

transforming global foreign exchange markets

e-FOREX

e-forex.net **FEBRUARY** 2025

CELEBRATING 25 YEARS OF PUBLICATION

FX PRIME BROKERAGE:

**Digital toolsets help drive
the industry forward**

AI & DATA SCIENCE:

**Reshaping the business
of FX signal generation**

POST TRADE FX:

**Achieving greater
operational efficiency**

STABLECOINS:

**Moving towards more
widespread acceptance**

DIGITAL ASSETS:

**Key requirements for
institutional execution venues**

COVER INTERVIEW

GERARD MELIA

HEAD OF SALES AT STONEX PRO

LIQUIDITY • RISK MANAGEMENT • STP • E-COMMERCE

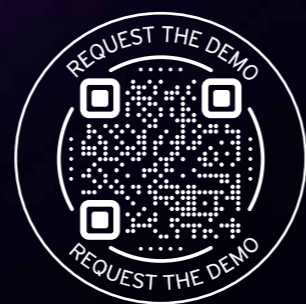
CITIFX WIRE

- Leverage live market commentary directly from Citi's trading floors around the world
- Follow content and data analytics curated by our in-house expert strategists, traders and quants
- Better understand complex market developments, recognise trading opportunities and manage currency risk



STILL INNOVATING

Contact your FX esalesperson to learn more



Welcome to

e-FOREX

transforming global foreign exchange markets



February 2025

We have devoted a great deal of space this month to post trade FX operations and to exploring what steps are being taken by the industry to manage its various challenges in order to boost efficiency. FX clearing and settlement are two important areas we focus on here along with the application of fintech and the role that blockchain and DLT may have in helping to streamline the post trade FX landscape. One of the hurdles that FX faces with respect to its post trade operations is the sheer scale and number of participants in its ecosystem which continues to grow. That brings with it added complexity which leads to more problems and bottlenecks. Nevertheless, a great deal of progress is being made, especially by post-trade vendors who have a vital role to play in addressing fragmentation and inefficiencies throughout the trade lifecycle. I think we will shortly see more significant changes with post trade FX operations which will move us closer to achieving the ultimate objective of a near frictionless processing environment.

There seems to be an arms race going on in the FX Prime Brokerage business as providers compete to utilise cutting-edge technology. In this edition we investigate how technology innovation is fundamentally altering how prime brokers operate with automation changing how processes work and why it's fast becoming a critical component of risk management and operational efficiency. AI is also expected to increasingly become embedded into prime broker products and services further adding to the industry transformation that's taking place. The intersection of technology, big data, and artificial intelligence promises to completely reshape FX prime brokerage sooner rather than later.

Artificial Intelligence is also reshaping FX signal generation which is the subject of our fintech feature this month. This discusses the technological breakthroughs that have enabled this evolution and the risks and opportunities this paradigm shift presents for both institutional and retail markets. AI looks like it will play a pivotal role in shaping the next generation of trading strategies and with all the other applications it is rapidly being lined up for in our industry, embracing it could be the key to staying ahead in the fast-evolving FX markets.

As usual I hope you enjoy reading this edition of the magazine.

Charles Jago
Editor

Susan Rennie
Susan.rennie@sjbmedia.net
Managing Editor

Charles Jago
charles.jago@e-forex.net
Editor (FX & Derivatives)

Charles Harris
Charles.harris@sjbmedia.net
Advertising Manager

Ben Ezra
Ben.ezra@sjbmedia.net
Retail FX Consultant

Michael Best
Michael.best@sjbmedia.net
Subscriptions Manager

David Fielder
David.fielder@sjbmedia.net
Digital Events

Ingrid Weel
mail@ingridweel.com
Photography

Tim Hendy
tim@thstudio.co.uk
Web Manager

SJB Media International Ltd
Suite 153, 3 Edgar Buildings, George Street,
Bath, BA1 2FJ United Kingdom
Tel: +44 (0) 1736 74 01 30 (Switchboard)
Tel: +44 (0) 1736 74 11 44 (e-Forex editorial & sales)
Fax: +44 (0)1208 82 18 03

Design and Origination:
Matt Sanwell, DesignUNLTD
www.designunltd.co.uk

Printed by Headland Printers

e-Forex (ISSN 1472-3875) is published bi-monthly
www.e-forex.net

Membership enquiries
Access to the e-Forex website is free to all registered members. More information about how to register can be found at www.e-forex.net

To order hard copies of the publication or for more information about membership please call our subscription department.

Members hotline: +44 (0)1736 74 01 30

Although every effort has been made to ensure the accuracy of the information contained in this publication the publishers can accept no liabilities for inaccuracies that may appear. The views expressed in this publication are not necessarily those of the publisher.

Please note, the publishers do not endorse or recommend any specific website featured in this magazine. Readers are advised to check carefully that any website offering a specific FX trading product and service complies with all required regulatory conditions and obligations.

The entire contents of e-Forex are protected by copyright and all rights are reserved.



Vivek Shankar
FX Prime Brokerage



Paul Golden
Post trade FX

MARKET COMMENTARY

12. Taking a peek inside the digital revolution reshaping FX Prime Brokerage

Vivek Shankar investigates the benefits that automation and digitisation is bringing to FX Prime Brokerage and what further developments we can expect to see as providers adapt to changing market conditions and client needs.



Gerard Melia
e-Forex Interview



Andrew Lane
AI & Data science

SPECIAL REPORT

24. FX post trade operations: Managing the challenges and achieving greater operational efficiency

In this comprehensive report which we have put together with the support of LSEG, TradeNeXus, Ostrra, Baton and CobaltFX, we examine the post trade FX landscape from a number of perspectives including clearing and settlement to try and assess the pain-points and inefficiencies that still remain with this critical part of FX operations and to see what is being done to try to address them.



Berkay Secil
Stablecoins



Brandon Mulvihill
Digital Asset platforms

E-FOREX INTERVIEW

46. StoneX Pro – Helping clients unlock real value to stay ahead of the competition

With Gerard Melia, Head of Sales at the firm.

FINTECH

56. How AI is revolutionising trading signal generation for institutional and retail FX markets

Andrew Lane outlines how AI is reshaping FX signal generation, the technological breakthroughs that have enabled this evolution, and the risks and opportunities this paradigm shift presents for both institutional and retail markets.

ASK A PROVIDER

62. Stablecoins: Building confidence to facilitate more widespread acceptance

Berkay Secil talks about the growing significance of Stablecoins, what they are being used for and how they might contribute to the development of new global payment arrangements.

DIGITAL ASSETS

66. Meeting market demand: Diverse and reliable execution venues for institutional Digital Asset trading

Brandon Mulvihill explores the features and functionalities institutional trading firms now require, the factors influencing the platform selection process and the pressing technical and business considerations shaping the future of Digital Asset trading.

COMPANIES IN THIS ISSUE

A	Devexperts	p10	L	S	
Acuity	DTCC	p8	LCH ForexClear	Saxo	p5
			LSEG	SGX FX	p19
B				smartTrade Technologies	p43
Baton Systems				Standard Chartered	p8
BiLira	E			State Street	p28
Bloomberg	Euronext	p23		StoneX	p46
				Swissquote Bank	p7
C					
Centroid Solutions	F				
Citi	Finalto	p33			
CobaltFX	Flextrade	p6			
	FXSpotStream	IBC	P		
			PLUGIT		
D				T	
26 Degrees Global Markets	I			360T	p6
	IPC	OBC	Q	TradeNeXus	p35
			Quantitative Brokers		

FX prime brokerage

Customised FX & precious metal liquidity and clearing solutions

With Saxo's technology-driven prime brokerage services partners access top tier bank and non-bank liquidity providers and venues.

Our FX prime brokerage combines co-located connectivity in all three major liquidity centres, credit intermediation, ultra-low latency pre-trade credit risk controls, bespoke pricing and execution analytics.

Saxo caters to clients of all sizes, from those who are too small to access the services of major investment bank prime brokers, to large clients who choose Saxo due to the quality of our service and offerings.

Our partners benefit from the trust and security of a regulated and licensed Danish bank with a global footprint, authorised in multiple jurisdictions.

31%
Total capital ratio

13.1%
ICAAP requirement

272%
Liquidity coverage ratio

SIFI
Designated Systemically Important Financial Institution by Danish FSA

BBB
S&P Global Ratings

Learn more at www.institutional.saxo
Contact: solutions-uk@saxomarkets.com
+44 207 151 2100

This material is produced for marketing purposes only. Trading in financial instruments carries some degree of risk, always ensure you fully understand all the risks before trading. Read Saxo's full disclaimer at www.home.saxo/legal/disclaimer/saxo-disclaimer.

360T and Quantitative Brokers partner for FX algos

360T and Quantitative Brokers (QB) have announced a partnership that will make QB's newly launched suite of FX algos available via 360T. This expansion introduces FX-optimised versions of its flagship algorithms, "Bolt" and "Strobe", designed specifically to account for the unique market structure and liquidity dynamics of FX trading. Strobe FX enhances schedule-based execution for TWAP and VWAP benchmarks, while Bolt FX is an implementation shortfall algorithm built to minimise

execution costs relative to arrival price.



Matt O'Hara

"We are delighted to announce this partnership with QB and are confident that providing access to highly sophisticated FX algos from an independent specialist provider, as additional tools alongside the broad range of bank offered algos already available via 360T, will provide significant benefits to our diverse and global client base," said Matt O'Hara, CEO of 360T Americas. Both 360T and QB are part of the Deutsche Börse Group.

FlexTrade links up with LoopFX

FlexTrade Systems has announced that mutual clients can leverage a new seamless integration between FlexFX and LoopFX. The move is designed to enhance the breadth of actionable liquidity options available when executing large FX trades, via LoopFX, within the FlexFX order blotter. LoopFX offers dark mid-point matching for Asset Managers and Banks, specializing in large trades in excess of \$10mln, which can reduce execution costs and improve best execution processes.

FlexTrade's FlexFX solution can be deployed as a standalone best-of-breed solution or as a fully integrated



Uday Chebrolu

component within FlexTrade's multi-asset Execution Management System (EMS), FlexTRADER EMS. Uday Chebrolu, SVP – FX and Digital Assets at FlexTrade Systems, noted: "The FX space is continually evolving, with innovative new solutions emerging that can positively impact trading efficiency and performance. Integrating LoopFX into our platform gives our clients using FlexFX access to liquidity for large FX trades, enabling them to optimize their execution process while minimizing market impact."

Acuity Trading partners with Aquariux FintechQX

Acuity Trading has partnered with Aquariux Fintech's AQX Trader, an innovative fintech software solutions company. This collaboration integrates Acuity's AnalysisIQ, into the AQX Trader platform, delivering premium trading signals within an intuitive, user-friendly interface. Together, Acuity and Aquariux Fintech are redefining how retail traders access and leverage market sentiment insights. Commenting on the partnership Andrew Lane, CEO Acuity Trading said that, "Retail traders have long faced challenges in turning technical

analysis into actionable opportunities. By embedding our transparent trading signals into AQX Trader's platform,



Kelmond Leow

we're delivering expert insights within a streamlined trading experience."

Whilst Aquariux Fintech, Kelmond Leow, CDO (Chief Delivery Officer) says that, "This collaboration is more than a technical integration, it's a step toward transforming how traders and brokers interact with forex markets. By combining Acuity's sentiment-driven insights with AQX Trader's innovative platform, this partnership redefines trading efficiency and accessibility to fundamentally reshape how traders engage with the market."

institutional

LIQUIDITY SOLUTIONS THAT OPEN NEW HORIZONS

swissquote.com/institutional

 Swissquote

DTCC launches ComposerX

The Depository Trust & Clearing Corporation (DTCC) has launched ComposerX, a comprehensive suite of platforms designed to streamline token creation and settlement with the objective of accelerating digital asset adoption throughout the financial ecosystem. ComposerX is a complete, end-to-end suite for managing digital assets through their full lifecycle – including issuance, distribution, servicing, and reporting. ComposerX provides powerful transaction, account and inventory management capabilities,

scalable data management tools, and an open smart contract framework for tokenization that's designed to automate complex financial processes and enable asset discoverability with reconcilable, self-describing data. "We're excited to launch the ComposerX suite, which provides firms with the tools they need to usher in a new era of institutional DeFi," said Nadine Chakar, Global Head of DTCC Digital Assets. "This is a milestone in DTCC's journey to lead the industry toward the development of a digital financial

markets ecosystem, where digital assets are treated with the same care afforded to traditional securities."



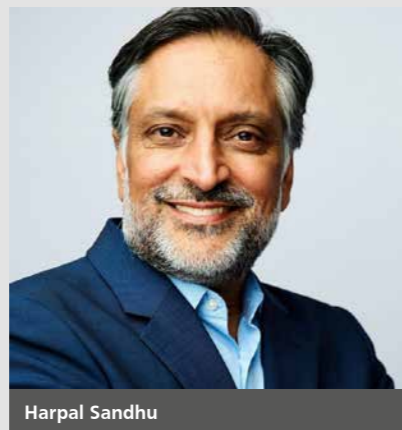
Nadine Chakar

Access Bank Nigeria selects Integral's FX technology

Integral has announced that Access Bank Nigeria has adopted its technology to help deliver on its regional expansion ambitions and elevate the bank's FX pricing and distribution capabilities.

Access Bank Nigeria has implemented Integral's tailored solutions for liquidity aggregation, pricing, distribution, and white labelling. A crucial aspect of the collaboration was the establishment of the foundations for sub-white labelling of Access Bank Nigeria's services to the bank's other entities

and affiliate banks. The technology also enables the bank to provide a



Harpal Sandhu

branded graphical user interface (GUI) to partners. Harpal Sandhu, CEO of Integral, said: "By offering highly configurable and scalable solutions across FX workflows, Integral can help clients meet the evolving needs of their customers, tapping into regional differences and building on existing technological infrastructure. The optimized pricing and distribution facilitated by this partnership will enable Access Bank Nigeria to elevate its FX trading and deliver improved service for clients. "

Standard Chartered launches AI-powered FX Insights

Standard Chartered has announced the launch of an innovative AI-powered video column, the "Standard Chartered



Samir Subberwal

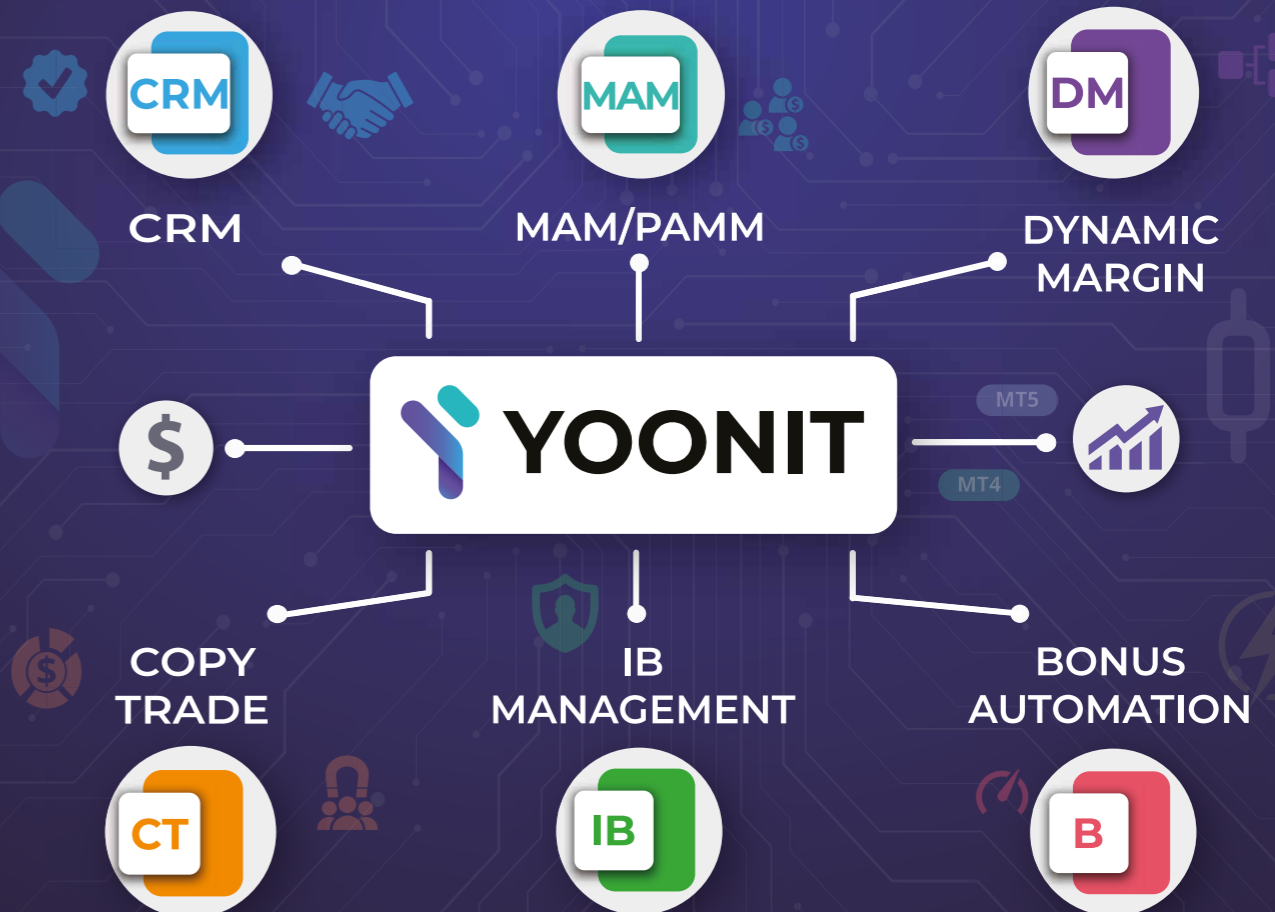
Wealth Management FX Intelligent Expert" for clients across its key markets. The feature leverages advanced artificial intelligence technology in collaboration with LSEG (London Stock Exchange Group). This industry-first initiative represents a significant step forward in delivering real-time, easily digestible FX market insights directly to clients, underscoring Standard Chartered's commitment to client-centric innovation and leadership in digital-first wealth solutions. Samir Subberwal, Global Head, Wealth

Solutions, Deposits and Mortgages, and Chief Client Officer at Standard Chartered, said: "We are delighted to collaborate with LSEG to bring this pioneering AI-powered FX video insight service to our clients in our key markets. By transforming our Global Chief Investment Office's expert views into easily digestible, high-quality videos, we offer our clients access to timely market insights wherever they are, reinforcing our commitment to technological innovation and personalised wealth solutions that meet evolving needs."

