

FXALGO NEWS

NEWS

TOP STORIES

Next-Gen algos on the agenda at TradeTechFX US

The evolving FX algo and TCA space once again featured highly among the leading industry topics being discussed at TradeTechFX US, both on stage and networking with clients on the side-

lines. The agenda featured a number of key areas relevant to algo trading, including the use of pre-trade analytics, in addition to a panel discussion focused on next generation algos. The panellists

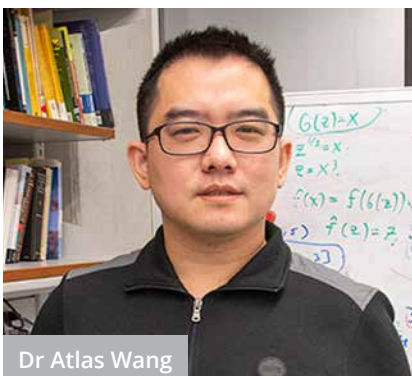
discussed the different approaches being taken by banks and third-party providers in providing customised algo offerings and considered who is better placed to provide algos to the buy-side. The Pre-Trade Insights Interview also explored the build vs buy options for TCA tools and the use of pre-trade analytics by the buy-side in helping to improve their execution outcomes. During the Innovation Day held prior to the start of the main conference, 360T hosted a roundtable discussion covering the next stage in the evolution of FX algos and how new data sources can be leveraged to improve execution outcomes. See page 4 for more information about this event.



XTX Markets aims to redefine future of algo trading with launch of XTY Labs

XTX Markets has launched XTY Labs, a new machine learning division which will be run by its research director, Dr. Atlas Wang who brings a wealth of experience and extensive expertise in machine learning, optimization and AI technologies to the role. The firm says

the programme is designed to provide elite researchers with the freedom, guidance and resources to create cutting-edge machine learning solutions tailored for the complexities of finance. "It's an honour to lead such a unique division where the brightest minds in AI and finance will converge to redefine the future of algorithmic trading," says Wang. "Our mission is to rapidly turn the latest AI breakthroughs into tangible market advantages, and I eagerly anticipate the revolutionary solutions that will emerge from this truly unique endeavour. With a world-class team, unparalleled resources, and a culture that fosters pioneering research, the XTY Labs is poised to become the crucible of next-generation financial technologies," he adds.



Dr Atlas Wang

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Links and websites of the month

STILL INNOVATING DYNAMIC ALGOS

SWEEP VOLUME TRACKER ARRIVAL
 POST & SWEEP
 TWAP
 PEG
 NDF
 VWAP

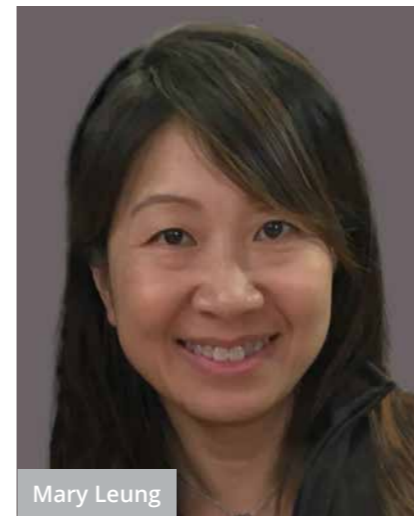
- New and improved Algo Strategies
- Execute NDF Algos
- Additional Liquidity venues
- Enhanced internalization through the Citi franchise
- Engineered with next generation market making technology
- Increased client parametrization and controls

Contact your FX esalesperson to learn more



State Street unveils innovative Percentage of Volume algo feature

State Street recently integrated a new Percentage of Volume (POV) feature into its flagship FLOAT strategy. Mary Leung, Global Head of Client Algos at State Street, shares how the POV tool further enables clients to control the pace of their execution and reduces market impact by further defining desired market participation.



Mary Leung

Can you please explain the new feature and its particular benefits to the client?

The introduction of our POV feature to the FLOAT algo strategy enables our clients to define the proportion of real time market volumes they are aiming to achieve through algo execution. Our clients are sophisticated, each with their own algo execution philosophy and individual trading goals. The POV feature allows them to configure the algo uniquely, using real-time volume market estimates.

We made the POV a component of FLOAT as opposed to a standalone strategy to align with our philosophy of providing clients with succinct, yet sophisticated, algo strategies which aid ease of use. We predefined different POV bands based on different execution styles i.e. passive, normal, aggressive etc. However, in keeping with all our algo strategies, clients desiring more algo control can override these pre-defined

bands and set their own POV conditions to match their execution goals.

Dynamic elements exist within the strategy that allow the POV to slightly speed up or slow down based on being in the money (ITM) or out of the money (OTM) from arrival price. In congruity with our other strategies, POV can interact with our Peer-to-Peer Interest Match (IM) liquidity. Interest match fills can be used in-line with the POV constraints, or clients can override the POV limits by using the Observe POV w/Interest Match option. When disabled, it ignores the participation rate constraint when Interest Match liquidity is available, i.e. the Interest Match volumes are not counted towards the participation percentage.

When did you roll out the new feature?

We released the POV feature via FXConnect, BBG, FXALL, FIX API and our Single Dealer VectorFX in January 2024 and will continue to roll it out to other third-party vendors over the next several months.

What has been the client response so far?

We build our algo offering to suit our clients' needs. The POV component of FLOAT is built for our hands-on clients who need the flexibility to control execution parameters in the algos, targeting a more nuanced outcome. As FLOAT already had an underlying POV component to it, it was a natural next step to deploy a customisable POV function. Clients have certainly taken the opportunity to utilise the new POV

feature since its release in January and have given positive feedback around their execution results.

Is this part of a wider build or new development for the overall FX algo suite?

We continue to develop and evolve our algo suite to meet client demands. Since we launched our current generation of algos in 2019, we have deployed our FLOAT strategy, Sweep & Post strategy, Portfolio Algo strategy, and our Staged strategy - which is an algo of algo workflow solution offering flexibility and rules based execution. We enhanced our TWAP/VWAP to execute in a 'smart' capacity and have fully developed our SDP VectorFX algo hub into an app that provides greater transparency and an enhanced algo user interface. One of our most popular algo features, our Peer-to-Peer Interest Match liquidity, now works with all our existing algo strategies and leverages our significant Real Money FX presence to increase peer-to-peer trade execution on multiple fronts.

Do you have any other innovations or new developments planned for the coming months?

We have several new enhancements that we are excited to bring to our clients in the near term, including new sources of Interest Match liquidity, Portfolio algo enhancements, NDF Algos, pre-trade TCA, among other features and have also begun exploring the use of our algo framework in the forwards/swaps space. We are excited for the continued development of the FX algo market in 2024 and beyond.



Photographs by Richard Hadley

Takeaways from TradeTech FX USA 2024

By Saeed Amen



Saeed Amen

In recent years, more financial firms have begun to open up offices in Miami, in particular a number of prominent hedge funds. It has also been the home of TradeTech FX USA for a number of years, where participants from the sell side, buy side and vendors converge every February. This year, I

made my way back to Miami to scope out the current developments in the FX market. These days, I am focused heavily on inflation at Turnleaf Analytics, these days, as opposed to FX, where I spent most of my career. However, that being said inflation is a key indicator for FX investors, and hence, it's always good to hear macro views at events like this, and to see how to they chime with our inflation models.

I also had the opportunity to represent Turnleaf Analytics in the "Shark Tech" startup session, which was great fun, where I talked about all the interesting work we've been doing forecasting inflation using machine learning and alternative data. I also participated in a panel on AI alongside Lee Ferridge (State Street), Vinay Trivedi (MaxxTrader Systems) and Revant Nayar (FMI Technologies LLC).

In this article, I'll try to cover some of the discussions at TradeTech FX covering

a multitude of different topics, including macro, trade automation, regulation and so on. Some sessions took place under Chatham House rules, so I'll often try to give a flavour of discussions, rather than direct quotations each time.

