hile the last two years have seen a marked increase the number of private funds adopting automated systems to replace outdated spreadsheets calculating carry and waterfall systems, still fewer than one in five firms say they are using

technology to tackle the calculations.

Private Funds CFO's Insights Survey 2022 found that the share of firms embracing tech solutions in place of spreadsheets had reached 18 percent, up from just 6 percent two years ago. Another 16 percent said they were planning to adopt automated systems. However, a lingering preference for using Excel was listed as the most common reason as to why two-thirds of respondents remain determined to avoid waterfall technology.

"The back-office role is coming into the 21st century," says Kwame Lewis, TMF Group's co-head of fund services for North America. "Doing everything in Excel probably isn't going to cut it anymore."

So why the reticence? Kanav Kalia, chief sales and marketing officer at Oxane Partners, says: "This function typically sits within the accounting setup, where the decision-makers are usually finance or accounting professionals with a liking for Excel that is no secret. One of the key obstacles to automation is inertia to change - Excel and manual processes have worked for firms for decades. Technology can seem like a black box and decision-makers need to have the confidence that they will have flexibility and control over the situation."

Change management can also become a hurdle to the success of a switchover, Kalia says, because there are apprehensions about how well the system will be received by end users and teams, and the knowledge transfer and training required can be off-putting.

"If you contrast these systems with trading systems, portfolio management systems or investor reporting systems,

the latter open up opportunities for additional alpha and can be used as a marketing tool for funds when they are fundraising," says Kalia. "Systems that reduce operational risk might not be as high up the priority list."

## A turning tide

Still, as more and more service providers develop technologies to support clients with increasingly sophisticated and cumbersome waterfall and carry calculations, attitudes are changing. Just as the pandemic accelerated tech adoption in so many other areas, it highlighted the need for accessible, centralized information and pushed many firms towards greater digitization.

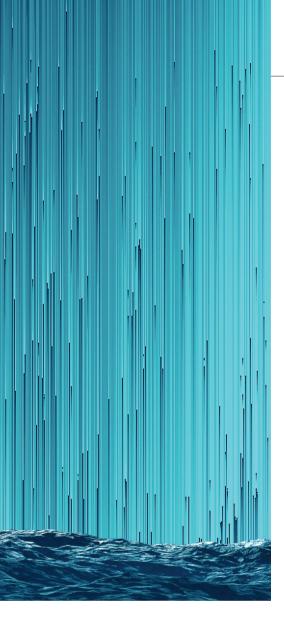
Dean Schaffer is head of the capital administration group at Alter Domus, having joined the firm in 2021 when it acquired Investors Economic Assurance, which provides waterfall and carried interest solutions to the alternatives industry. "I am definitely seeing a much bigger and stronger trend towards leveraging automation and technology to support waterfall models and carry allocation plans than ever before," he says.

There are multiple reasons for that, according to Schaffer, who points to the scale of capital and data coming



## Chasing waterfalls

A long-standing aversion toward using technology and automated processes to calculate carry and waterfalls is slowly dissipating, but the private funds industry has some way to go before adoption takes hold across the board. Claire Coe Smith reports



into private funds and the growing number of CFOs joining private equity firms that are open to leveraging technology. "Private equity firms are institutionalizing as significant investment organizations," he says. "CFOs are just more willing to leverage technology in an environment where they have more than they can manage.

"I have spoken to hundreds of CFOs over the years about waterfalls and carry, and very few of them say they have it under control and there are no issues with their model."

How you pay your LPs and how you pay your GPs are two critical processes for any fund. Relying solely on spreadsheets presents a number of issues - not least because there is a level

of granularity that Excel struggles to go into, says Schaffer. He also argues that tech can help overcome the "fat finger issue," whereby a mistake can be made that is incredibly difficult to identify until farther down the track, while an over-reliance on spreadsheets creates key person issues where entire organizations become reliant on the knowhow of a single spreadsheet owner.

"The technology has a clear benefit over spreadsheets in being able to do calculations with a lot more granularity, efficiency [and] speed, and with an institutionalized format with strong checks and balances," says Schaffer.

Sean Murray, global head of product transition and product integration at Apex Group, says waterfall and carry calculations tend to be highly tailored to every fund manager, which is why technology tools can face challenges.

"Due to the flexibility required in a lot of waterfall and carry calculations, there are still a huge amount of calculations done in Excel," he says. "Every manager has their own take on what drives outperformance versus their competitors. They want to get rewarded based on that, and it is very difficult to pin that down in a coded system."

He argues that performance calculations get more complex in closedend funds because there are more opt in and opt out of investment options available to investors. "Another challenge is that the fund manager and the auditors want to see the formula used, so even if the system can handle the calculation, as an administrator you are having to prove it out in Excel anyway for the benefit of the manager and the auditors."

## Simplifying problems

The lack of a one-size-fits-all approach and the need for a cost-benefit analysis to underpin any digitalization decision means that the choice to automate is heavily influenced by where the fund is in their growth journey, their size and the number of funds and investors they work with, according to Kalia.

"Technology can seem like a black box and decision-makers need to have the confidence that they will have flexibility and control over the situation"

KANAV KALIA Oxane Partners

Murray adds: "Where the calculation is more straightforward, we have seen much more widespread adoption of automation, but the complexity of many carry calculations is an issue. That can depend on the fund structure underneath as well - if you are rolling up a lot of underlying onshore and offshore vehicles, and onshore and offshore feeders, that's just adding extra layers of complexity."

Schaffer says managers should not worry that their carry and waterfall systems will be too complicated for the technology to handle. "Most people that we speak to say their waterfall is a little bit different and so our system may not be able to manage," he says.

"Our technology can support all types of waterfalls. We have deal-bydeal funds, total return funds, hybrid structure funds, evergreen funds - you name it, over the years we have supported it. While your waterfall may be a little different, the chances are it's not that different from something we have supported in the past."

"Far wider adoption is inevitable," says Murray. "Increased flexibility around the software... will certainly help propel us down this pathway. We may not ever get complete automation, but we will definitely get a lot further along the road."