ATTENTION ALL BROKERS

What are you doing to grow your business?

PLUGIT



Devexperts launches new SDP offering

Devexperts has announced the launch of DXtrade Institutional, a fully customizable single-dealer multi-asset platform offering, designed for banks, hedge funds, asset managers, and market makers looking to upgrade their frontend legacy systems. DXtrade Institutional will offer a scalable, multi-asset solution with seamless back-end integration and a modern user interface, and enable institutions to execute trades directly while maintaining full control over pricing, risk management, and liquidity

distribution. Nick Mortimer, Institutional Business Development at Devexperts, says: "This is the first DXtrade product we have launched that is not an off-the-shelf solution, but built specifically for each customer, offering a tailored solution that builds on and improves their existing software and meets firms' unique operational needs." Supporting spot, forwards, swaps, and options trading, DXtrade Institutional will provide direct trade execution; advanced risk management, including pre- and post-trade risk controls; full

customizability; and UX-focused design for improved trader efficiency.



Nick Mortimer

ICE and Reddit collaborate on new data products

Intercontinental Exchange (ICE) and Reddit have announced an agreement for ICE to leverage Reddit's Data API to research, create and distribute new data and analytics products for the financial industry. The products will leverage Intercontinental Exchange's extensive data science expertise and the vast data available through Reddit's Data API to offer innovative datasets and analytics to participants in capital markets. "The rich data set that flows across a platform like Reddit has the



Chris Edmonds

potential to provide opportunities for our customers as they look for new opportunities in global markets," said Chris Edmonds, President of Fixed Income and Data Services at Intercontinental Exchange. "We look forward to leveraging our deep experience with alternative datasets to create products and services utilizing Reddit's Data API that can help give our customers valuable insights into the markets and also help them manage risk across their portfolios."

Delta Capita to deliver post-trade OTC derivative services for HSBC

Delta Capita, a global leader in financial technology and managed



Joe Channer

services, has been selected by HSBC to deliver OTC derivatives confirmation and settlement services globally under a multi-year agreement. "The agreement we have established with Delta Capita opens up new opportunities for us to enhance our derivative post-trade services for our valued clients," said Karen Everingham, head of markets and securities services operations at HSBC. Joe Channer, CEO of Delta Capita, commented: "We are delighted to have been appointed by HSBC to provide operational services.

This collaboration reflects our expertise in delivering cost-efficient, scalable post-trade solutions and reaffirms our commitment to driving innovation in financial services." Delta Capital has further expanded its operational footprint by establishing strategic hubs in Kuala Lumpur, Manila and Pune, enabling seamless, 24/7 support for its global client base. This latest agreement underscores its dedication to operational excellence through its innovative infrastructure-as-a-service model.

End-to-end solutions for FX trading. Trusted by the FX community.



Visit lseg.com/fx



LSEG FX

Taking a peek inside the digital revolution reshaping FX Prime Brokerage

FX prime brokers are in an arms race to deliver cutting-edge technology as artificial intelligence and automation reshape the industry. The push for digital transformation has become existential, with firms investing heavily in tools that promise faster execution, better risk management, and more efficient operations, Vivek Shankar finds.



Vivek Shankar

Foreign exchange prime brokerage is undergoing a significant transformation, as market volatility and technological disruption reshape how institutions access and trade FX.

The sector's evolution comes amid a strong start to 2025, with major institutional FX venues reporting double-digit volume increases in January compared to the previous

month. Yet beneath the surface, a more complex picture emerges: nearly 40% of hedge funds have scaled back their FX prime brokerage relationships in the past three years, creating opportunities for a new breed of intermediaries offering "Prime of Prime" services to fill the void left by traditional players exiting the market.

Against this backdrop, technological innovation is fundamentally altering how prime brokers operate, with automation changing how processes work. James Dewdney, Associate Director, Institutional Sales, Saxo, strikes a positive note when asked about its impact.

"Automation frees up headcount to do other things," he says. "For example, manually monitoring margin usage and NOP limits is time-consuming. It requires dedicated headcounts who would have limited bandwidth for other responsibilities."

Reducing headcount burden is just one of the many ways technology is changing how FXPBs approach their workflows.

FXPBS TURN TO DIGITAL TOOLS

The push for automation goes beyond just freeing up resources. For many firms, it's becoming a critical component of risk management and operational efficiency.

"It is more accurate," continues Dewdney. "The present-day margin/risk engines embedded within vendor solutions or proprietary technology offer dependable real-time data." He notes that manually understanding a client's obligations across multiple currencies and tenors would be time-consuming without automation.

This automation trend is particularly crucial for larger operations. "Depending on the size of the FXPB, it might not be possible to run

"The present-day margin/risk engines embedded within vendor solutions or proprietary technology offer dependable real-time data."



James Dewdney

the business without these critical processes being automated," Dewdney says, highlighting how essential these systems have become to modern FXPB.

The transformation is most visible in trade processing and risk management. Daniel Smith, Head of Electronic Trading & Execution - APAC at 26 Degrees Global Markets, emphasizes how automation is reshaping the entire trade lifecycle. "By reducing operational burdens and minimising the requirement for manual intervention, providers can lower the risk of human error whilst improving efficiency and transparency," he says.

These improvements are driving measurable benefits across the industry. According to Lochlan White, CCO of Scope Prime, the impact is particularly notable in critical processes like margin calls. "There are huge advantages from automating the FXPB processes that can deliver immediate and measurable benefits," White says. "A good example here is margin calls, which if automated can reduce critical delays when it comes to collateral management and in turn reduce counterparty risk, especially in fast moving markets."

The evolution is particularly striking when compared to historical practices. Dewdney recalls his early career experiences: "In my first job in FX back in 2010 I used to confirm trades back to an interdealer broker. They had around 10 voice brokers, and it became a muddle in fast markets with time consuming reconciliations required after 5pm."

Today, at Saxo, he notes they offer clients real-time position keeping via platforms and APIs, with automated confirmations through email or FTP.

For firms like 26 Degrees, this has prompted substantial investment in technology. "We've worked closely alongside our technology partners to leverage existing workflows and invest in further enhancing our proprietary technology," Smith says. A recent overhaul of their internal dealing and risk systems has enhanced automation capabilities, allowing dealing and operations teams to focus on higher-value activities.

The results of these investments are becoming clear across the industry. White reports that operational errors can be reduced by as much as 40% through automation, a figure he says is supported by their experience working with FXPBs. This dramatic reduction in errors is particularly significant given the high-stakes nature of FX trading.

The impact of digital tools extends deep into risk management practices. "They play a critical role offering PBs real time, accurate interpretations from complex data sets which allow them to better manage risk," Dewdney says. "It also offers PBs scalability so they can offer the service at a competitive price."

Market volatility has made these tools increasingly vital. "During periods of significant market volatility, digital tools are more critical than ever, giving dealing teams the flexibility to manage workflows seamlessly and monitor risks in real-time," Smith says.

This is particularly crucial, he notes, when operating a multi-PB setup where exposures can build quickly across multiple counterparties.

White emphasizes the fundamental importance of risk pricing in the industry. "Pricing risk sits at the very heart of this industry, so anything that can be done in terms of mitigation here is of real benefit," he says. "Automation



Automation is becoming a critical component of risk management and operational efficiency

We set the standard in FX.

The proof is in the product. **FXGO** can power your trading with Bloomberg's world-class data and unparalleled liquidity in every currency pair and instrument. Seamlessly integrate your trading process with our comprehensive and innovative solutions.

Learn more at:
bloombergip.com/FXtrading



Bloomberg

“During periods of significant market volatility, digital tools are more critical than ever, giving dealing teams the flexibility to manage workflows seamlessly and monitor risks in real-time,”



Daniel Smith

allows for real-time monitoring of credit utilization and counterparty exposures, which in turn facilitates better risk assessment and proactive decision making.”

The alternative to such digital tools would be problematic, according to Dewdney. “Without the plethora of digital tools employed by brokers, managing and interpreting critical daily events in the business would take a lot longer,” he says. “Markets would be rife with human error, reducing efficiency and eventually faith in the overall system.”

For 26 Degrees, investment in digital infrastructure has yielded tangible benefits. “Real-time visibility, particularly with regards to market and counterparty exposures, has allowed teams to make more proactive and efficient decisions, based on real time data, ultimately leading to a reduction in inefficient credit allocation or usage,” Smith says.

The technology race in prime brokerage has become particularly intense and the evolution of these digital tools has transformed how firms approach credit monitoring. White points out

that “anything that helps increase the prospect of a potential credit breach being spotted before it occurs can only be good.” This proactive approach to risk management represents a significant shift from traditional reactive measures.

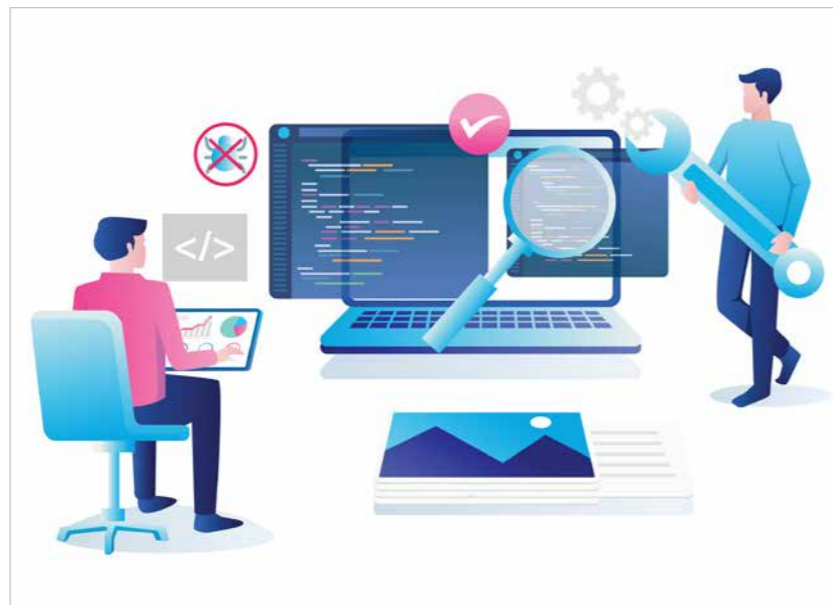
26 Degrees has made this a central part of their strategy. “Our continued investment in technology has been instrumental in enhancing pre- and post-trade transparency, driving more advanced reporting, risk management, and workflow optimisation,” Smith says. Such investments have become crucial for firms looking to maintain competitive advantage in the market.

These advancements in digital tools have particular significance for multi-counterparty setups, where real-time monitoring and risk assessment become exponentially more complex. The ability to track and manage exposures across multiple venues and counterparties in real-time has become a key differentiator for prime brokers.

Automated workflows are also transforming how prime brokers manage liquidity across their networks. “Dynamic credit allocation tools certainly help PBs reduce manual touchpoints,” Dewdney says. “They also improve the customers’ UX as the risks of trade rejections, because credit is exhausted at one venue, or another is reduced.”

Smith points to broader efficiency gains in capital deployment. “Without real-time monitoring, efficiently deploying capital can become time-consuming and complex, but with automated workflows in place, prime broking networks can make quicker, data-driven decisions,” he says. These improvements are particularly evident in areas like securities lending and portfolio margining, where automation has enhanced liquidity across networks.

The impact on capital efficiency has been significant, according to White. “Anything that can accelerate trade processing and remove the accompanying inefficiencies frees up capital enabling it to be redeployed faster,” he says. “Optimizing settlement processes and integrating collateral management systems means that PBs



Operational errors can be significantly reduced through automation

Are you looking for a long-term and sustainable relationship with your LP?

Talk to us today

Why work with us?

- Seamless multi-asset liquidity
- Optimised execution and superior market access
- Low latency pricing in NY4, LD4 and TY3
- Highly resilient connectivity
- Highly awarded non-bank Prime Services

26

TWENTY SIX DEGREES GLOBAL MARKETS

Prime Services tailored for you.



www.26degreesglobalmarkets.com

“Automation allows for real-time monitoring of credit utilization and counterparty exposures, which in turn facilitates better risk assessment and proactive decision making.”



Lochlan White

operational buffers come “with the by-product of improved pricing and in turn offering a more competitive offering. Understandably with these outcomes, automation has been swift.”

DIGITAL TOOLS TRANSFORM FXPB DATA ANALYSIS AND PORTFOLIO MANAGEMENT

New toolsets are transforming portfolio optimization and trade compression, with real-time capabilities leading to significant operational improvements. “Portfolio Optimization opportunities can be illustrated in real time with the right digital tools,” Dewdney says, a development that’s proving crucial as banks adapt to post-Basel III requirements.

This regulatory shift has intensified the focus on a critical area. “Banks and FXPB’s have been working towards more efficient compression of their books,” Smith says, noting that while ‘risk-free compression’ of identical trades is straightforward, the real challenge lies in handling trades with different economics or maturities.

can minimize the amount of liquidity that’s tied up in operational buffers.”

The alternative to automation in liquidity management presents clear challenges. “Manually right sizing limits on an ongoing basis is likely to prove a thankless task as liquidity is dynamic,” Dewdney says. “I cannot imagine a Prime Broker being thanked by a customer for doing so, rather than reprimanded for not doing so!”

These improvements in capital efficiency are yielding competitive advantages. White notes that reduced

The advances in automation are addressing historical pain points, particularly in trade novation.

As Dewdney explains, while identifying compression opportunities was manageable, the process itself was burdensome: “It was the novation’s element that chewed up the FX Prime Brokers time... Circulating novation requests and requiring three parties to join the endeavor within X number of days was inefficient!”

This inefficiency has driven changes in how FXPBs approach compression. Smith points out that limiting compression to perfectly matching trades severely restricts opportunities and benefits. “For FXPB’s to maintain competitiveness, a balance must be struck between constraining and managing residual risk and offsetting a sufficient population of trades for efficient portfolio optimisation.”

Real-time capabilities have become central to this balancing act. Dewdney’s emphasis on accuracy through digitization aligns with the industry’s push toward more sophisticated compression strategies, enabling firms to identify and execute optimization opportunities more effectively.

The complexity of modern portfolio optimization extends beyond simple trade matching. “The industry has come a long way in this regard,” Smith says, highlighting ongoing investments in proprietary technology to tackle operational complexity, credit utilization calculations, and risk management.

The intersection of technology, big data, and artificial intelligence is reshaping how FX prime brokers approach reporting and analysis. “Financial market businesses are a confluence of technology, big data and artificial intelligence,” Dewdney says, pointing to his firm’s use of sophisticated analysis tools that go



Real-time insights have become particularly valuable in today’s fast-moving markets

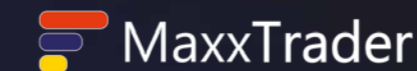
Your gateway to the global FX ecosystem, empowered with cutting-edge technology

SGX FX brings innovation to the global FX ecosystem - from accessing wide liquidity pools in both OTC and Futures markets, to customising cutting-edge workflow solutions for the buy and sell-side, our comprehensive offerings are designed to help you stay ahead of the curve.

Singapore Exchange

sgx.com

SGX Group Companies:



Taking a peek inside the digital revolution reshaping FX Prime Brokerage



Artificial intelligence will increasingly be embedded into Prime Broker products and services

beyond traditional transaction cost analysis (TCA).

