PRIVATE EQUITY WIRE

INSIGHT REPORT



THE GREAT REBOOT:

Why private equity is finally turning to technology

JULY 2022

SUPPORTED BY:

Arcesium

EXECUTIVE SUMMARY

After 30 years of relying on Excel spreadsheets and human insight, private equity fund managers are embracing technology and data to drive value in their investments.

More traditional data collection is being supplemented with AI-powered tools, algorithms and prediction models to provide estimates for financial health and revenue growth at target and portfolio companies.

In a survey by Private Equity Wire, over 50 industry stakeholders were asked 'In what one area could GPs increase or improve their use of data, technology or AI?' The most popular response was "value creation within portfolio investments".

New value creation teams are being built and expanded, combining experienced origination professionals with often younger data scientists. Further, investment and portfolio management is evolving quickly with new software solutions.

As competition increases within the asset class, leveraging recent developments in data science to add or find value from portfolio assets appears to be the new secret sauce.

The insights and predictions unlocked from new data flows can, in turn, drive new forms of decision-making as well as faster and potentially more accurate due diligence and valuations. Software can also be used to track failed acquisitions by region or sector and interrogate the reasons why a bid was unsuccessful. Were the reasons market-based or internal, and can they be avoided in the future?

Larger fund managers are building or bringing some of this capability in-house so they can own these insights, but smaller and mid-market managers can rarely afford such a luxury. In some of these cases, another trend highlighted by Private Equity Wire's research may provide an answer: outsourcing.

Fund administration and back-office accounting are still the first and most common functions to be outsourced within a fund or firm, but the trend is moving into the middle and – to a lesser extent – the front office.

Over half of survey respondents said they had outsourced part of their firm's operations over the past 12 months and around three-quarters of that group believed the decision had "added value" to their business.

Both trends reveal the asset class's move to a more institutional mindset. This also makes sense for LPs – many of whom are increasingly asking questions of fund managers on their tech stack to assess operational risk along with the potential for value creation. With the SEC in the US also proposing new cybersecurity rules on risk management, the increasing use of technology and data within the industry looks set to grow exponentially for some years to come.



COLIN LEOPOLD
HEAD OF RESEARCH & INSIGHT

CONTENTS

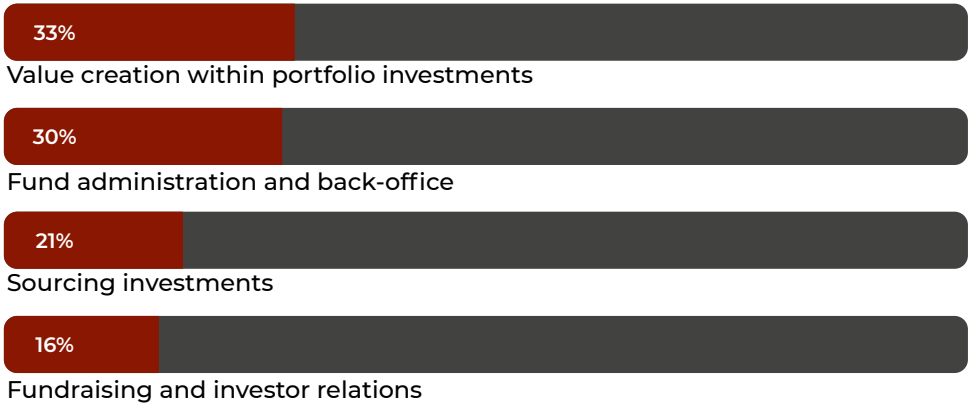
3 KEY FINDINGS
4 SECTION 1 | VALUE CREATION
8 SECTION 2 | OUTSOURCING
13 SECTION 3 | TECHNOLOGY M&A
19 SECTION 4 | TECH TALENT

METHODOLOGY

Private Equity Wire surveyed over 50 private equity industry stakeholders during May and June 2022 on the subject of technology in the asset class. Of that group, the majority were fund managers or GPs, with the remainder split roughly equally between investors and service providers

KEY FINDINGS

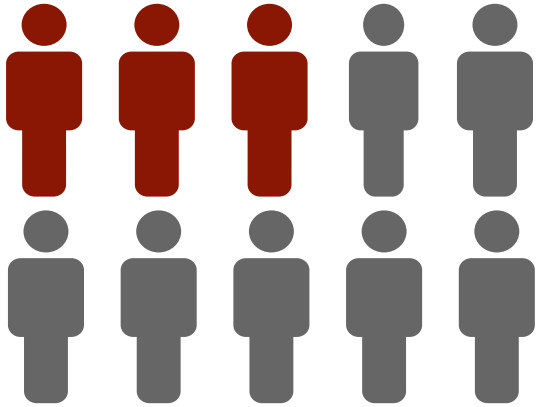
PRIVATE EQUITY GPs CAN BETTER APPLY DATA, TECHNOLOGY AND AI TO THEIR INVESTMENT PORTFOLIOS



In response to the question: 'In what one area could GPs increase or improve their use of data, technology or AI?'

PRIVATE EQUITY FIRMS HAVE JOINED RACE FOR TECH TALENT

31% of respondents confirmed they are either currently recruiting for, or have recently recruited, staff in the areas of data analytics/science or programming

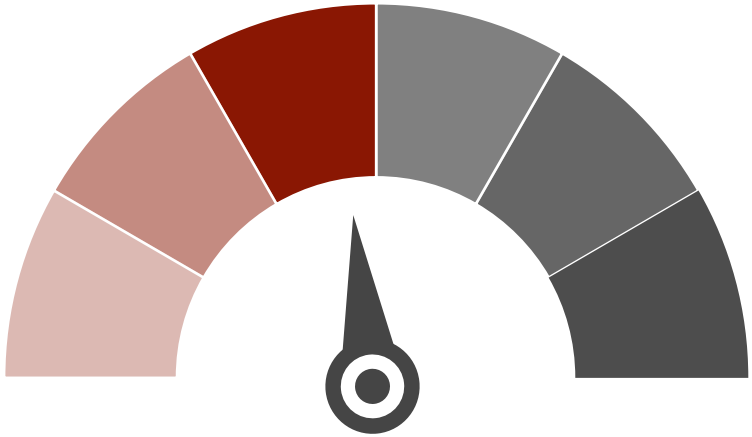


OUTSOURCING OFTEN BEGINS IN THE BACK OFFICE BUT PRIVATE EQUITY FIRMS ARE FINDING IT WORKS ELSEWHERE TOO

ALMOST 50%
have outsourced part of their firm's operations over the past 12 months

78%
of that group believed the decision has "added value" to their business

IN THE TECHNOLOGY SECTOR, ALMOST HALF OF RESPONDENTS ARE CONCERNED ABOUT RECENT M&A FOLLOWING MARKET VOLATILITY



SECTION 1



WHY DATA IS THE NEW SECRET SAUCE FOR GPs

Within private equity fund portfolios and across the economy lie treasure troves of valuable financial information. GPs are feeding it into algorithms and prediction models to bolster their strategy

The founders of the world's largest private equity funds relied on personality and connections to build and execute their first leveraged buyouts. The relentless march of technology is forcing their now gargantuan organisations to take a different approach: they are turning inwards to unearth value from the decades of data in their porfolios.

In a survey by Private Equity Wire, over 50 industry stakeholders were asked 'In what one area could GPs increase or improve their use of data, technology or AI?' The most popular response was "value creation within portfolio investments". The third most prevalent choice (after the more obvious "back office and accounting") was in "sourcing investments".

Leveraging recent developments in data science to add or find value from their portfolio is the new secret sauce for GPs, say sources at, or close to, some of the oldest and largest funds. And the strategy is being increasingly used alongside in-person networking and old-school origination to find an edge.

"Data is creating competitive advantage," says a US-based source working with one of the world's largest private equity funds.

AI advantage

"There's more competitive pressure in terms of sourcing deals and driving value creation for investors, so you have to be able to identify those opportunities faster than others."

More traditional data collection is being supplemented with AI-powered tools, algorithms and prediction models to provide estimates for financial health and revenue growth at target and already-owned firms.

The trend also looks set to drive change within the organisational structure of many private equity firms as new data-orientated teams are built and hires are made (see Chapter 4 in this Report).

"We're seeing a lot more private equity firms invest in their own data science capabilities, internally, and trying to partner with alternative data providers, to supplement their internal data science efforts," says a technology consultant advising private equity firms on the subject.

"I think most of the firms that we've seen will have a data team in place, or a lead data scientist and not much of a team beyond that."

How private equity funds use this

new capability is dependent on the software they are using or bringing in from third-party providers but also the amount of data they can leverage.

"The pure existence of data, whether it be through providers like Pitchbook, or Cap IQ, or otherwise, means there's more and more data out there. And there are more tools out there for firms to collect data internally on their own operations," says a source at an AI-based service provider to the industry.

The volume and granularity of the data available on private assets today would have been unimaginable a few decades ago. The number of alternative-data providers is more than 20 times larger now than it was 30 years ago – with more than 400 currently active providers compared to just 20 in 1990, according to a report by the Alternative Investment Management Association.