ON THE MACRO FRONT

There were many discussions on the macro front, which covered a spectrum of different topics ranging from the likely next move from the Fed to geopolitics. The main conference day started with presentation by Rebecca Patterson (formally Bridgewater). Patterson began her discussion by noting how FX implicitly requires a broad macro knowledge, and an understanding of trade flows and capital flows. On the question of a soft landing, she attributed slightly more possibility to that, compared to a hard landing. In particular, she wasn't emphatic about the idea of a soft landing, because ultimately, it

needed several factors to occur. First consumers need to keep spending, but at present, confidence is skewed more heavily towards high end consumers, as opposed to across a full spectrum, and any pullback could result in a negative feedback loop. On the inflation front she was worried there are a myriad of factors helping keep inflation higher, which could make the Fed go slow in terms of cutting. Indeed, the market has already begun to reduce the number of Fed cuts this year. Indeed, looking at our own Turnleaf Analytics inflation forecasting model for the US, across the curve they have been on the higher side compared to the market, even before the latest upward surprise in US CPI. Whilst the focus is unsurprisingly on the presidential election, Patterson noted that who wins Congress is crucial. The deficit has ratcheted higher with a combination of fiscal policy and tax cuts from Trump.

Also on the macro front, Candice Bangsand (Fiera Capital) interviewed Frances Donald (Manulife) about her outlook for the coming year. Donald's view was more to the downside compared to Patterson. Donald noted that she was still in the recession camp. Indeed looking globally, whilst the US was indeed growing, this was not true everything. She noted that the UK and Japan for example were in recession, and we were already in a global easing cycle. It looked as though the Fed would be the last to cut, likely in June. Central banks had a difficult task, whilst they could ease because of growth concerns, there was also the question of inflation, and she didn't want to dismiss the recent upside in US CPI, even if she took the view that a lot of inflation was transitory. It was also the case that drivers of inflation have been changing, whereas before it might have been because of spending (ie. demand), this is not necessarily the case now. Take food for example, Donald suggested. It is high because of other factors, such as geopolitics, insects, weather etc. It is more difficult for central banks to respond in a more supply driven world.

One interesting point which Donald made, was the disconnect between manufacturing and services. Last year everyone had been calling for a recession, because leading indicators were pointing to this. Whilst global manufacturing had entered a recession, services have not. Manufacturing based economies fell into recession, whilst service led economies (like the US) have done well. On the FX side, she felt it was difficult to be bearish USD given macro conditions.

FOCUS ON POLITICS

With wars in Ukraine and Gaza, geopolitics has been in the spotlight recently. The geopolitics panel was moderated by Jillien Flores (MFA), and had panellists Andy Blocker (Invesco), James Fishback (Azoria), Steven Geovanis (Wilshire) and Michael Allen (Beacon). On the Middle East, it was felt that we wouldn't see a further escalation. The prospect of a second Trump presidency was also debated, and how it would likely result in tariff on China, and it was unlikely that China tensions would dissipate under Trump.

Greg Valliere (AGF Investments) had a session dedicated largely to the US presidential election. He noted that if the

FX ALGO TRADING TOPICS AT THE EVENT

Mary Leung, Global Head of Client Algos at State Street, shares her thoughts on four of the key topics that were discussed during this year's TradeTechFX US, both as panellist in the Bank and Non-Bank Algo panel discussion as well as during networking and client meetings held through the event:

The use of AI in FX algo trading

We noted that 'AI' is a very broad term, a lot of the machine learning techniques like classification, regression, clustering are already common among trading algorithms to derive certain analytics within the algo. It's an existing tool that aides in algo development.

However, to use AI as a blackbox of sorts to decide when, where, and what to trade is going to be a problem, as financial institutions should be able to explain to a regulator why certain decisions and actions are made. If a sell-side firm cannot explain what causes the algo strategy to take certain actions because the decision is based on blackbox AI, sell-side firms will be hesitant to utilise this technology.

Interest in NDF algos is growing as the eNDF market continually matures

eNDF algos are only possible once the eNDF market is stable enough to ensure consistent pricing. There has been notable advancement over the last 2-3 years in terms of liquidity and depth of market since the first offering came out. Outside of APAC NDFs, BRL is the next most coveted currency pair, both as NDF and deliverable, that the buy-side would like to trade via algo

Clients are prioritising data-driven approaches

More clients are focusing on pre-trade analytics and a more data-driven approach to understanding market conditions and liquidity, or to choose which RFQ provider or algo/strategy provider to help them make informed decisions on their executions. The context and timing of the trade is also important in evaluating algo performance.

Incorporating portfolio/basket algos to drive efficiencies

From our various client meetings, it became clear that some clients have multiple orders with a common currency crossed against different currencies that they manually net together. Once netted, they manually control the timings of multiple orders – which is a time consuming and inefficient workflow. These clients would benefit from the use of a portfolio/basket algo to help streamline their workflow as well as optimise their execution.



(ION FX) and Phil Weisberg (oneZero). The topic of the optimal number of counterparties came up. The point that Connelly made was that there it was important to have a conversation with counterparties about what you were doing. Once you begin trading you needed to collect data and engage with LPs. Babic chimed in on the point of the need for a two way conversation, and it was not a set it and forget it process. Relationships were important, particularly at those times when liquidity went to zero. Adhikarapatti noted that whilst spreads may not be dissimilar, the skew could be different and other important points such as market impact and information leakage could differ between counterparties.

Allan Guild (Hilltop) also interviewed Kaustuv Dasgupta (Two Sigma) about executing EMFX, which also had a focus on liquidity. Dasgupta made the point that simply having more liquidity providers on your panel is not always the answer. Having too many LPs in your panel could result in market information leakage. They used a quantitative approach to dealer selection using a proprietary approach. Simply looking at simple metrics like spreads in isolation may not be sufficient to understand the quality of flow. Ultimately, it was a matter of communicating openly with the counterparty and there was a need to listen to the data, Dasgupta added.

THE GLOBAL CODE FOR FX
There was a panel about the Global Code for FX which had got introduced a

few years, moderated by Janet Dawson (GEMA), with panellists Geraldo Garcia (Banxico), Daniel Mitchell (RBC Asset Management), Harri Vikstedt (Bank of Canada) and Anna Nordstrom (NY Fed). It was noted that how before the code, the markets had very granular and disparate rules, and there had been market abuse. The idea of the code was to have one global code, and to make it principal based. Not only was it meant to cover the sell side, but other participants, including the buy side, infrastructure providers and central banks. The code has had a meaningful impact on trade practices, it was noted. Indeed, there has been reduction in last look times by providers, for example. Furthermore, the code is being reviewed, every few years, adapting to changes.

TCA AND PRETRADE ANALYTICS

One subject which has gained prominence in recent years has been TCA in FX. There are indeed many vendors in this space including TradeFeedr, who have managed to bring together a massive amount of trade data on their platform for number crunching, combined with tick data, to make doing TCA relatively straightforward. One of the biggest challenges in data science, is the data pipeline for storage.

Michael Melvin (Rady School) interviewed Brendan McMurtry (T Rowe Price) about the subject of pre-trade TCA. McMurtry had taken the route of building their own framework



for TCA. Obviously, he noted that if you don't have the resources, another option would be a vendor. Of course doing your own TCA framework makes it more customisable. The flipside, which I'd add, is that you most likely need a vendor such as TradeFeedr, when it comes to peer group analysis, given that trade data can only be aggregated by a third party (and can't be shared directly). McMurtry detailed how the project took 5 years. The goal had been to optimise the workflow around execution, to understand when best to execute, the size, the counterparty etc. They had a machine learning model to predict which counterparty would likely win a particular trade, and are working on a module for recommending which algo strategy is most appropriate. One important point is that given traders are

very busy, the system had to distil down the recommendations easily. To aid them in their task they had many thousands of data points of historical trade data, to help train the various models. The underlying system was written in R.

DIVERSITY, EQUITY, AND INCLUSION

A subject which has become more prominent in recent years has been that of DE&I. Allan Guild (Hilltop) moderated the discussion on the topic with Inderjit Takk (Mackenzie Investments), Sabin Chowdhury (PIMCO) and Telmo Simoes (ATFX). It proved to be a very honest discussion about the topic. It was noted that having a diverse desk was important, and key to that was for people not self select themselves out of the recruitment process. Business might be king, but ultimately, there was some behaviour which has not always been called out, and a specific example of this was given. Ultimately, it was suggested that HR needed to promote inclusion, and to get people to feel a sense of belonging. Senior managers needed to drive that message. Surveys weren't necessarily always the answer as well.

