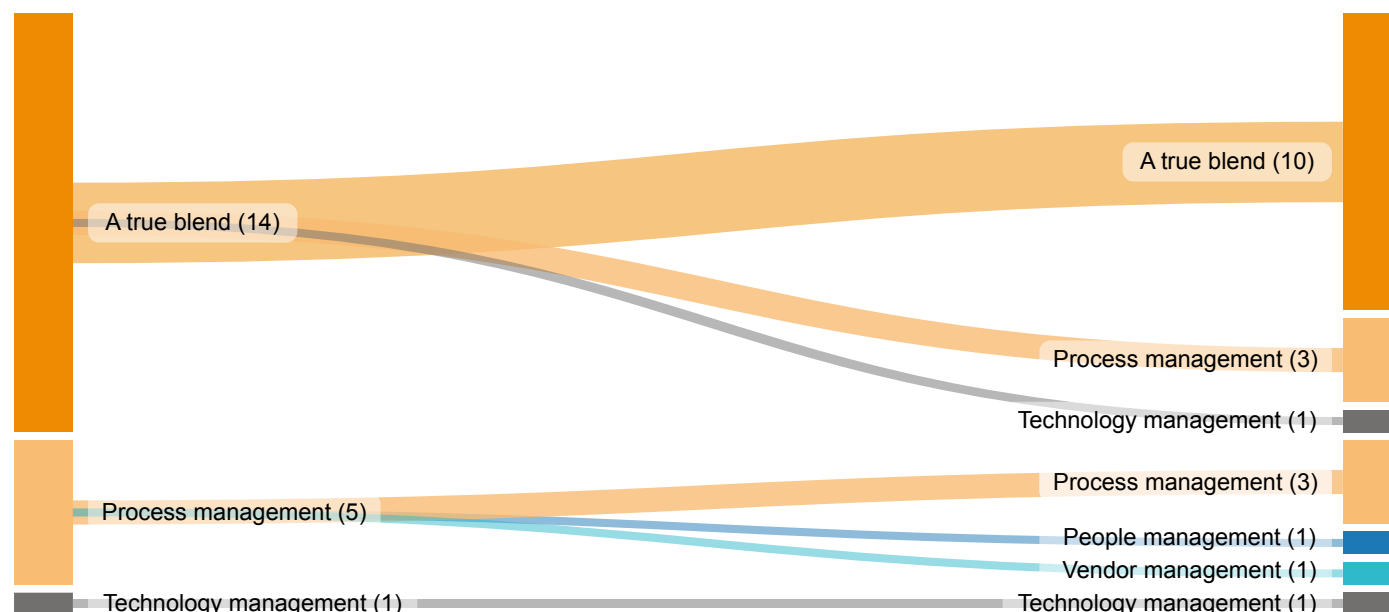
Elaborating further, he continues: “It’s unique in that it’s a constantly changing role. It’s such a wide remit, with so much to do, that no two hedge fund COOs’ jobs are the same. You tend to wear many different hats, and you’re covering many different processes, and everyone has their own areas of expertise.”

Survey data appears to back up this perspective. More than half (54%) of hedge fund ops heads see their role as a true blend of people, process and technology management today, according to Hedgeweek research. That compares to almost 70% two years ago, a dip partly attributable to the growing presence of tech and increased processes, which are accounting for an increasingly larger part of the role. Specifically, operational leaders who see their role as predominantly process management has risen over the past two years, from 25% to 31%. The rise of technology, meanwhile, is also playing an increasingly vital part within the COO sphere, with those who see their position as predominantly tech management increasing from 5% to 8% over the past two years.

Figure 2.1 How hedge fund COOs describe their role now versus two years ago



*Analyst note: Among survey respondents, 26 said they were a COO or head of the operations department at a hedge fund management business currently and 20 said they were two years ago.
Source: Hedgeweek survey, Q3 2022*

Figure 2.2 How hedge fund COOs describe their role now versus two years ago – flow of change

Analyst note: Chart relates to the 20 survey respondents that said they were a COO or head of the operations department at a hedge fund management business now and two years ago. Source: Hedgeweek survey, Q3 2022

Shift

This shift in the COO role is also a reflection of the longer-term institutionalisation of the hedge fund industry itself, industry participants say.

“There is an overarching trend, especially as many hedge funds have got bigger and

bigger, where they look more like normal financial institutions, banks or otherwise,” says Scott Radke, chief executive officer, at New Holland Capital. “As a result, the scope and the responsibility of the COO has become dramatically greater than for the smaller hedge funds that we may have

had in the past.” Reflecting on longer-term industry shifts, Andrew Beer, managing member and co-portfolio manager at Dynamic Beta Investments, points to expanded regulatory and client demands stemming from the greater professionalisation of the business.

“In the early 1990s, the typical hedge fund would have the skilled stockpicker who would manage the portfolio. If you raised \$10 million from family and friends, and were charging two-and-twenty, you’d have \$200,000 of revenue and this would be enough to hire a jack-of-all-trades COO. The pair of them

would be sitting in a small rented office space, hoping to grow to \$100 million or \$500 million,” Beer recalls.

“Back then, this was really a cottage industry. You had to do things like trade reconciliation, but you didn’t have to register as an RFA, so you did not have the whole SEC compliance burden.”

By the turn of the millennium, however, the increased institutionalisation of the industry meant funds of funds and other institutional consulting firms began to favour hedge funds with larger operations and more staff.

“By that time, if you wanted to kind of get up and running, you had to demonstrate your COO, your CFO, the head of trading, the head of risk; you had show that you were registering with the SEC and so on,” Beer

continues. “Basically you were trying to do well in this beauty pageant with institutional investors, and differentiate yourself from all the funds of the prior model, which was basically two guys in a room. The due diligence standard went up a lot, and so did the number of bodies.”

Route

Such fundamental shifts in the business landscape have meant ops heads’ skillsets are constantly evolving. That, in turn, is upending the previously well-established career path of the hedge fund COO.

Industry observers note how COOs and CFOs traditionally specialised in so-called “block-and-tackle” defensive processes, but tended to be less well-versed in portfolio risk or strategy details. “In the past, the COO did

their thing, and the CFO did their thing, and compliance did their thing – and everyone was in their own little realm,” Chris Scarlata, COO and CFO, New Holland Capital, notes.

