SECURITIES INDUSTRY news

Bringing the Heat: How to Incubate High-Frequency Traders

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You hanker to launch your own high-frequency trading team. But you lack the requisite resources: a high-performance, low-latency, algorithmically-driven trading platform, connections to market data feeds, access to exchanges and trading venues, investment capital-and working capital.

No problem, if you fit one of the profiles preferred by entrepreneurial support centers that have been set up to incubate high-frequency firms that want to strike out on their own.

Many traders in the flip-your-portfolio-as-fast-as-you-can set are seeking new homes in the wake of Wall Street disruptions, realignments, debates about bonuses and new, proposed rules from Washington, D.C., that could force large banks to shut down their proprietary trading divisions, which often engage in high-frequency trading.

"The last couple of years, we've seen massive dislocations in the financial markets. A lot of good people got laid off from banks and hedge funds and so, there is now a demand for incubators to help these guys get up, going and trading as quickly as possible," says Ram Rao, director of sales and business development at Trading Cross Connects (TXC), a Jersey City, NJ-based incubator that aims to work with high frequency trading teams.

Traders who seek out an incubator-type setup for their operations are also able to quickly create a performance record, points out Jayesh Punater, CEO of Gravitas Technology, an IT consulting company to many hedge funds. "Traders without a recognizable name or proven track record have a more difficult time raising capital," for their high frequency fund.

At TXC, the preferred profile indicates: You have been a high-frequency trader for two years or more; trade in foreign exchange, fixed income or listed derivatives; and have returns that consistently outweigh the risks of the trades being made-ideally, a Sharpe Ratio greater than 7.

If that's your experience, TXC wants to talk to you and help your trading team launch in two to three months or less.

It is one of several, startup incubators with offices in the three-state area surrounding New York City. Another startup incubator that targets high-frequency trading teams is New York-based Thesys Technologies, a division of Tradeworx, a hedge fund based in Red Bank, NJ that employs both middle- to high- frequency trading strategies.

A third and "somewhat new" incubator is Eze Castle Integration, a Boston-based provider of IT, technology and consulting services to more than 500 hedge funds. For the past three years, Eze Castle says it has also been incubating startup funds out of its midtown Manhattan offices and more recently, has started to provide technology, infrastructure and disaster recovery services to high-frequency trading firms.

All these organizations try to offer high-end trading technology to the startups, related services such as co-location and proximity services and in the cases of TXC and Thesys, working or seed capital. In contrast, office space, a trading platform, co-location of trading servers near the matching engines of trading venues are the focus of Eze Castle Integration's incubator services. Capital is not provided.

While the aim of launching high-frequency firms may be new, the idea of providing the initial ecosystem to "incubate" entrepreneurial ventures is not. "These new incubators have not invented the wheel," said Alexander Kouperman, president of InfoHedge Technologies, a New York consulting firm. But, he said, they do offer a new wrinkle in the market, providing access to technology and services that cater to the needs of high-frequency traders.

The incubation houses are alternatives to launching a high-frequency firm on one's own. That can mean working with a hedge fund hotel that provides office space and little else. Or partnering with established hedge funds, such as Millennium Partners or SAC Capital, or prime brokers associated with a large sell-side firm or an introducing prime broker such as Lighthouse Prime Services or even consulting firms such as InfoHedge. Such partnerships can provide advice, space or help with capital raising.

In the instance of TXC, the startup incubator launched in April of last year and went live with its first startup hedge fund in December. It is backed by Icap, the world's largest interdealer broker and a provider of post-trade services. Also with skin in the game is Bay Head CI (BHCI), a New York-based firm which provides trading and working capital for high-frequency algorithmic trading.

Rao sees a growing market for his services because, "if you start a high-frequency trading firm on your own, you have to build the technology yourself and that can cost several million dollars." As an alternative, he explained, an incubator for high-frequency funds aims to provide state-of-the-art technology and infrastructure ready-made that is latency-sensitive, so the new traders can hopefully out-execute pre-existing players. In the instance of TXC, its trading systems are expandable and applicable to a range of asset classes.

TXC was founded by former Icap executives, including Alan Schwarz, its president and chief operating officer. Schwarz is a former general counsel for the Americas at Icap, who has also spent time in securities trading as an executive at BrokerTec, an electronic fixed-income trading platform purchased by Icap in 2003. Rao, who joined the firm in September, has worked in several roles at Barclays Capital, most recently as head of fund derivative sales for the Americas. Before that, he served as chief operating officer for Barclays Capital's prime services business, worldwide.

According to Rao, TXC works with funds in more than one way. If a fund simply wants access to infrastructure and technology-that is, high-speed, low-latency connectivity to major exchanges, co-location or other business services, then a client can pay either a flat license fee or a transaction fee per trade. The fee is a function of the services utilized.

However, if a fund seeks both infrastructure, provided by TXC, and capital, provided by its strategic partner investment partner Bay Head, then the client is not charged a license or transaction fee. Instead, there is no charge for the services offered and TXC/Bay Head takes a minority stake in the company and enters into a revenue-sharing agreement.

"The revenue-sharing arrangements are all over the place," insists Rao.