CONCLUSION

I've tried to give a summary of the discussions at TradeTech FX USA, which brought together talk on macro and also the whole business around trade execution. I'm looking forward to the next instalment of TradeTech FX, which will be held in Europe in the Autumn.

election were held now, Trump would likely win, but of course, the election itself is not being held now. Biden has also been slipping with his core groups such as young people. On the question of the candidates, polls suggested voters felt Biden was too old. Whilst slightly younger than Biden, there was also the question of Trump's health. Valliere couldn't really see any other candidates contesting the election, barring some sort of health issue. He also downplayed rumours that Biden would stand aside for Michelle Obama, noting that she is not interested in running. Furthermore, it has been very rare for presidents to stand aside, with one of the few exceptions being LBJ who declined to stand for a second term. He added though that it was not out of the question, that Nikki Haley could run as an independent. Whilst there was a path to victory for a third party candidate it was unlikely.

usage might be reduced, but it won't get replaced. Sterling had indeed lost its reserve currency in the past, but at that time, there was an obvious alternative, the dollar. Today, it is less clear, because there is no viable alternative. The Euro was not an option given the lack of the fiscal union, and CNY given geopolitics. It was also unlikely to be crypto.

OPTIMISING LIQUIDITY AND TRADE AUTOMATION

An important part of the investing process is trying to figure out how to source liquidity. There were a number of discussions on this topic, including a panel moderated by Tom Gentile (Crabel Capital), with panellists Mike Babic (BoA), Chris Connelly (Cubist), Srichakri Adhikarapatti (UBS), Eugene Markman

DE-DOLLARISATION DEBATE

If there is a topic that seems to always get interest on Finance Twitter, it is the talk of de-dollarisation. The premise is that the USD's place as the world's reserve currency is threatened, engulfed by changing geopolitics. Tomo Tokuyama moderated a discussion with panellists Lee Ferridge (State Street) and Tom Nakamura (AGE). Nakamura suggested that de-dollarisation is a reality, following the weaponisation of the dollar, and it was becoming a slow war of attrition. Ferridge partially agreed, noting that yes the dollar's

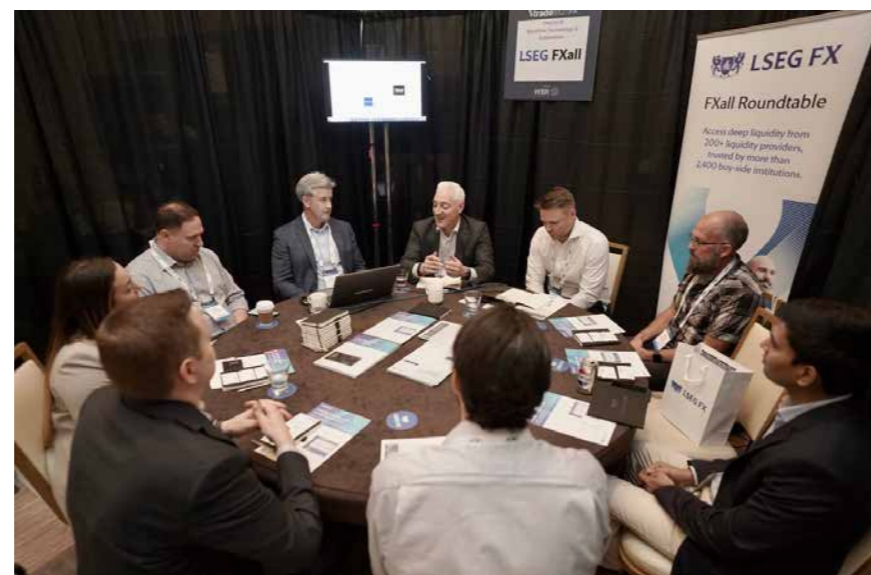




Image by Shutterstock

Service and product development:

What's on the priority lists of leading FX algo providers for the year ahead?

Institutional traders shared their predictions for the coming year in one of the largest cross-asset surveys of its kind, the 2024 JP Morgan e-Trading Edit. Key sentiments which will be of particular interest to FX algo providers and users alike include the expectation that volatile markets will be the greatest daily trading challenge, followed closely by liquidity availability and workflow efficiency. In turn, traders expected electronic trading in FX to further increase this year, then rising to a predicted 73% for 2025. These wider industry trends all appear to be working in favour of the use of FX algos, but to what extent are algo providers gearing up to ensure clients have the right tools and support to confidently opt for algo execution in this evolving trading environment? Nicola Tavendale writes.



Nicola Tavendale

According to the JP Morgan survey findings, the significance of liquidity availability is creeping back up to regain its number one spot, having risen in ranked importance from 22% to 24%. It was only overtaken as a leading concern among traders by volatile markets at 28%, while workflow efficiency also rose to 13% from the

previous year. According to Scott Wacker, Global Head of FICC e-Sales at JP Morgan, 100% of survey respondents predict to increase their electronic trading activity over the coming years. "It's an exciting time for the electronic and automation space right now, as we look to offer clients added choice of execution options," he added.

For FX algos however, the previous boom in demand seen during the Covid period has subsided and volumes now remain at a steady rate, says Vivek Sarohia, Global Head of Alternative Execution Services at HSBC. In addition, he notes that in terms of client type, HSBC is actually seeing less usage by the traditional real money client base and more from the systematic hedge fund, corporate and banking sectors. "Transparency of an algo's performance, both in-flight and post-trade, are important to all client types, so we continue to invest in algo analytics and post-trade TCA," Sarohia adds. "We are also looking at how the algo suite can

provide greater spread capture, reduce market impact and increase speed of execution on open-ended orders. An effective way to achieve this is through greater internalisation and, in response, we have been rolling out our new internalisation methodology to clients. We refer to this new methodology as 'floating IX', which allows the client to act as a liquidity provider to HSBC, who is the principal, all in a fully anonymous fashion."

According to Sarohia, this new functionality also allows client orders to be placed at levels inside the spread with HSBC and to float dynamically with movements in market prices. He explains that due to the significant size of HSBC's FX principal franchise, this enhancement increases the likelihood of a fill order, with minimal impact on mark-outs. HSBC's other key focus in 2024 is the deployment of its FX Basket Algorithm, says Sarohia. "The basket algo has been designed off the back of client demand where they wish



Vivek Sarohia

“Transparency of an algo’s performance, both in-flight and post-trade, are important to all client types..”

to execute a portfolio of FX orders, typically across correlated trading pairs, but in a way that reduces the execution risk of the orders impacting each other, as well as reducing overall transaction costs,” he adds. “The HSBC basket algo allows a client, such as an asset manager with different investment portfolios, to place a portfolio of FX orders, and then nets and splits the constituents into directly tradable pairs before calculating optimal execution trajectories. It does this by minimising constant absolute risk aversion (CARA) utility, taking into account portfolio covariance matrix, non-linear market

impact and varying market volume.” As a result, HSBC’s basket algo provides three key benefits for clients, says Sarohia. Firstly, it ensures the netting of an FX portfolio to avoid unnecessary trading activity, thus reducing transaction costs. Secondly, he notes that the algo’s awareness of correlations between the underlying pairs helps it to execute at an optimal pace which reduces market impact on the basket, while the third benefit for clients is that the algo also minimises the weighted average slippage from the decision prices while controlling the market volatility risk.

INTERNALISATION

Meanwhile James McGuigan, FX Algo Product Manager at Citi, agrees that high levels of internalisation is a popular topic for algo providers to focus on – and for good reason. “Internalisation, along with intelligent usage of external venues, can be key to achieving a better quality execution with lower levels of market impact and we continue to improve our performance in this area,” he says. “However, our clients have been telling us that they are not yet convinced that achieving a high proportion of internalisation on their orders is necessarily always beneficial. Using both our own in-house analysis and also working in conjunction with third-party TCA providers, we are aiming to help clients better understand the quality of internalisation they achieve

so that they can add this important additional dimension to the way they assess each provider’s execution.”

In addition, improving execution analytics continues to be a focus for clients, with pre-, live and post-trade being more or less important, depending on each client’s execution style, McGuigan explains. “Clients who actively monitor the execution of their algo orders appreciate the market colour that we provide and are increasingly looking for more sophisticated data from the algo itself, in real time, to explain why it is executing the way it is, including when it decides not to trade,” he adds. “This information can help clients determine if they need to make in-flight changes to meet their execution objectives.”

DATA-DRIVEN DECISION MAKING

Alexis Laming, FX Algo Trader at Crédit Agricole CIB (CACIB), adds that as CACIB has a client-driven approach, their focus tends to be that of that bank’s as well. The exception, however, might be the limitations in the use of AI when it comes to algos, as Laming believes it is important to be fully able to explain to the users how the algo will behave and why CACIB believe it is the best strategy. “Otherwise, if our clients need new products or tailor-made tools, we are happy to discuss it. For instance, in order to meet our client needs we are currently working on deploying NDF



James McGuigan

“Clients who actively monitor the execution of their algo orders appreciate the market colour that we provide and are increasingly looking for more sophisticated data from the algo itself..”

algos as we have a good footprint in this space,” he says.

