

As technology and security demands grow, how are CTOs managing budgets and are resources forthcoming from the boardroom?

BY CHRIS MATTHEWS

alk of the need to improve IT systems, infrastructure and network connectivity often causes the senior management of hedge funds to tune out. As long as the lights are kept on, the technology is functioning fine.

Yet, as more hedge funds look to implement greater automation and integration, and with data and reporting pressures and cyber-security concerns growing, technology is taking on a more important role.

So how do CTOs manage their shuffling technology decks and budgets and sometimes persuade their board-rooms of the need for more resource?

Given the varying size of hedge funds, it is evident that the budgets available to some dwarf the resources accessible to others, although what is universally measurable is the interest taken by firm executives. The chief technology officer at a \$10bn manager says it is critical that for a technology initiative to be given the green light, senior management must first be willing to recognise its business value.

"Within certain hedge funds, especially the portfolio managers and owners, some understand and appreciate technology and where it fits – others do not and that can be a hard hurdle to overcome," the New York-based CTO says.

"It is about how you can show and demonstrate value to those executives and the track record you build over time can help break down some of those walls."

Overcoming these executive hurdles is something that the COO at a European-based manager says can be difficult.

"It is not so much the cost of replacing a system, it is more the cost of parallel running which can prove challenging for senior management," the COO explains. "People understand in principle but they can't always understand that you need to run two systems for a long period of time."

According to EY's Global Hedge Fund Survey 2014, firms will spend more than 10% of total expenditure on technology initiatives over the next three years, with 81% increasing investments in cyber-security.

This is hardly surprising given cyber-security's global prominence. The SEC has been the industry's cyber cheerleader in recent years, highlighting the area in a series of documentation, roundtables, and news releases.

Releasing its updated risk alert on the subject in September and with plans to start a second wave of reviews soon, actions taken by the US regulator have clearly had a domino effect across the hedge fund community.

For the New York-based CTO, budget requests for cybersecurity have become an easier sell to management who are increasingly interested in the finer details of cyber solutions.

He explains: "Our executives are trying to be more informed. Clients are coming back to them and asking what we are doing about cyber and so are investors and the marketeers – they are all asking about it.



I think the role of the traditional CTO has changed dramatically in the last few years. To be a CTO in today's climate, you can't just have infrastructure skills as it can be bought in by a third-party David Mansfield, netConsult

"They need to be just as informed as I am. When we spend money on cyber, they want to be more involved – not because they are questioning what we are doing, but because they want to be more educated."

From solutions around advanced threat protection and next-generation firewalls to the emergence of behavioural analytics, firms are implementing a myriad of different measures to ensure cyber-security.

One area where there is less appetite though is in appointing a dedicated security officer. There are only a handful of managers who have gone down the route; Brevan Howard, Pine River Asset Management, BlueBay Asset Management, Point72 Asset Management and most recently BlueCrest Capital are a select few known to have a CISO internally. It is a function that is clearly more applicable to those with hundreds of staff and operating in multiple jurisdictions where a solitary CTO is unable to deal with the mounting security demands.

The European COO, whose firms employs more than 400 people, says he was turned down by the board on a request for a CISO.

"We were turned down on the budget for a security officer unfortunately. But now that we have the budget for a whole new cyber layer, I think we will look at it again once this is in place," he explains.

"If we have a much better layer of active threat protection and have increased our insurance cover and documentation, I think it will also be up to us to go back to the board. We will have spent the equivalent of a whole year's salary on improving these defences, the question now being does that then obviate the need for a person or do we need some-

one else on top of that spend?"

Such debates around people versus technology have been magnified in recent years as the outsourced technology model has garnered more appeal.

Bart McDonough, CEO of Agio, a managed IT and cyber-security services firm, notes: "Cyber-security requires a high degree of expertise as well as attention; it's a day in, and day out practice, but firms just don't have the luxury of acquiring the skill-set or the number of resources required in-house. Historically, firms would keep absorbing the support costs associated with IT, employing new people for new projects; however, that adds up quickly."

This consolidation of responsibilities, be it to a thirdparty or internally with the COO doubling up on technology duties, has occurred at many, more specifically smaller, hedge funds in recent years.

"I think the role of the traditional CTO has changed dramatically in the last few years. To be a CTO in today's climate, you can't just have infrastructure skills as it can be bought in by a third party," says David Mansfield, COO at London technology firm netConsult.