In an instance where TXC/Bay Head provides capital, the size of the stake varies based on services provided and capital required. Also, TXC/Bay Head does not share in the fees and commissions charged by execution firms, banks, clearing firms, exchanges, electronic communication networks or market data providers. Such costs are paid by TXC with no mark-ups. Trading teams requiring capital are vetted and the vetting process can take anywhere from two to six months.

"The important point here is that, as a minority owner and investor in a fund, our interests are aligned with the trading team," Rao said. As a minority owner, the incubator can also profit from any dividends the fund may issue or in the event that the fund is sold or acquired by another firm, he says.

This way of working is in contrast, he said, to other types of seeding or incubator operations that may charge for the services they provide, charge for the capital they provide and sometimes take a cut of the fees and commissions charged by banks, execution firms, clearing firms, exchanges and market data providers. But there are a variety of models out there.

Besides technology and capital, entrepreneurs also get these competitive advantages by setting up shop at TXC's incubator, Rao contends:

- Faster time to market: Depending on the complexity of the proprietary algorithms being developed, startup teams can begin trading in as few as two months.

- Cost avoidance: Trading teams do not have to build the infrastructure and software required for high-frequency trading strategies.

- Cost savings: TXC negotiates fees and commissions with prime brokers, banks, ECNs, exchanges and service providers that can give startups economies they could not achieve on their own.

- More ownership: Entrepreneurs keep the majority of the ownership of their businesses, whether they take seed capital or not.

Armed with trading tools, high-speed connections and, where needed, capital, trading teams are set up to compete with established high-frequency trading firms such as Citadel Investment Group, Getco and Tradebot, as well as high-frequency traders working at large firms such as Goldman Sachs. "We are democratizing access to high frequency trading," insists Arzhang Kamarei, managing partner at Thesys Technologies in New York. "We allow clients to partner with us and be up and running with a really cutting edge top-of-the-line, high-frequency trading infrastructure with less than $20,000 in upfront costs," he said.

The emergence of incubators comes naturally at a time when big returns are being recorded in high-frequency trading. Citadel stated in a legal filing last year that its high-frequency trading unit earned approximately $1 billion in 2008.

President Obama could also be spurring interest. If Congress approves his plan to preclude large U.S. banks from maintaining proprietary trading desks of their own, that could spur an exodus of talent willing, confident and economically motivated to strike out on its own.

Of course, not all incubators are equal and industry professionals say there are pros and cons to signing up.

Irene Aldridge, managing partner at Able/Alpha Trading, a high-frequency firm that got its start at an incubator, says that such organizations can be helpful to startup teams, but they can be quite expensive in the long run.

"Incubators typically seek to retain a large share of gains to mitigate the risk of their investment; incubators often insist that the nascent fund execute through their proprietary network, where the incubator charges the fund larger than normal fees and has the capability of front-running the fund managers," she said, referring to those incubators that may focus on making revenue on trade or technology commission fees.

Lance Friedler, a partner at Sadis & Goldberg LLP, a law firm that represents many hedge funds, pointed out that for many incubators, it's all about the commissions they generate from the firms they incubate.

"They are willing to give away office space and a trading platform because of the millions they are getting in commissions. If these traders are doing a couple million trades a day, the commission fees [on the trading activity] can be astronomical," he said, assuming the incubator is taking a cut on trading fees or functioning as a broker-dealer.

However, one area where incubators often fall short is in helping introduce founders of new firms to potential investors, said Andrew Schneider, co-founder of Hedgeco Networks, a hedge fund information and database provider. "Most tell you they will help you with this, but the reality is they don't, they don't have the connections," he said.

In the end, incubators are simply one of multiple ways to get launched. "It's all a matter of what is best for your particular group," said Steve Simmons, managing director with Lighthouse Prime Services.

"Some want to work with a traditional prime brokerage, others want to be very entrepreneurial or work with an incubator," Simmons said, whose firm also works with Formation Trading Group (FTG), which helps to seed startup funds. Whatever one's choice, more than one expert advises that startup teams bring their own attorneys into the picture to represent their own interests and that they analyze all commissions associated with the organization they choose to work with.

Rishi Narang, author of "Inside the Black Box: The Simple Truth About Quantitative Trading" and a co-founder of Thesys Technologies' parent company, Tradeworx, offers the following advice to those assessing the new, high-frequency trading incubators. Ask:

- If they provide the business environment needed: The space, data feeds, plug-and-play relations with brokers?

- How much access to your trading results do you have to give away?

- What is the revenue cut taken? This, he says, can range from 25 to 50 percent.

- Is the technology top-notch? Test it.

- What are the speeds of the communications line and data feeds? Benchmark them.

- Is the overall infrastructure fast enough to let your algos compete effectively? Figure it out, upfront, if at all possible.

Narang also suggests that trading teams should consider that they may need to hire people and if one has relations with a shop that is well-networked, that can be a form of assistance. "Is there an in-house headhunter? Or a technology person who knows about market microstructure issues who can help with certain problems? You have to decide if what you want is more of a strategic partner or simply some capital, space and computers," he says.

If you do decide to sign up, look at the incubator not just as a starter house, to work out of from month to month. "Figure out what matters in terms of making the relationship last," he says. "If the technology is not what it should be, do you have an out in the contract? If the costs are too high, do you have an out? If the capital isn't there when you need it, do you have an out? I would not focus as much on exiting the arrangement, without cause, but you should definitely protect yourself from issues of cause," he said.