According to Laming, clients now have a lot more experience in using algos and are now fully aware of the main pros and cons of using different strategies, but still tend to lack the data needed to make an informed decision pre-trade. He adds: “Algo providers should help them have all the cards in hand to choose the best strategy, based on the execution needs and market conditions. Data is key to assessing performance and to using the best algo given the market, but this is often expensive or hard to digest for some buy-side users. We believe that talks between users and providers around the use of third-party analytics is helping the algo ecosystem to grow with increased transparency.”

Analytics and data, and how clients use that information to execute their FX orders, is also at the forefront of HSBC’s FX digitalisation strategy, says Sarohia. “Understandably, clients do not want data which is not relevant to be pushed to them, but rather to be consumers and pull what they need from banks, when they need it, in formats which they can consume efficiently,” he adds. “HSBC has addressed this change

through the development of our next-generation trading terminal, AI Markets. AI Markets uses purpose-built natural language processing (NLP) to allow clients access to data which was previously extremely costly to acquire, fragmented across multiple sources, or just unobtainable.”

As a result, he adds that clients can now gain access through AI Markets to HSBC’s real-time and historic cross-asset data sets, generate bespoke financial market analytics for themselves and browse the latest market insights, depending on their exact needs and preferences, through a choice of either web-based platforms, commercial chat channels or direct API. “HSBC partners with clients to address their data needs and provide a dynamic service able to respond quickly to changing requirements of clients and the marketplace,” Sarohia explains. “We see this adaptability as a key element in providing confidence to our client base to partner with HSBC on their execution.”

Looking ahead, HSBC is also fully supportive of the aims of the FX Global Code and Sarohia expects this year’s FX Global Code review will continue the drive for greater transparency and uniformity, especially around disclosures and TCA. Laming adds that as algos are gaining market share, the review will certainly impact the algo market and predicts a similar scenario to the BIS report on execution algorithms from 2020, when an algo taxonomy was proposed to help algo users navigate the different strategies from all their providers. “We use it to explain what is to be expected from each strategy we have in our suite,” he says. “For us, the path towards more transparency is always a good approach.”

FUTURE EVOLUTION

In terms of the wider evolution of the FX algo market, Sarohia notes that some believe artificial intelligence will be the natural evolution for algo development - with even more decision-making of the algos being determined in real time through machine learning, rather than pre-programmed parameters. “We shall see if this rings true, as I think the FX algo market is still some way off in this respect,” he adds. Instead, it was



Alexis Laming

“We believe that talks between users and providers around the use of third-party analytics is helping the algo ecosystem to grow with increased transparency.”

actually internalisation which proved to be one of the leading drivers behind clients choosing to use HSBC’s algos in 2023, Sarohia notes. “The opportunity to access the depth of liquidity that a firm like HSBC can provide, and being able to execute algorithmically, significantly reduces the market impact of a client order, and over 90 percent of orders sent to us requested access to HSBC’s internal liquidity pool,” he adds. “Our new methodology for internalisation has seen a marked improvement in the internalisation rates of client orders, rising from average 20pc to nearly 50pc in certain pairs, depending on the time of day, without any significant impact in mark outs.”

Laming agrees that liquidity provision is indeed extremely important when talking to algo users. He explains that clients need to understand precisely where the child orders will be sent, and why. “Optimising liquidity is part of our day-to-day work as it leads to increased performance for our clients, which is our main goal. On the other hand, internalisation is not very well defined across market participants. Is a deal causing a price to be skewed on some venue really internalised? Perhaps the Global Code review could help define a market wise definition,” he concludes.

	Percentage of total respondents 2024	Percentage change between 2023 and 2024
Volatile markets	28%	-18%
Liquidity availability	24%	+2%
Workflow efficiency	13%	+4%
Other	9%	+8%
Availability and cost of data	7%	+1%
Best execution requirements	7%	+2%
Regulatory changes	7%	+3%
Information leakage	4%	+2%
Price Transparency	0%	-4%

e-Trading Edit 2024: The significance of liquidity availability is creeping back up

Elke Wenzler and her MEAG trading team:



Elke Wenzler

Laser focused on minimising transaction costs and market impact whilst optimising timing and volume

MEAG handles the investment activities for Munich Re, ERGO and from private and external investors, making it one of the world's leading asset management companies which currently manages EUR 323 billion in assets under management (as to 30 September 2023). Elke Wenzler, head of trading at the firm, talks to FXAlgoNews about the key objectives of her dealing team and its use of algorithmic FX trading toolsets.

Elke, you have been spearheading the development of a comprehensive multi-asset trading desk for your firm. Please tell us a little more about that and what your responsibilities and job at MEAG involves.

As Head of the Multi Asset Trading Desk, my main responsibility is to oversee the entire trading process for multiple assets such as equities, bonds and FX, cash and derivatives. I also oversee the overlay/hedging strategies and securities lending. This involves me and my team working closely with various other teams within the firm such as Risk, Business Mgt, Legal and Compliance and Operations to implement and ensure a robust and efficient trading platform for our PMs and clients. An important part of my role is to identify the emerging requirements and needs and translate them into our technical infrastructure, ensuring compliance with regulatory guidelines and industry standards. We closely monitor market trends and developments to continually enhance the trading desks' capabilities and stay ahead of the curve.

In the past you have held various positions at sell-side firms. In what ways has the experience and expertise gained from this helped shape your work on the buy-side?

The experience and expertise gained from working on the sell side has greatly influenced and shaped my work to date. Having different perspectives is particularly beneficial to having a broad and deep understanding of markets and financial instruments, helping me to understand market dynamics, trading strategies and risk management

techniques that I can apply on the buy side. On the sell side I have been involved in structuring, execution and order routing for clients, while in my previous role on the portfolio management side I was responsible for specific markets and portfolio construction. Both sides now give me a solid understanding and well-rounded perspective of the financial industry and the needs of PMs and our clients. This is invaluable and I can now use it to ensure efficient and cost-effective trade execution, helping me to navigate the complexities of my current role and add value to my firm and our clients.

How would you describe the key objectives and guiding principles of your desk and the dealing activities it undertakes?

With a broad and diversified mandate, our key objectives are to minimise transaction costs by executing trades at the best prices, minimising market impact and optimising timing and volume to achieve efficient execution and, in certain mandates, to add alpha. Across all asset classes, we aim to enhance the liquidity of our mandates, which is particularly important in high-touch trading. This involves actively managing liquidity risk, ensuring access to diverse liquidity sources and optimising trading strategies to efficiently maintain market liquidity even in stressed market conditions. Another key objective is risk mitigation - the identification, assessment and management of market, counterparty and operational risks. At the heart of a trading desk is the principle of best execution - trading at the most favourable terms for your firm and your clients. In addition, compliance and regulatory adherence is a



MEAG has a worldwide presence and offers investment solutions to institutional clients as well as financial intermediaries

fundamental principle for all buy-side trading desks to ensure that our activities are always conducted in a legal and ethical manner, which includes adherence to the FX Global Code. In addition, the Desk's values aim for transparency and open communication with our portfolio management, clients, counterparties and other stakeholders about market conditions and trading activities to ensure a trust-based relationship to achieve the best results. And a strong focus on risk awareness and risk management - including the ongoing implementation of risk assessment and risk controls to remain relevant in an ever-changing market environment. As a new desk, we are still in the process of changing and improving our

processes, technology infrastructure and trading strategies - a process that I am delighted to have embedded in the DNA of my team, because with technology, regulation and liquidity changing dynamically, we need to constantly evaluate to ensure the performance of the desk and add value to our business.

How important have execution algorithms now become in your day to day trading operations and what are the advantages of using them?

FX algos have been an important part of our toolkit for execution for a number of years now. They allow us to have closer control and management of the execution of our

larger FX trades as well as gather a lot of market information for further analysis.

What are your main objectives when undertaking algorithmic FX trading and what types of orders are usually a good fit for them?

Our objectives can vary depending on the type of order we receive and from which of our internal clients. For the less time critical executions, we are looking to be more passive and minimize overall market impact. These tend to be a lot larger in size and would usually have a large bid/ask spread when trading on a risk transfer price. Trades which are time sensitive, and in more illiquid currency pairs, we may look to get executed as quickly as possible whilst trying to outperform a risk transfer price.

How do you source your FX algos and what issues influence how you go about that?