These advancements are particularly crucial given the evolving regulatory landscape. Smith notes that “with the growing complexity of regulatory requirements, automated reporting and regulatory functions has become increasingly resource-intensive,” making digital tools essential for maintaining efficient compliance.

The sophistication of modern analysis platforms reflects this growing complexity. At Saxo, Dewdney explains, they use FairXChange to gain deeper insights into their FX liquidity business. “This application is a lot richer than simple TCA,” he says. “The platform has embraced this dynamic to help their clients establish unique, actionable insights into their businesses.”

The scale of modern FX operations makes such tools indispensable. “Saxo serves some of the largest retail intermediaries in the world, many of whom have over one million active clients. It is nearly impossible to carry out this analysis manually,” Dewdney says, highlighting how digital tools have become essential for managing large-scale operations.

“Digital toolsets are enhancing reporting and data analysis functions in FXPB by providing key tools such as real-time reporting and risk management dashboards,” Smith says, emphasizing how these improvements boost transparency while reducing operational costs.

The benefits extend beyond just operational efficiency. Dewdney points to the strategic advantages: “The upside to us is being able to focus on yield whilst policing the less desirable flow too. The result of this ongoing promote / prohibit approach is a more equitable business for clients and liquidity providers alike.”

Real-time insights have become particularly valuable in today’s fast-moving markets. Smith notes that these tools are “providing more accurate and timely insights,” enabling firms to make better-informed decisions quickly and efficiently.

The demand for sophisticated reporting capabilities continues to grow. As Smith explains, such tools are “becoming increasingly important as the demand for timely, accurate, and compliant reporting grows in an ever-evolving regulatory landscape.”

LOW-LATENCY SYSTEMS IN TECH RACE

Leading FX prime brokers are making significant infrastructure investments to support high-frequency trading demands. “Investing in high performance soft/hardware; state-of-the-art application servers, storage solutions, dedicated fiber connections in major data centers together with redundancy environments,” Dewdney says, noting how this creates “a secure, redundant and low latency environment suitable for sophisticated clients.”

The competitive landscape has pushed firms to optimize multiple aspects of their trading infrastructure. “Leading FXPBs like 26 Degrees have continuously invested in and optimised low-latency trading infrastructure, including both proprietary and vendor systems,” Smith says, emphasizing a balanced approach between internal development and external expertise.

White highlights the critical nature of these investments: “Latency will always be a watch word in the world of FX trading, so removing this as much as possible at every step of the journey is vital.” He points to specific industry trends, including “the co-location of servers and heavy investment in technology by the PBs to meet the needs of hedge funds and higher frequency traders.”

Beyond pure speed, firms are developing more sophisticated execution capabilities. Smith describes his firm’s development of “a suite of algos suited to the increasingly fragmented liquidity landscape we find ourselves in presently.” These range from “time, volume, participation and market impact based-based executions to extended hours Equity market executions and access to alternative liquidity sources.”

The drive for lower latency has broader implications for market efficiency. “The cost of orders not being filled first time is well reported and the response of market participants in recent years reflects this,” White says.

For firms serving smaller market participants, these technological advances enable new service offerings. “As a provider of outsourced trading services for small to medium sized funds, our high touch desks look to enhance our clients’ trading outcomes,” Smith says, noting how this allows client flow to be “executed in a more cost-effective way by leveraging the expertise of our teams for execution requirements around the clock.”

The emphasis on redundancy in these systems highlights how critical reliability has become alongside speed. Dewdney’s mention of redundancy environments underscores a key point: sophisticated clients require not just low latency, but consistent and reliable low latency, with real-time risk management capabilities maintained even at high trading volumes.

Transparency has become equally important as speed in modern trading systems. Smith points to how “real-time reporting and Transaction Cost Analysis (TCA) have been integrated to ensure the necessary levels of transparency,” enabling clients to both monitor execution quality and optimize their trading strategies in real-time.

When asked about the benefits digital transformation in FX prime brokerage has delivered, Dewdney notes that “This would be a long list,” before outlining key advantages including “realtime risk management” and improved accessibility, noting that “digital FXPB platforms allow clients to access critical trading data and carry out BAU operations online, anywhere.”



Blockchain technology also appears poised for adoption in the industry

Cost efficiency has emerged as a significant benefit. “Automation via digitization improves operational efficiencies, i.e. through lower head counts and fewer costly errors,” Dewdney says. This aligns with Smith’s observation that “automation has significantly reduced the operational burden and costs associated with manual processes while increasing scalability.”

Digital tools have become fundamental to the industry. “Make no mistake, counterparties absolutely expect to see digital tools – it’s really a given in 2025,” White says, emphasizing how these tools reduce operational risks and enable more sophisticated analytics.

The impact on liquidity management has been particularly notable. Dewdney points to “24/7 liquidity access with reduced intermediation” that has “tightened spreads, mitigated human error thus lowering transaction and clearing costs.”

Portfolio optimization represents another key benefit. “By decreasing gross notional exposure FXPBs can improve their balance sheets, reduce counterparty risk and improve regulatory compliance,” Dewdney says. This development has particular significance for balance

sheet management and regulatory requirements.

Regulatory technology has also seen significant advancement. Dewdney highlights progress in “regtech,” including “the automation of ID verification and transaction monitoring,” enabling prime brokers to manage counterparty risks more effectively.

The evolution of data analytics has enhanced client relationships. Smith points to his firm’s proprietary platform ‘Insights,’ which “allows us to deliver actionable insights that can not only improve performance and increase transparency but also help foster a more productive relationship with our clients.”

As White notes, the industry focus has shifted from revolution to refinement: “By now, this is a case of finessing rather than revolutionizing the industry,” with digital tools providing “another layer when it comes to better reporting or faster risk monitoring.”

TECHNOLOGY RACE POINTS TO FXPB’S DATA-DRIVEN FUTURE

So where does the future of FXPB lie? Artificial intelligence emerges as a key theme, one might say predictably. “Artificial intelligence will increasingly

THE INTERSECTION OF TECHNOLOGY, BIG DATA, AND ARTIFICIAL INTELLIGENCE IS RESHAPING FX PRIME BROKERAGE



be embedded into Prime Broker products and services," Dewdney says, highlighting potential applications in "personalizing client services and choosing which data to highlight to clients and when."

The industry is already seeing this transformation take shape. "We are already witnessing further acceptance and integration of AI and machine learning models," Smith says, though he notes these "efficiencies need to be balanced with an appropriate governance framework for decision implementation."

White points to AI's specific applications in risk management: "Artificial intelligence holds significant potential for the FXPB industry in the near term as it has the potential to enhance risk monitoring as well as highlighting toxic flow."

Beyond AI, blockchain technology appears poised for adoption. "The blockchain is also on the cusp of seeing meaningful adoption in the industry,

something that would streamline settlement and improve data security," White says.

The scope of automation continues to expand. Smith points to "continued automation across the entire trade lifecycle" driving greater efficiency and reducing operational costs. This evolution, he suggests, will enable "FXPBs to offer more scalable, cost-effective, and data-driven services."

White also notes that "further developments in APIs are imminent, enabling better integration of the FXPBs into proprietary trading systems."

Risk management capabilities are set to become more sophisticated. Dewdney highlights how "AI monitoring can also establish unusual patterns in transaction data and even prevent fat finger events," providing "an added layer of personalized service and risk management." Beyond execution, AI's influence extends to broader operations. Smith notes its potential

applications "not just in pricing decisions, but also capital deployment and treasury functions based on probable credit usage."

The transformation of FX prime brokerage through digital tools and automation shows no signs of slowing. As regulatory requirements grow more complex and clients demand greater efficiency, the industry's technology race looks set to intensify.

Yet beneath the drive for faster systems and smarter tools lies a fundamental shift in how prime brokers operate and serve their clients. The focus has moved from simply providing access to liquidity toward offering comprehensive, data-driven solutions that enhance every aspect of the trading lifecycle.

This evolution suggests that success in FX prime brokerage will increasingly depend not just on the breadth of services offered, but on the sophistication of the digital tools that deliver them.



Stay ahead with

Collapse to Mid

Struggling to decide between passively pegging to bid/offer for maximum spread capture or pegging to mid for better execution odds?

Why choose when you can do both?

The cherry on the top? Our solution lets you optimise for both spread capture and execution—seamlessly.



Faster fills



Minimal market impact



Smarter execution



Ready to trade smarter?

Minimise your market footprint
Maximise your opportunity



To learn more visit euronextfx.com



FX POST TRADE OPERATIONS:

Managing the challenges and achieving greater operational efficiency

Optimising financial resource efficiency through FX clearing

By Andrew Batchelor, Head of LCH ForexClear, LSEG Post Trade



Andrew Batchelor

Managing scarce financial resources is a growing challenge for FX market participants, who are under pressure due to a range of factors – from rising trading costs and increased regulation to complex, inefficient operational and workflow processes, internal competition for resources, fragmented data, and legacy technology.

Shrinking investment expenditure requires everyone to do more with less, making the choices of where to spend ever more critical – particularly in attempts to improve returns.

With the vast majority of the FX market remaining bilateral since the financial crisis, unlike many other markets, regulators have used alternative approaches to encourage participants to clear trades at a central counterparty (CCP). The

implementation of SA-CCR and Uncleared Margin Rules (UMR) has materially diluted returns for uncleared trades, mainly on the sell-side.

But this dilution has impacted the buy-side as well – through pricing and access to credit lines. Firms continue to explore ways to optimise their capital footprint and lower margin costs to ease the financial pressures imposed by SA-CCR and UMR.

So, how can participants increase financial resource efficiency?

The key to FX trading efficiency

With limited resources to build bespoke solutions that drive efficiencies, being able to reduce capital and margin costs in the simplest and most cost-effective manner is critical. The key to this is CCP clearing.

The simple power of a CCP is the multilateral netting achieved over the bilateral, fragmented ecosystem when it comes to both margin and capital (and credit lines). Add to that the lower margin requirements vs. bilateral, and clearing typically delivers reductions of 70% in NDFs and FX options, which are both in scope for UMR. Better offsets are achieved by consolidating multiple counterparties down to a single CCP, along with more favourable modelling/weighting.

The other main financial benefit of clearing is a reduction in capital requirements. SA-CCR, on a relative basis, has hit FX particularly hard, as it is calculated at a counterparty and currency pair level. This makes it difficult to optimise bilaterally given the high turnover of the asset class, number of participants and currency pairs, and the network needed to achieve material and lasting benefits.

After the initial multilateral netting benefits, simply facing a CCP (without having to engage in bespoke processes or find offsetting counterparties) reduces the counterparty risk weight by at least 90% (the best bilateral counterparties are 20%+ whereas a CCP is only 2%). For risk-weighted asset (RWA) calculations, clearing FX represents a significant optimisation opportunity by reducing capital and margin costs.

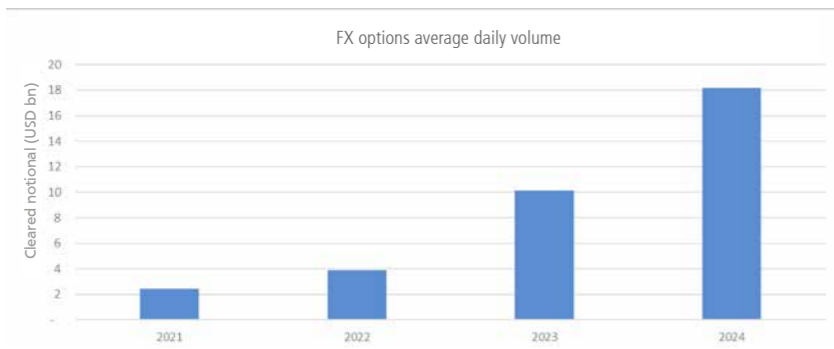
And of course, facing a CCP in a multilateral netted manner frees up credit lines to conduct more business elsewhere.

Innovating to expand the FX clearing ecosystem

FX forwards

To enable market participants to overcome these barriers, LSEG Post Trade's LCH ForexClear, SwapAgent, and Quantile businesses worked closely with market participants to

Source: LSEG



develop an innovative 'FX Smart Clearing' solution to help reduce capital and margin costs across entire FX portfolios.

A key first step towards wider clearing of FX swaps and forwards, FX Smart Clearing helps solve capital challenges by enabling banks to clear their FX forward trades through a CCP in an optimised or selective manner. Netting exposures and facing a qualifying CCP reduces the SA-CCR exposure, lowering capital requirements vs. equivalent bilateral positions, for both RWA and the leverage ratio (LR) calculation.

Launched in November 2023, the service now has seven clearing members and has completed nine runs. From October 2024, it has been available as part of Quantile's frequent FX capital optimisation runs. In 2024, the service cleared US\$35bn notional, with volumes expected to increase as more members join in Q1 2025. For an

in-depth discussion of FX forwards clearing, [read our Q&A](#).

Non-deliverable forwards (NDFs)

For more participants to benefit from FX clearing, it needs to be as commercially compelling as possible and an integral part of FX trading. LCH ForexClear already clears approximately 25% of the NDF market (when looking at the 2022 BIS FX survey). The integration of clearing into LSEG's NDF Matching central limit order book (CLOB) platform enables easier access to the full book of liquidity in the venue, for all participants, and better market transparency.

As the first FX NDF trading platform that offers pre-trade intent to clear trades, NDF Matching provides lower-cost execution and combines the liquidity, operational, and capital benefits of an NDF CLOB and clearing. We anticipate this will help to further boost and diversify FX liquidity – delivering a simpler, safer, and more efficient market for all participants.

Source: LSEG



FX options

The growth in FX options clearing has been nothing short of extreme, with cleared volumes up 100% vs 2023. As a product subject to UMR, it was the natural next step after NDFs, and with the multilateral netting and portfolio margining benefits achievable against an already large pool of risk from NDFs, understandably volumes have been growing. Additionally, given the G5 currency pair dominance in FX option volumes, it provides a natural offset to further boost the capital benefits that can be achieved by FX Smart Clearing for FX swaps and forwards.

What's the outlook for FX clearing?

FX clearing at LCH ForexClear continues to gain momentum, as more participants onboard and use the service, alongside established members and clients, driving record clearing activity throughout 2024 – notably in FX options, supporting the ongoing electrification of this market.

More participants and higher volumes help build a larger liquidity pool, increasing opportunities for multilateral netting, while reducing margin, capital footprint, and counterparty credit risk.

We look forward to launching new solutions developed in collaboration with our market partners. These include a current project with CLS that will remove silos between cleared and bilateral settlement, making it more efficient for banks to onboard to the CCP and creating significantly greater netting benefits.

In a cost-conscious environment, where financial resources are scarce and optimisation is critical, FX clearing holds the key to boosting post-trade efficiency.



We clear the way for your FX trading

LCH ForexClear can help your FX trading get to where you want it to be, optimising financial resources and credit usage across the FX product range.



For more information, scan the QR code to learn more about LCH ForexClear.



Overcoming the complexity of post trade FX options

By Paul Golden

Managing differing degrees of complexity across the post-trade FX options space demands a combination of operational change and technology investment - and the human factor should not be underestimated either.

Recent market data highlights the growing significance of the FX options market, with traders seemingly increasingly willing to accept higher potential exposure at sale time in exchange for lower risk when buying.

From a post-trade perspective, the challenges inevitably vary depending on whether the trades are bilaterally transacted or cleared. It is therefore important to consider both the differences and areas of overlap between these two approaches given that many clients value the flexibility of being able to choose between clearing or remaining bilateral.

FX options specifically add greater layers of complexity where the more exotic the option, the more data points there are to capture, agree and monitor. Furthermore, the majority of FX options are still manually traded, which reduces STP and increases the risk of error.

Simplifying workflow

"For asset managers, workflow is a

key consideration post-trade," says Louisa Kwok, head of TradeNeXus, part of State Street's GlobalLINK suite of electronic trading solutions. "These managers typically manage a large number of funds spanning different asset owners, jurisdictions and investor bases. This can create a large number of unique requirements across the standardised workflow which translates to a higher cost base."

External providers like TradeNeXus help address these needs and reduce costs by implementing features to help with data quality (such as rules engines to improve data input) and data insights (for example, reports and metrics) as well as offering best-in-class partnership products.

FX options pricing models are naturally more complex than forwards or spot. However, one of the benefits of clearing and standardisation of post-trade, with market participants facing a CCP or under a central agency agreement, is that some of these complexities can be reduced.

That is the view of Stuart Crabtree, FX options subject matter expert at LSEG, who goes on to outline some of the costs and benefits associated with the clearing of FX options. "Whenever you move into a cleared environment there will be

additional fees – such as clearing house and potentially clearing broker fees," he says. "In addition, there are initial margin and default fund contributions, which have to be deposited with the clearing house."