“Now, though, COOs understand enough about what’s happening in accounting and finance, and they understand what’s happening in compliance, and they also understand IT, which has been a big shift compared to the past. They tend to be people who are becoming much more familiar with the trading itself. So they are coming in and are, almost by survival, having to really be the central point for execution, for everything that’s going to let that firm grow.”

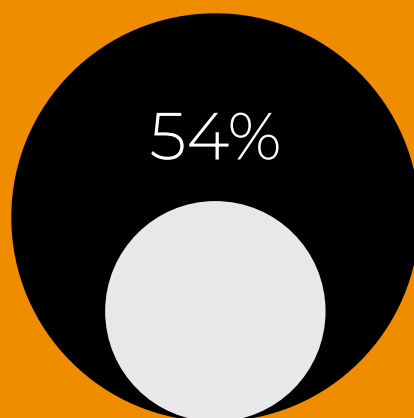
“Every COO has a different route to becoming a COO,” adds Phillip Chapple. “When I first came into the industry, most of them were accountants. It was considered

similar to a CFO; people had maybe been at an administrator, or at a bank, or an accountant, and then moved into ops. Now, though, I’d say most of the people are coming in from a pure operational background, though talking to a lot of COOs, there are some lawyers too. There is no right or wrong route.”

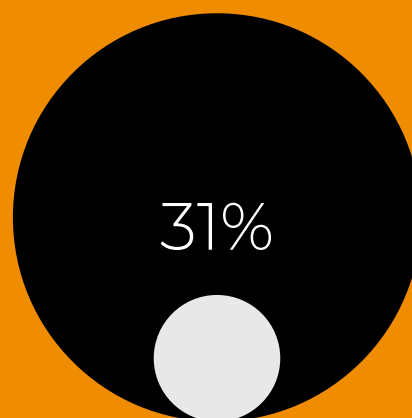
He continues: “It’s about having certain core skills: looking at risk management is core, having a good idea of regulation is core, as well as legal and accounting. There are so many different facets. So I don’t think it changes the route in, but it perhaps broadens it, so that it isn’t just purely accountants, or people with legal backgrounds - there are now people with more operational, mechanical, engineering approaches, in terms of figuring out how things all fit together.”

KEY FINDINGS

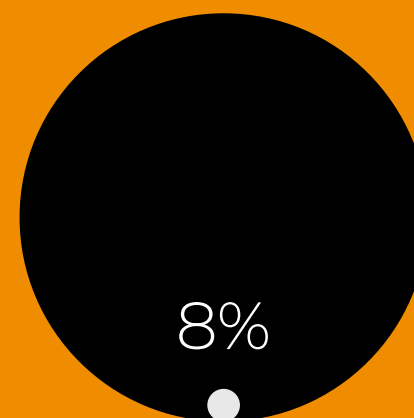
The COO role now mixes people, process and tech management



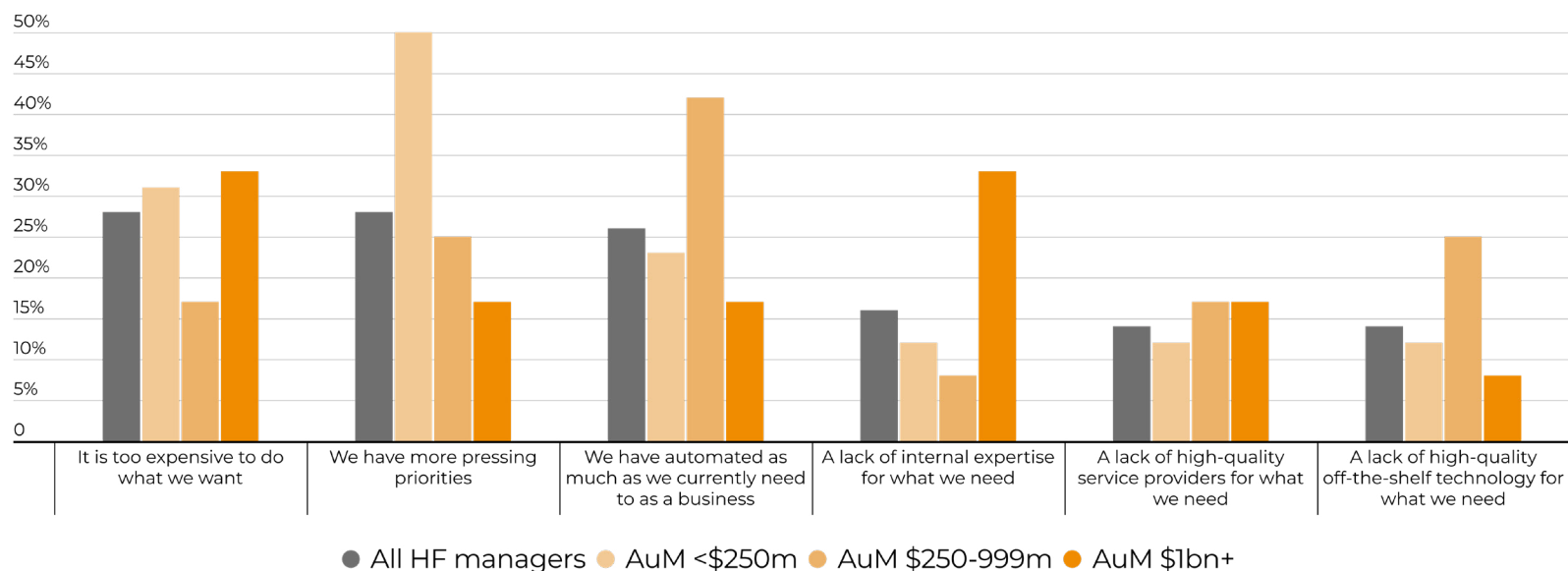
54% of hedge funds COOs see their role as a true blend of people, process and technology management today



31% see the role as predominantly process-focused



8% see the role as predominantly technology-focused

Figure 2.3 Reasons hedge fund firms haven't automated some operational processes

Source: Hedgeweek survey, Q3 2022

Value

As a result of this broadened remit, and expansion of the role, ensuring operations specialists maintain that the right mindset and approach to this increasingly challenging role is almost as important as core skillsets.