We have our main panel of bank algo providers that we rotate within, using TCA to analyse their performance. We are looking for providers that provide the execution, functionalities and tools which can easily be integrated within our processes. Flexibility and performance are key. In addition, we incorporate the principles of the FX Global Code into our decisions, in



We have a number of internal projects looking at how we can best lever AI and ML for our trading and execution

particular with regard to conflicts of interest and the routing policy applied.

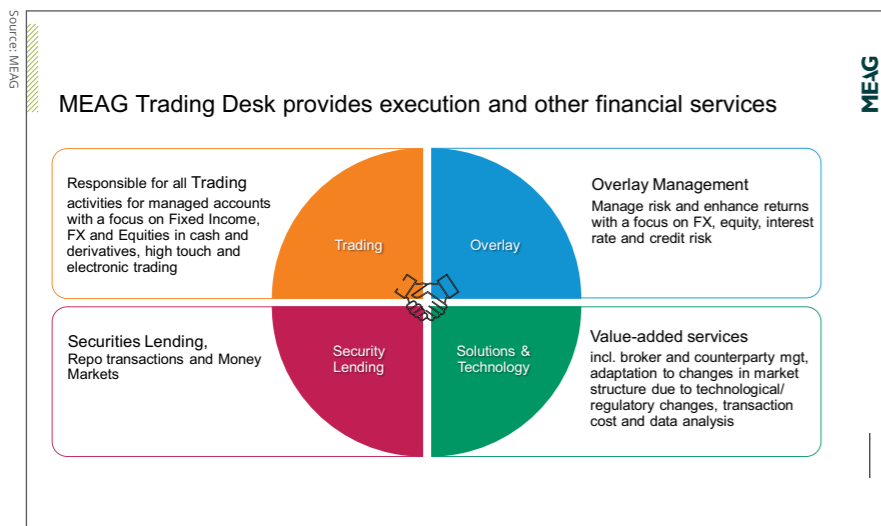
How much real-time visibility do you seek on how an algo is performing during the execution process?

We like to be able to see in flight TCA along with market condition information such as liquidity conditions and depths of books. In the future, we think this can be expanded to see real time markouts and impacts of the individual fills to provide more information to us as traders.

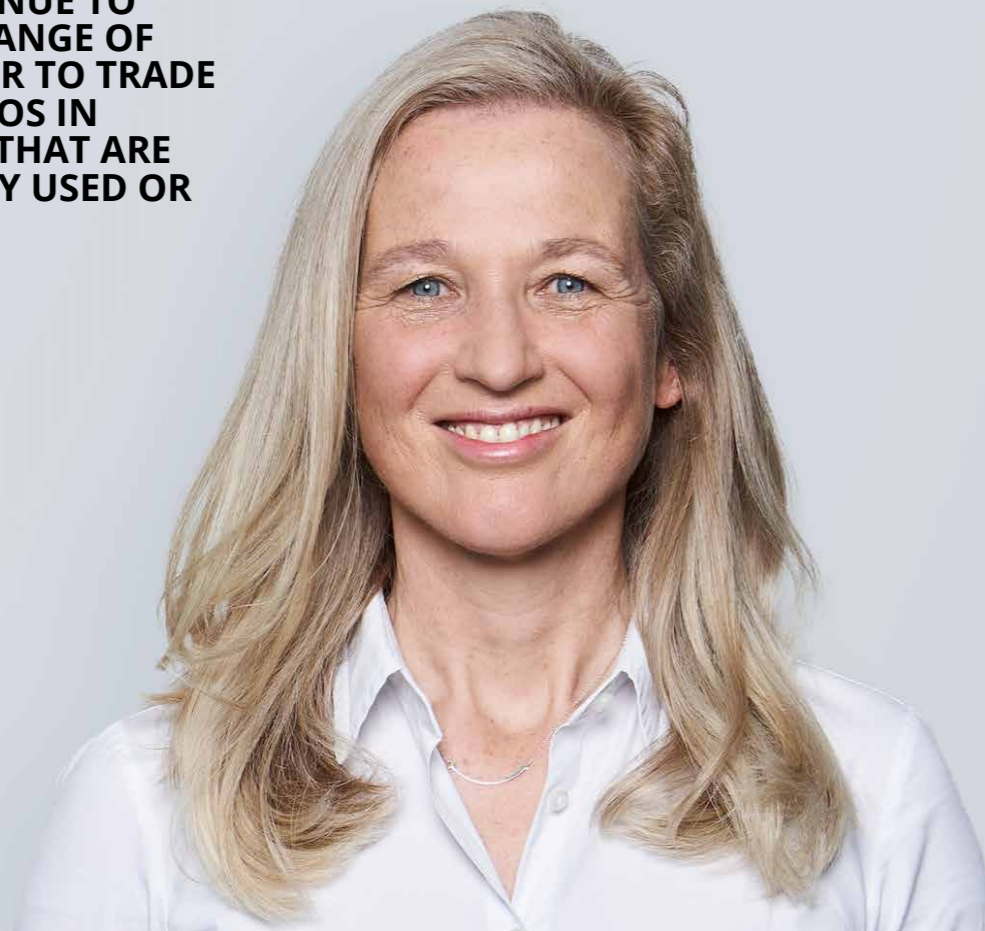
How do you analyse the results of your algorithmic FX trading to see how effective it is and what metrics are useful for achieving this?

We have used external TCA providers for many years to enable us to use like for like comparisons and not rely

solely on the banks' own data for the analysis. We compare metrics such as actual performance vs forecast



WE WILL CONTINUE TO EXPAND OUR RANGE OF ALGOS IN ORDER TO TRADE OR UTILISE ALGOS IN ASSET CLASSES THAT ARE NOT CURRENTLY USED OR AVAILABLE



performance; benchmarking against risk transfer and arrival pricing, as well as looking to see what kind of market impact the algo has had.

In what ways does TCA and other types of analytics help you to make more effective use of FX algos?

TCA feeds into our decision making processes, allowing us to use more quantitative measures to determine which execution method would result in a best probable outcome. It helps us decide on provider selection and algo strategy based on current market conditions and what we would like to achieve. We don't believe that this kind of TCA provides a single answer for execution, but is one of the tools that feed into our decision making process.

What other data related to algorithmic FX trading are you trying to capture which may help you to improve your execution outcomes?

I think we are already capturing so much data around algo trading, but

what is becoming very interesting is peer group analysis data and being able to compare across a deeper set of data than just our own execution.

AI and Machine Learning are now being leveraged for algorithmic FX trading and its associated analytics.

In what ways are you looking to exploit the power of next generation technologies like these in your own trading operations?

We have a number of internal projects looking at how we can best lever AI and ML for our trading and execution in terms of making things more efficient and improving our execution process.

In what ways are you likely to expand your use of FX execution algos still further in the future?

As we already use algos extensively on the desk, we would be looking for further developments in areas such as NDF and swap trading, while the latter is probably more subject to

having a more developed electronic market for swap trading.

In terms of further improving your trading desks operational efficiency, effectiveness and development, what's going to be on the priority list for 2024?

We are in the process of improving our technology infrastructure, including the implementation of a new EMS to address the issue of interoperability between the various systems we use.

Our aim is to provide every trader in the Multi Asset Trading Team access to all the necessary trading protocols and information they need to execute trades efficiently, both pre-trade and in-trade.

We also aim to increase automation while maintaining our focus on achieving best execution through the use of data, analytics and AI. In addition, we will continue to expand our range of algos in order to trade or utilise algos in asset classes that are not currently used or available.



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GFXC 2023 survey results: FX algo trading and the upcoming FX Global Code review

The Global Foreign Exchange Committee has published the findings of its latest FX Global Code Survey, which aimed to measure the effectiveness of the FX Global Code as revised in 2021 and additional Code-related materials that were introduced as a result, including the Algorithmic Due Diligence and TCA Templates. The survey results are not only significant in measuring the industry response and adoption of the updated Global Code, but will also be used to assist the GFXC in deciding which areas should be focused on as part of this year's review of the Global Code.