Discipline and third-party advice is required to combine statistics and company information with cloud computing and machine learning to analyze large pools of structured and unstructured information, say sources. The insights and predictions unlocked can in turn drive new forms of decision-making as well as faster and potentially more accurate due diligence and valuations.

Private equity firms are leveraging real-time data about consumers from car parking utilization rates as a measurement of foot traffic, seeking out the frequency of keywords in search terms, social media activity, phone usage, demographics, and census data and satellite feeds to improve sales and marketing at their portfolio companies, say sources.

As identified by the Private Equity Wire survey, GPs are applying new data management technologies in two ways. Firstly, in the front office, deal origination and the sourcing of new investments is being disrupted.

"We are seeing more firms try to do proprietary sourcing, where they might be evaluating businesses that aren't even on the market, but that fit their portfolio strategy," says the technology consultant. "This includes using publicly available information and data to better drive and find companies that they're interested in and getting a perspective on that before they might even hit the market."

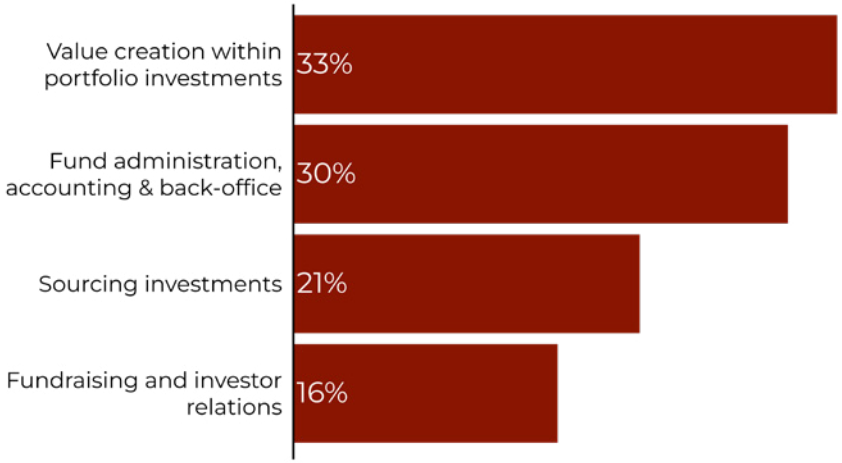
More data, please

Research as a Service (RaaS) has evolved from Software as a Service (SaaS) with AI, machine learning and natural language processing (NLP) setting the scene for personalized recommendation algorithms so GPs can identify investment opportunities before others.

"As GPs in the private markets bring in more third-party data, it gets complicated to manage and extract value from information coming from so many sources," says Cesar Estrada, head of the private markets segment at Arcesium. "We help origination teams harmonize those disparate sources and get to a single source of truth."

Such an approach works well for fund managers with a specialist sector strategy, for example in healthcare. They may seek insight from their database on the number of healthcare exits in their portfolio that have achieved a certain multiple and use that information to price their

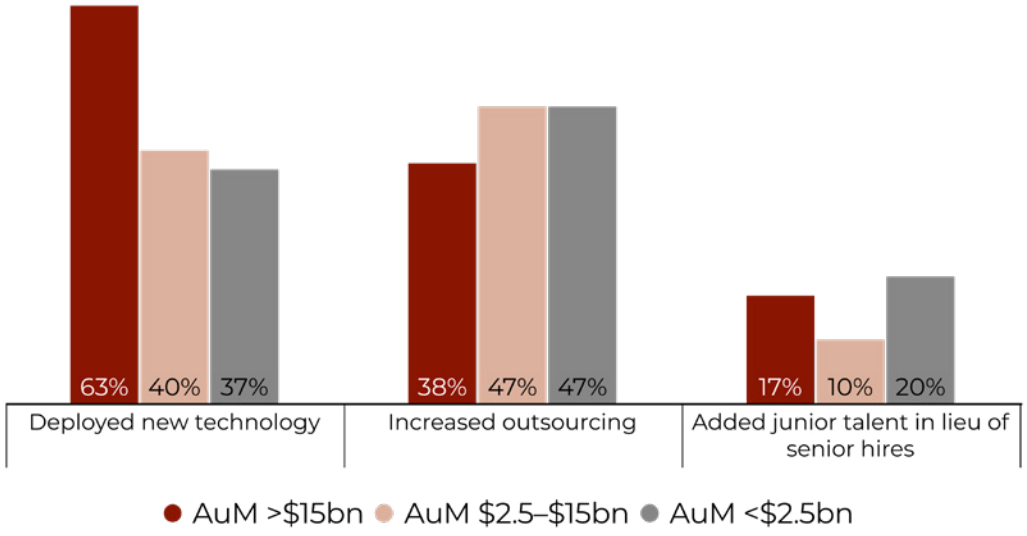
Figure 1.1: In what one area could GPs increase or improve their use of data, technology or AI?



Analyst note: Responses predominantly from GPs but also include LPs and service providers.

Source: Private Equity Wire survey, June 2022

Figure 1.2: Actions taken by PE firms to mitigate margin erosion at the management company, by firm AuM



Source: EY Global Private Equity Survey

next acquisition in a new market. A more generalist private equity fund manager might leverage internal data to better predict whether they will be overweight or underweight a specific sector in their wider portfolio base before making an acquisition or launching a new fund strategy.

Software can also be used to track failed acquisitions by region or sector and interrogate the reasons why a bid was unsuccessful. Were the reasons market-based or internal, and can they be avoided in the future?

"What percentage of the deals you originate do you actually close on," asks the AI-based service provider. "It's a lot easier now to collect information on origination and combine that data with internal systems. If you do a robust job of tracking the activities of an origination team, or even a fundraising team, you can actually be smarter around having operational efficiencies [in other parts of the business]."

The second application of data science here is being seen through increased value creation on assets already owned or acquired.

"With a data layer in place, our clients can better organize their information for deal origination purposes and enrich portfolio monitoring to draw new insights," says Estrada.

According to sources, new value creation teams are being built within GPs, combining experienced origination professionals with often younger data scientists. The approach is not new, but the process is evolving quickly with new software solutions.

Team building

One example is Blackstone which has been compiling historically unconnected data streams to identify value creation initiatives across the business for some time already. Another is KKR Capstone, which has one of the most well-known 'value creation' teams in the industry, with more than 90 full-timers located in Europe, US and Asia. Described by Forbes as KKR's "in-house consulting team", it works with deal teams during due diligence and with boards and management teams post-acquisition to develop 100-day value creation plans, drawing on the scale and scope of the KKR portfolio.

Investment banks advising on sell-side M&A with access to pools of financial information are also more frequently using data science to promote figures on low customer churn, up-sell/cross-sell opportunities, bolt-on opportunities and digital transformation when they pitch assets for private equity investment, say sources. However, this approach may favour the sale of companies in some sectors over others – for example fintech and retail (where customer data is more readily available) as opposed to sectors such as manufacturing or infrastructure.

"GPs are getting very good at [using data] to look at historical performance and find they're very good at buying businesses with good talent and management but they lost money by misreading a market evolution, so they will quantify that and create a go-forward solution with a sourcing algorithm for example," says the technology consultant.

> **As GPs in the private markets bring in more third-party data, it gets complicated to manage and extract value from information coming from so many sources**

"Value creation is being much more informed by desired outcomes," he says. "And I think that sort of starts with very simple views around KPIs and how those KPIs might benchmark to other companies or issues inside the portfolio, then using that to determine which are the areas that we want to go deeper from a data analysis perspective."

Confidence in such an approach will build quickly, as KPIs around digital transformation, online marketing or ESG link to financial performance and financial models add years of data and transactions.

But sources agree the GPs that keep core metrics in their sights will be the ones winning the arms race.

"Lots of teams have got very sophisticated with analysis of customer segmentation and digital marketing [within portfolio companies] but people that have a discipline around asking targeted questions in a particular deal will drive more advantage versus trying to find unique insights from wide swaths of data."

Owning insight

This could ultimately drive fund managers deeper into their specialized strategies where they can find an edge over rivals with their proprietary data.

"I think you will see more and more GPs that crop up with insights in a handful of sectors. And that's their special sauce, that they know the sector inside and out," says the US-based source.

"Can they skin the cat before others do, though?" asks the technology consultant.

If the value creation advantage is being delivered through a third-party solution, rather than developed in-house, using insight as competitive advantage might eventually become the new business as usual.