"For a hedge fund COO, trying to design an infrastructure that is controlled, and gets the firm to where it needs to be, can vary depending on the type of strategy, and personnel. It's tough, and COOs must be

able to think technically in terms of what they are good at and they you need help on," Chapple adds.

"It can be really tough being honest with yourself and admitting you don't 100% know

something, and so figuring out how to learn something, or pick the right service provider or adviser to plug a hole, is important."

Underlining this point, he believes it is ultimately "impossible" for a COO to cover

off everything, adding that “no-one’s an expert in everything.”

Chapple says: “The most dangerous thing about the COO role is if you just presume that you know enough, when you don’t. In those cases, the control points on yourself are not going to be caught, and that can become a big problem.”

“It’s often down to finding the right individual,” says Chris Scarlata. “The expectations on that person are that they will be able to come in and work with all these different teams and be the central figure that the founder of the fund can trust and know that everything is going to be looked after.”

There is now a growing acknowledgement of the importance of the COO role on the part of hedge fund CIOs and owners of firms.

“It’s definitely not just about clearing trades and moving cash anymore. It’s a much wider remit now,” says Scarlata.

“Having someone who is really rock-solid that can look after essentially all of the business other than the investment function is more acknowledged today than it has been in the past,” adds Scott Radke. “The consequence of that is you’re seeing, in general, the hiring of more capable individuals who are being compensated really well when things go well. Not quite at the level of the key investment professionals, but it is definitely not the afterthought that it might have been 10-plus years ago.”

“The value that gets added to the system by allowing the CIO to just focus on investments, that is enabled by a really good COO, is worth a lot of money.”

KEY TAKEAWAY

The hedge fund chief operating officer’s remit and skillset has expanded considerably in recent years, with more than half of all COOs surveyed by HedgeWeek now viewing their role as a mix of people, process and technology management. As an increasingly central figure within the business, with infrastructure design and tech expertise playing an ever-greater part of the position, the value-add of a good COO to hedge fund firms has been enhanced.

“

“Having someone who is really rock-solid that can look after essentially all of the business other than the investment function is more acknowledged today than it has been in the past”

BUILDING THE BUSINESS

Amid sustained economic upheaval and investment volatility, operations specialists discuss the major trends and themes that are reshaping hedge funds' business infrastructure

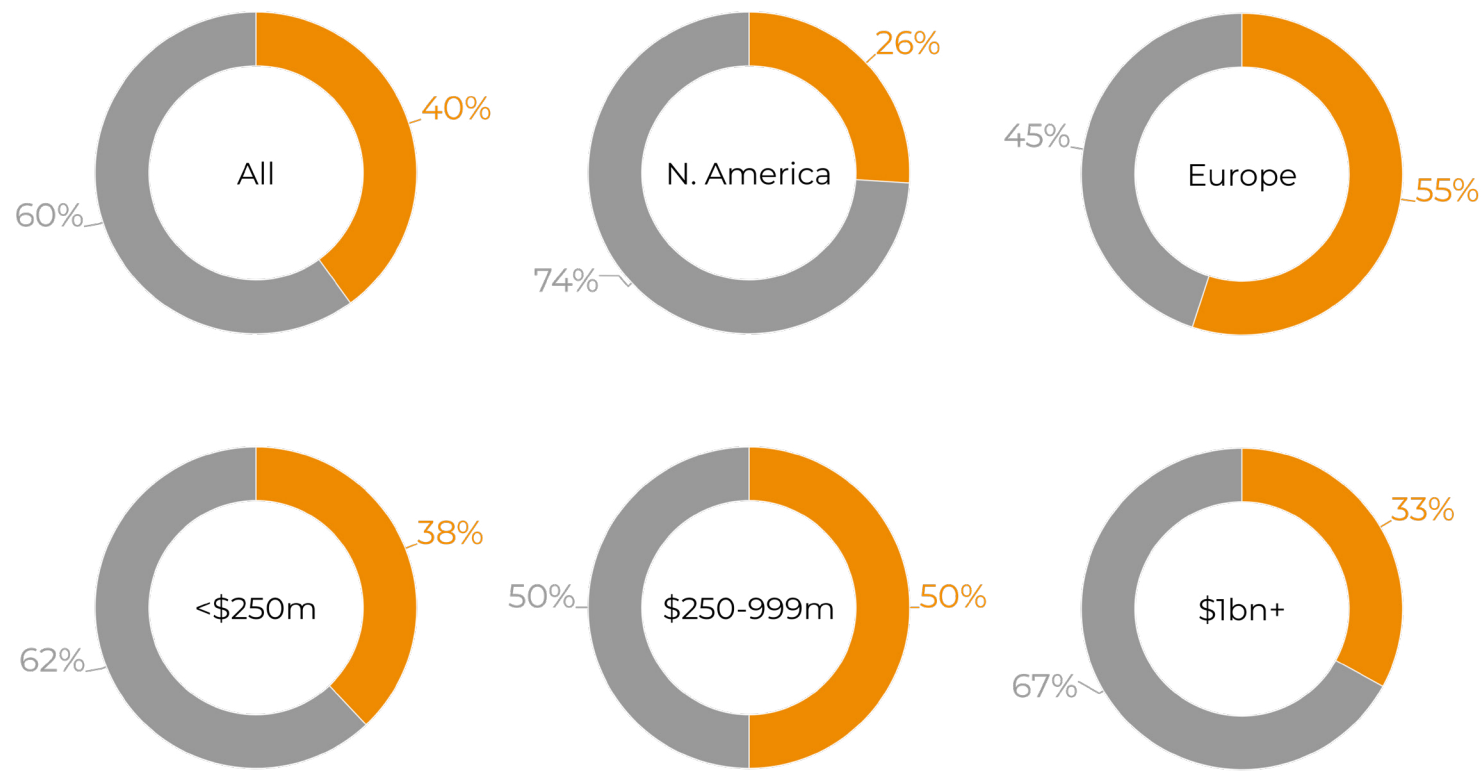


The unprecedented turmoil brought about by the coronavirus pandemic over the past two years heralded far-reaching changes to hedge funds' infrastructure and business models, with cyber risk, network security and virtual due diligence emerging as a front-and-centre challenge as firms pivoted to remote working.