However, those margin calculations are done on a multilateral net basis, so participants will see a reduction in overall margin needed when clearing options rather than facing counterparties in the bilateral market. "When we look at the margin reductions in addition to the capital benefits of facing the clearing house, we see our members saving considerable amounts by clearing their FX portfolios".

Margin management

However, those margin calculations are done on a multilateral net basis so participants may see a reduction in overall margin or the financial resources they use when clearing options rather than facing other counterparties in the bilateral market. There are also capital benefits.

Kwok observes that FX options clearing can significantly change the governance and mechanism of the trade though. "For example, there are significant benefits to standardised margin calculations, dispute resolution and governance,



Stuart Crabtree

but there are also new considerations around understanding the settlement model, the exercise/expiry model and the likely points of concerns/failures," she adds.

Since OTC FX is still largely traded bilaterally and the concept of clearing in FX is relatively new to asset managers, clients may choose to delay adopting clearing - or manually manage their clearing workflows initially until they hit a volume threshold to invest in new solutions and technology to automate.

Portfolio focus

In relation to bilateral post-trade challenges, management of portfolio hygiene has been a key focus for banks with changes in regulation such as SA-CCR and Basel III Endgame to come. "Buy-sides are now also increasingly reviewing their margin and counterparty exposures," says Kwok. "Another form of management is in trade reduction through compression where there are effectively fewer trades to manage and process."

While highlighting the need for greater automation of workflows, Kwok suggests human intervention will still be required to resolve

disputes between front office, counterparty, custodians and clearing brokers particularly if there is negotiation or deeper investigation. "Data quality will be crucial to ensure a resolution can be found in a timely manner," she says. "We have invested in our data strategy through the delivery of a data hub that allows us to deliver more data products that encompasses both trading and back office, as well as advanced analytics to help optimise workflows."

This centralisation of portfolios and messaging flows allows for standardisation and automation in the market. "There is additional complexity with options and that is the expiry process," says Crabtree. "In a bilateral world, you are facing each counterparty directly, so you need to inform every party when exercising an option. Whereas in the cleared world, all expiries are against the clearing house. That messaging now needs to be sent to the clearing house and then out to the other side of those trades." LCH has implemented standardised reference price sources and a process to logically exercise or expire options automatically.

For all the talk of automation, Crabtree says there will continue to be a role for human intervention in the future of post-trade processing of FX options. "On the processing side, features such as automated exercise and expiry processes and running all cleared settlement flows together to determine net payments bring efficiencies," he observes. "But people will still be involved in some of the decision-making processes, especially at trade inception. No matter how well you design or code a process, there is always going to be an edge case that you may not have thought about, which is why ensuring there is appropriate



Louisa Kwok

oversight and people who understand what is supposed to be happening, and have the required expertise and knowledge, is really important."

Streamlined settlement

In terms of market developments that are going to be significant in the short to medium term, Crabtree refers to LCH moving into the main CLS settlement session this year, which will streamline and consolidate settlement and funding requirements for members, open up the service to the buy-side, as well as adding additional currency pairs.

"We have only just started the journey of physical FX clearing with options," he adds. "The more of these flows that end up being cleared, the more the benefits of the cleared model can be realised - the obvious ones being the credit intermediation and process benefits the clearing house brings.

At the moment, we only have options being cleared by the biggest banks in the market. The network effect will become much more powerful when there are more participants and different users involved, which is when the credit, capital, and process benefits from clearing can have an even greater impact."

Tackling settlement inefficiencies in FX

By Vivek Shankar

The FX market has long grappled with settlement inefficiencies in post-trade processes, a challenge that continues to impact market participants and operational workflows. These inefficiencies stem from the complex nature of FX transactions and the intricate web of relationships between trading platforms, clearing houses, settlement systems, and market participants. As the global FX market evolves, addressing these settlement issues has become increasingly crucial for enhancing overall market efficiency and reducing systemic risks.

Loic Moreau, Head of Risk and Operations at LCH ForexClear, sheds light on the current state of FX settlement. "Today, all cleared deliverable FX is settled in CLSClearedFX, a dedicated LCH session in CLS," he says. This settlement structure introduces challenges.

"The problem with having separate settlement sessions, one for bilateral

and one for cleared, means there is a double funding obligation from members to CLS where the payments flowing in do not net with the payouts," Moreau explains. This situation creates additional liquidity and operational complexities for market participants, highlighting the need for more efficient settlement mechanisms in the FX market.

Kah Yang Chong, Head of Business Development at TradeNeXus, offers further insights into these inefficiencies. "Compared to other financial instruments, OTC FX is fast-paced and complex with its wide array of market participants, trading rationale, and varied workflows," he explains. "It's difficult to find a one-size-fits-all solution, which may be why regulations are broad and often carve out FX to some degree." So is there anything that can be done operationally and technologically to solve this problem?

Where inefficiencies originate and efforts to solve them

Steven French, Head of FX & Securities Product Strategy at OSTTRA, echoes both points about fragmentation. "The fragmented nature of the FX markets means that execution takes place across a diverse range of trading platforms with multiple paradigms supported including bi-lateral, tri-party, and centrally cleared," he says. French also notes that while processes and services exist to improve settlement efficiencies, inconsistent adoption across market participants leads to a continued reliance on manual processes, resulting in trade breaks.

Chong adds that while most FX settlements are processed straight-through, the niche scenarios that do encounter issues can have significant impacts with higher operational burden and associated risk.

Data quality is a critical factor in settlement efficiency. "In some cases, systems may not be able to transform or interpret data correctly, requiring manual intervention to input, send, or consume data," Chong says. "This can lead to manual errors, incorrect interpretation of data or lack of visibility into the process." Furthermore, as the industry moves towards shorter settlement cycles, these inefficiencies become even more pronounced. Chong warns, "For example, as currency settlement cut-off approaches, this increases the chances of settlement issues as parties may need to switch settlement methods and rebook trades."



Data quality is a critical factor in settlement efficiency

PVP SETTLEMENT ORCHESTRATION FOR EVERYONE IN POSTTRADE

The home of **MarkitServ, Traiana, TriOptima & Reset**

osttra.com/pvp





Loic Moreau

Are there any solutions to these issues? Moreau details efforts at LCH ForexClear to solve some of them.

“We aim to be the first CCP to send all settlement instructions for physically settled FX into CLS’s main session. And that will be netted with the bilateral settlement,” he says. This integration, slated for later this year, subject to regulatory approval, is expected to address several key issues, including the operational, funding, and liquidity challenges outlined earlier.

The strategy stems from a collaborative effort with CLS and major market participants. “We partnered with CLS to find a solution to address these inefficiencies. And we didn’t set a limit because we had all these problems we identified in mind. And rather than

trying to address one and then another, we tried to find a global solution for the CLS-eligible currencies,” Moreau explains.

Chong emphasises the importance of a holistic approach in tackling these challenges. “At TradeNeXus, we continually engage with our clients to identify market challenges and work with our network of counterparties to find a common solution that we can implement to reduce manual workarounds and upstream hardcoding,” he says. This collaborative strategy aims to create a stronger ecosystem for market participants, improving overall marketplace efficiency.

French points to the critical role of post-trade vendors in all of this. “Post-trade vendors have a vital role to play in addressing fragmentation and inefficiencies throughout the trade lifecycle. Settlement risk can be significantly reduced by adopting solutions that are closely integrated with execution, providing transparency into trade breaks and messaging failures,” he explains.

French also underscores the importance of self-service capabilities in gaining real-time oversight and control over settlement risk causes. The question is, should these capabilities come entirely from a technological angle, or are there



Kah Yang Chong

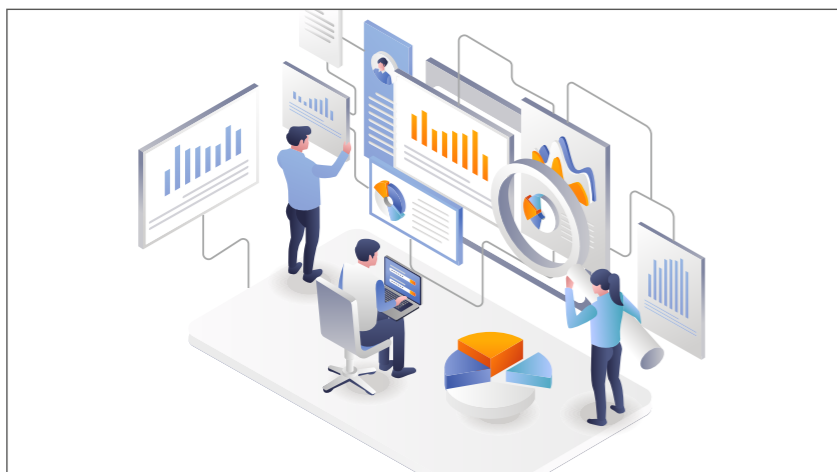
operational changes firms can make instead?

Technological and operational solutions

While acknowledging that technology will play a role, Moreau warns against piecemeal solutions that might create new problems while solving others. “You may create new issues. So you resolve one and you create another one,” he says. This shines a light on the need for operational efficiency, no matter the level of technological investment.

Chong believes closer collaboration within a firm is part of the solution. “Bringing the front office and operations closer together through closer coordination, transparency of data, and common understanding of the challenges and issues in each area,” Chong says, can lead to a better risk culture and improved outcomes.

He cites recent T+1 securities market changes as an example where such coordination proved crucial. “Our clients shared that they facilitated closer coordination between the teams because of the common need to ensure timely settlement of the shorter-dated trades by working with the front office to address potential pitfalls with shorter timeframes,” he says.



Monitoring and exception management tools can help firms to proactively identify and address issues before they impact settlement



The world’s markets, your way

Service available only to Professional clients and varies per jurisdiction
Trading involves significant risk of loss

www.finalto.com



Scan to find out more.





Steven French

French broadens the scope of the discussion, highlighting the need for improvements in pre-trade processes as well. "While post-trade processes receive much more attention now, pre-trade activities like onboarding firms, counterparties, funds, and accounts also require an overhaul," he says.

French also points out historical blind spots in post-trade processing. "Historically, post-trade processing has suffered from some blind spots as trades move from system to system, making it difficult to track confirmations," he explains. This lack of visibility often leads to uncertainty and inefficient communication methods to resolve issues.

Addressing these inefficiencies requires a multi-faceted approach. As Moreau puts it, there's a need for "better coordination

in the industry between the settlement providers, and also better coordination and communication on the technology that is used."

"Now we know we have new technologies," he continues, but cautions, "Are they really game changers for the industry? I do not think so. They are providing additional value, but there are already services in place that provide what people need."

Moreau instead stresses the importance of focusing on fundamental issues.

"What matters the most to me is the efficiency of the processes and the ability of banks to recycle payments to avoid having to provide additional funding," he explains.

Chong believes data and transparency are critical parts of the picture.

"Availability of good data (input and output) together with closer linking of front office and operations can solve many of the challenges highlighted above, and this may largely be addressed by technology," he says.

"TradeNeXus has integrated with State Street's LINK platform which is an interoperable interface bringing together platforms like FX Connect on the trade execution side together with TradeNeXus post-trade to provide insights into execution audits, trade

breaks and settlement status." On a more granular scale, TradeNeXus has recently partnered with buy-side clients and banks to launch a new feature that allows upfront identification of CNH vs CNY onshore trades at trade matching Chong continues, illustrating how technology can offer solutions where market standards are lacking.

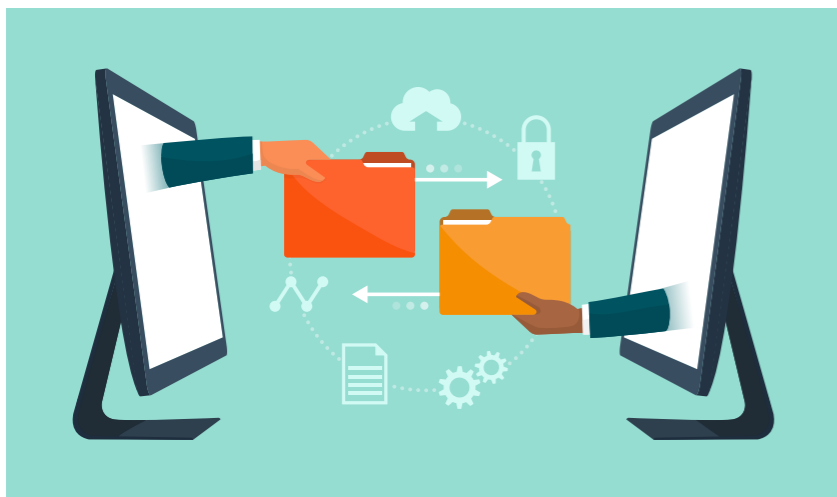
"Technology absolutely has a role to play in solving these problems," French asserts. He outlines Ostra's Onboarding, Connectivity, and Operations (OCO) initiative, explaining how it "helps firms address settlement inefficiencies by providing enhanced self-service onboarding and connectivity."

French also highlights the importance of proactive issue management and transparency. "Advanced monitoring and exception management tools can help clients proactively identify and address issues before they impact settlement," he says, adding that "improved reporting capabilities offers greater transparency and gives firms the clarity they need to understand and resolve any bottlenecks in the trade lifecycle."

Technology is solving long standing issues in FX settlement

As the industry moves towards shorter settlement cycles, these technological solutions are becoming increasingly crucial. "With shorter settlement cycles, this may require further optimization of processes with compressed timeframes," Chong notes. "Technology will play a key part in the solution by taking exceptions management to the next level."

However, technology is not a silver bullet. The path forward appears to lie in a balanced approach that leverages both new and existing technologies, improved data quality and processes, and maintains a focus on the fundamental goals of efficient and risk-minimised settlement.



Closer collaboration between the front office and operations can lead to a better risk culture and improved outcomes

TradeNeXus

Bringing together a community of FX market participants to **drive efficiencies within the post-trade workflow**



Matching / Confirmation

Automated trade matching, enrichment and confirmation messaging



Gross/Net/CLS Settlement

Multiple settlement types supported through tailored rules management



SSI enrichment

Enrich trades with locally stored SSIs and use broker published instructions for enhanced STP



Custodial & Third-Party SWIFT Messaging

Real-time SWIFT messaging to custodians, agents and counterparties



CLSTradeMonitor

Transparency into CLS workflow with a consolidated view across custodians



Clearing Connectivity

Submit and manage FX transactions for central clearing within a single platform



Trade Optimization

Providing asset managers with access to identify optimization opportunities, automate their compression and novation workflows, and consolidated monitoring.

TradeNeXus is an award-winning platform with innovative solutions to help clients navigate the ever-changing post-trade landscape.



www.tradenexussolutions.com

This communication is provided by State Street Global Markets International Limited ("SSGMIL"), or, where applicable and permissible, its bank and non-bank affiliates ("State Street"). SSGMIL is authorized and regulated by the Financial Conduct Authority. This communication is intended for general marketing purposes and is intended only for professional clients or eligible counterparties or their equivalent. Products and services described herein may not be available in all jurisdictions or through all State Street entities and may only be available to certain users of TradeNeXusSM, FX Connect MTF[®] (which is registered with the Financial Conduct Authority as a multilateral trading facility (MTF)), or certain other State Street services. Activities described herein may be conducted from offshore. Information provided is of a general nature only and has not been reviewed by any regulatory authority.

This communication is not intended for retail clients, nor for distribution to, and may not be relied upon by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to applicable law or regulation. This communication or any portion hereof may not be reprinted, sold, or redistributed without the prior written consent of State Street. This communication and the information herein does not constitute investment, legal, or tax advice and is not a solicitation to buy or sell currencies, derivatives or any other financial products or services, nor is it intended to constitute any binding contractual arrangement or commitment by State Street to provide securities, foreign exchange, derivatives or any other services. Certain foreign exchange business, including spot and certain forward transactions, may not be regulated in all jurisdictions. Past performance is no guarantee of future results.

TradeNeXus: Becoming an essential part of its clients' post-trade workflows.

TradeNeXus is a part of GlobalLINK's suite of market-leading e-trading platforms, technology, data and workflow solutions from State Street. We asked Ben Lancaster, Head of Product at TradeNeXus, which delivers straight-through processing, operational efficiencies and settlement risk reduction, to tell us more about the comprehensive services it offers.



Ben Lancaster

Please tell us a little about the various market participants who make up the TradeNeXus ecosystem?

TradeNeXus is an award-winning post-trade FX and money markets platform for asset managers. Our ecosystem consists of more than 400 global asset managers across 190,000 funds interacting with over 70 banking groups and 800 custodians. Our ecosystem also integrates important financial market infrastructure providers such as SWIFT, CLS and LCH.

Why did you decide to build this community?

The community is built to drive efficiencies and add value across clients' workflows in post-trade FX. Post-trade FX remains a fragmented market with many bespoke and legacy processes, and our core product brings together clients and their counterparts to drive consistency, STP and minimise costs. We are focussed on innovation, and continue to invest in new features and ideas as the growing need for automation, data-driven decision making and simplicity continues to be key drivers in post-trade FX.