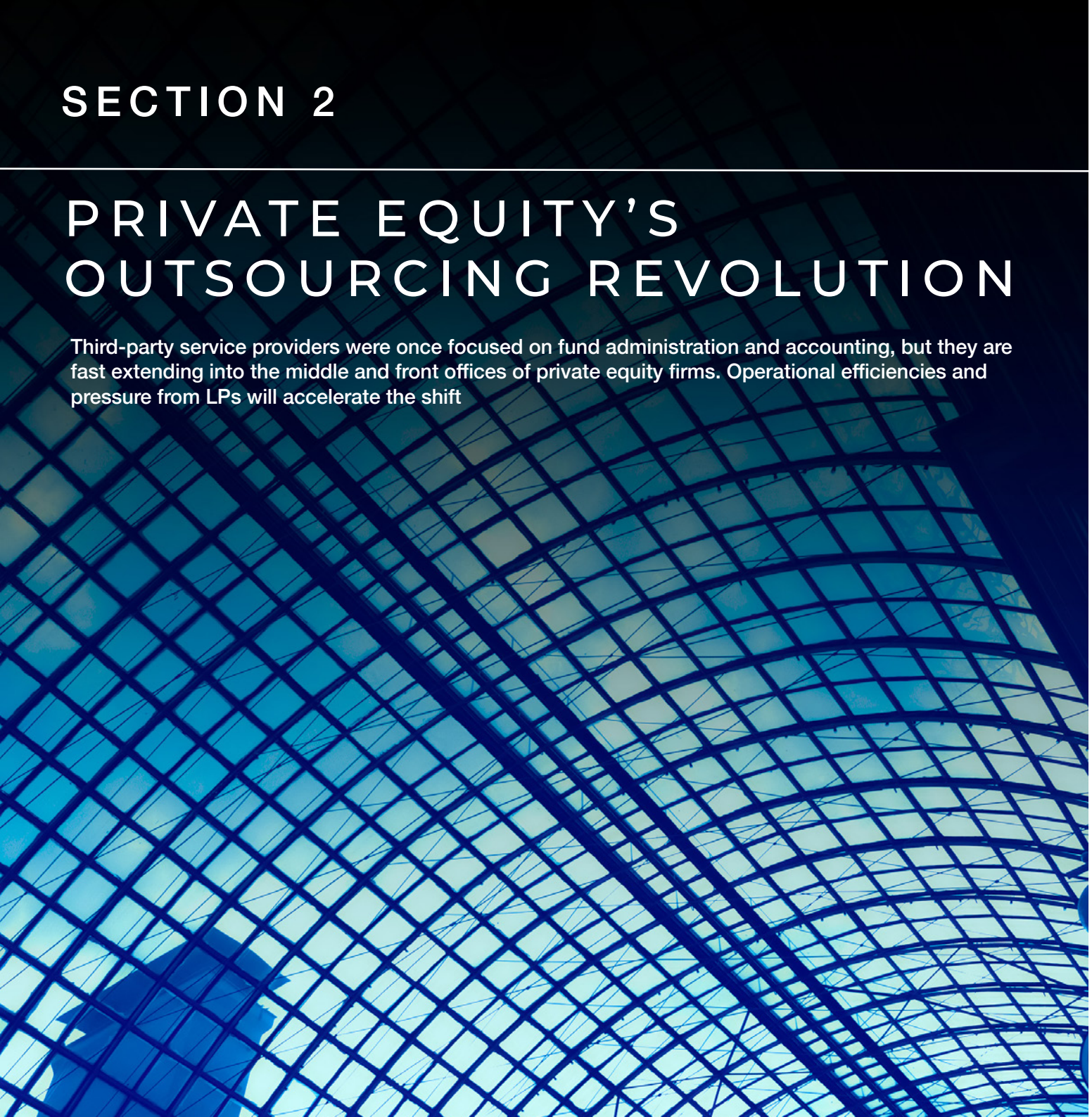
Key Takeaways

GPs are looking at how much proprietary data they can leverage to drive their investment strategy forward but the insights they unlock may not be so unique

SECTION 2

PRIVATE EQUITY'S OUTSOURCING REVOLUTION

Third-party service providers were once focused on fund administration and accounting, but they are fast extending into the middle and front offices of private equity firms. Operational efficiencies and pressure from LPs will accelerate the shift



After more than three decades of transforming their portfolio companies, private equity firms are bringing new operational solutions into their own businesses. In many cases, the answers lie with a new generation of technology service providers.

In a survey by Private Equity Wire in June, almost half of more than 50 respondents said they had outsourced part of their firm's operations over the past 12 months and around three-quarters of this group believed the decision had "added value" to their business.

While fund administration and back-office accounting are still the first and most common functions to be outsourced, the trend is starting to hit fundraising and deployment too (see Chapter 1).

According to sources across the industry, the trend has been accelerating over the past three years and still has a long way to go.

"It's partly driven by demand [from GPs] but there's also more supply of these tech solutions – you see more start-ups coming into the front- and middle-office space specifically geared towards catering for the needs of private markets," says a US-based source with one of the world's largest private equity funds.

Popular outsource solutions typically involve Big Data, NLP, machine learning, and "generally doing things that humans can't do fast enough", adds the source.

According to a London-based lawyer who advises some of the world's most well-known private equity funds, while there have been some early movers in adoption and outsourcing of tech solutions, an increasing in-house sophistication is visible among GPs across the board, particularly in the use of virtual portals where data on investments can be uploaded, shared and analyzed more efficiently.

Firms with excess of $15 billion in funds may be leading the way currently, but all firms are stepping up their game to keep pace with the larger players in

the space, according to EY's 2022 Private Equity Survey. The move to a more "mature" business approach and institutional mindset includes improvements to internal reporting and compliance to fully developed financial planning and analysis functions, it found.

Historically, or even 10 years ago, most of this work would have relied heavily on Excel spreadsheets and human interpretation. A former executive at a well-known private equity data provider says that the number of inputs on those sheets has probably multiplied by a magnitude of 10 since then with the growth of the asset class.

"This is 30 years of firms doing this in Excel, with whatever model they've built, and have never tried to do something different despite how painful putting those models together might be," says a technology consultant to private equity firms.

"The industry has been slow to adapt to date but with so much more competition in the market, and a change in market dynamics, there's no way you can turn a blind eye to [technology] and still be successful. There is lots of potential here in how GPs measure, manage, monitor what happens in their portfolio and use that to inform future investments."

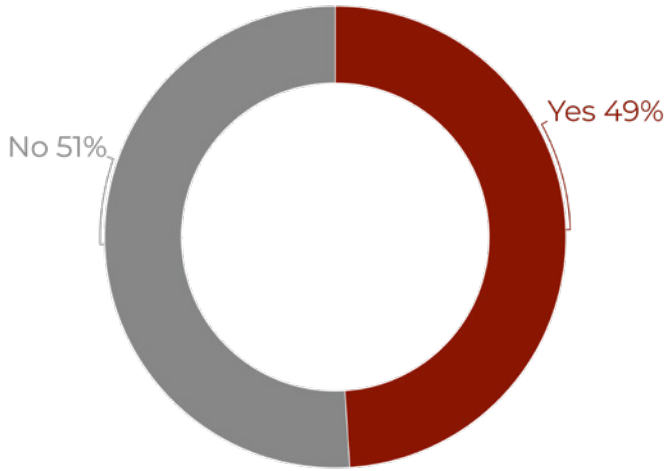
There are three reasons why an outsourced solution makes sense for many GPs in the current market.

Firstly, although some of the larger firms are building or acquiring their own technology solutions and teams to draw proprietary insights, the cost of doing so is still prohibitive for most. New software tools can be easier to use and a safer way to store sensitive data and are being marketed to GPs of all sizes.

A shift in the size and type of private equity firms raising and deploying capital is the second driver. CFOs in mid or lower-mid market GPs want a scalable operating model that can take advantage of the recent growth in private equity allocations. New fund structures and the rise of crossover managers (from the public markets, for example) can also complicate collaboration between legal, finance, and IR teams, says Estrada.

"A by-product of private equity growth is the need for more external support: more fund administrators, more custodians; more agents; and

Figure 2.1: Have you outsourced any of your firm's operations or IT infrastructure in the past 12 months?



Analyst note: Responses predominantly from GPs but includes LPs and service providers.

Source: Private Equity Wire survey, June 2022

Figure 2.2: Which function has your firm outsourced over the past 12 months?



Analyst note: Responses predominantly from GPs but include LPs and service providers.
Source: Private Equity Wire survey, June 2022

more partners. These extra touchpoints can compound the challenge of collecting, digitizing, and normalizing the data associated with a diverse and larger portfolio," he says.

Thirdly, and perhaps most visibly, private equity fund managers are becoming increasingly burdened with LP requests for financial information, which can often be processed more easily through such new outsourced solutions.

A leading London-based placement agent says that prospective LPs are increasingly asking questions of fund managers on their tech stack and what has been outsourced before they commit capital – in order to assess operational risk but also the potential for value creation.

"We see that in a number of ways at Arcesium," says Estrada. "An interesting shift has been in their due diligence. We're seeing more questions from LPs about our tech capabilities than we ever have before."