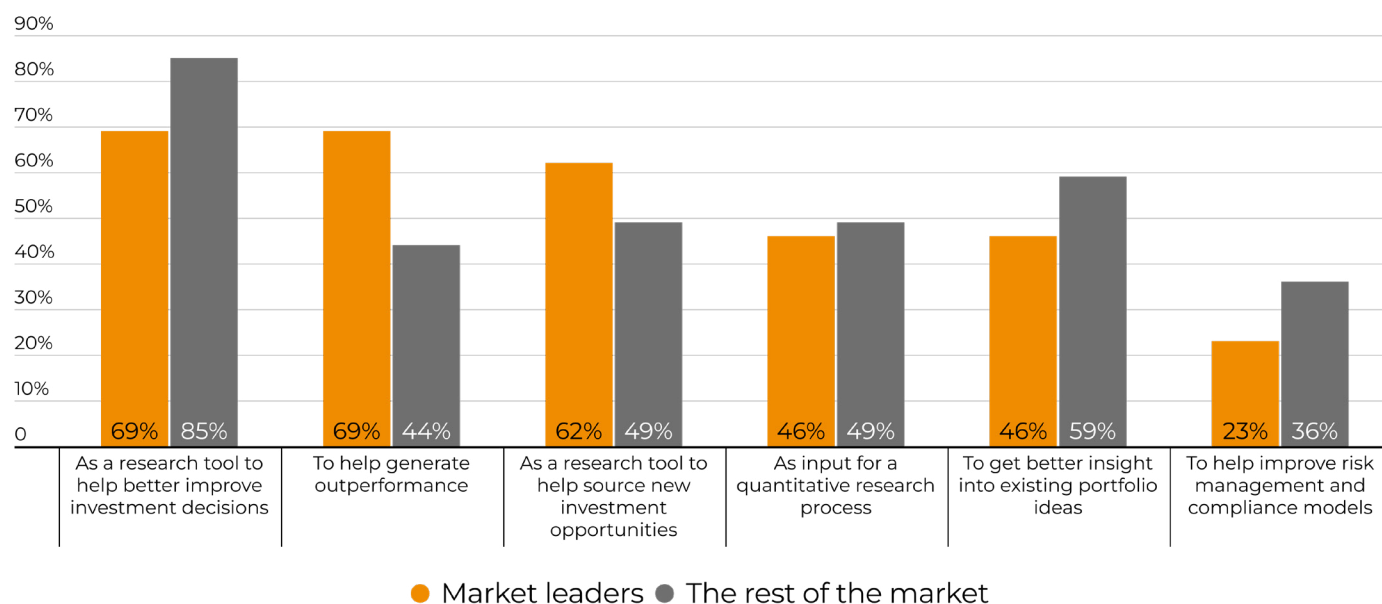
Now, against a backdrop of ongoing regulatory change and sustained market dislocation, managers of all sizes and strategies remain alert to new, emerging and future operational risks, with many acknowledging the key role played by tech and automation in adapting to an increasingly unpredictable business landscape.

Indeed, some 40% of all hedge fund managers surveyed by Hedgeweek said

Figure 3.1 Breakdown of hedge fund management firms automating operations to ‘futureproof’ their business



Analyst note: Chart represents survey respondents to select ‘futureproof our business’ among their top three reasons for automating operational processes generally. Source: Hedgeweek survey, Q3 2022

Figure 3.2 The main uses of alternative data by hedge fund management firms

Source: *Casting The Net: How Hedge Funds are Using Alternative Data*, AIMA & SS&C, May 2020

futureproofing their business is one of the top three drivers behind their decision to automate (see Fig. 3.1). That number rises to 50% among medium-sized hedge funds with between \$250-999 million in assets, while one in three of the largest managers with more than \$1 billion AuM also see future-proofing as a key automation driver.

Regulation

The current direction of travel among market authorities – reflected in the US Securities and Exchange Commission's planned new private fund reporting and disclosure requirements, as well as potentially tighter curbs on managers subject to the EU's AIFMD and MiFID II rules – means regulation now forms an ever-larger part of COOs' workloads, particularly in balancing evolving operational compliance with day-to-day trade clearing and reconciliation.

"So much of the challenge now is driven by regulation," Phillip Chapple, chief operating officer, Monterone Partners, observes. "Whenever you go through any kind of industry stress, more regulation tends to follow. Sometimes those proposals disappear, in other cases they don't – so you end up spending a huge amount of time trying to determine whether it's something your firm need to worry about."

This lack of clarity from regulatory authorities may also serve to impede active measures to address such challenges through automation or outsourcing, according to ops professionals.

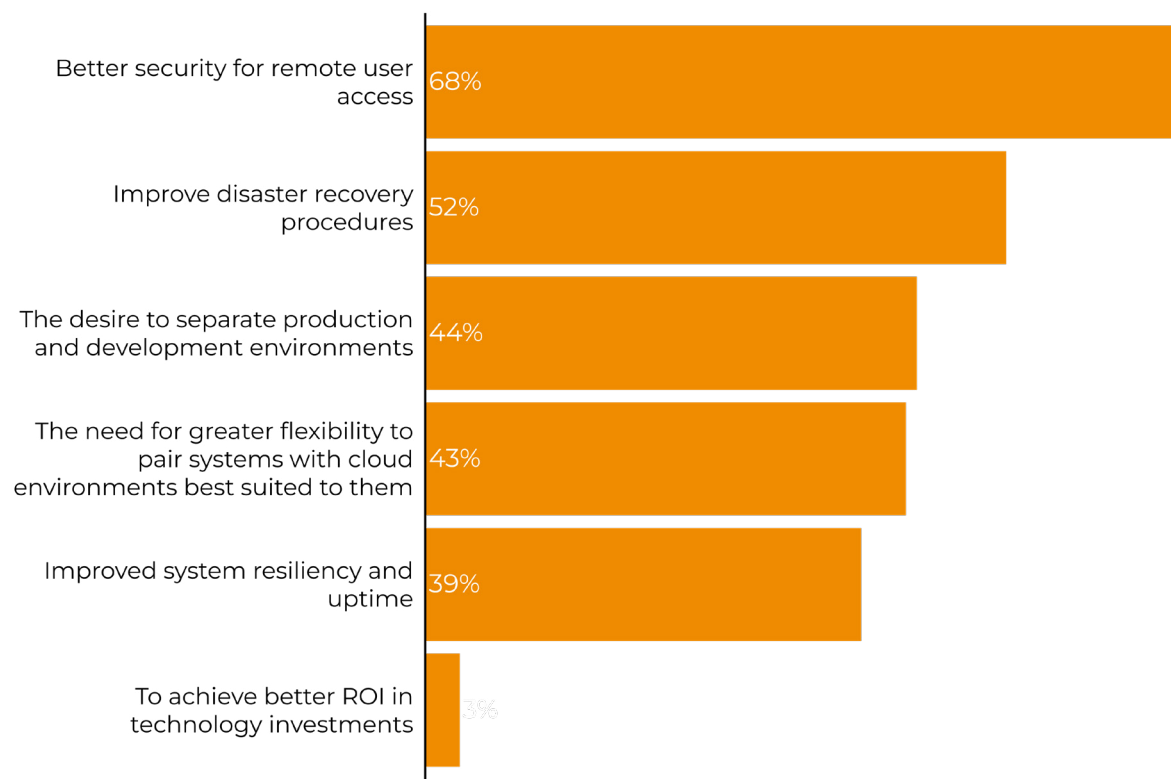
Chapple explains: “Once regulation is properly disseminated and understood, you can then build rules around it, and technology can certainly provide a lot of solutions around certain challenges after there is clarity around what the interpretations are, and over longer periods of time.