We have been at the heart of FX post-trade for over 20 years, and we continue to see growth in volumes and clients, which is testament to how the industry values our product.

What are the core services and functionality that TradeNeXus offers?

TradeNeXus' core functionality is trade matching, confirmation and settlement messaging for foreign exchange and money market transactions. The platform offers consolidated multi-counterparty view of post-trade activities, including exception-based confirmation management workflows. SWIFT messaging is a core component of TradeNeXus and the platform automatically enriches custodial SWIFT messages with broker SSIs.

TradeNeXus settlement workflow supports Gross, Net and CLSsettlement which is facilitated through user tailored rules to determine settlement method. Net settlement figures are also agreed on the platform between our clients. Our platform provides customisability to meet unique client needs, whilst maintaining a consistent workflow for both asset managers and banks.

In what ways is the shifting regulatory environment continuing to put increased pressure on buy-side firms, especially asset managers, to seek more effective post-trade workflow solutions?

Following the T+1 securities settlement changes in US/ Canada, firms had to complete a front-to-back review of their processes and workflows to ensure their workflows are efficient to handle the compressed timeframe. This change impacted both front office and post-trade teams, and the need for transparency and data quality is becoming ever more important to identify and resolve settlement issue early on. This has led to the growing demand for advanced data analytics on both client and counterparties operational metrics provided by the platform, as well as adoption of products such as CLSTradeMonitor that provide real-time transparency to the settlement process.

As data become ever more important to our clients, TradeNeXus has data at the core of our strategy, and recently implemented a datahub which encompasses both trading and post-trade data. This allows us to look at datasets across our entire ecosystem, and launch more data-driven analytics and products to help our clients navigate both their day-to-day operations and strategic goals.

This includes our upcoming data analytics for clients that allow them to assess their broker performance, and integration into State Street LINK platform, which is an interoperable platform interface which has integration to FX Connect next to TradeNeXus to aid in quicker dispute resolution and greater transparency of any operational hold-ups.

You have worked hard to make your solutions seamless for clients. What advantages does that have, particularly for firms that want to adopt your add-on services?

TradeNeXus' simplicity is its strength. Clients who utilize TradeNeXus today can opt into our add-on services modularly and continue to benefit from a consolidated dashboard and workflow to manage all their post-trade activity. This includes leverage existing account setups, integration workflows, and rules engine which will minimize the uplift required for clients to adopt. This speeds up time-to-market and reduces training and resources required.

Please give us some examples of the collaborative work you have recently been undertaking with other organisations which has helped you to expand TradeNeXus beyond a matching and messaging platform

Ahead of US and Canada T+1, TradeNeXus collaborated with

State Street's StreetFX to deliver a partnership solution with DTCC. By connecting to DTCC Institutional Trade Processing (DTCC-ITP) and its central trade matching platform, CTM®, StreetFX can automatically execute the required FX trade necessary to fund the purchase/sale of related securities transaction. Once the FX trades are executed, they will flow through to TradeNeXus for straight-through-processing for post-trade workflows, serving as an automated solution around T+1 considerations. This initiative was recognised in the FX Markets Asia Award 2024 as TradeNeXus and StreetFX was awarded "Best bank for post-trade services".

In recent years, TradeNeXus has also collaborated with market partners to launch new joint offering including CLSTradeMonitor integration, LCH clearing connectivity workflows, and trade optimisation workflows with Capitolis, all accessible within the TradeNeXus dashboard.

What are your plans for growing your portfolio of post trade FX services and solutions this year into next?

Building on the work done this year on data, TradeNeXus will be introducing broker KPIs towards the end of this year and will further enhance metrics in aiding clients in optimizing their workflows and extend interoperability in our LINK platform, which brings together research, trading, analytics, post-trade together in one interface.

Staying with automation, we will be working with our clients to integrate to our netting automation feature. Users will benefit from a quicker process for agreeing settlement netting.

In the second half of this year, TradeNeXus will also be looking to launch a new settlement repository to provide buy-side asset managers to opportunity to automate their SSI exchange with counterparties.

How much more innovation can we expect to see from TradeNeXus in the future to ensure it continues to be at the centre of the post-trade ecosystem?

There continues to be significant change on the post-trade horizon whether it be regulatory driven initiatives or new technology. TradeNeXus will continue to partner with our clients and leverage our ecosystem of participants to invest in new features that can add value to the post-trade space. In the drive for greater automation and market structure changes like T+1, there are significant opportunities to re-look at existing FX processes and improve on them. TradeNeXus constantly engages with its clients and partners to improve its service.

Exploiting the power of fintech in post trade FX

By Paul Golden

Fintechs are already tackling inefficiencies across many aspects of post trade FX and there is a real sense that significant improvements can be achieved as the market continues to evolve.

The fintechs operating in this space have adopted a variety of approaches. Some are focused on the digital experience, while others have established themselves as 'second generation' providers, using interoperable technologies to enable firms to bridge the gap between legacy infrastructure, their need to operate in real-time right now and building systems to support future connectivity and business requirements.

"As trade volumes have increased, we have seen a widening gap in terms of what legacy systems can do," says Arjun Jayaram, founder & CEO of Baton Systems. "When we add T+1 and tokenised assets into the mix, it is clear that we are in a transition phase." Increased transparency is often referred to as a key benefit of fintechs operating

in the post trade FX space, but Jayaram says this is just part of the answer.

"You need transparency of trades and liquidity where firms can have a real-time view of their assets starting from when the trade or an obligation originates, as that asset moves, right to the point where they have assets in their bank accounts and reconciled with their books and records," he says. "You also need what we refer to as collaborative workflows. These are automated, programmable distributed workflows governed by pre-agreed rules, alerts and controls."

Regulatory requirement

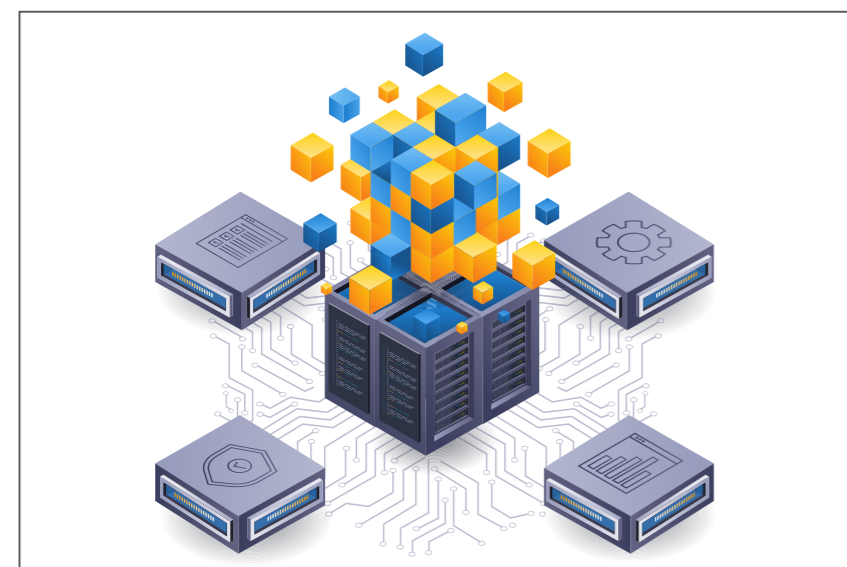
There is considerable interest in the extent to which fintechs can help FX market participants with their regulatory



Arjun Jayaram

compliance, so it is essential that fintechs understand where they sit in the process and how this is impacted by the regulatory spectrum. There is also a role for new technology in helping to improve risk management.

Baton Systems believes blockchain and DLT have a significant role to play in streamlining post trade processes. However, this does not mean it is the answer to every challenge. "I would go so far as to say that blockchain is the wrong solution for some problems, for example where there is a centralised venue and you need access to data," says Jayaram. "However, in situations where you need shared data or a shared view of the data and there is a collaborative workflow, a distributed ledger is of great value. For things like liquidity and netting in FX, collateral management or cashflow management there are definitely benefits."



Blockchain and DLT have a significant role to play in streamlining post-trade processes

Fintech influence

There has been a significant amount of change in the market that doesn't show signs of slowing and everyone is feeling cost, resource and roadmap challenges. Fintechs can help supplement legacy technology and bridge the gap for quicker and often more cost-efficient adoption of needed changes.

That is the view of Louisa Kwok, head of TradeNeXus, part of State Street's GlobalLINK suite of electronic trading solutions, who adds that by participating in a vendor solution with an existing ecosystem, clients can benefit from the know-how of other participants.

"TradeNeXus has over 20 years of experience servicing 400+ global asset managers and their counterparts. We leverage our client base in garnering a wide view of challenges to create value-add solutions that can flex to suit varying client needs. We continually look at ways to innovate with an eye on client adoption impact. TradeNeXus is a part of State Street's LINK platform which is an interoperable workspace that brings together execution venues with our post trade solution to provide lifecycle transparency."

New technology based on front-end interoperability such as FDC3 (Financial Desktop Connectivity and Collaboration Consortium) standards can bring together applications that historically sit in silos into one single desktop environment. This can not only increase transparency, but also allow data to be shared between the applications on the front-end, creating a new paradigm for data sharing between applications without API integrations.

In the FX world, transparency should only exist between parties to a trade, or a group of trades shared with regulatory bodies by the trade originators and permitted to those trade parties.

Fintechs can enhance this transparency by providing real-time visibility into each stage of the post trade process, allowing secure sharing of data between trade participants and regulators and leveraging advanced analytics to provide the counterparties with a clear view of the entire process.

Standards drive

"New technologies drive the creation of common data standards, which are essential to creating lasting change in the industry and for meeting regulatory requirements," explains Andy Coyne, founder of CobaltFX. "More harmonised standards will allow institutions to leverage shared infrastructure, reducing the complexity of complying with fragmented regulations."

Coyne acknowledges that DLT brings benefits such as immutability and enhanced security but notes that there are issues around speed, interoperability between chains, cost and KYC.

"It is important to differentiate between layer 1 and layer 2 technologies as they have different cost and time priorities," he says. "In the FX market, layer 1 refers to the blockchain infrastructure which is typically used for the final state of transactions rather than for risk management. External layers need to be real-time, inexpensive and secure to address the broader industry challenges beyond transaction finality."

As for future developments, Jayaram refers to a number of potential catalysts for change including the high interest rate environment and faster settlement.

Settlement challenge

"We are seeing big market structure changes with new treasury clearing rules coming in and the move to T+1 that are likely to shape the industry," he says. "The next step is real-time settlement



Andy Coyne

24/7, where intraday liquidity becomes an issue because of the shortened cycle. Then there are light tailwinds such as emerging tokenised money market vehicles, although these are nice-to-have rather than something likely to warrant major change across the industry."

Kwok observes that post trade processes and data will no longer sit in silos. Regulations like UMR have brought front office and operations closer together and there will be greater demand to have a holistic view of the trade from order creation to settlement to address structural changes in the industry and the definition of best execution. "This means the need for data - and breaking the silos between systems - will continue to grow," she adds.

Coyne anticipates increased profit opportunities as fintechs enable full credit optimisation, preventing over-allocation and ensuring accurate limit-up scenarios.

"With streamlined credit deployment, trades will no longer be missed due to the slow and archaic means by which credit is deployed," he says. "Additionally, there will be wider acceptance of shared technical infrastructure for aspects of trade management that do not represent a profit-making opportunity."

How FX forwards clearing is addressing market demand for capital efficiency

With James Shanahan, Head of Product, LCH ForexClear



James Shanahan

We know FX forwards clearing is on the horizon so can you give us some context on LCH ForexClear today?

LCH ForexClear is already the market leader in clearing non-deliverable forwards (NDFs) and FX options. Multilateral netting means that initial margin is significantly less expensive at the clearing house than if these instruments remained bilateral and subject to the Uncleared Margin Rules (UMR). Adding forwards into this clearing mix and portfolio margining them together can further reduce margin costs, while providing regulatory capital relief due to the CCP 2% counterparty risk weight, as forwards can be offset against existing

FX option and NDF risk positions. This means that even though forwards aren't subject to UMR, clearing them can reduce financial resource requirements for banks by providing regulatory capital relief for zero to minimal initial margin increase (or even a margin reduction).

Where does demand for forwards clearing come from?

FX swaps and forwards represent 64% of the global market volumes, and the recent implementation and ongoing phase-in of SA-CCR internationally makes trading more capital-intensive than ever before. This means that, in order to continue using these products and providing them to clients, banks need to increase the efficiency with which they deploy capital to support these products.

Can you explain to us what FX Smart Clearing is?

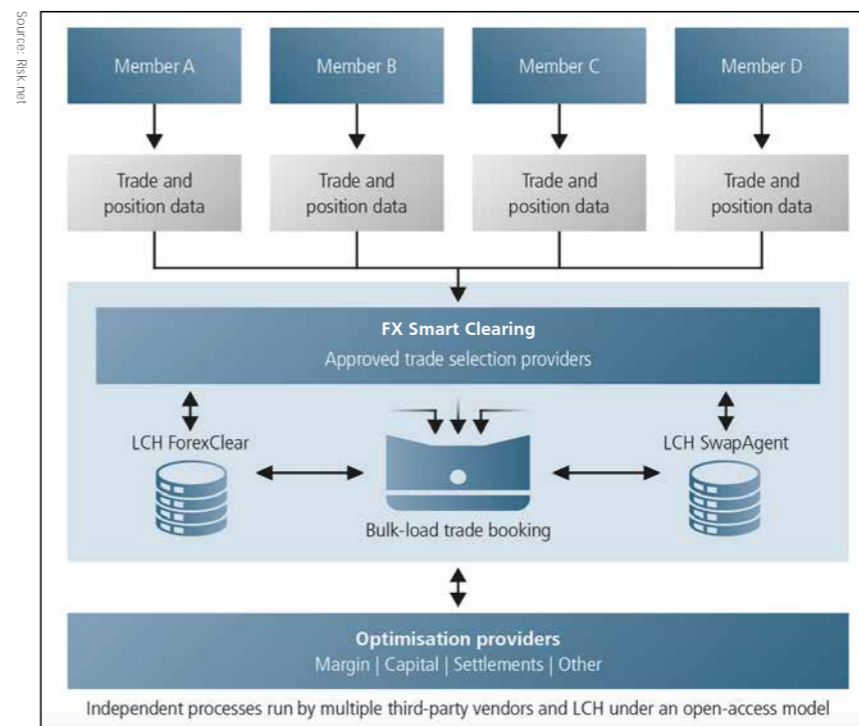
FX Smart Clearing is the 'intelligent', selective clearing of FX forwards and swaps to help banks reduce their capital costs across their entire FX portfolio, while constraining margin costs to an acceptable level. By facing a qualifying CCP, banks can reduce their counterparty

risk weights over bilateral counterparts, lowering capital requirements vs. equivalent bilateral positions, for both risk-weighted assets (RWA) and the leverage ratio (LR) calculation.

We work with Approved Trade Selection Providers (ATSPs), such as Quantile, whose optimisation processes suggest which trades to clear with LCH ForexClear. Cleared trades will keep cleared margin within predefined tolerance levels set by each bank, while significantly reducing regulatory capital requirements.

What's the current situation with forwards clearing and where do you see growth coming?

We're currently building a network of banks that can undertake optimisation of forwards and clear them at reduced costs in terms of margin by accessing natural hedges against their cleared NDF and FX options portfolios, or on their own merits to a level of margin the bank deems acceptable. As this network expands and adoption grows, the benefit to the banks is expected to grow significantly as the addition of each bank to the network offers a disproportionately greater number of potential offsets for the ATSP



FX Smart Clearing in action

optimisation process to find. Banks each have their own set of constraints, such as credit limits to bilateral counterparties in the network, how much initial margin they're prepared to take on for a given capital benefit, and how many trades they want to clear. The more these constraints are eased, the higher the optimisation efficiency becomes.

There's lots of talk about selective clearing. Are there plans to push 'native' forwards clearing?

Absolutely. FX Smart Clearing helps banks show that they can manage the margin and capital impacts of clearing forwards in a cost-effective way, meaning that they can demonstrate a business case that clearing all forwards – not just a small subset of trades – is resource-efficient too (in terms of capital saved vs. margin incurred).

There are a number of ways banks could achieve 'native' forwards clearing. They could clear with a filter at the point of trading, i.e. certain currencies that are smaller so they

won't drive margin increases, smaller notional or even margin reducing only. They could periodically 'backload' or sweep portfolios of existing trades into clearing on the same financial resource efficiency basis as they send new trades. They could do different combinations of 'filter' and 'sweep'.

We are now working with banks to understand the most beneficial way to move to 'native' forwards clearing, while focusing on ensuring forwards clearing is more resource-efficient than keeping those trades bilateral.

Can you describe your ideal end-state?