What LPs want

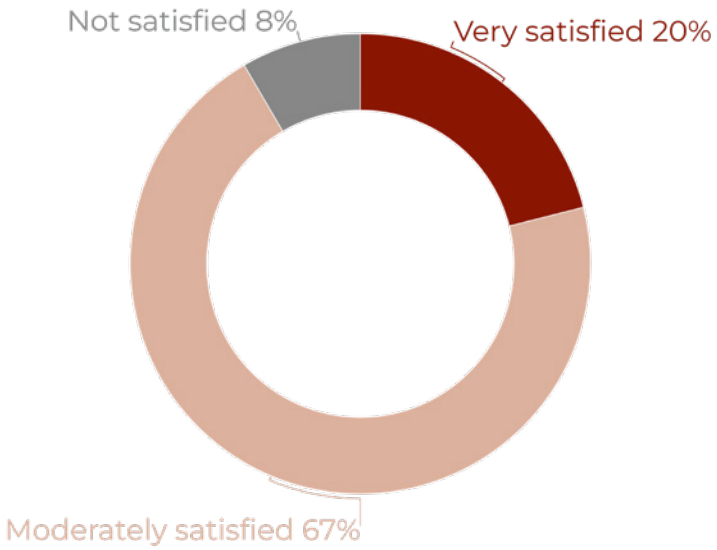
Some cornerstone investor commitments are now contingent on the use of an established back-office platform or fund administrator, and sources note cases of LPs specifying the level or type of administrator to be used.

"For LPs, ensuring the backbone of the fund setup effectively is a key area of risk mitigation," says one GP source.

"We now have around three to four years of LPs expecting that the GP is leveraging technology in some way, whether it's via an asset servicer or a fund admin, or whether they're owning it internally. I don't know that an LP necessarily cares who it is, as long as there is technology for them to deliver the reporting capabilities they need," says the US-based source.

Sixty per cent of LP respondents surveyed in the Brackendale Private Equity Technology LP Sentiment Survey H1 2022, said they would be more likely to consider allocating to a fund, if the fund manager had a tech-enabled partner to outsource their middle and

Figure 2.3: How satisfied are you with the technology capabilities of the GPs you currently invest in, with respect to their reporting?



Source: Private Equity Wire 2022 LP Survey

back-office activities to. Only 17 per cent of the respondents said they receive responses to ad-hoc requests within a day of the request and the majority said this is at least partially reliant on manual processes within their GP/LP relationship.

LPs want to assess the vulnerability of their investments to shocks or market downturns, as well as more transparency on ESG metrics such as carbon emissions or diversity.

While back-office outsourcing is common, the decision to implement a middle-office or end-to-end technology solution is often based on the size of organization.

Large fund managers may be building or acquiring their own in-house technology, but they can also be the most likely to rely on bulky legacy systems and software. New or recently launched fund managers can often more easily build a new technology strategy from scratch using best-in-class service providers. Their decision to outsource can free up limited human resource to more valuable tasks.

Machine learning and natural language processing tools are also unlikely to be built and owned by the majority of GPs. “It’s not whether you own the technology itself, it’s how you apply the technology,” says the US-based source. According to the CFO at a large private equity allocator which has large volumes of GP data to track, a recent decision to use a new AI system has saved the cost of one full-time accountant. The software took 90 days to implement and the cost was negligible. The allocator is now working with the same provider for an end-to-end solution and hopes to eventually move to a 100% outsourced model.

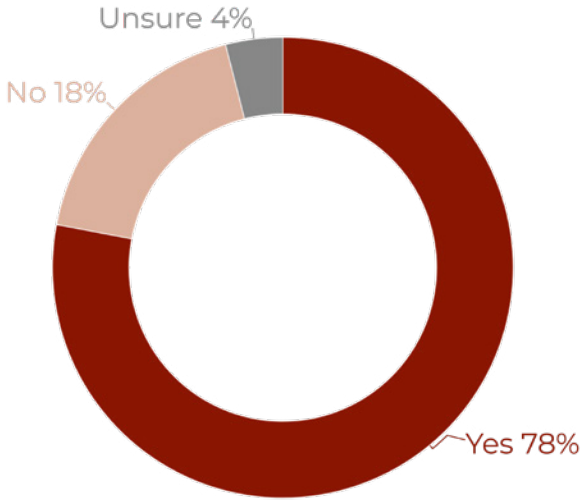
A smaller GP with an outsourced fund administrator is skeptical this approach will work for everyone, though. “If you need to be quick and nimble then outsourcing may not be the way to go – we have one fund admin who only checked their emails twice a day, at 11am and 3pm. We were banging our head against a brick wall [when we needed information quickly].”

Whether such an approach is successful, or not, depends on the solution itself as well as the size of the private equity firm in question.

Is there a baseline outsourcing approach that works for different sized private equity firms and should it include middle and front office functions?

“It varies greatly,” says Estrada. “On the front

Fig. 2.4: Of the respondents outsourcing part of their operation over the past 12 months, did the decision add value to your business?



Analyst note: Responses predominantly from GPs but include LPs and service providers.
Source: Private Equity Wire survey, June 2022

office side of things, while our clients may not be outsourcing their 'secret sauce', they are looking for us to help them create a unified data layer to enable it. Private equity firms clearly want an end-to-end solution that helps them better manage data and investment lifecycles. But many have been hesitant to adopt new applications and others are still in the early stages. Whether our clients layer on new applications or fully overhaul their workflow, our goal is to help streamline processes to get the most value from their data."

Key Takeaways

LPs are driving fund managers to rethink their operations amid a boom in tech-enabled platforms and services but the right solution may look very different depending on the size of the GP

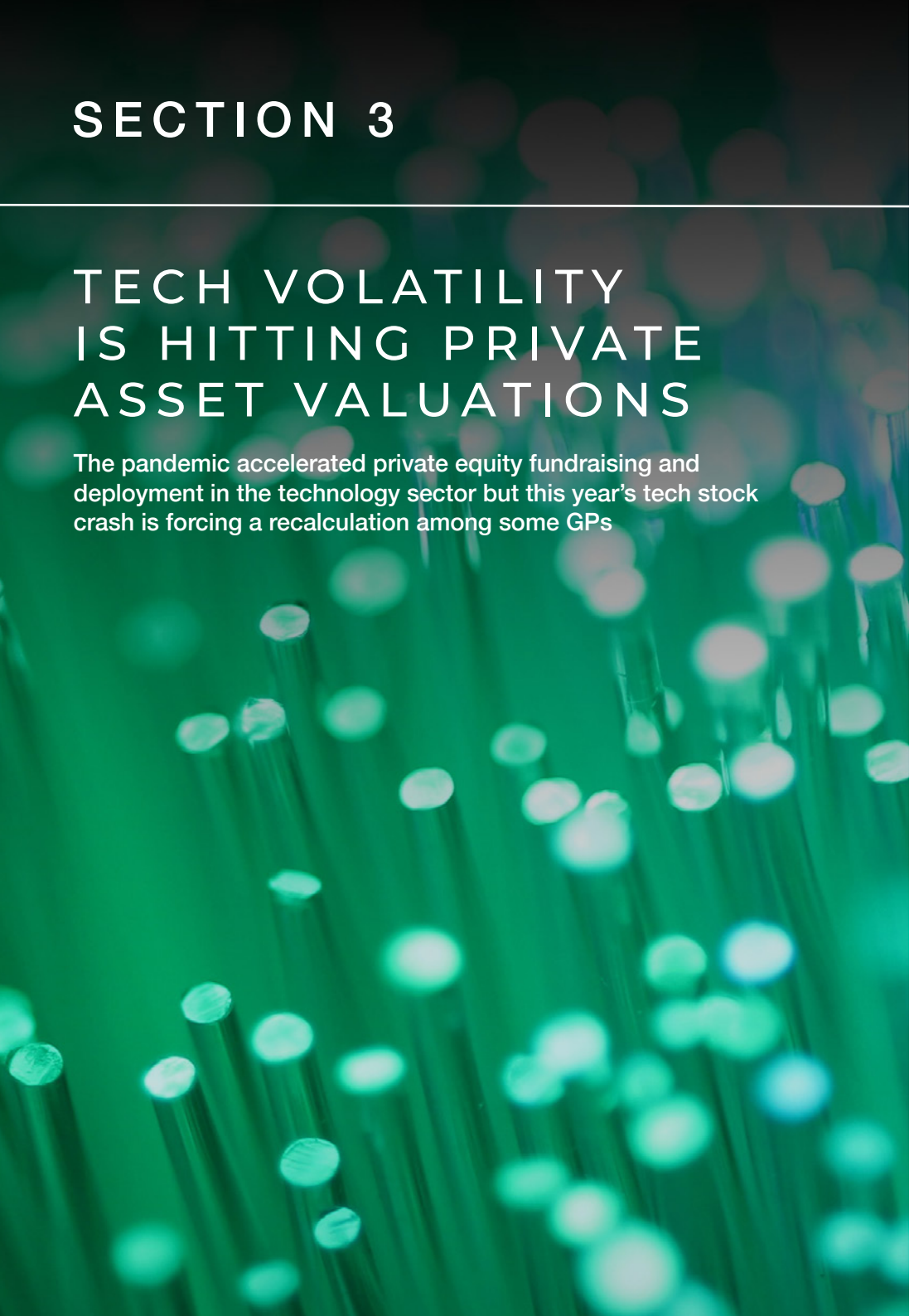
New cybersecurity rules

The growing wealth of financial information being held and accessed by private equity firms has a downside, too. Increasingly the asset class is being targeted as a 'weak link' by cyber criminals and ransomware attackers using targeted phishing, spoofing and digital impersonation to siphon large amounts of money during the course of a complex transaction involving multiple counterparties.

