Financial Markets **INSIGHTS**

# For trading infrastructure, the buy-build question increasingly favours buy

*In this article, Mike O'Hara and Adam Cox of The Realization Group look at the trend of financial firms – on both the sell side and the buy side – outsourcing their trading infrastructure to specialist providers at co-located data centres. The prospect of outsourcing such a vital part of a trading firm's operations has enormous implications, from cost to performance to business models. Mike and Adam hear from* ***Stéphane Tyč****, Co-founder of McKay Brothers,* ***Ken Barnes****, Senior Vice President of Options Technology and* ***Bill Fenick****, Strategy and Marketing Director at Interxion. Together, they see a variety of drivers for the shift and a wide array of benefits for those firms that are looking to take advantage of the operational and strategic benefits that outsourcing offers. The companies that are taking the plunge are diverse, but they are alike in one key respect. They have all weighed the buy-versus-build calculation and found that in today's changing technological and regulatory environment, there are more reasons than one might suspect for joining the buy camp.*

## Introduction

There is an old joke about two men in the woods who see a bear. One of the men suddenly digs in his backpack, pulls out a pair of sneakers and starts to put them on. The second man is bewildered. "What are you doing?" he says. "You can't outrun a bear." As the first man furiously laces up his sneakers, he replies: "I don't need to outrun the bear. I need to outrun you." In the world of low latency trading, that joke speaks to a lot of financial market participants. You don't necessarily have to be the fastest to make money; you just need to be faster than a lot of the other guys. For an increasing number of market participants, that means outsourcing their trading infrastructure. But the outsourcing equation is based on many other factors beyond being a bit faster than the next guy. Banks and buy-side players are looking at managed services arrangements that allow them to move to an Opex rather than Capex model, one that can take pressure off of strained budgets. Front office infrastructure outsourcing also can free up resources, increase strategic flexibility and allow companies to take advantage of cutting edge technology in areas such as security.

## A broader arena

When high-frequency trading started to take off more than a decade ago, there was a relatively small group of players, each looking for whatever edge it could find. It was a highly profitable business and it led to an explosion of innovation in financial technology, as vendors and participants sought to build products and networks that could shave microseconds or even milliseconds off trading latency. Many other market participants, including large banks and quant-based buy-side firms, were content to stay out of the fray. For these firms, alpha was based on other factors such as business models, trading strategies, products or customer relationships. The larger of these firms typically built their own front office infrastructure in co-location centres, while only the smaller firms opted for a managed services model. But that is starting to change. Technological advancements, regulatory requirements, internal bandwidth factors and the various benefits that outsourcing offers are all driving the trend.

**Stéphane Tyč** of McKay Brothers, a network and data feed provider, sees a growing number of market participants trying to gain lower latencies and invariably that means buying rather than building.

"Our very first clients were almost exclusively using us to do 'winner takes all' trades. This is not the case anymore," Tyč says. "There is competition for all strategy types. For the quant strategies, this competition drives the alpha to become shorter and shorter term. In order to succeed you have to take advantage of your model predictions before the others."

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Stéphane Tyč, McKay Brothers

Artificial intelligence is increasingly important to shape all kinds of trading strategies, he notes. Faster algorithmic decisions require faster data and faster execution.

Options Technology, a provider of managed trading technology, also sees a lengthening queue of customers looking to buy trading infrastructure. "There is much more demand out there than we can handle," says **Ken Barnes**. "There's an obvious need that's being fulfilled and there is a set of very real constraints that inhibit people from being able to enter the market, or at least enter it quickly."

Barnes breaks down the burgeoning pool of new customers into three of what he calls "sweet spot use cases", each of which will be based on different derived benefits for market participants. The first of these are banks outsourcing their electronic trading infrastructure, including all or at least most, of the servers, data centre space and networks including cross connects to their customers and liquidity provider partners.

For banks, one of the key factors is the bandwidth it takes to build rather than buy. "If you look at a bank IT department they have to know so many domains, they have to look after so many different types of business with different requirements. You're well past the point where they can be expected to have a lean, knowledgeable, agile delivery team that can, in a cost-effective manner, deploy expert engineered solutions that match performance," Barnes says.

Tyč of McKay Brothers adds that many bank trading desks have been underinvested for some time. "They don't need to be the first to trade but they do need the best risk management tools and to meet best execution standards for their clients," he says.

A second use case involves application providers and their clients. For instance, that could mean a company that develops software that handles complex functions such as portfolio management, risk calculations or order management. "You suddenly find yourself either at the vendor facing customers that no longer want to babysit it, or as the customer you're tired of dealing with it and you just want a simple managed service experience," Barnes says.

Finally, there are the smaller organisations, usually on the buy side, that have demanding requirements in terms of supporting the mobility of the workforce.

### The 'hedge fund hotel'

This last group of users may be served by something **Bill Fenick** of Interxion terms the "hedge fund hotel". That basically consists of a data centre, racks and data feeds, either direct or consolidated. Some providers may include execution engines as part of the package.

One of the big attractions is that it frees up a firm to focus on the business of trading. "They can really concentrate on their trading strategy, versus trying to do all the updates that are constantly coming in for things like trading infrastructure and exchange-driven changes to data feeds, and all the various other things that happen in this technology-driven world," Fenick says.