The key takeaways from the Survey were presented to the GFXC at its most recent meeting. According to the survey results, the updates to certain Principles of the Global Code were generally viewed as effective, including the changes to Principle 18 of the Code which relate to algorithmic trading. (See Fig 1) Close to 10% said they found the amendments to the FX Global Code regarding Algorithmic Trading and Transaction Cost Analysis (Principle 18) to be very effective in increasing transparency, with a further 39% finding the changes to be effective. The remainder were either neutral about the changes or unaware of them, while four responses believed the updates were

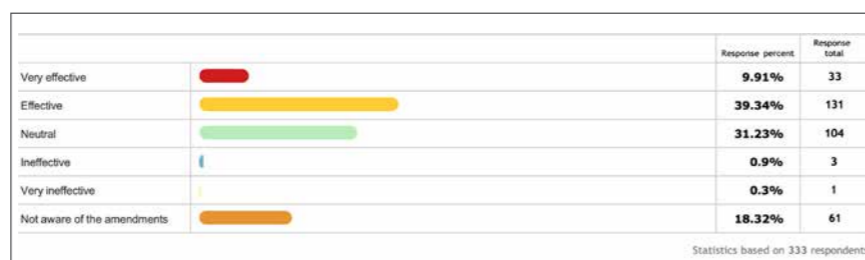


Fig 2: How effective were the 2021 amendments to the FX Global Code regarding algorithmic trading and Transaction Cost analysis (Principle 18) in increasing transparency?

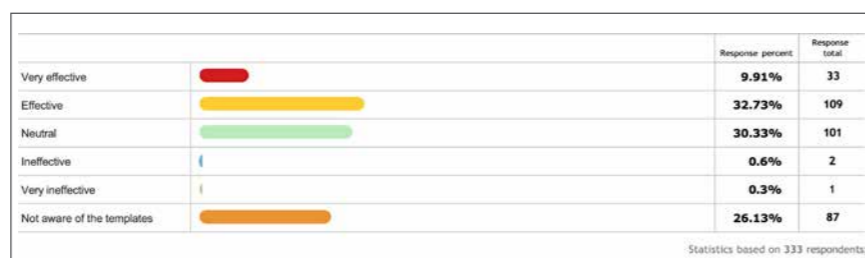


Fig 3: How effective was the introduction of the Algo Due Diligence and Transaction Cost Analysis templates in assisting market participants in meeting the codes principles for disclosure and transparency?

either ineffective or very ineffective. (See Fig 2).

The survey also asked the industry how effective the introduction of the Algo Due Diligence and TCA Templates in 2021 had been so far in helping Market Participants to meet the Code's Principles for disclosure and transparency. Nearly 33% had found the templates to be effective, while a

further 10% believed they had been very effective. Less than 1% thought they were ineffective or very ineffective. (See Fig 3).

In addition, the Survey found that 9% said their firm, as an algo provider, uses the Algo Due Diligence templates, while nearly 11% said that their firm, as an algo user, had done so. Another 3% had also used the templates in both capacities – as an algo user as well as provider. Close to 40% said they did not use the templates. (See Fig 4).

The use of the TCA Due Diligence templates by firms followed a similar pattern of adoption to the Algo templates, with close to 23% having used the template either as liquidity provider, liquidity customer or as both a provider and consumer. (See Fig 5).

The GFXC Chair, Gerardo Garcia of the Bank of Mexico, noted that in regards

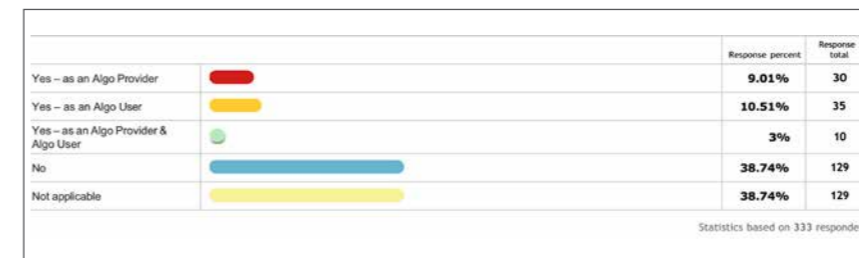


Fig 4: Does your firm use the Algo Due Diligence templates?

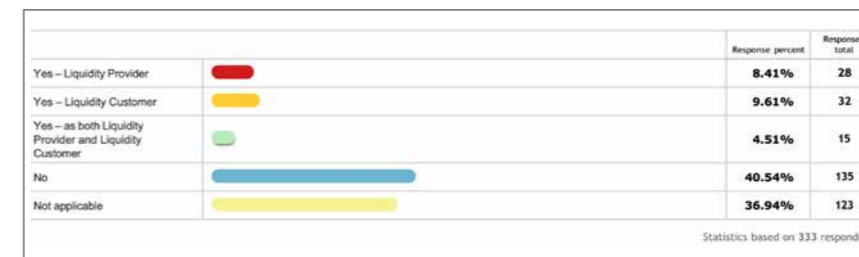


Fig 5: Does your firm use the Transaction Cost Analysis templates?

to the 2024 Code Review, there should be a high bar for making changes to the Code. He highlighted that the topics from the Survey would be a potential area of future focus. The Committee also discussed recent trends in FX market

structure during the two-day meeting. Fragmentation, electronification and the use of algorithms were all recognised as growing trends in the FX market and, as such, will be closely monitored by the GFXC.

During a panel discussion at the meeting, Matt O'Hara of 360T explained that electronic trading had expanded beyond spot and into derivative markets, which has contributed to market fragmentation. Automation had also increased, O'Hara said, especially among buy-side market participants. Algorithm adoption and rules-based trading had also expanded across the FX industry according to O'Hara, who added that the principles in the FX Global Code on transparency have helped to drive algo adoption.

It was agreed that the next step would be for the GFXC to further engage with LFXCs and finalise the priorities for the 2024 Code review, with the next meeting of the Committee expected to be around July.

More information can be found at: https://www.globalfxc.org/docs/gfxc_survey_results_Jan24.pdf

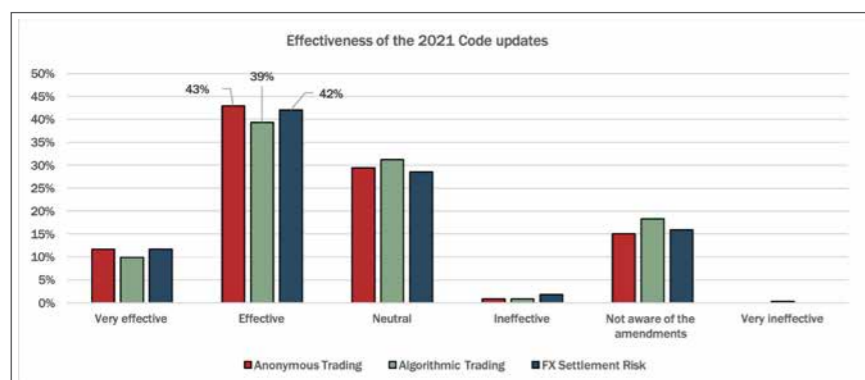


Fig 1



FOR THE DIARY

Finance Hive FX US Members meeting 25th April 2024



Closed-door, Chatham House roundtable discussions, inspirational keynotes, facilitated 1:1s, educational masterclasses, opulent surroundings, networking drinks. This is the Hive Buy Side Member Meeting.

thehive-network.com/foreign-exchange-us-members-meeting/

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EDUCATION & TRAINING

Pragma:

The award winning quantitative technology provider that offers unique outsourcing partnerships for both buy and sell side clients.

Pragma specializes in multi-asset class algorithmic trading solutions. We asked Danielle Caravetta, Head of Global Sales, at the firm to tell us more about its unique business model and outsourcing services for algorithmic FX trading.



Danielle Caravetta

execution algorithms, integration with the client's own unique access to liquidity, as well as real-time and post trade TCA tools.

Why are increasing numbers of firms looking to outsource their algorithmic FX trading requirements?

Building a robust algorithmic trading platform suitable for the world's largest asset managers and corporations requires a highly skilled development team, quantitative and market structure expertise and an expensive infrastructure to support the required high-performing software and network connectivity.

As such an in-house built system requires a lot of time, people, and money. As resources and margins continue to shrink inside both banks and funds alike, the need to scale and leverage third parties to reduce overhead and improve margins continues to grow. Outsourcing algorithmic trading technology allows the firm to reduce their time, personnel, and financial investment, while still maintaining many benefits of an in-house build.

What are the benefits of outsourcing to a leading quantitative trading specialist like Pragma?

The main benefits of outsourcing to Pragma are the abilities to maintain transparency, flexibility, and control, at the same level of building in-house, even relative to the largest global banks, while allowing clients to significantly reduce the time and money it costs to build and maintain an in-house platform, allowing the client to allocate resources to other parts of the firm where outsourcing may not be an option.

How do your outsourcing arrangements work and what level of customization can you offer for clients?