LP investors and regulators see the risk, too. In November last year, the Institutional Limited Partners Association (ILPA) issued a new standardized due diligence questionnaire with added cybersecurity components. And in February, US regulator the SEC proposed new rules on cybersecurity risk management, incident reporting, and disclosure for funds that would impose sweeping new cybersecurity obligations.

As shown by the 2020 cyber-attack on Thoma Bravo and Silver Lake-owned software company SolarWind, portfolio companies can be a doorway for hackers to find entry into a network so cyber-risk can flow up as well as down the supply chain.

Global cybercrime costs are expected to grow by 15 per cent per year over the next five years, reaching $10.5 trillion annually by 2025. Technology consultant Gartner predicts that, by then, 60% of organizations will use cybersecurity risk as a primary determinant in conducting third-party transactions and business engagements," adding that: "Investors, especially venture capitalists, are using cybersecurity risk as a key factor in assessing opportunities."



SECTION 3

TECH VOLATILITY IS HITTING PRIVATE ASSET VALUATIONS

The pandemic accelerated private equity fundraising and deployment in the technology sector but this year's tech stock crash is forcing a recalculation among some GPs

Last year, during a keynote address in Berlin, one of the founders of Thoma Bravo, Orlando Bravo, declared: "Software is not an industry... software is the business of every industry".

The pandemic was making technology more ubiquitous, he argued. Today, almost every business is on its way to becoming a technology company or, at the very least, a tech-enabled service company. But the crashing volatility of tech stocks during Q1 this year has forced a re-think among some investors. The sentiment is crossing over to private markets, say sources, limiting bidding in some M&A auctions and threatening to reset valuations at the end of June 2022.

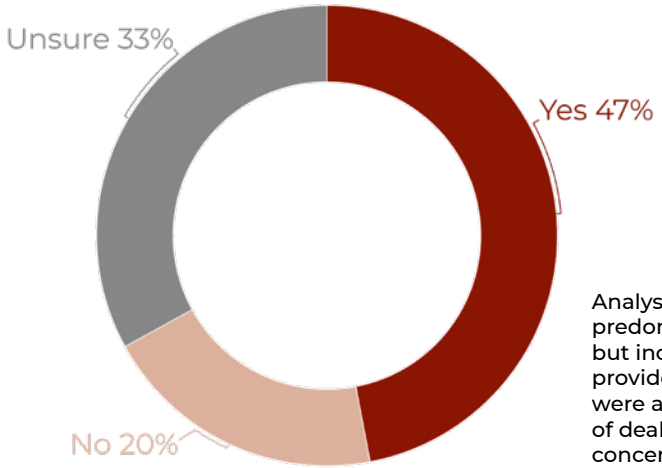
In a survey fielded in June, of more than 50 private equity professionals, almost half of all respondents said they were concerned about private equity investments made in the technology sector following the revaluation of tech stocks earlier this year.

"We are seeing, at the moment, many challenging auction processes, because sellers still have certain valuation expectations which cannot be justified by buyers in the current macro-economic climate," says a London-based private equity lawyer.

In the public markets, the axe has fallen on growth tech companies. For private equity funds, the impact is less clear but may be evident in recent examples such as Thoma Bravo's renegotiation to buy the software company Anaplan in June.

A growing number of GPs have developed core investment strategies in the technology space, and many more increased their exposure to the sector as 'stay-at-home stocks' boomed during

Figure 3.1: Proportion of respondents concerned about recent M&A in the technology sector



Source: Private Equity Wire survey, June 2022

Analyst note: Responses predominantly from GPs but include LPs and service providers. Respondents were asked, 'In terms of dealmaking, are you concerned about private equity investments made in the technology sector following the revaluation of tech stocks earlier this year?'

the pandemic.

"For tech companies, 2021 saw all-time highs in terms of capital raising from PE/VC investors and also, global listings, both under direct route and SPACs," said Raja Lahiri, Partner at Grant Thornton Bharat in March. "In 2022, we are already seeing signs of valuations of tech companies moderating."

More than half of the firms making up the top 10 best performing private equity firms in the 2021 HEC-DowJones Private Equity Performance ranking have a strong focus on technology investments, with Accel-KKR unseating another tech-focused firm Francisco Partners to take the top spot.

More recent investors may be reviewing their exposure to certain companies in the sector in anticipation of an expected shift in valuations.

"I would say that there are some adjustments in valuations in the private market but it's not in the same proportion [as the public market]," says Jérôme Chevalier, partner and co-founder of Quadrille Capital.

"And I think that it's a bit early to tell. Our view is that when we look at the public stocks, there are obviously huge corrections in many segments. And the way we look at things is that we think that the probably excess evaluations that happened in the last two years have been corrected."

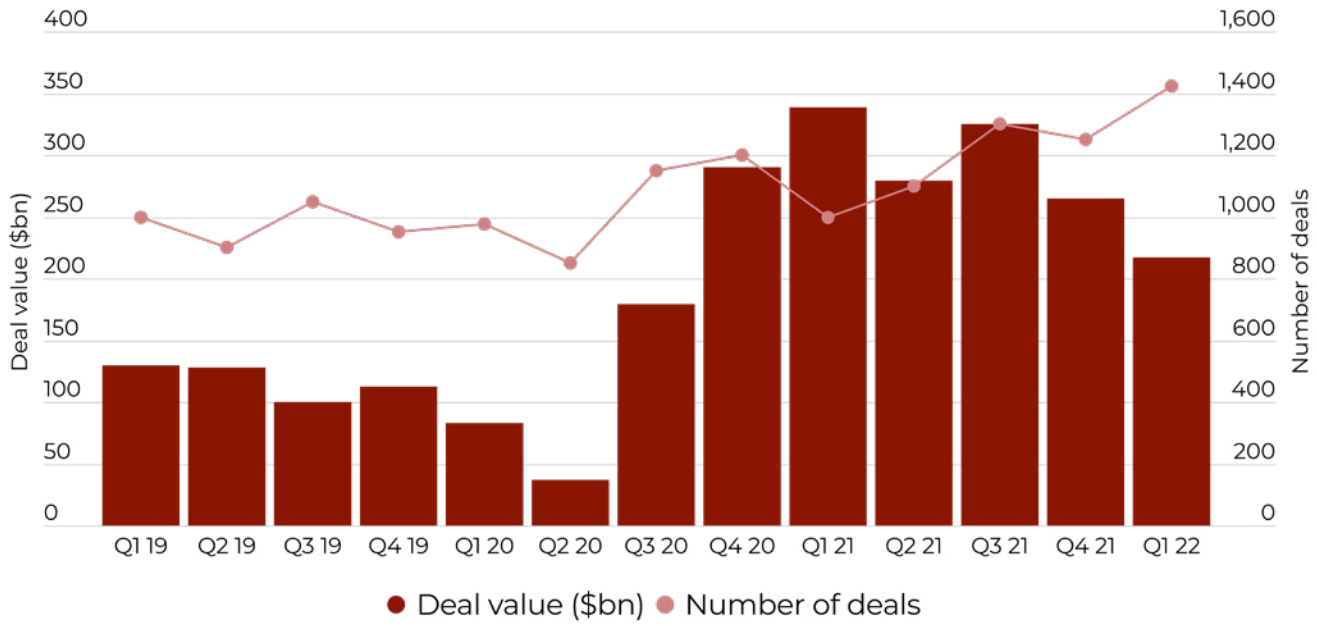
The more experienced technology-focused private equity firms don't appear to be pulling back for now, although M&A negotiations are becoming more protracted in some cases.

"We're seeing the funds who've got the experience and investing in these things have faith in longer term trends," says a source close to several large private equity funds. "Some of this is just a speed bump, valuations got a little bit out of whack. But if you believe that, fundamentally, things like the convergence of AI, machine learning, and automation, make it very ripe to automate some basic processes then that train is going to continue."

In 2022, this train has very much arrived at software and cybersecurity (see interview with Thoma Bravo in this Report).

In April, weeks after the tech stock crash, three

Figure 3.2: M&A activity in the technology sector, since 2019



Analyst note: Data compiled 31 March 2022

Source: 451 Research, S&P Global Market Intelligence

private equity deals in the cybersecurity space announced were worth a combined value of almost $17 billion: Thoma Bravo agreed to take SailPoint Technologies private for approx $6.9 billion; Kaseya said it was paying $6.1 billion for Datto; and KKR agreed to a $3.8 billion deal for Barracuda Networks.

By May, acquisitions of North American-based cybersecurity firms touched $30 billion and, according to Pitchbook, US PE firms will close at least 400 middle-market software deals in 2022.