“But the issue tends to be during that initial phase of a new regulation, where everybody’s trying to work out how it affects them, and what it actually means. At that point, you may not yet have the tech in place to handle it. You can talk to consultants and service providers, and that’s very useful, but ultimately you have to make the call yourself.”

At the same time, many COOs are increasingly have to say ‘no’ to their CIOs and portfolio managers as a result of increasingly complex regulatory and tax restrictions, anecdotal evidence suggests.

“Often they are having to say to their PM, ‘Sorry – you can’t trade this due to regulatory restrictions’ or ‘you cannot do this in this way

Figure 3.3 The primary drivers for hedge fund management firms’ planned adoption of a multi-cloud environment



Analyst note: Chart relates to those firms who reported the intention to shift to a multi-cloud IT model. Source: 2022 Hedge Fund Managed IT Trends Reports, Agio, 2023

“

So much of the
challenge now is driven
by regulation

Phillip Chapple, COO, Monterone Partners

due to tax reasons’,” Chapple notes. “This is something that has really changed from 10 years ago for the ops side – the regulation tail didn’t really wag the dog. It’s now becoming a lot more restrictive, there’s more regulatory complexity. If a PM wants to trade something, there is often a whole quagmire of wiring to get through to see if it’s even possible.”

Cybersecurity

With increased automation, more functions migrating to the cloud, and remote working remaining prevalent in the aftermath of the coronavirus pandemic, cybersecurity continues to be key issue for hedge funds’ operations chiefs, particularly as the SEC and other regulators look to ramp up disclosure requirements and strengthen preventative measures to protect investors.

More than 90% of hedge funds say they intend to move to a multi-cloud model over the next two years, according to recent research by Agio. The 2022 Hedge Fund Managed IT Trends Report – which surveyed

technology, cybersecurity, operations, and compliance professionals in the hedge fund industry during Q1 – found that better security for remote users is the main driver of this shift (66%). In addition, improved disaster recovery procedures (52%), and the desire to separate production and development environments (44%) were also key motivating factors for moving to a multi-cloud model.

Market professionals say the desire for even the largest hedge funds and asset managers to move more of their systems into the cloud now makes the oversight of business operations and risks a pressing issue, especially in light of the continued threats of data leaks and cyber-attacks.

“With enhanced technology comes a bigger need for cybersecurity,” observes Nicholas Pepe, chief operating officer, Mill Hill Capital. “While there are efficiencies that have been created by the digital world, it has also brought new risks.”

With hybrid and remote working models remain prevalent even as the worst of the

Covid-19 pandemic recedes from view, the importance of utilising technology in tightening up disparate networks and curb business risks is seen as critical.

“Cybersecurity is paramount in making sure that if people are working from remote locations, that doesn’t pose a threat to our business. The other part is making sure we are getting everything we can from our team, and ensuring that remote work allows us to actually improve productivity,” Pepe adds.

“For smaller managers it is tougher to be fragmented and working from different places – it’s important that we are all in the office as much as possible. With that said, the new reality is that we have been able to cut down time on travelling; we can meet with investors, service providers and counterparties virtually as often as we need to. The ability to work remotely – even if it is in a sporadic way – has enhanced efficiencies and increased our ability to operate as a full team all the time.”

He adds: “The issue of cybersecurity, and cyber-threats, is something that has evolved much faster than other challenges in the past. It’s a threat we are constantly focused on, and spending more resources on, in order to minimise it. This is one place we have definitely ramped up our spend.”

Alternative data

While much of the focus around hedge funds’ increased use of alternative data has centred on its ability to strengthen investment ideas or trading themes (‘investment alpha’), industry research suggests firms are also beginning to lean into the so-called ‘operational alpha’ opportunities offered by alt-data.

A study published by the Alternative Investment Management Association and SS&C (‘Casting the Net’) in 2020 found that hedge funds are using alternative data as a

tool to improve certain business development decisions around skills and output and help combat operational risk.

More than one-third of all manager respondents surveyed by AIMA & SS&C – and close to a quarter of market leaders – are now using alternative data to help improve risk management and compliance models.

“Regarding alternative data, COOs are increasingly getting involved in ensuring the way data is pulled in and structured is going to end up in as usable output,” says Chris Scarlata, COO, New Holland Capital.

“Internally, the COO is getting involved in implementing analytical tools such as Tableau or Power BI and being able to work with a team to make sure that everybody can utilise those tools most efficiently in-house.”

“

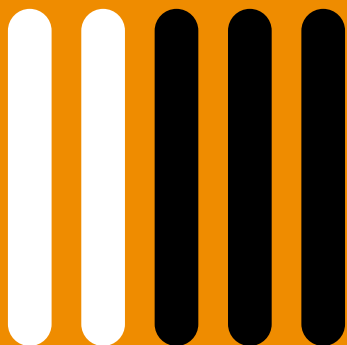
“With enhanced technology comes a bigger need for cybersecurity”

KEY TAKEAWAY

Regulatory upheaval continues to be a key pressure point within the industry, while the ongoing migration of business operations towards the cloud, and remote working remaining in place post-pandemic, means more hedge fund COOs are keen to utilise technology and automation to help future-proof their businesses from new and emerging challenges.