Pragma provides an algorithmic trading platform that enables its clients to create a unique algorithmic trading suite for their internal traders and external clients. For example, Pragma can create a fully customized FIX specification, with unique order parameters and algo names. Clients can also customize how the algos

leverage each client's own unique liquidity pool in a variety of ways such as by trader, currency pair, or algo in order to optimize the client's execution preferences. For some algorithmic strategies Pragma provides over 140 different flexible parameters!

Are you able to integrate with the liquidity pools of clients and how much demand is there for this?

One of the key features and benefits of the Pragma360 platform is the ability to connect to each client's own liquidity pools. Pragma will connect to the client's aggregator, whether a third party or in-house solution which allows the platform to consume market data from each liquidity pool the client wishes to access.

The benefit is that the client's customized algos will also access their curated, unique pool of liquidity all under the client's name (since Pragma is a vendor).

Pragma360 also supports the curation of a unique liquidity pool for their institutional clients that may be different from the pool for internal traders. Pragma recommends connecting to a variety of banks, non-bank and ECN liquidity.

Pragma can turn off and on different liquidity pools based on different criteria to satisfy the client's objectives which allows the client to truly reap the benefit of their own algorithmic solution. This also allows the client to control and manage relationships with liquidity providers, which generally results in tighter spreads and better performance.

What level of customer support do you provide to your clients?

Pragma provides real-time, first level support to its clients 24 hours a day, 5.5 days a week. The Pragma Trade Desk has a team of 6 execution consultants that are available via Bloomberg IB chat, phone and e-mail. The TradeDesk is fully equipped to answer questions on algo behavior and make configuration changes on behalf of the client.

The Pragma TradeDesk will also advise on market structure along with liquidity sources and order types. Having access to Pragma's first level support allows the client to more easily provide quality and timely support to its traders and institutional clients. The Pragma team will deliver new features to each client several times per year and work hand in hand with the client to make configurations and customizations on a request-by-request basis.

What additional tools do you offer to support your execution algos?

Pragma offers a comprehensive suite of real-time and post trade transaction cost and venue analysis tools as part of the Pragma360 platform. The marquee tool is Panorama, our Algorithmic Management System. Leveraging Panorama, the Pragma TradeDesk monitors all Pragma client orders in order to provide a high level of consultation and support for clients.

Pragma also provides Panorama to its clients so that they have full transparency into both the parent and its corresponding child orders, allowing them to interact with their clients' orders on the fly, and provide real-time performance and venue analytics to their clients. Complementing this tool suite, Pragma also provides TradeReports a post trade TCA portal. Moreover, Pragma provides data files supporting interaction with third party TCA providers.

We are now seeing next generation technologies like AI and ML making their presence felt in algorithmic FX trading. In what ways are you leveraging them yourselves?

Pragma has for a number of years leveraged advanced machine learning in its execution algorithms. Led by Pragma CEO, David Mechner, who has a background in neuroscience, Pragma kicked off a research initiative in 2017 called "Project Mercury." Mercury leverages deep learning techniques to optimize routing within the algorithmic logic. Specifically, Mercury employs a signals-based approach to determine the optimal time to either post or cross the spread.

Pragma runs A/B experimentation with client flow to analyze improvements in performance. Pragma has consistently seen performance improvements from the deep learning techniques. Pragma is also often "horse-raced" vs other algo providers by their clients and consistently comes out at the top of the performance pool.

Your FX business model does not conflict with your clients. Why is it so important to create a more sustainable, value-added and long-term partnership with them?

It has been very important, particularly to bank clients, that their technology provider is independent and does not pose any conflict of interest with their FX franchises. Pragma not conducting prop trading should make the client feel comfortable that Pragma will not use the client's data for Pragma's benefit.

Having the un-conflicted partnership allows the teams to share ideas and information freely, allowing Pragma to have long-standing relationships with each client as their business continues to grow.

In what ways do you think the algorithmic FX trading market is likely to evolve which may further strengthen the outsourcing proposition for many participants?

The FX market will continue to become more complex as dealers offer more trading services, venues enhance their offerings and clients continue to demand innovative solutions to finding liquidity and reducing market impact.

Pragma also sees additional products becoming more suited for algorithmic trading such as NDFs and swaps. As demand for algorithmic trading for these more complex products grows, the demand for outsourcing will naturally grow as the barriers to entry to have an institutional grade algorithmic trading service will be too high and expensive for many banks and hedge funds to build and maintain their own trading solutions internally.

Exploring the nuances of FX algo trading strategies and provider selection

By Allan Guild and James Chapman, Directors at Hilltop Walk Consulting

Our previous article in this publication on the intricacies of FX algo trading instigated some engaging discussion and feedback – thank you to all involved. Two themes seemed to resonate with readers: the strategic considerations of Execution Scheduling algos such as Time-Weighted Average Price (TWAP), and what differentiates algo providers. In response, this piece delves deeper into those topics.



Allan Guild



James Chapman

Selecting the appropriate duration requires an understanding of market dynamics and the objectives of the trading strategy, and often falls to the qualitative judgement of an execution trader.

THE QUANTITATIVE VERSUS QUALITATIVE DILEMMA

Algos are lauded for their systematic, quantitatively-driven approach to trading, which often contrasts with the more subjective method of setting the key duration parameter. When this critical element is determined arbitrarily or based on the trader's discretion, it introduces an element of unpredictability into the algo's performance.

This can lead to a scenario where the algo's performance is not fully governed by its quantitative framework, diminishing the control and predictability that may have driven the adoption of algos.

BENCHMARK CONSIDERATIONS

In the context of FX algo trading, the selection of an appropriate benchmark is crucial and can often determine whether Execution Scheduling algos are the right strategy.

Mismatch with transaction goals: Execution Scheduling algos are often benchmarked against average prices

Volatility risk management: However, when spreading trades over a period of time, the corresponding increase in volatility risk must also be considered. This is the risk that the market moves unfavourably against the trader as a result of underlying volatility in the market unconnected to this particular order. This must be balanced with market impact.

SIGNIFICANCE OF THE DURATION PARAMETER

The performance of Execution Scheduling algos is heavily influenced by the selection of the duration parameter, which determines the period of time over which trades are executed, and contributes to the balance of risks.

EXECUTION SCHEDULING ALGOS

Execution Scheduling algos methodically distribute trade execution over a set time period in order to balance two types of risks: market impact risk and volatility risk. So let's explore their utility and the critical nature of timing in their performance.

Market Impact mitigation: By dispersing trades, these algos mitigate the market impact, which is the adverse effect large orders could have if executed simultaneously. This is particularly relevant for sizable trades that, if placed at once, could move the market unfavourably against the trader.

over a set period. However, the average price over an arbitrary period may not reflect the true objectives of the trader, particularly when the FX risk is realised at a particular point in time.

Targeting a point-in-time benchmark, such as the WMR fixing, requires a strategy that accounts for market dynamics and liquidity at that specific moment. The uniformity of Execution Scheduling algos does not always offer the flexibility needed to adjust to these dynamic conditions, which can lead to suboptimal execution when compared to this type of benchmark.

Tailored execution strategies:

Research by organizations like Siren FX indicates that for larger trades or those targeting a precise benchmark, a different execution strategy, such as starting earlier and increasing execution rate closer to the benchmark window, might be more effective. This considers market movements and the impact of trades in a more nuanced manner than the one-size-fits-all approach of Execution Scheduling algos.

THE ROLE OF EXECUTION SCHEDULING ALGOS IN FX TRADING

While Execution Scheduling algos have a place, their suitability is not universal and is heavily contingent upon the approach used to select parameters, and the chosen benchmark for success. Firms must carefully consider these factors to determine the solution that can deliver the best outcome for their specific needs.

DIFFERENTIATING AMONG FX ALGO PROVIDERS

Most market-makers provide a suite of Client algo offerings, however, the assumption that all these offerings are created equal could lead to overlooking critical nuances that might impact outcomes. Understanding the potential differences between these offerings is essential, particularly as they may align differently with the diverse use-cases of market participants.

VARIABILITY IN STRATEGIES AND MODELS

The diversity of models offered by algo providers is a primary area of differentiation that can significantly



When spreading trades over a period of time, the corresponding increase in volatility risk must also be considered

impact success. As discussed in our previous article, the three major algo strategy families—Execution Scheduling, Arrival Price, and Market Impact Minimisation—form the foundation of most algo offerings. However, the presence and implementation of these strategies can vary considerably among providers.

Range of strategies: Not every algo provider will offer all three core strategy types. A provider's focus may lean towards one strategy over others based on their market philosophy, technological capabilities, or client base.