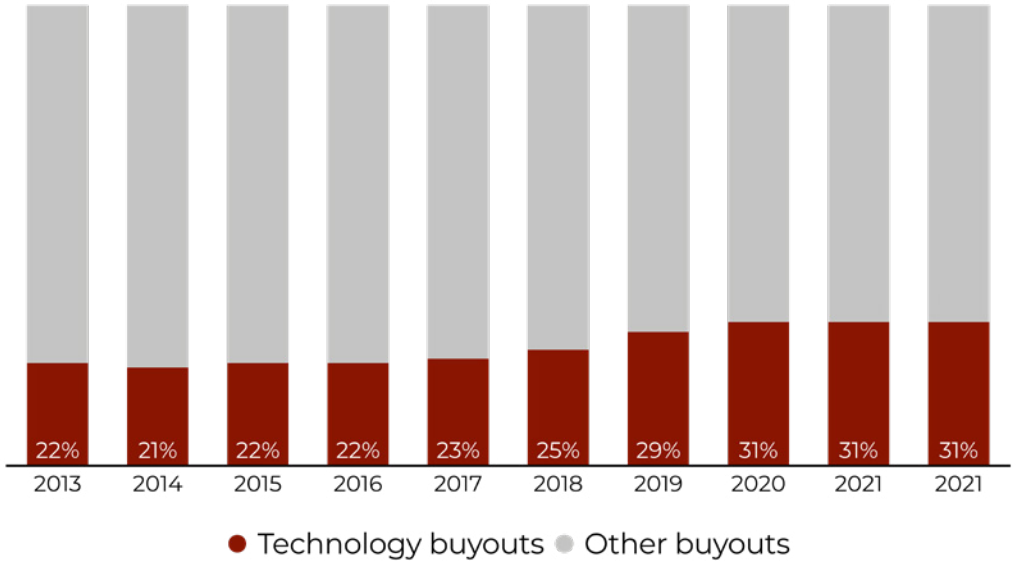
Despite the grim outlook in the public markets for some technology companies, private equity fund managers are also expected to drill down further into the tech sector with a view to attracting the best dealmakers and the best deals.

"Within software there are as many sub-segments as there are in medicine," says Chevalier. "It's a really wide space that it is expected to continue to grow to be robust."

And, rather than increasing their exposure to technology as a sector, others will continue to focus on how technology can be used to create value in other sectors or assets.

Last year Bilge Ogut, partner and head private equity technology at Partners Group explained: "We don't

Figure 3.3: Technology buyouts as a proportion of all private equity buyouts, 2013–2021



Source: Dealogic

look at technology to identify the next 'cool thing'. For instance, although blockchain, digital currencies, artificial intelligence and machine learning are fantastic developments, and we have to keep up to speed with them, our focus is more on how these technologies can be applied to solve real-life problems at scale, with broad adoption and long-term use cases... The space is constantly evolving so you need to be a quick learner and bring together many moving parts."

In the meantime, cashflow and balance sheets are being looked at more closely by established fund managers in the tech space.

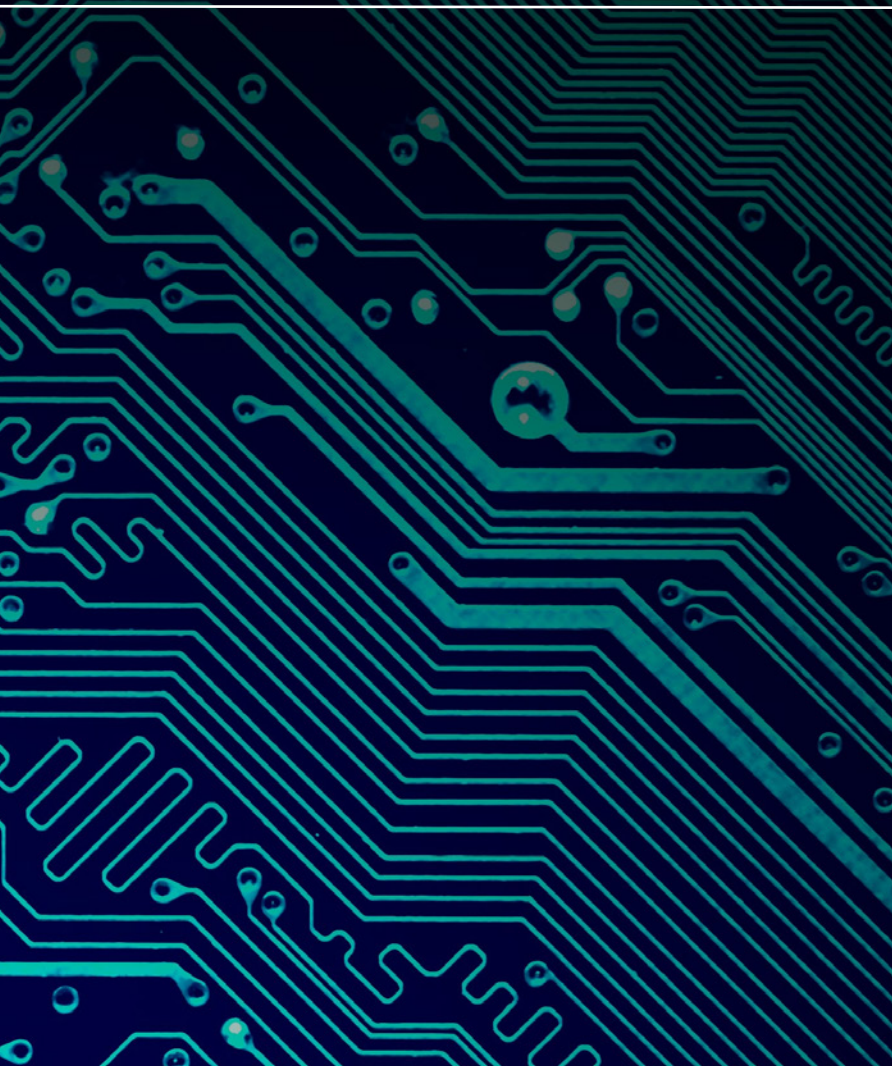
"How well financed a company has always been 50 per cent of our investment decision," says Chevalier, "the rest being obviously, 'Does the technology work? Is there a market to sell it? And does the management want to really to build a big company?' We pay a lot of attention to the financial side. And I think that this is important today to make sure that your companies are well financed."

Key Takeaways

LP investors in private equity may need to reconsider their exposure to technology-based fund strategies as valuations look set to cool

THOMA BRAVO DECODES CYBER M&A

M&A volumes in the cybersecurity sector are at record levels, buoyed by private equity funds jumping in. The most active sees further growth ahead





ANDREW ALMEIDA, PARTNER, THOMA BRAVO

2021 was a landmark year for cybersecurity M&A, with approximately $77.5 billion in M&A volume and $29.3 billion in PE & VC investments.

Despite macroeconomic headwinds and recent volatility among some growth-orientated tech companies, private equity interest in the space is expected to continue to grow – bolstered by the sector's robust demand projections, high gross margins and a capital light business model.

According to S&P Global Market Intelligence in May, "cybersecurity M&A will likely remain hot, even as investor interest in tech more broadly continues to cool".

Proof, so far, lies with Thoma Bravo, which last year announced the $12.3 billion acquisition of Proofpoint and, in April, followed with an approx $6.9 billion move on SailPoint.

Since 2017, tech-focused Thoma Bravo has completed the most cybersecurity deals with 30, according to data from Pitchbook. Below, Andrew Almeida, partner at Thoma Bravo's flagship team in Miami, explains why.

How immune are cybersecurity companies from the crashing share prices of technology companies this year?

Even with all the volatility in the markets and whispers of a looming recession, we talk consistently to CIOs and CSOs of larger organizations, mid-size organizations, and not a single one is talking about cutting back their cybersecurity spend. It's definitely a sign of the times. I think the cyber threat landscape has never been larger, and it's never been scarier, unfortunately. I think we're still in the very early innings of that trend. The largest companies say they're 10 to 20 per cent done with their cloud transformation and that's after 10 years of work – it's not something that's going to cool down anytime soon.

Thoma Bravo acquired Proofpoint for $12.3 billion – one of the largest deals in the sector to date. Is there a ceiling on deal size and where do you see your next deals coming from?