KEY FINDINGS

Futureproofing the business
is a major reason to automate



About 40% of all
hedge fund managers
say futureproofing the
business a top three
reason behind their
decision to automate



Around 50% of
medium-sized hedge
funds with between
\$250-999 million



1 in 3 managers with
\$1 billion+ in assets say
futureproofing is a key
automation driver

MAINTAINING A BALANCE

Despite the boom in third party service provision, hedge funds' ops infrastructure remains a mix of outsourced, cloud- and in-house processes, as COOs are keen to maintain oversight over key business functions

The expansion in the range and quality of outsourced business functions and third-party service providers has shaken up the way the hedge fund industry assembles its operational infrastructure. The lockdowns and remote working models brought about by the Covid-19 pandemic accelerated the already-gathering momentum of outsourcing, underpinned by a growing 'digital-first' approach built around looser constellations of trading and operations networks with technology and automation at their core.

Yet survey data gathered by Hedgeweek suggests most hedge funds remain keen to maintain a balance between the creative 'ideas factories' of physical trading floors and the

benefits of off-site remote technology and outsourced services.

Nimble

Outsourcing has come into particularly sharp focus within the start-up and emerging hedge fund manager sphere in recent times, with the sustained ramp-up in the volume and quality of service providers coming against a backdrop tightening budgets. Industry professionals observe how the expansion of affordable third-party offerings for a range of middle- and back-office processes has proven a particularly important enabler for many hedge funds, mainly at the smaller end of the scale, allowing them to outsource key functions and avoid



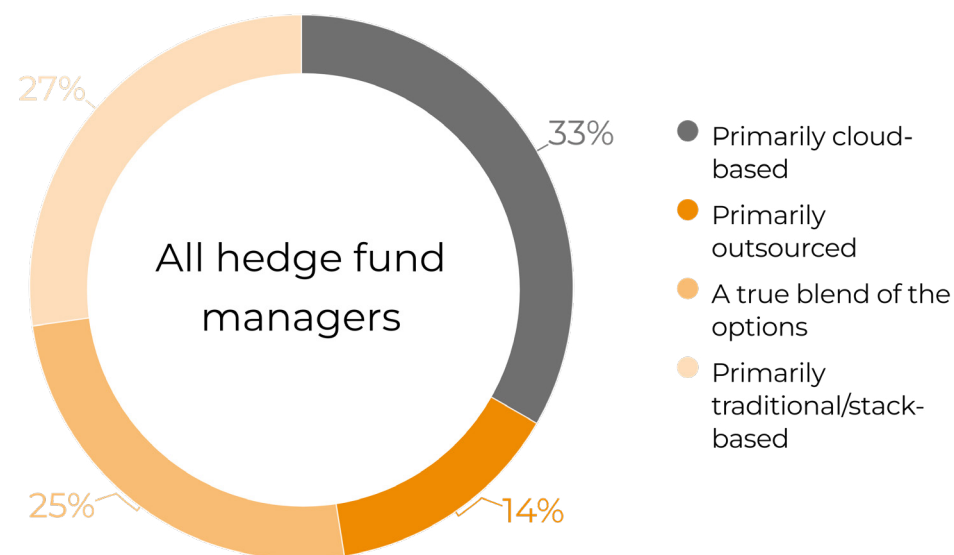
the often-considerable upfront tech spend on certain processes, at a time when the barriers to entry within the industry have never been higher.

“What’s interesting about the hedge fund world is that there are now so many third-party providers that have commoditised certain things,” Chris Scarlata, COO and CFO, New Holland Capital, says. “If you now want to get an off-the-shelf reconciliation tool that can handle all trades, all cash, these sorts of things, you don’t have to build that, you don’t have to hire three in-house people to do that anymore. You can get it off the shelf for a lot of strategies.”

Andrew Beer, managing member and co-portfolio manager at Dynamic Beta Investments, says the service provider space has seen strong growth and development since the late 2010s, which has transformed automation and outsourcing for hedge funds, and ripened business opportunities for third party firms.

“The outsourced CFO, the outsourced COO, and outsourced compliance generally is so much better than it had been 10 years ago,” Beer observes. “Each of these little areas and functions have these dynamic industries, where smart people are going in and starting new businesses, taking market share, and

Figure 4.1: Reasons hedge fund firms haven’t automated some operational processes



Source: Hedgeweek survey, Q3 2022

becoming more responsive, more nimble and pricing things in a more economic way.”