Ideally, we'd like to see banks first clear everything that's eligible, with the knowledge that it can then quickly be optimised, rather than optimise and then clear. This speeds up how quickly banks can access the benefits of clearing.

There has been lots of talk about the interdealer space but are there plans to address the buy-side? And what would this look like?

Forwards clearing has the potential to offer huge value for the buy-side by reducing the cost of trading, reducing the buy-side's usage of prime broker balance sheet, freeing up credit lines with prime brokers and providing better access to liquidity.

It also reduces reliance on prime brokers, providing backup and portability options in the event of a prime broker running out of credit lines or going under for any reason – making trading easier, cheaper and operationally safer, in the same way clearing already does for so many other instruments.

What are the barriers to adoption of forwards clearing?

Bank technology can be rigid and most clearing infrastructure was built to work by asset class and counterparty for mandatory clearing, so banks often have an inflexible clearing logic in their technology stack.

With FX Smart Clearing, our workflow gets round this by bypassing a substantial part of the normal clearing workflow because the trades come directly from the ATSP to LCH ForexClear. Then all the banks have to do is perform a reconciliation and ensure the trade is booked facing LCH – what was a bilateral trade is now cleared.

Banks are often set up to expect the case for clearing to be regulation-led (e.g. by mandate or SIMM), rather than economically led. This makes it extremely important to get the economic case for forwards clearing, and make it visible throughout each bank, to ensure those benefits are widely, as well as deeply, understood. Our growing forwards clearing network demonstrates that this is already happening.

Post trade FX operations: A process of evolution not revolution

By Vivek Shankar

Much has been made of existing inefficiencies within post-trade FX operations. The question is, where does the industry go from here? Do we need an overhaul of existing processes or is there a way to evolve them to meet market needs?

"I think there's a lot that can be done in the FX market, especially within post-trade FX," Laura James, COO of LCH ForexClear, asserts. "One of the hurdles is the sheer scale and number of participants in the FX ecosystem, probably the largest of any asset class, and it continues to grow." With growth comes complexity and many of the challenges post-trade FX currently faces.

While challenges such as aligning the buy and sell side loom, James feels strategic partnerships point a way forward for the industry. What do these partnerships look like, and how can FX market participants come together to transform post-trade operations?

Participant collaboration and realising market reform

Kah Yang Chong, Head of Business Development at TradeNeXus, believes consensus and strategic partnerships between market participants are essential. "If market participants come to a consensus on a solution, adoption will be greater," he suggests.

Chong advocates for an evolutionary

approach. "It is important to build and improve on an existing ecosystem as this will help adoption of change, versus adopting a revolutionary product," he says. "Strategic partnerships may be important to achieve this in the future."

James echoes this point, proposing leveraging industry bodies to initiate crucial conversations. "I think what we need to do is use more [industry] bodies like GFMA, ACI, and others to actually start the conversation," she says.

Meanwhile Steven French, Head of FX & Securities Product Strategy at OSTRA, is optimistic about the industry's capacity to work together towards a common goal. "FX Market participants have proven time and time again that they can work together to address changing market requirements," French states, whether due to "regulatory change, industry guidelines or in reaction to macroeconomic events."

"Industry bodies including GFMA and the Global Code are doing a fantastic job of bringing focus to those areas of FX (including post-trade) and are generating discussion, driving consensus, and publishing industry guidelines," he adds.

As an example of collaboration, James mentions a partnership with Aladdin as "a big step for the post-trade FX ecosystem," which aims to support



Laura James

FX clearing for asset managers and demonstrates how the industry is evolving even without mandates.

However, French notes that post-trade processes need simple solutions that avoid adding complexity, something Chong resonates with. "Greater agreement means listening to customers from ideation to delivery," Chong says. "Ultimately, this is what drives value to clients, and delivers change."

James states that industry forums are ideal venues to foster collaboration and set a path for the future of post-trade FX. "Like ACI's Square Mile debate, we need to have a discussion around what the post-trade landscape would look like if we were to start today," she says. "What steps do we take to get there?"

French notes that potential improvements must result in substantial efficiency gains, not

smartTrade

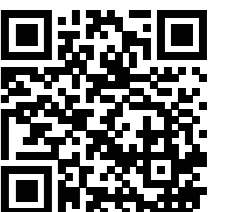
Turning Payment Flows into Revenue Streams

- A Complete Range of Currencies, Products, and Transaction Types
- Intuitive Workflows for Simple and Complex Payments
- Connecting to FX Liquidity with Dynamic Payment Routing
- Ready for ISO 2022 Compliance

CBP Architecture Overview



**Unlock the Potential.
Maximize Your Revenue Today!**



just incremental improvements. "Improvements must provide measurable savings in resource, risk and time across teams and processes in order to realise true market-led reform," he says.

Addressing the regulatory element

As with all markets, improvements to existing processes need regulatory blessing and initiative. James emphasises the importance of collaboration with regulators when promoting the benefits of improved processes. "We're consistently working with all of the regulators and we think there's numerous benefits to clearing," she states, adding that these conversations span different jurisdictions.

Chong cites the T+1 initiative as an example. "Whilst driven by securities market changes, T+1 has had a positive impact on post-trade and FX through front-to-back operational and trading processes review," he says. "This spurred a lot of discussions with clients on our side, to further understand their pain points and introduce new features."

Basu Choudhury, Head of Alliances and Partnerships at OSTTRA, is quick to clarify the kind of regulatory reform the industry needs. "If by regulatory reform we are implying



Basu Choudhury

global mandates or "legal obligations" such as those that exist for other non-cleared OTC products, then the answer would likely be a firm no," he says. "We could see a two-tiered ecosystem, where financial institutions in smaller countries would have high barriers to entry and lose access to key markets and trading parties."

Instead, he points to the FX Global Code which focuses on adherence to principles as the right way forward. French notes that a lot of recent regulatory focus has been on risk mitigation within counterparty, credit, and settlement.

"No formal clearing mandate has been issued for the clearing of FX, despite the large notional amounts associated with FXOs, but we have seen a steady increase in cleared volumes," he says. "This shows industry participants can work together when they recognise risks, but the time to adjust internal processes and systems can drag on when no official deadline is in place."

While acknowledging incremental regulatory initiatives such as SA-CCR rolling out to European banks, James highlights the significance of regulatory developments in specific jurisdictions. "What's interesting for us is what the individual jurisdictions are doing?" she says. "Because if you get a change in India or Korea, that actually allows or encourages new participants into clearing."

Looking towards the future

James says an ideal future FX post-trade landscape will be centred around a central hub. Such a system could address the current "bifurcation of the flow" and allow for tailored optimisation, noting, "Different people and participants can optimise different things. Some might want to optimise margin, some might want to optimise capital."

She also notes that strengthening the link between clearing and credit utilisation is critical, along with the importance of reflecting cleared trades in credit lines, which could free up trading capacity. "When you send a trade to clearing, that credit line should be freed up," she says. "But what we struggle with today because of the convoluted ecosystem is actually once that trade is cleared, is that even feeding back up to the trader?"

Chong anticipates significant changes in the FX post-trade landscape in the future. "T+1 settlement will become the norm outside of FX hedging for securities trades," he says. "This means less risk for the system as a whole, but requires more focus on post-trade FX to increase automation, data quality and improve processes".

French believes a "defragmentation of processes through the streamlining of trade processing events, combined with greater visibility into operational tasks" is critical to continued post-trade development. "There is an industry-wide black hole in current operations processes between trade break management and T+1 reconciliation that OSTTRA are working hard to illuminate with the introduction of enhanced pre-trade technical onboarding capabilities and post-trade transparency across the entire post-trade FX ecosystem," he says.

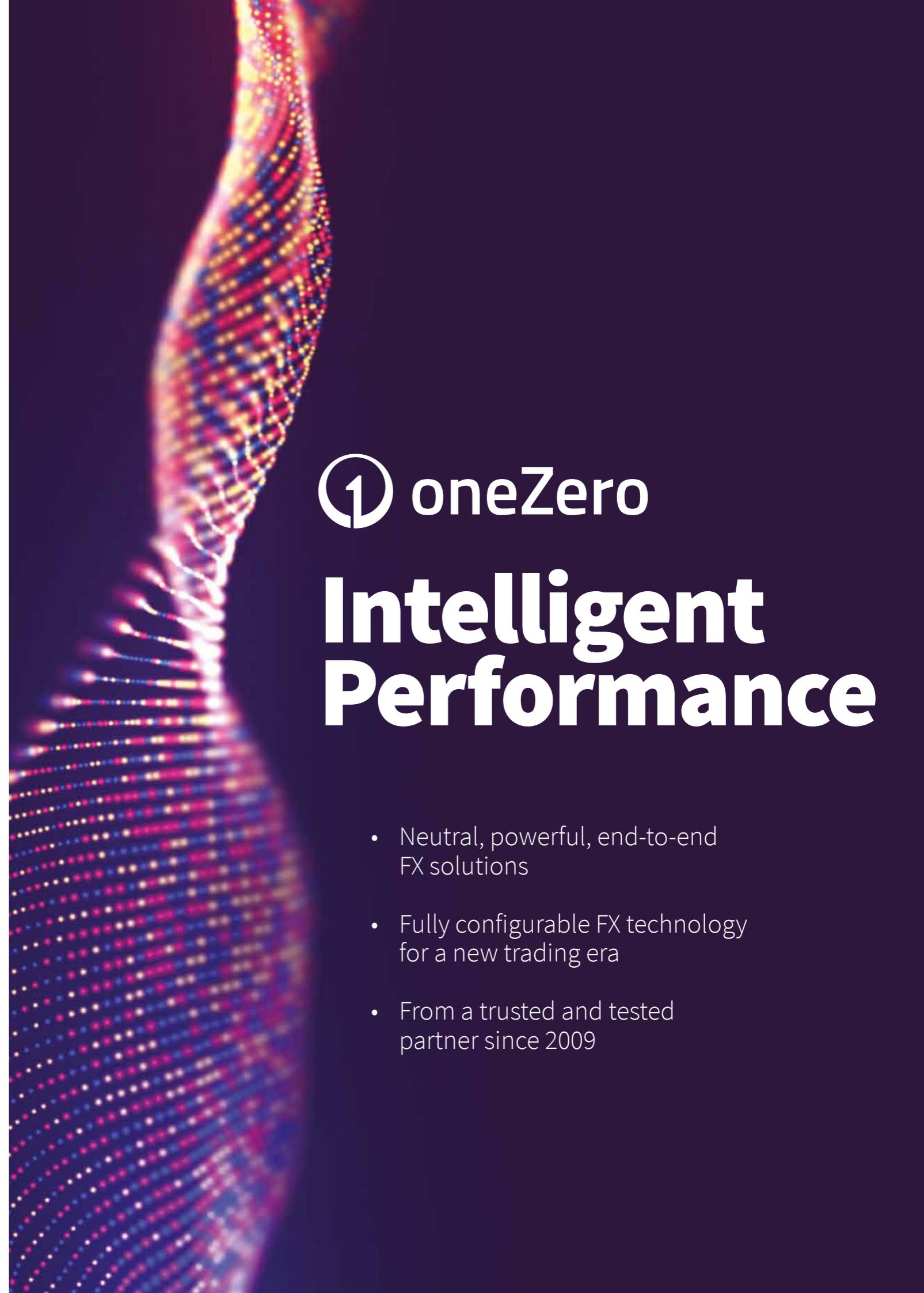
He states that this development coupled with "frictionless post-trade processing across the trade lifecycle" will revolutionise post-trade processing.

Given the number of significant developments in the pipeline, the FX market can certainly expect changes to post-trade processing soon, and hopefully fewer hurdles.

 oneZero

Intelligent Performance

- Neutral, powerful, end-to-end FX solutions
- Fully configurable FX technology for a new trading era
- From a trusted and tested partner since 2009



StoneX®

Helping clients
unlock real value
to stay ahead of
the competition

Gerard Melia

StoneX Pro delivers comprehensive FX trading and hedging solutions for institutions and corporates across the global markets. e-Forex spoke with Gerard Melia, Head of Sales at the firm to discover more about how it is combining top class customer service with access to new platforms, products, strategies, markets and liquidity venues to give its clients a competitive edge.

Gerard, you have nearly two decades of experience in the financial services industry. How did you arrive at StoneX?

2025 is my 20th anniversary in financial services. It feels like a long journey with plenty of highs and lows, challenges and achievements and some very valuable life lessons along the way. Despite the years of experience, I know there's still so much more to learn and achieve and that keeps me motivated. My path into finance wasn't exactly conventional. I started out in marketing, and my first "grown-up" job was as a webmaster in the electronics industry. Back then, coding was still very much hands-on as content management systems weren't yet mainstream. Let's just say I crashed the corporate website more times than I care to admit while tinkering with HTML! I made the leap into financial services in 2005, entering through the CFD & FX sector - but always working on the B2B side of the business.

Those early years were fast-moving and full of change, not unlike what we're seeing in crypto today. It was an era of rapid expansion, steep learning curves, and making my own fair share of mistakes, all of which played a role in shaping me. I did a few years contracting in FX, Payments, and various technology firms before finding my way back into the FX liquidity space with GAIN Capital, where I led the B2B Relationship Management team before taking the reins of the CFD Liquidity business. That role evolved significantly when GAIN Capital was acquired by StoneX in 2020, leading to the integration of our CFD Liquidity

team with StoneX's long-established FX division. This merger ultimately paved the way for StoneX Pro, led by Eric Donovan, whose leadership has been instrumental in refining and expanding our FX offering. It's been quite a ride - one that has taken me through different industries, technologies, and market cycles. But what's kept it exciting is the constant innovation and the sense that, even two decades in, there's still so much ahead.

What do your current day to day responsibilities at the firm usually involve?

I lead the sales and marketing activities for StoneX Pro, so my primary focus is on expanding our eFX client base and driving revenue growth. I'm fortunate to work with an exceptional team of seasoned professionals who are highly

experienced. I try to take on a more strategic approach to our sales and marketing effort to support both global and regional activities.

In collaboration with Claire Dollander in our New York office, we work closely with our regional sales leadership teams to localise our marketing strategies.

Fred Allatt - who has been with StoneX for nearly 14 years and is a well-known figure in the industry - leads the Americas team, alongside Nichole Herendeen, Jeff Blanco, and Sara Gonzalez Leyva.

In APAC, a region that has seen significant growth for StoneX Pro in recent years, QianYing Goh leads our efforts alongside Jeanette Kong. Much of my time is spent understanding the unique requirements of each region



StoneX Pro offers a simplified and cost-effective one-stop solution for FX trading, hedging and liquidity

StoneX Pro – Helping clients unlock real value to stay ahead of the competition

and collaborating with the local teams to support their growth trajectory.

Our EMEA operations are based in London, with Andrea Michael on the sales team and Sevinc Edikci and Cristina Garcia Hernandez handling FX operations and client support. My role is essentially ensuring this talented, high-performing team has the support they need to excel, while getting out of the way to let them do what they do best. Together, we're building an effective global strategy that drives results while remaining adaptable to local needs.

Please remind us about the range of turnkey FX solutions that StoneX Pro provides for its clients.