Model specificity: Even within providers offering the full suite of strategy families, the underlying

mathematical models used to drive these strategies can differ. These variations stem from distinct research inputs, proprietary techniques, and model philosophies.

Model-driven results: The choice of mathematical model is far from trivial. It can dictate the algo's behaviour in different market conditions and ultimately determine its performance. For instance, two providers offering Arrival Price algos may produce different execution outcomes based on how their models interpret and respond to real-time market data.

Timing and liquidity awareness: The ability of an algo to discern and act upon fluctuations in market



The performance of Execution Scheduling algos is heavily influenced by the selection of the duration parameter



Understanding the potential differences between market-maker offerings is essential

liquidity is crucial. It should have the capability to understand liquidity patterns and anticipate changes, allowing it to navigate through market microstructures effectively and choose the most opportune moments to execute child slices of an order.

Use-Case alignment: Different use-cases demand different model attributes. A model that excels in a high-liquidity environment might not perform as well in a market characterized by volatility and thin liquidity. Traders need to match their requirements with the specific strengths of a provider's model.

Customization and adaptation: Some algo providers offer customization options within their models, allowing traders to fine-tune parameters to better suit their trading objectives. The ability of a model to adapt to a trader's specifications can be a significant differentiator.

DIFFERENT LIQUIDITY POOLS

Diverse liquidity sources: The expansion of liquidity pools, including the growth of dark pools and mid-matching services, has provided more options for executing trades. These pools can offer different prices and depths of liquidity.

Specialized pools for algo trading: Alongside traditional liquidity sources,

there are now pools specifically designed to cater to passive and algo executions. These pools often offer features like reduced market impact and anonymous trading.

Internalisation: algo providers who are also significant market-makers may possess the added advantage of accessing their internal liquidity. This internal pool may provide more favourable conditions for client algos, potentially reducing transaction costs in addition to the increased liquidity.

SMART ORDER ROUTING

The functionality of Smart Order Routing—deciding the best path for each order slice to navigate through the many available liquidity sources—can significantly influence the execution outcomes of algo orders.

This decision-making process takes into account factors such as price, liquidity depth, and the potential for slippage, aiming to improve trade execution. By intelligently routing orders, the execution quality in terms of both price and speed can be optimised.

AGGRESSIVE VS. PASSIVE ORDER PLACEMENT

Deciding whether to place an order passively or to take (aggress) an

existing order requires a balance of potential benefits and associated risks.

Capturing vs. Paying Spread:

Passive order placement is traditionally associated with capturing the spread, as it involves placing an order at a price that is not immediately executable, hoping another market participant will trade against it. Conversely, aggressing orders—taking liquidity by fulfilling existing orders—typically involves paying the spread, which can be a straightforward but costlier approach.

Risks of Passive orders: While passive placement can be beneficial in terms of costs, it carries its own risks:

1. Execution uncertainty: There's no guarantee that a passive order will be aggressed by another market participant, which could result in the algo's child slice not being executed within the desired timeframe.
2. Market Impact concerns: The mere act of placing a passive order might influence market sentiment or reveal intentions, potentially driving liquidity away and worsening the eventual execution price.

The decision to place orders aggressively or passively should not be static but dynamically adjusted based on real-time market data, balancing cost, urgency and market impact. An algo that can intelligently blend order styles based on the prevailing market conditions can significantly enhance execution outcomes.

CONCLUSION

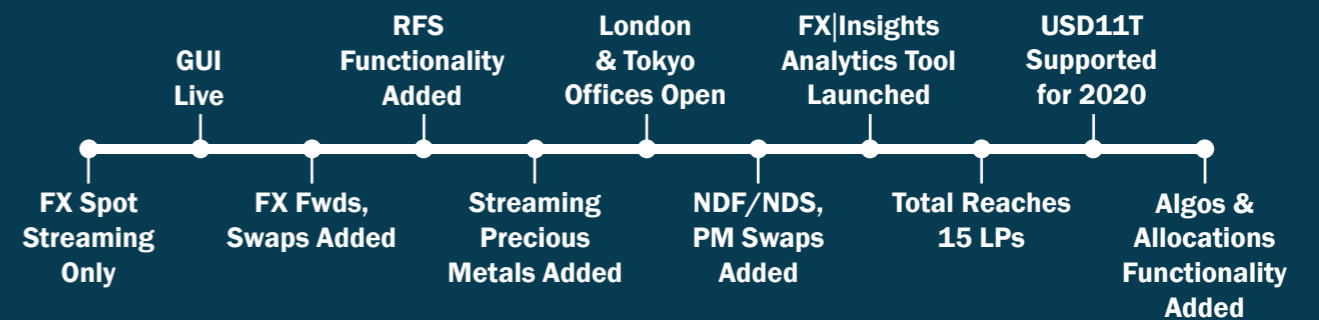
Market Participants should carefully evaluate the offerings of different FX algo Providers before deciding which providers to use. While having an FX algo offering is now a fairly standard part of the services offered by an FX market-maker, the offerings themselves are far from commoditised.

While fee levels will always play a role in comparing one provider against another, the differences in available strategies, model performance, available liquidity pools and smart order routing have the potential to have a far greater impact on execution outcome than a small difference in fees.

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youtube.com/watch?v=lnTnFHHq5es

VIDEO VAULT

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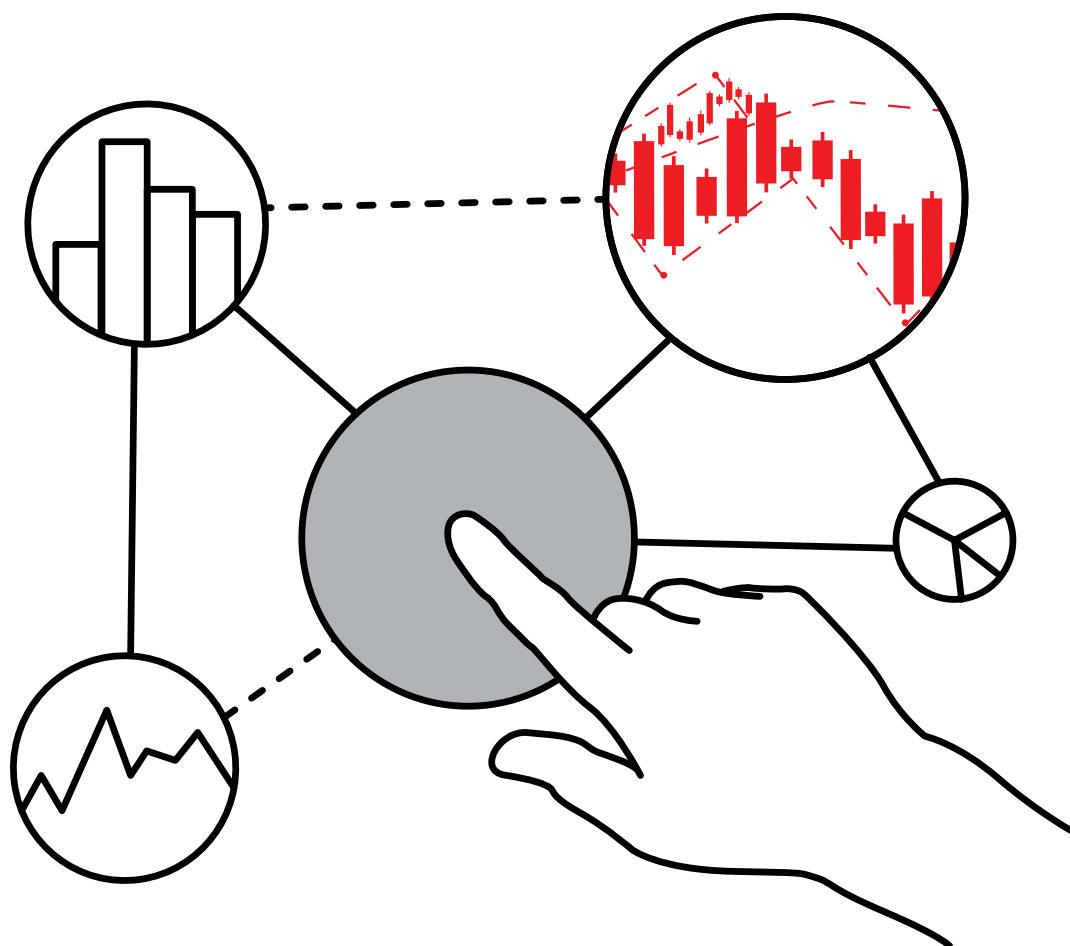
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