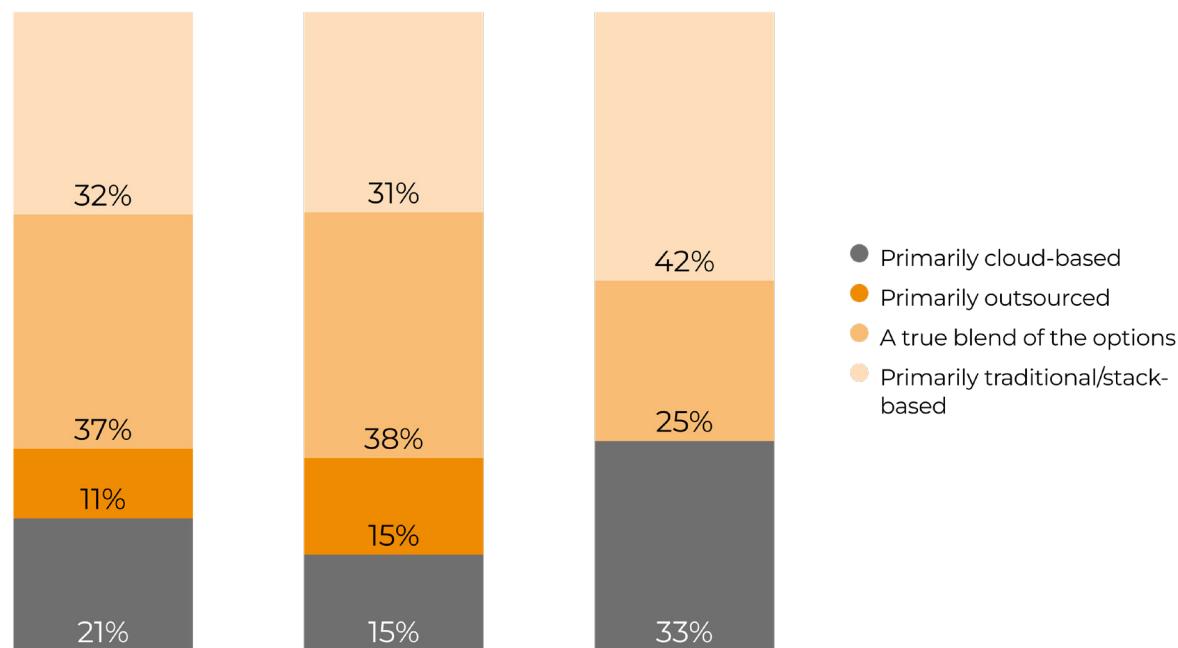
Balance

Overall, smaller- and medium-sized hedge fund firms generally run a mix of outsourced, cloud-based and in-house ops functions. In contrast, larger managers running more than \$1 billion in assets mainly keep a primarily traditional or stack-based infrastructure (see Fig. 4.1).

Among emerging hedge funds specifically, more than one-third of managers' operations infrastructures are now predominantly cloud-based, with about 20% having a primarily outsourced ops infrastructure (see Fig. 4.2). In the perennially-tricky launch phase, some boutique hedge funds have gone even further, contracting out most or all of the operations functions to an outsourced COO – usually also involving a high degree of automation – so that managers can focus on managing the portfolio and growing the business.

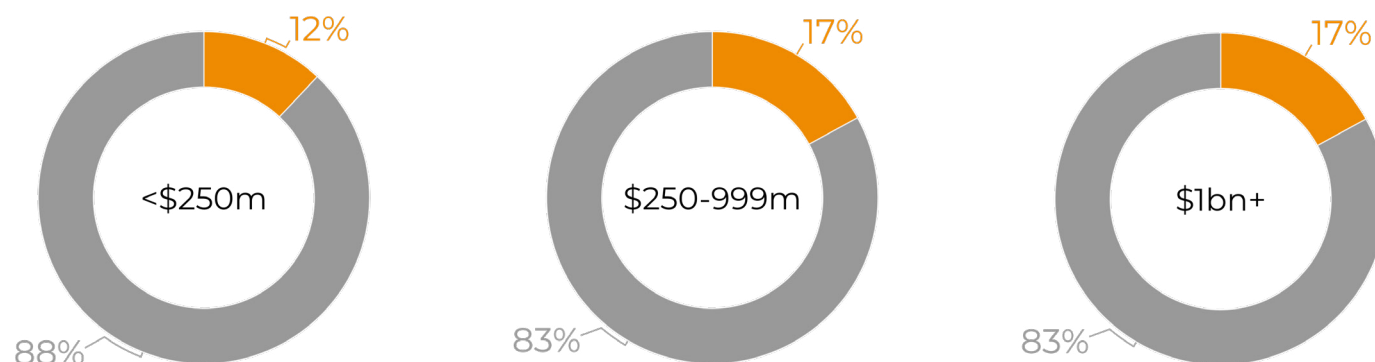
“Service providers offer you an evolutionary path along which to start out, using them initially and then shifting as AuM and

Figure 4.2: Reasons hedge fund firms haven't automated some operational processes – by firm AuM



Source: Hedgeweek survey, Q3 2022

Figure 4.3 Breakdown of hedge fund management firms not automating operations because of a lack high-quality service providers



Source: Hedgeweek survey, Q3 2022

profitability allows,” says Scott Radke, CEO of New Holland Capital. “Eventually, as those managers grow, they tend to become dissatisfied with the one-size-fits-all third-party service providers, and they end up bringing it in-house.”

“People are your biggest expense when you are starting up a hedge fund - you’re trying to keep it at a break-even level to give yourself the best chance of success,” says Phillip

Chapple, COO of Monterone Partners. “There are a lot of very good outsourced COOs, but even they typically expect firms to move to a full-time COO once the external money beyond friends and family starts to flow in.”

Stringent

So as hedge funds continue to grapple with a battery of challenges spanning cost

squeezes, business risk, fee pressures and patchy returns, the question of how far managers should go in outsourcing of ops functions, while also maintaining oversight of potential risks, continues to divide industry opinion.

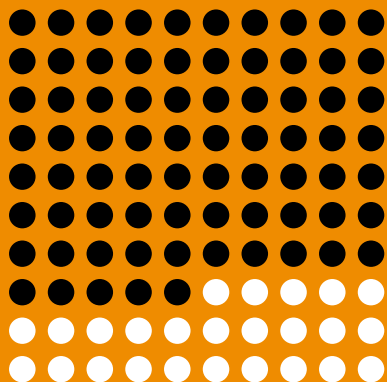
While firms may outsource accounting, or certain compliance functions, for instance, some industry specialists sound a note of caution on a fully-outsourced ops system,

“

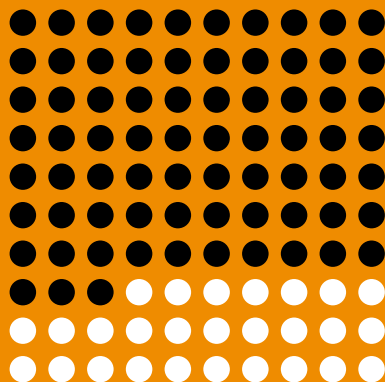
Service providers offer you an evolutionary path along which to start out, using them initially and then shifting as AuM and profitability allows”

KEY FINDINGS

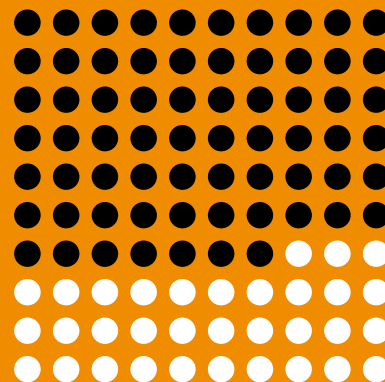
Most hedge funds maintain in-house oversight over key ops processes