We offer a simplified and cost-effective one-stop solution for FX trading, hedging and liquidity with advanced digital platforms, and peace of mind knowing that our parent company, StoneX Group, is publicly traded and



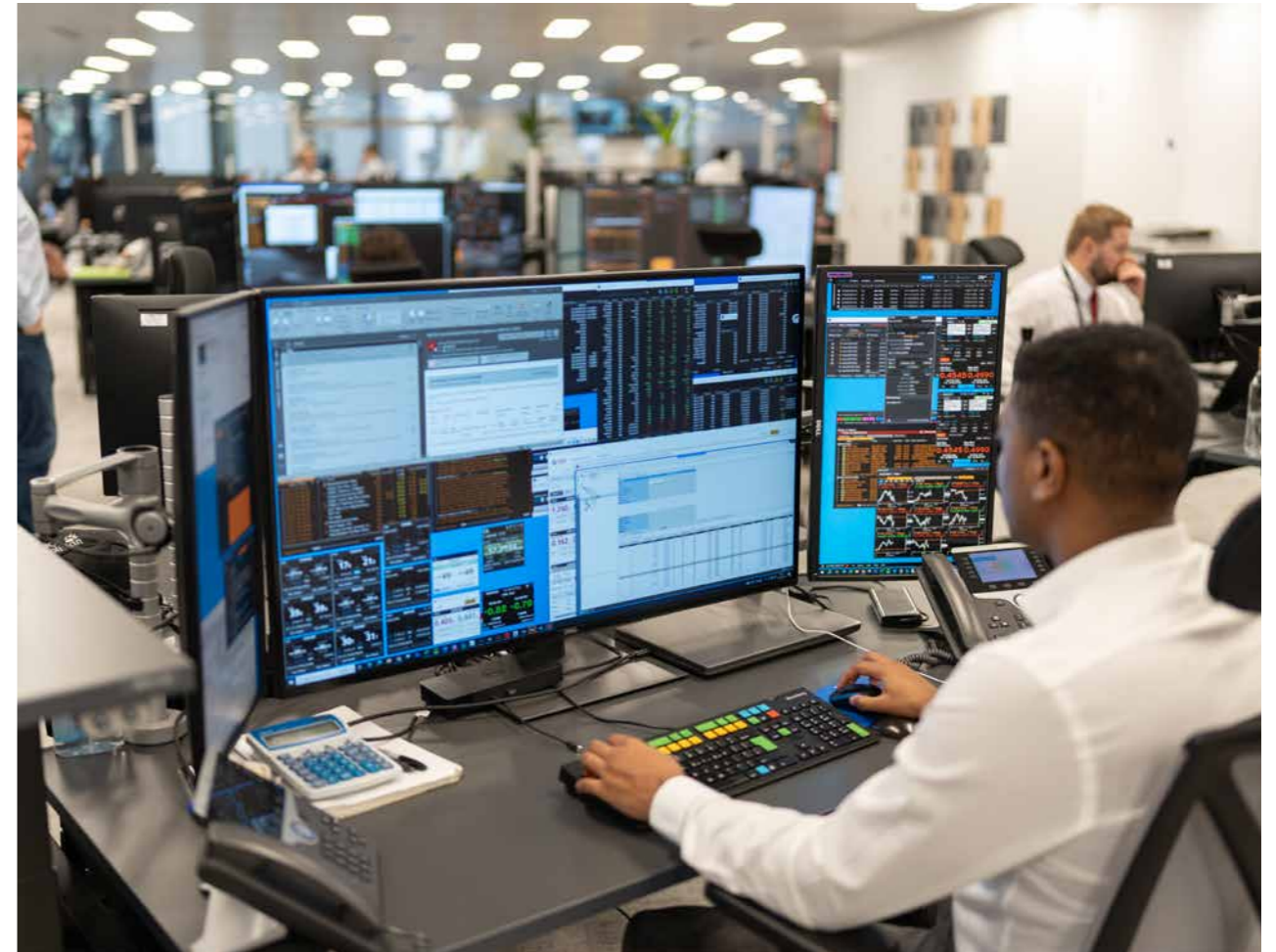
Fred Allatt leads our Americas team

Moody's/S&P-rated, and serves 54,000+ institutional and commercial clients worldwide.

We bundle everything needed to tap into the global FX market in a simple and turnkey account structure. This includes institutional-grade liquidity across 40+ currencies, including emerging markets: spot FX, forwards, swaps, NDFs, options, and deliverable FX in 17 currencies. We offer one single point of contact that manages liquidity relationships, all STP mapping, legal agreements, reporting, counterparty credit and netting, and more. Our clients benefit from our high-performance infrastructure using just one counterparty, one connection, one account. Our solutions are scalable and can handle trade sizes from \$50K to \$500MM. As a non-bank FX broker, we have the ability to serve our clients' needs more effectively than traditional bank providers: our clients can open an account in just a few weeks, access liquidity across a broad portfolio of FX products, and leverage our 24/6 dealing desk and a variety of services tailored to their needs.



Qian Ying Goh leads our efforts in APAC



We invest heavily in the professional development of our employees, ensuring they have access to cutting-edge tools and technology

We offer a broader scope of services and address our clients' business needs, whether it involves ongoing currency transactions, trading options or NDFs, or seeking guidance on hedging specific risks. We offer more flexibility than traditional banks while we are well capitalized and have high regulatory standards. Another aspect that makes our offering attractive is our competitive pricing. By blending our own market maker liquidity with that of tier 1 banks, we give our clients access to market-leading spreads and unique deep liquidity pools across 40+ exchanges. StoneX Group, our parent company, trades \$4.4 trillion annually. StoneX Retail (Forex.com and City Index) with 400,000+ retail clients and StoneX Payments providing currency delivery across 350+ correspondent banks, are also part of the StoneX Group FX ecosystem. This wide-ranging reach positions StoneX Pro uniquely

in the FX markets. Thanks to our scale and our ability to offer professionally managed liquidity, StoneX Pro is able deliver a competitively priced institutional offering.

What types of firms are choosing to leverage the expertise and advanced technology of StoneX Pro to reduce overheads and complexity and what factors are increasingly attracting more of them to do this?

StoneX Pro serves clients across the financial spectrum. As a multi-asset broker, we leverage existing relationships within StoneX's global Metals, Commodities, and Securities businesses, where extending FX coverage is often a seamless and logical progression. For many of these clients, FX is an essential but secondary component of their operations, so the ability to access FX hedging and

deliverable FX services through an established partnership - with minimal additional financial investment - is highly valuable.

We've strategically positioned ourselves away from the HFT and Prime of Prime segments of the FX market, where it has become increasingly challenging to add meaningful value. Instead, our focus is on financial firms where FX isn't their sole or primary business focus—such as asset managers, hedge funds, and regional banks. These clients see significant value in outsourcing their FX liquidity needs and technology to a partner with the regulatory framework, financial stability, and expertise of StoneX. Similarly, we support clients who require access to a broader portfolio of liquidity than what is typically available through single-bank platforms. Our Fintech clients, in particular, appreciate the opportunity



StoneX Pro – Helping clients unlock real value to stay ahead of the competition



Our clients benefit from our high-performance infrastructure using just one counterparty, one connection, one account

to focus on their core competencies while trusting StoneX Pro to invest in the liquidity and technology they need to support their businesses. By delivering these “raw materials” efficiently and reliably, we help them achieve their goals while allowing them to scale and innovate.

We know you and your team have been working on a new and important corporate hedging offering and will have more to say about that a little later this year, but can you share any details about it with us at this stage?

We've taken a close look at the FX market and identified a significant opportunity for a company with StoneX's financial strength and expertise to deliver a truly compelling corporate FX service. With all the necessary product components already in place, we're well-positioned to develop this offering. While I can't go into too much detail about the specifics just yet, one of my primary focuses over the next six months will

be laying the groundwork to cater to corporate hedging clients later this year. It's an exciting initiative that I believe will bring real value to this segment of the market.

It takes a long time to build trust amongst participants in this industry. How has StoneX Pro managed to achieve that?

Building trust in the financial industry takes time, and with a century of experience, StoneX has had the opportunity to learn and grow alongside the clients we serve. As we celebrated our 100th anniversary in 2024, one thing remains clear: trust is earned by consistently putting our clients first and supporting their success. Achieving this requires having the right people in the right roles, working with dedication and expertise. Since joining StoneX in 2020 through the merger with GAIN Capital, I've been continually impressed by the calibre of my colleagues and their unwavering commitment to meeting and exceeding client expectations.

The quality of our people is our secret sauce.

In your opinion what are the key attributes that clients are looking for from their institutional FX providers and how has StoneX Pro tried to differentiate itself from competitors?

Clients expect FX providers to deliver flexibility, cost efficiency, and exceptional customer service so we have prioritised these attributes. Being close to clients and offering a flexible approach is in StoneX's DNA. It allows us to adapt to the diverse needs of our clients and offer tailored solutions that align with their business models and strategies. Cost efficiency is another key area where we differentiate ourselves, ensuring our pricing is competitive while maintaining the highest standards of execution and service.

It's worth noting that being cost-effective doesn't necessarily mean being the cheapest. Instead, it's about delivering real value to our clients by



One of my primary focuses over the next six months will be laying the groundwork to cater to corporate hedging clients

focusing on solutions that address their specific needs and operational challenges. Having this value-oriented approach ensures we provide the right balance of competitive pricing and high-quality service that supports our clients' success. Most importantly, we pride ourselves on being customer-oriented, placing the needs of our clients at the heart of everything we do. By maintaining close relationships and actively listening to their feedback, we've built a reputation for delivering personalised services and solutions. This combination of adaptability, value, and customer focus is what truly distinguishes StoneX in the FX space.

In what ways has the culture of your company with its commitment to your clients' success and the high standards expected from employees also helped in facilitating its success?

We employ a multi-faceted approach to staying current with technological demands. Our in-house IT department, staffed with top-tier talent, is a

cornerstone of our technological innovation. This team develops and maintains our proprietary systems and platforms, driving the adoption of new technologies and shaping how we deliver our services. Their expertise and commitment to best practices are instrumental in keeping us at the forefront of the industry.

We also collaborate with external vendors, leveraging best-in-class technology solutions when they offer clear advantages over internal development. These partnerships allow us to benefit from the specialised expertise of vendors which excel in their respective fields, ensuring we remain agile and up to date. However, the most critical component of our technology strategy is listening to our clients. Their feedback frequently shapes our direction, particularly in fast-evolving areas of the business.

By integrating client-driven requirements into our technology roadmap, we can provide solutions that not only meet their needs but

also enable them to scale and succeed in their own businesses. It's a client-focused approach so we remain aligned with the market and ready to adapt to emerging trends.

Cutting-edge technology has now become an essential ingredient for delivering institutional FX services. How does your team go about staying on top of that requirement to ensure you are investing in the right technology areas and future proofing as far as possible?

We have three methods to stay on top of technological requirements. StoneX has a significant IT department, and we hire the best people to develop our proprietary systems. That team with those skills is a significant driving force behind our adoption of new technology and ways of delivering our services. We frequently turn to them for best practice. We use external vendors throughout our business, relying on best-of-breed technologists who focus on their competencies.

StoneX Pro – Helping clients unlock real value to stay ahead of the competition



StoneX Pro provides API access to institutional FX liquidity and over 13,500 multi-asset CFD products

We tend to use external technology vendors when we see significant advantages of going outside and not using our own technology. This too helps to stay current because we're partnering with experts in their own area.

But fundamentally, the greatest tool we have to remain current is to listen to our client's feedback. They are frequently the driver of our technology strategy. I've mentioned already that we see some parts of our business change rapidly in relation to how they want FX services delivered – we incorporate these requirements into our technology strategy and aim to give our customers the solutions they need to scale their own businesses.

In what ways do you expect to see technology and advances in electronification broadening your customer base and the range of institutional FX services you will be able to offer in the future?

The rapid rise of Fintechs, particularly Payment Service Providers and Digital Asset firms, has reshaped the landscape of FX services, driving a demand for seamless and efficient access to FX. This shift has influenced how we cater to a significant segment of our client base.

While our traditional brokerage model remains a cornerstone of our business, an increasing number of clients now view deliverable FX as a vital component in their service offerings. These clients seek FX solutions that are hassle-free, dependable, and easily integrated

into their products—packaged as a consistent and reliable service with low maintenance. Looking ahead, we anticipate this demand to grow further. At StoneX, we are focusing to managing the complexities of liquidity curation, enabling our fintech clients to concentrate on what they do best - delivering their innovative solutions to the market.

What are your views about the fast-evolving Digital Assets and the Crypto markets and the opportunities they may represent for market leading FX dealers like StoneX Pro?

The digital assets and crypto markets have been on the cusp of mainstream adoption for several years, capturing the attention of both investors and institutions. While there are signs of



I've been continually impressed by the calibre of my colleagues and their unwavering commitment to meeting and exceeding client expectations

growing acceptance in markets like the US, it remains difficult to gauge the depth and longevity of the current support. At StoneX, we are actively positioning ourselves to be a leader in this space. Our approval to operate a digital asset business in Ireland in 2024 represents a significant milestone, allowing us to provide innovative, regulated solutions that bridge the gap between traditional financial systems and the evolving world of crypto. This initiative enables us to support clients operating within this fast-changing sector, ensuring they have access to the expertise, security, and liquidity they need.

A key driver of StoneX Pro's growth is the increasing reliance on FIAT currency by crypto brokers and digital asset firms. While cryptocurrencies often dominate the headlines, FIAT remains the

essential backbone of these ecosystems, facilitating payments, settlements, and conversions. The rise of crypto has, in turn, driven a notable increase in demand for deliverable FX services, as brokers and exchanges require seamless access to traditional currencies to manage their operations. StoneX's expertise in curating liquidity and delivering reliable, efficient FX solutions positions us to meet this demand and support the unique needs of this rapidly growing segment.

What's on your agenda for this year in terms of focusing efforts to grow your business and client footprint around the world?

In addition to developing our corporate hedging service, we're focused on expanding our client base beyond our core markets. StoneX has

a strong track record in emerging and frontier markets, and we're always exploring opportunities to establish a presence in regions where we can provide real value. For example, we brought Jeff Blanco on board in our Toronto office late last year, and we're already seeing promising momentum in the Canadian market.

As I mentioned earlier, APAC remains a high-growth region for StoneX Pro. We'll be concentrating on scaling our Singapore desk to meet the increasing local demand, supporting emerging markets across the region, and aligning our currency offering with the specific needs of these markets. These initiatives reflect our commitment to delivering tailored solutions and driving growth in regions where we see the greatest potential.



A COMBINATION OF ADAPTABILITY, VALUE, AND CUSTOMER FOCUS IS WHAT TRULY DISTINGUISHES STONEX IN THE FX SPACE

How AI is revolutionising trading signal generation for institutional and retail FX markets

By Andrew Lane, CEO, Acuity Trading

The financial markets are no strangers to innovation, and foreign exchange (FX) trading is no exception. As the largest financial market in the world, with over \$6 trillion traded daily, FX markets are ripe for disruption. Artificial Intelligence (AI), in tandem with data science, has emerged as a transformative force, especially in trading signal generation. Whether for institutional giants or retail traders, the confluence of access to a wide array of alternative data sets, access to processing power, access to complex algorithms and sentiment analysis is redefining how trading strategies are built, executed, and optimised. In this article, I'll explore how AI is reshaping FX signal generation, the technological breakthroughs that have enabled this evolution, and the risks and opportunities this paradigm shift presents for both institutional and retail markets.



Andrew Lane

LEVERAGING AI AND DATA SCIENCE FOR FX SIGNAL GENERATION

The cornerstone of AI's potential in FX trading lies in its ability to process and analyse massive volumes of data at unprecedented speeds. Unlike

traditional approaches that rely heavily on historical price patterns and technical indicators, AI-powered signal generation incorporates a broader spectrum of data sources, including economic reports, geopolitical developments, social media chatter, and real-time news feeds.

FROM HISTORICAL ANALYSIS TO REAL-TIME INSIGHT

Historically, FX signals have been derived from price movements, technical indicators, and macroeconomic data. While effective to some extent, these traditional methods often lag behind the market. AI bridges this gap by leveraging data science to analyse both structured and unstructured data, offering signals that reflect real-time market

conditions and sentiment. For instance, AI can rapidly interpret the implications of unexpected Central Bank speeches or a geopolitical event, generating actionable signals within seconds. This capability is particularly valuable in the FX markets, where volatility and speed are critical.

CASE STUDY: SENTIMENT-DRIVEN FX SIGNALS

One example of AI's power is sentiment-driven signals. By analysing millions of social media posts, news articles, and financial reports, AI can gauge market sentiment—whether traders are bullish, bearish, or neutral. This data is then transformed into predictive signals, enabling traders to position themselves ahead of significant market moves.

How AI is revolutionising trading signal generation for institutional and retail FX markets

BLENDING TRADITIONAL STRATEGIES WITH NLP AND SENTIMENT ANALYSIS

One of the most revolutionary aspects of AI in FX signal generation is the use of NLP. NLP enables algorithms to understand and interpret human language, extracting meaning and sentiment from unstructured text data. When combined with traditional trading strategies, NLP enhances the robustness and accuracy of trading signals.

HOW NLP WORKS IN FX SIGNAL GENERATION

NLP systems scan a diverse range of text-based data, from central bank meeting transcripts to breaking news headlines. Advanced algorithms extract key insights, such as the tone of a central banker's speech or the market's reaction to a key economic data release. By blending these insights with traditional price and volume data, AI generates signals that account for both market fundamentals and sentiment-driven dynamics.

For instance:

A hawkish speech by the Federal Reserve Chair might generate a buy signal for USD. (See Below)



On August 26, 2022, during Federal Reserve Chair Jerome Powell's speech at the Jackson Hole Symposium, Powell reaffirmed the Federal Reserve's commitment to bringing inflation under control and emphasised that interest rates would need to remain higher for longer, even at the cost of some economic pain. This hawkish tone signaled the likelihood of retaining higher interest rates for longer, leading to a surge in the USD as markets priced in tighter monetary policy.

The U.S. Dollar Index (DXY), which measures the dollar's strength against a basket of other currencies, jumped rapidly following the speech, reflecting increased demand for the USD.

This example illustrates how AI-driven trading systems equipped with sentiment analysis and NLP can detect and act on the tone and content of central bank speeches in real time, generating trading signals aligned with market sentiment and expectations.

A tweet from a major geopolitical leader hinting at economic instability could trigger a sell signal for the affected currency. (See Above)

For instance:

On August 1, 2019, U.S. President (designate) Donald Trump tweeted about imposing a 10% tariff on an additional \$300 billion worth of Chinese goods, which immediately led to a sell-off in China-sensitive currencies like the Australian Dollar (AUD) and a rally in safe-haven assets like the Japanese Yen (JPY). This tweet created widespread uncertainty about the global economy and trade, reflecting how a single social media post from a geopolitical leader could trigger automated trading signals and market reactions.