 

Not only does relying on a specialist provider take away the hassle of maintaining an infrastructure, but also it brings two significant benefits.

First, there is the question of Capex and Opex. The costs of building and operating a network, or building a fully equipped data centre operation, can run into the millions or even tens of millions of dollars. For many mid-sized firms this quickly becomes prohibitive, and even for large firms the sums involved are sizeable enough to warrant considering alternatives. Providers devote huge budgets to research, development and production for networks and data centre operations and their customers get to reap the benefits of that.

Second, using specialist providers means the technology is tried and tested, an important point considering the mission-critical functions that are part of a trading desk.

A similar point can be made about the specialist providers themselves. At Options Technology, Barnes says, the knowledge required to deliver a successful outcome has come over a period of time.

"We've had to learn this stuff deal by deal, painful experience by painful experience," he says. "I really do not think that there are shortcuts because you have to build up so much business logic and so much process knowledge around how stuff actually gets done," he says. "I think anybody who tries to think that they can just by cleverness skip the line is fooling themselves."

Barnes adds that every new deal a provider does raises the bar in terms of requirements and brings in funding in order to build capabilities that will help all of the other customers. That dynamic is generally not there in what Barnes calls a "captive technology situation".

Reaping the benefits of a specialist provider's experience is one important attraction from outsourcing. But it's generally not the first one that comes to mind for customers. That would be cost. And by going outside, a bank can end up paying far less for its infrastructure.

Another major benefit is the agility and operational freedom that outsourcing offers. For instance, an outsourcing firm is in a position to deploy new customer connections or software versions quickly. Even when a company devotes budget to infrastructural spend, it may need to get in a long queue for internal IT resources. But by using a provider, that is not an issue.

**Potential risks?**

In addition to the various operational and strategic benefits to be had from outsourcing, there is a consensus among experts that technological change is happening too fast for all but the largest or most niche-oriented players to be able to keep up.

"You wouldn't want to do everything yourself unless you think you've got a huge competitive advantage," says Fenick of Interxion. "With the nature of the technology changing so quickly, it's very difficult to keep up and have a consistent competitive advantage."

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Bill Fenick, Interxion

In the past, it was common practice for firms to want to do everything internally, or at least as much as possible. That has been turned on its head and there are compelling arguments as to why. So, what makes some firms still lean towards building rather than buying? And what are the additional factors they may want to consider?

The first reason is that some executives may simply see it as safer to use their own teams. They will know what level of skills and capabilities they have internally; provided those capabilities can meet their requirements, they would naturally see less reason to bring in external providers. The point that Fenick made above about technological change, however, may call such an approach into question.

 

In fact, a firm's belief in the strength of its own capabilities for providing an edge could even end up being misplaced. Unlike specialist providers, whose success often depends on using state of the art technology, trading firms run the risk of not always being fully up to speed on the latest approaches to solving infrastructural issues.

Another reason firms may favour building concerns control. Using internal IT resources allows for more direct control of technological decision-making. The issue here, as noted above, is that at most firms, a department will need to compete internally for resources based on whatever IT projects are already in the queue. So by going externally, the firm may end up gaining more control.

"I think that is massive and that works in big and small ways," says Barnes of Options Technology. For example, say a customer likes a provider's cyber security platform but feels there is not an appropriate level of intrusion detection. In such a scenario, the customer is in a strong position to demand that the provider make the necessary upgrades in order to win or retain business.

**The future**

While the outsourcing trend has been gaining momentum of its own accord, it is getting an extra boost from some of the regulation that is hitting the market. Tyč cites MiFID II's best execution requirement as a good example. Firms are expected to "take all sufficient steps", according to the official language, to ensure they get the best possible results for clients.

"It is impossible to argue that you are fulfilling the requirements of MIFID II if you trade on stale data," Tyč says.

Outsourcing experts expect another factor to drive future growth will be demand from new geographical locations, such as Asia. Fenick says anecdotal evidence suggests many Asian hedge funds and proprietary traders are looking to get into the European market. Many of them will not need a full rack in a co-located data centre but will only need half a rack.

At the other end of the spectrum are the biggest players and some of these are showing interest in enterprise deals from providers.

"We are going to offer more enterprise deals for larger financial institutions but we are being cautious in doing so," says Tyč. The firm wants to be careful to offer standardised products to ensure scalability.

McKay Brothers, like Interxion, sees a more diversified geographical customer base. "Ultimately our clients should be any firm that is co-located with an exchange. It is a very simple definition."

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> Ken Barnes, Options Technology

Barnes of Options Technology says the ultimate driver of business is proving to be a mind shift. "You're seeing a pretty radical change in the buying preferences of the consumer," he says. In the past, there was a strong bias towards building everything internally. Now, Barnes says the view among market participants is more like: "Actually, that's the last thing we should be doing."

For Tyč, that will no doubt be seen as a blessing, although it has its downsides. As he contemplates the demand for his company's products and services, he says: "I do not anticipate much free time in the years to come."

**For more information on the companies mentioned in this article, visit:**

www.interxion.com

www.mckay-brothers.com

www.options-it.com

 


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