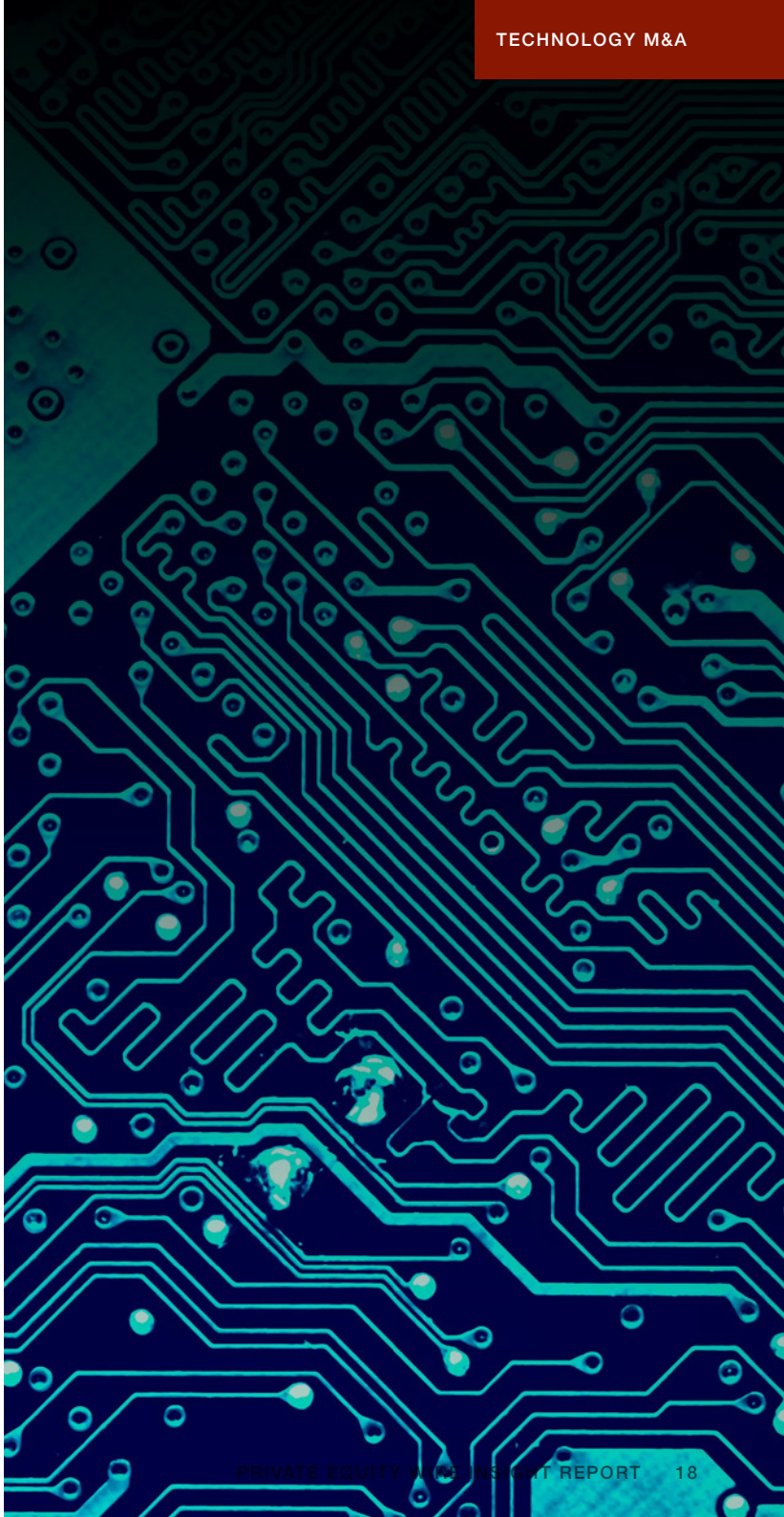
I think as far as software goes, the sky seems to be the limit here. I don't

see any reason why it couldn't keep getting bigger. For the next deals, absolutely take-privates should be on the menu. Carve-outs have always been an incredible area of value creation and we're very opportunistic there but carve-outs tend to not come in waves, at least as far as we've seen historically. They're all very specific to situations involving the parent company. I would assume that in more uncertain times, and maybe a down-market, people start to think about monetizing less strategic assets. When they start to occur, we will be there.

Software companies are notoriously capital light. Can you explain how this business model fits into your playbook?
Software is definitely in a class of its own, in terms of the business model. Gross margins are incredibly high and recurring contracts renew at incredibly high rates. Our value-add typically comes from working closely with management, on issues like expanding into a geography that they've struggled in historically. A lot of these companies we're buying, they're global businesses but there's a major region that they've struggled in, so we have sales and marketing experts on our operating staff that will help these companies crack issues.

With more buyer selectivity on tech M&A and larger deal sizes reducing the number of potential buyers for an asset, how are you weighing exit strategies in the current market?
Our strategy lends itself really well to any sort of volatility that's in the markets; in periods of public market decline, where we own assets that we may have acquired in the past couple of years, we will look at those assets, and we will consolidate the market. When you look at our history, we've very rarely run bank or auction processes for our portfolio, it's almost all inbound interest. And so we just keep our heads down, especially in times like this, we focus on operations, we focus on making sure we're maximizing all the right KPIs and then the buyers will actually show up. We always have an exit strategy in mind when we make an investment but it's never the one that ends up materializing.

Thoma Bravo's investment strategy has received attention for working closely with management and aligning with the company's culture. Is this so unique within private equity?
We've separated ourselves so far from all of the stereotypes of private equity, and today, we're not buying struggling businesses – we're buying market leading businesses that are the number one player in their respective industries in really attractive markets. Things like email security, identity and access management, financial planning software – these businesses aren't struggling. So our thesis is that we're going to buy the best businesses and partner with management to figure out ways to make them better, to make them grow faster, to make them more profitable, to help them do the acquisition that they've always wanted to do which the public markets would never understand.



SECTION 4

PRIVATE EQUITY FIGHTS FOR TECH TALENT

Private equity firms of all sizes are prioritizing talent management over any other strategy, but they face challenges and may end up re-building their organizations in the process

Hiring challenges in most developed economies have forced many private equity firms to think harder about where they are under-resourced and how their organization is structured.

One area is receiving particular attention.

EY's latest Global Private Equity survey shows that, aside from asset growth, talent management is the most important strategic priority for firms of all sizes.

Data science, operations and reporting roles are all in high demand across the industry, as LPs push for more transparency and GPs attempt to unlock value across their portfolios and firms.

"Almost all PE firms are looking to operationalize and scale the technology and data they have to benefit investors. For the first time, we're seeing demand for chief data officers, data scientists and engineers so that firms can gain an edge," says a service provider to the industry.

The demand for greater tech capability is wide and still in its early stages.

In a Private Equity Wire survey of more than 50 industry stakeholders, over 31 per cent confirmed they are either currently recruiting for, or have recently recruited, staff in the areas of data analytics/science or programming.

"There isn't a single part of the alternatives industry that hasn't had a good run, so everyone has been hiring. In the last 20 months, the market has been very buoyant," says Charlie Hunt, director of UK at recruitment firm PER.

"The bigger funds are becoming massive asset managers and creating new strategies that require entire new teams. As a consequence, they've been hoovering up a lot of talent."

Many of these fund managers are turning away from outsourcing to build large in-house teams, while other managers see value in the combination of both.

"In the past seven years, there's been a switch from outsourcing tech efforts, to now potentially

having a whole suite of data experts who help with portfolios, analyzing markets, due diligence and dealing origination," says Hunt. "There are now jobs in PE that never used to exist – the industry has really professionalized."

In some cases, the switch to a more tech-orientated business can also allow a firm to limit issues such as key-person risk higher up in the organisation, by drawing more value from data and analytics instead of a person's network or knowledge.

According to EY's January Global PE Survey, 43 per cent of GPs said that they have increased the scrutiny of their PE firms' talent management programmes, with 30 per cent expressing a confidence in better talent management programmes signalling the firm attracts top talent within the industry.

Talent managers help firms to recruit and onboard staff at all levels, while also advising on a firm's approach to culture, structure, training and employee benefits.

The push for the best talent in the industry has also encouraged a remodelling of the traditional PE firm, as funds work to retain and attract talent.

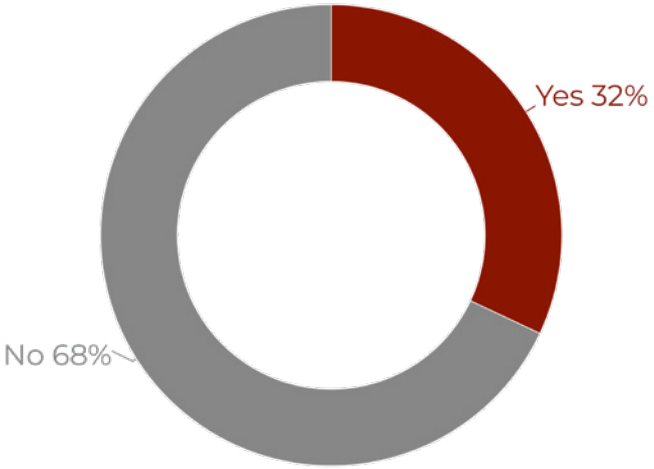
"PE firms are more focused on culture and employee experience than they have ever been. As well as offering perks and various incentives, they're also looking to leverage technology to make employees' jobs as efficient and smooth as possible," says the service provider.

No perfect candidate

With increasing amounts of capital flowing into PE and new types of investors allocating to the asset class, the pressure is on GPs to make the right decision with regards to both their investments and hiring processes.