EUROPEAN TECHNOLOGY AWARDS

23 November
The Artillery Garden at
the HAC

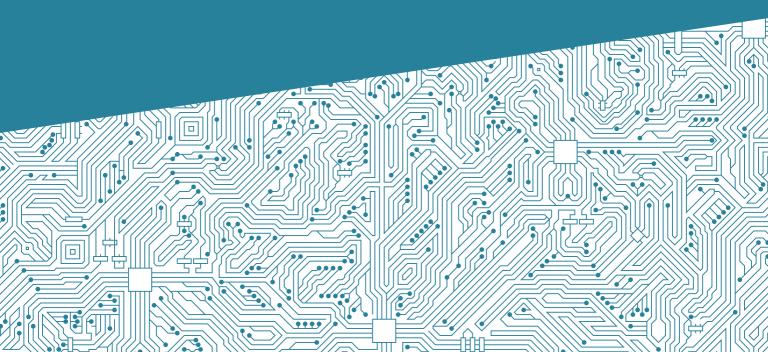
REWARDING EXCELLENCE IN HEDGE FUND TECHNOLOGY

BOOK YOUR PLACE AT THE AWARDS

SPONSORSHIP/TABLE ENQUIRIES

Amy Reed +44 (0) 20 7832 6618 a.reed@hfmweek.com

www.HFMEuropeanTechnologyAwards.com



"I think the only reason why you would choose to employ a CTO now if you are a small fund is if they are bringing a real value-add to the business because it is an expensive hire and also the outsourced solutions are becoming bigger and better."

The growing vendor network and product quality available to firms is resulting in more and more CTOs using service providers to meet technology requirements with development resources saved for the business differentiators.

"We have gone from a build to more of a buy mentality wherever possible and I don't see that philosophy slowing down," the New York CTO says. "As more of the technology becomes commoditised, which we are seeing more of, we tend to buy what we can and build our differentiators."

For start-up and smaller hedge funds, the outsourced model and adoption of agile, inexpensive cloud systems is evidently driven by cost. But for the New York CTO, who says his budget has "almost tripled in five years", the reason is mainly due to speed to market.

He notes: "It is usually due to time to market because we need to change so quickly based upon our growth.

"We have had explosive growth and have gone into new markets that we may not have had experience with before so we tend to partner with firms that have already solved the problem."

He says the technology strategy for the entire firm is devised 18 months in advance with planned initiatives "constantly re-evaluated as we go along".

"We had to do a storage refresh this year and that was close to \$1m - it was a 15-minute conversation with management," he says.

"They want to understand the homework I did to pick the product, where it fits in our scale and strategic initiatives. They didn't ask for ROI or TCOs because it is almost impossible to derive value out of a SAN.

"Management know I've tested and vetted other products, it is a one-pager, I give them a business summary, a cost and a timeline and that is about it."

Money available for system integrations and infrastructure refreshes becomes easier as firms grow their assets and requirements shift from the initial launch phase.

According to Citi Prime Finance's expenses survey carried out at the end of 2013, technology spend increases more than 400% as hedge funds moved from \$1.5bn to the \$5bn level.

"This sharp jump reflects an important developmental shift that occurs," the report says.

"Many hedge fund managers that have been performing upgrades to their original launch infrastructure now reconsider the efficacy of their platform and may choose to make a more substantial and strategic investment. Much of this has to do with the need to better manage data."

Not all technologists have such straightforward resourcing discussions. A CTO based at a London firm, which has around \$500m in assets, tells of a "hardware budget in the tens of thousands of pounds if I'm lucky"

and says it is critical that his IT model is as lean and efficient as possible.

"In our world, Bloomberg is obviously the biggest example of a monopoly data provider and is a significant outlay," he says.

"The basic functionality of having a Bloomberg terminal I don't think you can avoid but from our IT perspective, do we actually need the Bloomberg data feed?

"If you look behind Bloomberg, they are sourcing the data from somebody else.

"For example, getting the bond Libor rates, there is actually a standard website it comes from and so it helps looking at different options.

"We instead use a third party which provides the data feeds the firm require but for a lot cheaper than what Bloomberg charges."

Many technology vendors, and data providers particularly, are often criticised on cost structures and designing con-

tracts which tie firms in for several years.

When asked in a recent HFMTechnology survey, almost two-thirds of CTOs said that they would very much like vendors to offer rolling contracts.

Agio's McDonough says "people don't like to be locked in", and changes to agreements would ease budget pressures on managers as well as benefit providers.

"No one wants to be tied up in fiveyear deals anymore," he adds.

"The smaller hedge funds want the consumerisation of IT - like an app, you buy it, pay the subsequent monthly subscription fee and move on. They want the Drop Box-type model.

"The subscription model is definitely becoming more popular, and will ultimately benefit the software companies long-term, but it's a painful transition.

"The solid software companies with

great customer service will win out - Oracle and Microsoft are already shifting to these models."

The COO adds: "In doing proof of concepts for security - we have looked at a number of suppliers - the majority are more than prepared to give you a free trial.

"However, there are still some suppliers that want to get paid for a trial period. We can't be paying lots of times for something we may never use."

The merits of certain products, contracts and costs will always create tensions between CTOs and CFOs.

Regardless of a hedge fund's AuM, no firm likes to waste money and budgeting for technology is forever going to be a tough fight, however good performance may be.

"If your owner is not a big believer, budgeting will be hard - you are always going to have to fight that fight," says the New York-based CTO.



No one wants to be tied up in five year deals anymore. The smaller hedge funds want the consumerisation of IT - like an app, you buy it, pay the monthly subscription fee and move on. The subscription model is definitely becoming more popular, and will ultimately benefit the software companies long-term, but it's a painful transition

Bart McDonough, Agio