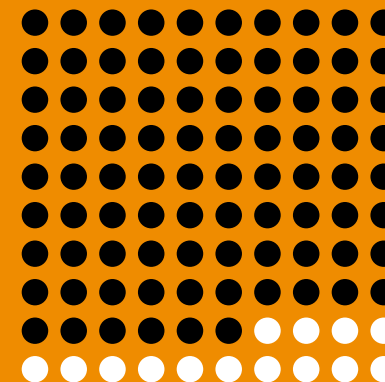
Overall, 25% of hedge funds have a mix of cloud-, outsourced- and stack-based infrastructure



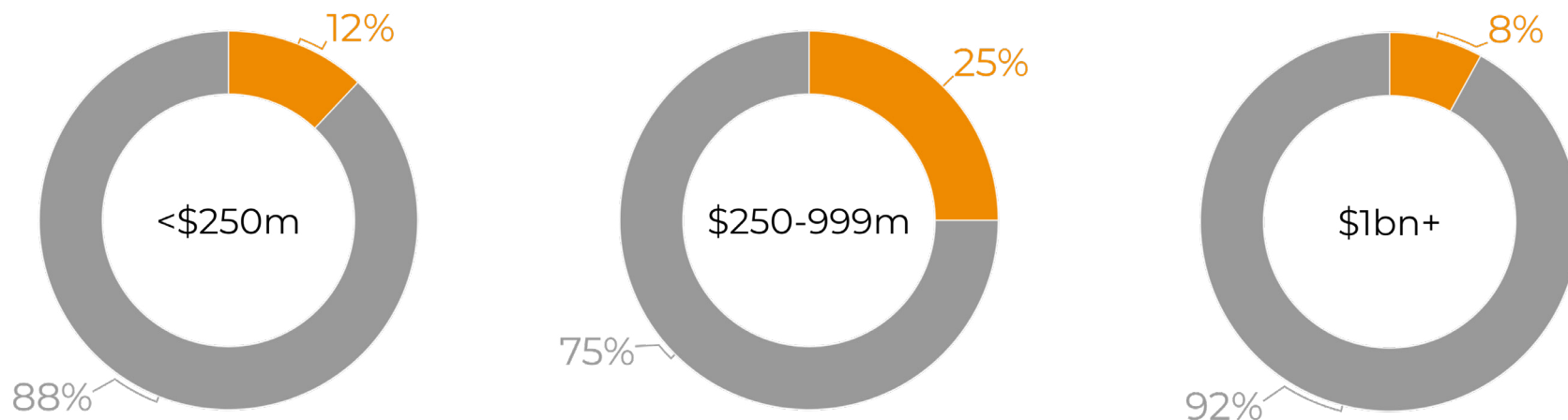
While 27% of all hedge funds have a primarily traditional/stack-based infrastructure, that number rises to 42% among \$1 billion+ managers



33% of hedge funds have primarily cloud-based infrastructure



14% of hedge funds have a primarily outsourced-infrastructure

Figure 4.4 Breakdown of hedge fund management firms not automating operations because of a lack high-quality off-the-shelf technology

Source: Hedgeweek survey, Q3 2022

and underline the importance of COOs serving as an ever-present 'big picture' check on everything.

Supporting this perspective, Hedgeweek survey data reveals that across the entire hedge fund AuM spectrum, only 14% of

managers have a primarily outsourced operational infrastructure, while one-third have a primarily cloud-based set-up. By comparison, 25% of all managers have mix of cloud-based, outsourced and stack-based infrastructure, with an additional one-in-four firms having a traditional in-house set-up.

"If somebody needs to do a reconciliation, or someone needs to strike a NAV, or somebody needs to test a compliance programme – the more administrative, block-and-tackle, daily things – these things you can outsource. But you absolutely cannot outsource a senior-level, non-investment person who we rely on

to be independent within the firm that we are investing in," says Chris Scarlata.

Expanding on this point, he says: "They need to be there every day; they need to be interacting with the team members. They need to know



The compliance and other burdens haven't diminished over time – in fact they have gotten more stringent – but actually working with external parties has mitigated the crushing effect that we've seen at other firms of trying to manage all these things

Andrew Beer, Managing Member and
Co-portfolio Manager, Dynamic Beta Investments

what's going on in the trading systems, and know the needs of the firm."

Andrew Beer says: "Certain things we continue to do in-house, such as on the trading side, though our trading is fairly automated so it's not as taxing as if you're, for example, a merger arbitrage strategy.

"Following a year-long process of identifying areas, we materially reduced the number of people we had in-house. We outsourced our finance function, we didn't have a CFO anymore. We got an outsourced chief compliance officer.

"The conclusion was that, in general, outsourcing had become so much better that we didn't need a lot of people in-house. Instead of having a jack-of-all-trades, what we really needed was a jack who would manage all trades. There has been a profound improvement in how we run on a day-to-day basis."

He continues: "Part of the reason for doing it in-house was that you always had more control. If my chief compliance officer is in-house, I can walk over to them and we can have a conversation about something. It's very different than when you're dealing with

someone in the outside. From my perspective, there was always a question when you're dealing with outsourcing over whether you can get enough of their time, whether they are responsive.

"But on the other hand, these service providers are all competing with each other to try to have the most knowledge about best-in-class practices, and to update their technology and infrastructure and reporting and all these things to make themselves even better. So we feel we've been a real beneficiary."

KEY TAKEAWAYS

Hedge funds recognise the benefits of utilising outsourced services and technology firms for certain back- and middle-office processes. But survey data shows most firms continue to run a mix of outsourced, cloud and in-house infrastructure, with managers keen to retain a degree of oversight over the most critical business functions.

Against a backdrop of increased regulatory and operational compliance burdens, third-party service providers have the opportunity to capitalise on the growing demand among hedge funds for automation and technology solutions, particularly among smaller managers.

CONTRIBUTORS:

Hugh Leask
Editor

hugh.leask@globalfundmedia.com

Tony Griffiths
Head of content

tony.griffiths@globalfundmedia.com

FOR SPONSORSHIP & COMMERCIAL ENQUIRIES:

Jo Cole
Group Commercial Director

jo.cole@globalfundmedia.com

Published by: Global Fund Media, Lion Court, 25 Procter St, London WC1V 6NY

© Copyright 2022 Global Fund Media Ltd. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

Investment Warning: The information provided in this publication should not form the sole basis of any investment decision. No investment decision should be made in relation to any of the information provided other than on the advice of a professional financial advisor. Past performance is no guarantee of future results. The value and income derived from investments can go down as well as up.