"Everybody, particularly in the private market space, has money to deploy for hiring, but they're a little too focused on finding the perfect candidate all the time. Right now, they need bodies on board to help manage these growth initiatives, which might change dramatically if we

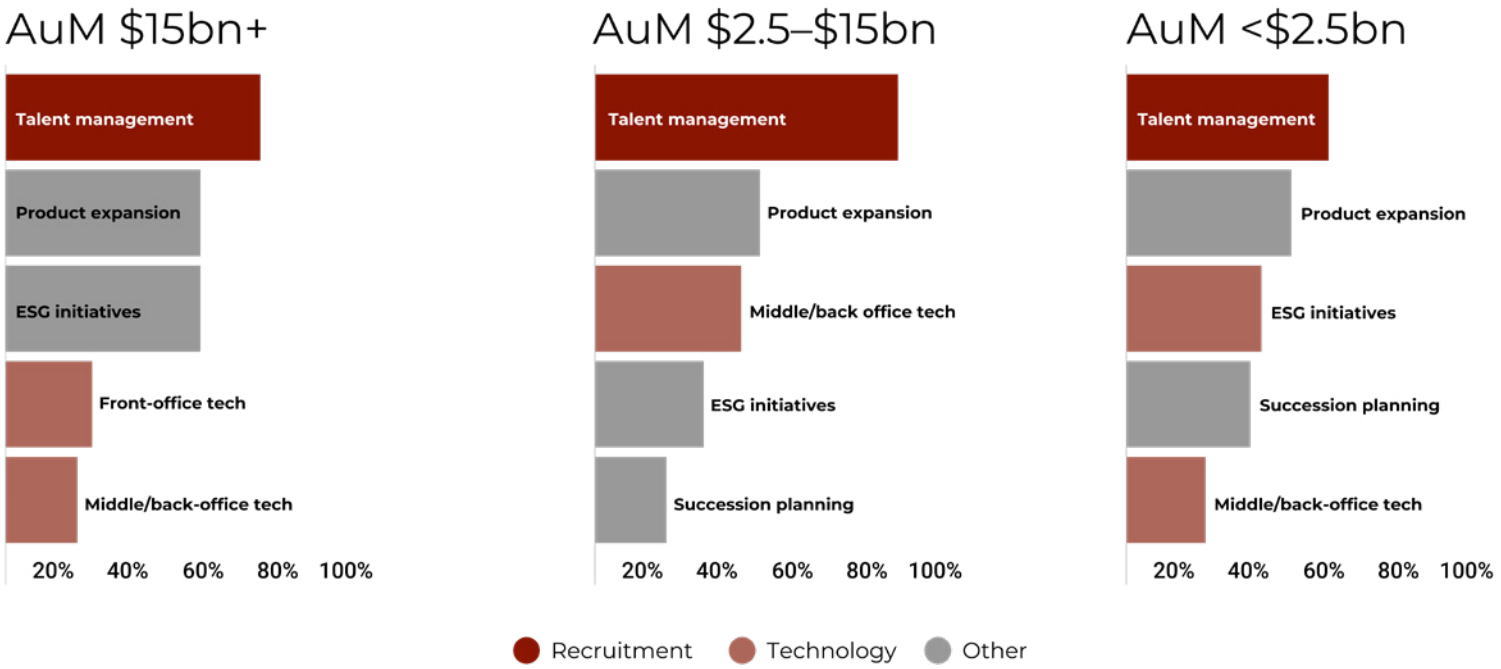
Figure 4.1: Have you recently, or are you currently, recruiting for staff in the areas of data analytics/science or programming?



Analyst note: Responses predominantly from GPs but includes LPs and service providers.

Source: Private Equity Wire survey, June 2022

Figure 4.2: Private equity firms' top five strategic priorities, by firm AuM



Analyst note: Two answers above abbreviated from 'Enhancing mid/back-office tech' and 'Front-office tech transformation

Source: EY Global Private Equity Survey

see another three months of markets sliding like they are," says Jonathan Doolan, managing partner at Indefi, a global strategy advisor.

Finding talent in reporting has been a big challenge and, despite major efforts, there appears to be a lack of talent in the space.

"There is currently a very candidate-scarce market – that has been the biggest problem we have found. On top of this, funds haven't lowered their expectations on the quality of talent and just aren't willing to compromise on their requirements," says Hunt.

PE firms have been struggling to retain younger talent due to competition from firms in other parts of the economy.

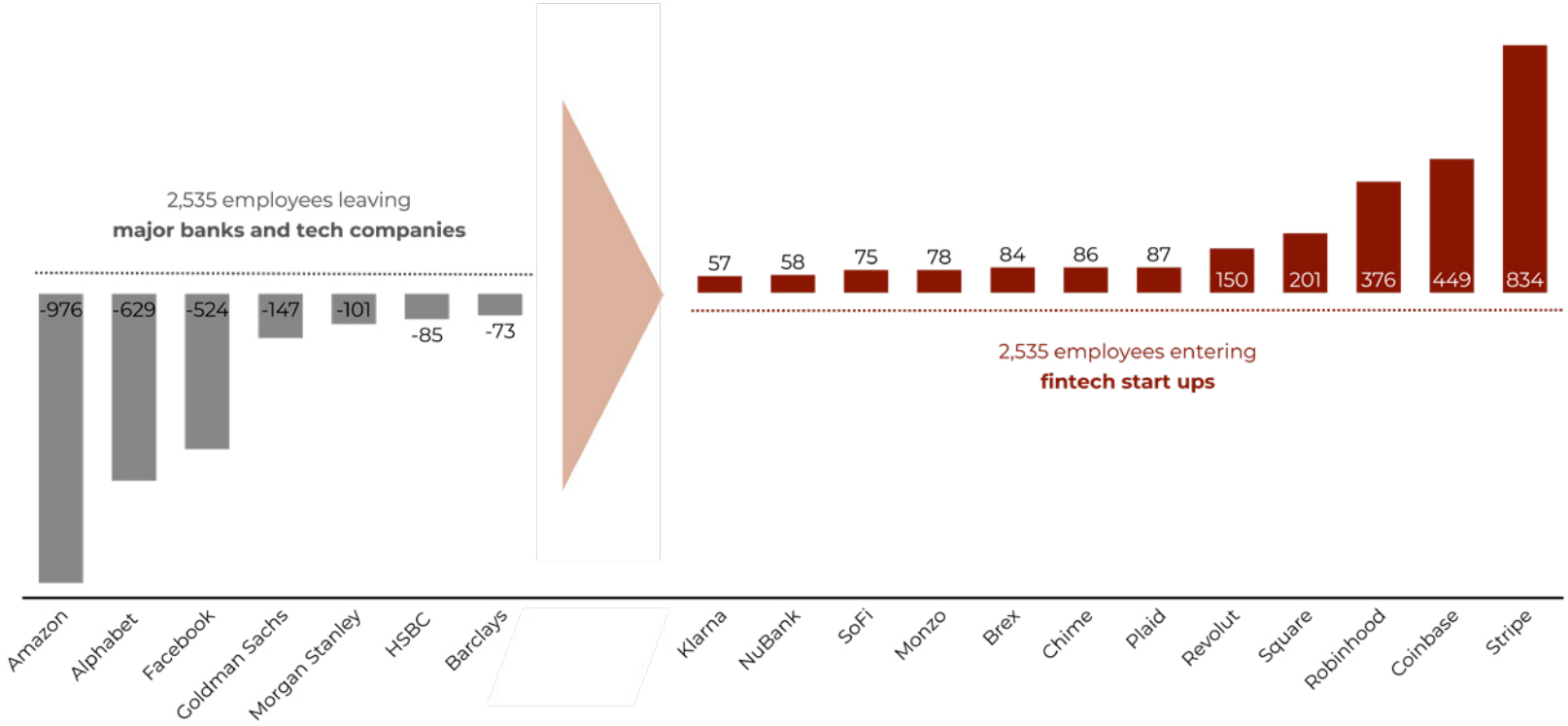
According to data from EY, 60 per cent of PE CFOs said it was difficult to recruit millennial and Gen Z employees and some 82 per cent reported issues with retention, especially larger PE firms with $15 billion or more in assets.

The challenge echoes recent calls for more diversity within private equity, which is slowly starting to increase. Research from McKinsey reveals that the percentage of ethnically diverse people and women talent has increased, and the promotion rate for women has increased at all levels.

However, though the amount of firms with over 30 per cent of front-office positions held by women has almost doubled between 2020 and 2022, it still remains below a quarter.

"The big public pension funds, the AP funds in the Nordics, and the big

Figure 4.3: The great tech reshuffle, Jan-20–Apr-22



Analyst note: Chart represents the movements of 2,535 employees of major banks and tech companies tracked by Revelio Labs.

Source: Revelio Labs

funds in Toronto, are the ones where, if you're not taking note of DEI and aligning with it, you're putting yourself at a significant competitive disadvantage. If you're not internalizing it, it's going to limit your ability to scale effectively," observes Doolan.

The lessons learnt here will no doubt inform new strategies for private equity firms recruiting analysts, data scientists and technology professionals from all ages and backgrounds in the years to come.

KEY TAKEAWAYS

- **For GPs:** In-demand candidates are increasingly paying attention to a firm's culture, and the lifestyle they would have within a business plays a big role in which firm they choose to join
- **For LPs**: GPs are looking to improve their data and how they deliver their data to keep their investors informed on returns and strategy
- **For Service Providers**: Private equity firms are seeking assistance with the hiring process and advice on how to adapt their firm's culture to make it more appealing to candidates

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