This example perfectly underscores how sentiment analysis and NLP in AI-driven systems can be leveraged to detect such cues in real-time and generate actionable signals.

THE ROLE OF SENTIMENT ANALYSIS

Sentiment analysis, powered by NLP, adds another dimension to FX signal generation. It allows algorithms to

quantify market mood in real-time. By assessing whether the market sentiment aligns or diverges from technical trends, traders gain a deeper understanding of potential price movements.

OVERCOMING TECHNICAL OBSTACLES TO AI INTEGRATION

While the promise of AI in FX trading is immense, the path to its integration has not been without challenges. Historically, there have been significant technical hurdles, including data quality issues, computational inefficiencies, and latency concerns.

THE DATA PROBLEM

The quality of input data is critical for accurate signal generation. The FX market, with its fragmented structure and decentralised nature, presents unique challenges in aggregating and normalising data. Recent advancements in data science and machine learning have largely resolved these issues by enabling algorithms to clean and standardise data from multiple sources efficiently.

REAL-TIME PROCESSING

Another significant hurdle was latency—the time it takes to process data and generate actionable signals. In the high-speed world of FX trading, even milliseconds matter. Innovations in cloud computing and AI chip technology have dramatically reduced processing times, enabling real-time signal generation that meets the demands of even the fastest markets.

SCALABILITY

Finally, the ability to scale AI systems to handle the immense volume of FX trading data was a major challenge. Today, AI platforms employ distributed computing systems and parallel processing techniques to analyse vast datasets without compromising speed or accuracy.

REAL-TIME SENTIMENT AND VOLATILITY IN SIGNAL GENERATION

Unlike traditional models that rely solely on historical data, AI-powered systems excel at integrating real-time market sentiment and volatility metrics into their signals. This dynamic approach provides traders with a more comprehensive view of the market, enabling them to react quickly to changing conditions.

CAPTURING VOLATILITY

AI models incorporate real-time volatility indices to adjust the aggressiveness of trading signals. For instance, during periods of low volatility, signals might emphasise range-bound strategies, while high-volatility scenarios may trigger trend-following strategies.

DYNAMIC SENTIMENT INTEGRATION

By continuously monitoring sentiment shifts, AI ensures that its signals remain relevant. For example, a sudden spike in bearish sentiment detected through news analysis might lead to an immediate sell signal for a particular currency pair, providing traders with a critical edge. A strong example of a sudden spike in bearish sentiment detected through news on Twitter impacting a currency pair occurred on March 17, 2020, during the height of the COVID-19 pandemic. (See Above)

On that day, news broke on Twitter that multiple European countries, including Italy and Spain, were imposing strict lockdown measures due to the rapid spread of the virus. This news created

How AI is revolutionising trading signal generation for institutional and retail FX markets

significant fear and uncertainty in financial markets, which was amplified by the real-time reactions shared on Twitter by major financial news outlets, analysts, and policymakers.

The result? A sharp sell-off in the Euro (EUR) against the U.S. Dollar (USD), as traders sought the safety of the dollar amid growing concerns about the economic fallout in Europe. Sentiment analysis tools could have identified this spike in bearish sentiment in real-time, triggering automated sell signals for EUR/USD before the broader market reacted.

This demonstrates how AI-driven systems leveraging NLP and sentiment analysis can capture and interpret bearish sentiment from social media platforms like Twitter, providing traders with a critical edge to react swiftly to unfolding events.

RISK MANAGEMENT IN AI-DRIVEN SIGNAL GENERATION

While AI offers unparalleled advantages, its deployment in FX trading must be accompanied by rigorous risk management practices. Automated systems are not immune to errors, and unchecked reliance on AI can expose traders to significant risks.

MODEL VALIDATION AND MONITORING

AI models must be continuously validated against real-world outcomes to ensure their reliability. Regular backtesting, combined with real-time monitoring, helps identify any discrepancies between predicted and actual market movements.

HUMAN OVERSIGHT

While automation is a key feature of AI-driven signal generation, human oversight remains essential. Traders and analysts should regularly review AI-generated signals to ensure they align with broader market conditions and trading objectives.

THE FUTURE OF AI IN FX TRADING STRATEGY

As AI technology continues to evolve, its integration into FX trading strategies will only deepen. Here's how we envision the future:

1. Adaptive strategies

AI systems will become increasingly adaptive, learning and evolving in real-time to respond to changing market conditions. This capability will enable traders to deploy strategies that are more resilient to market shocks and anomalies.

2. Personalised trading solutions

For retail traders, AI will enable the creation of personalised trading systems tailored to individual risk appetites, trading styles, and objectives. This democratisation of advanced trading tools will level the playing field between institutional and retail participants.

3. Integration with emerging technologies

AI will increasingly be combined with other emerging technologies, such as blockchain and quantum computing, to further enhance its capabilities. For instance, blockchain could provide more reliable data sources, while quantum computing could unlock new levels of computational efficiency.

TRANSFORMING INSTITUTIONAL AND RETAIL FX MARKETS

The transformative impact of AI-driven signal generation is being felt across both institutional and retail FX markets, albeit in different ways.

Institutional Markets

For institutional players, AI offers a competitive edge by enabling faster, more accurate decision-making. Hedge funds and investment banks are already leveraging AI to identify opportunities and optimise portfolio management strategies. The ability to process

unstructured data at scale is particularly valuable for institutions operating across multiple markets and time zones.

Retail Markets

For retail traders, AI represents a significant opportunity to access tools that were once the preserve of institutional players. Automated trading systems, powered by AI, are making it easier for retail traders to execute sophisticated strategies without requiring extensive technical expertise. Platforms that integrate AI-driven signals are also helping retail traders mitigate risk and improve their overall profitability.

CONCLUSION

AI is revolutionising trading signal generation in the FX markets, offering unprecedented opportunities for both institutional and retail participants. By blending traditional strategies with advanced techniques like NLP and sentiment analysis, AI is transforming how signals are generated, enhancing their accuracy, and aligning them with real-time market dynamics. While challenges remain, ongoing advancements in data science, computing power, and risk management are paving the way for even greater integration of AI in FX trading.

As we look to the future, it's clear that AI will play a pivotal role in shaping the next generation of trading strategies. Whether you're a seasoned institutional player or a retail trader just starting, embracing AI-driven signal generation could be the key to staying ahead in the fast-evolving world of FX markets.

At Acuity Trading, we're proud to lead this charge, leveraging cutting-edge AI technology to empower traders with actionable insights and tools. The future of trading is here, and it's powered by AI.



Centroid's Core Technologies

Through the suite of innovative technology solutions offered by Centroid brokers can be in full control over their trading systems, stay ahead of the competition and increase market share.



Centroid
BRIDGE

Multi-Asset Liquidity and Execution Management Engine



Centroid
RISK

Comprehensive Risk Management System



Centroid
HOSTING

Hosting Solutions for MT4 / MT5 and other trading systems



Stablecoins: Building confidence to facilitate more widespread acceptance

By Berkay Secil, CMO, BiLira



Berkay Secil

What are the main types of stablecoin and how do they differ from one another?

Stablecoins generally fall into four categories: fiat-collateralized, crypto-collateralized, algorithmic, and commodity-pegged. Each type operates differently, offering distinct trade-offs in terms of decentralization, stability, and risk.

- Fiat-collateralized stablecoins maintain reserves in traditional currencies, such as the Turkish Lira or US dollar, held by centralized issuers. They provide stability but rely on trusted third parties to manage funds.

- Crypto-collateralized stablecoins are backed by digital assets like Ethereum or Bitcoin. Because cryptocurrencies are volatile, these stablecoins are over-collateralized to maintain security. Smart contracts manage the system, triggering liquidations when collateral drops below required levels.
- Algorithmic stablecoins don't use collateral in the traditional sense. Instead, they rely on automated supply adjustments to maintain their peg. They can be efficient but have faced challenges during extreme market volatility.
- Commodity-pegged stablecoins derive value from assets such as gold or silver. These reserves are typically stored in vaults, allowing holders to redeem their stablecoins for the underlying commodity.

Each model caters to different user needs, from stability-seeking investors to those prioritizing decentralization.

What factors lie behind the growing significance of Stablecoins and what are they typically used for?

Several forces are driving stablecoin adoption:

- **Economic Stability & Inflation Protection:** Stablecoins provide a store of value in regions facing currency depreciation.
- **DeFi & Cross-Border Transactions:** They offer liquidity in decentralized finance (DeFi) applications and enable fast, low-cost global payments.
- **Institutional Use:** Businesses integrate stablecoins into payroll, settlements, and treasury operations.
- **Regulatory Clarity:** As frameworks develop, stablecoins are increasingly recognized as viable financial instruments.

Their role in digital finance is expanding rapidly, positioning them as key infrastructure in the global economy.

What types of assets do collateralized stablecoins use as backing?

Collateralized stablecoins rely on different asset classes to maintain stability:

- Fiat-backed stablecoins, such as USDC and TRYB, hold reserves in government-issued currencies or

- short-term securities.
- Commodity-pegged stablecoins, such as Paxos Gold, are pegged to assets like gold, with reserves audited and stored in vaults.
- Crypto-backed stablecoins, such as DAI and sUSD, use digital assets as collateral. They require over-collateralization, ensuring stability even during market fluctuations.

Each model has different risk factors—fiat reserves depend on custodial trust, commodity reserves fluctuate with asset prices, and crypto-backed models face volatility but enhance decentralization.

How do stablecoins ensure their value remains pegged to their collateral?

Maintaining a stable value requires different mechanisms depending on collateral type:

- Fiat-backed stablecoins rely on cash reserves and allow users to redeem 1:1 with traditional currency.
- Crypto-backed stablecoins over-collateralize and use automated liquidation mechanisms to maintain solvency.
- Commodity-pegged stablecoins are pegged to assets like gold, but fluctuations in commodity prices can affect their stability.
- Algorithmic stablecoins adjust supply dynamically—minting more when demand rises and reducing circulation when demand falls.

Stablecoins also depend on arbitrage, liquidity management, and transparency to maintain their peg, ensuring reliability in different market conditions.

What role are more diverse collateral assets likely to play in the future of stablecoins?



The role of stablecoins in digital finance is expanding rapidly, positioning them as key infrastructure in the global economy

Diversifying collateral sources could strengthen stability and broaden adoption. Expanding beyond fiat to include real-world assets, commodities, and cryptocurrencies can reduce reliance on any single risk factor.

However, introducing diverse collateral also brings liquidity risks, counterparty exposure, and valuation complexities. Some assets may be difficult to liquidate during downturns, which could weaken a stablecoin's peg. As stablecoins evolve, issuers will need to balance diversification with robust risk management to maintain long-term reliability.

In what ways do stablecoins leverage the benefits of cryptocurrencies?

Stablecoins merge the best aspects of traditional finance with the innovation of blockchain technology:

- **Global Accessibility:** Transactions can occur anywhere with internet access, improving financial inclusion.
- **Decentralization & Lower Costs:** Stablecoins reduce reliance on

intermediaries, cutting transaction fees.

- **Smart Contracts & Automation:** They enable programmable payments, lending, and DeFi integrations.
- **Interoperability:** Some stablecoins function across multiple blockchain networks, enhancing liquidity.
- **Fast Settlements:** Transfers clear within minutes, significantly improving payment efficiency.

By combining crypto's efficiency with price stability, stablecoins serve as a key bridge between digital and traditional finance.

How might regulatory developments significantly influence the evolution of stablecoins?

Regulation will shape stablecoins' future by determining which models thrive and which face restrictions. Well-defined policies could encourage institutional adoption, while excessive oversight might limit innovation.

Key regulatory considerations include:

- **Reserve Transparency & Audits:** Issuers may need to prove full collateral backing.



Stablecoins: Building confidence to facilitate more widespread acceptance



Trust is everything in stablecoins. Without transparency, users lose confidence, and a stablecoin can unravel.

- **AML & KYC Compliance:** More stringent identity verification requirements may emerge.
- **Centralized vs. Decentralized Models:** Non-collateralized stablecoins might face stricter scrutiny due to their risk profile.
- **Legal Classification:** Whether stablecoins are considered securities, commodities, or digital currencies will affect taxation and compliance obligations.

The challenge will be striking a balance—ensuring stability and consumer protection without stifling technological progress.

How important has public trust and transparency now become in building confidence in stablecoins, and what can the industry do to facilitate this?

Trust is everything in stablecoins. Without transparency, users lose confidence, and a stablecoin can unravel.

To reinforce credibility, issuers must:

- **Provide Verified Reserves:** Regular

audits and real-time proof of backing build trust.

- **Improve Communication:** Clarity about collateral, redemption mechanisms, and governance prevents uncertainty.
- **Strengthen Risk Management:** Holding liquid, diversified reserves ensures redemptions can always be met.
- **Use Blockchain for Transparency:** On-chain verification allows users to independently verify backing.
- **Prepare for Market Shocks:** Quick, clear communication during crises can prevent panic.

Ultimately, the stablecoins that prove their transparency—not just claim it—will be the ones that endure.

Stablecoin stability mechanisms are not perfect. What are the risks associated with this, and what steps are being taken to address them?

Stablecoins face multiple risks, including:

- **Collateral Risk:** A sharp drop in reserve value can weaken stability.
- **Liquidity Issues:** Liquidating assets

quickly during stress events can be costly.

- **Counterparty Dependence:** Reliance on third parties for collateral management introduces risks.
- **Regulatory Uncertainty:** Legal changes can disrupt stablecoin operations.

To mitigate these risks, issuers are improving transparency, diversifying collateral, and refining algorithms to enhance risk management and long-term resilience.

Stablecoins are potentially more capable of serving as a means of payment and store of value than traditional systems. How might they contribute to the development of new global payment arrangements that are faster, cheaper, and more inclusive than existing ones?

Stablecoins offer a practical alternative to legacy payment systems:

- **Faster Transactions:** Transfers settle in minutes, eliminating multi-day delays.
- **Lower Fees:** Many stablecoins, like BiLira (TRYB), keep transaction costs under \$1.
- **Greater Financial Inclusion:** Users without bank accounts can access stablecoins via mobile wallets.
- **Interoperability & Smart Contracts:** Automated payments and seamless cross-platform transfers enable new financial applications.
- **Enhanced Security:** Blockchain ensures transparency, reducing fraud and improving verification.

With the right infrastructure and regulatory framework, stablecoins could revolutionize digital payments, making them more efficient, affordable, and globally accessible.



StoneX Pro

Turnkey solutions for FX trading, liquidity, and physical delivery

StoneX Pro offers institutional-grade market access and advanced digital platforms to firms of all sizes.

What sets us apart:

- Fully automated STP trading solutions
- 24-hour trade desk and support
- Diversified global liquidity network professionally managed by StoneX Pro
- Full suite of institutional FX products: spot, forwards, NDFs, options, swaps, emerging markets
- High-performance infrastructure in all major data centers
- One counterparty, one connection, one account
- Physical settlement and delivery services in 17 currencies

Visit stonexpro.stonex.com to learn more

© 2024 StoneX Group Inc. all rights reserved. The StoneX Group of companies provides financial services worldwide, including physical commodities, securities, exchange-traded futures and options, OTC instruments, risk management and advisory services, global payments and foreign exchange products. StoneX Financial Inc. (SFI) is a subsidiary of StoneX Group Inc., a member of FINRA/NFA/SIPC and registered with the MSRB. SFI is registered with the U.S. Securities and Exchange Commission ("SEC") as a Broker-Dealer and with the CFTC as a Futures Commission Merchant and Commodity Trading Advisor. References to securities trading and prime services are made on behalf of the BD Division of SFI. References to exchange-traded futures and options are made on behalf of the FCM Division of SFI. You can learn more about the background of StoneX Financial Inc. on BrokerCheck.

No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without our prior written consent. This document and the information herein are provided confidentially for information purposes only to the recipient. The information herein is not advice nor a recommendation to trade nor an offer to buy or sell any financial product or service. It does not take into account your particular investment objectives, financial situation or needs and does not create a binding obligation on any of the StoneX Group of companies to enter into any transaction with you. You should perform an independent investigation of any transaction to determine whether it is suitable for you.

This information is provided on an 'as is' basis and may contain statements and opinions of the StoneX Group as well as excerpts and/or information from public sources and third parties and no warranty, whether express or implied, is given as to its completeness or accuracy.

Meeting market demand: Diverse and reliable execution venues for institutional Digital Asset trading

By Brandon Mulvihill, Co-Founder & CEO, Crossover Markets



Image by Shutterstock



Brandon Mulvihill

As institutions continue to embrace digital assets, the demands on institutional trading platforms have never been higher. The evolving needs of market participants require robust, scalable and innovative trading infrastructure. While execution models such as central limit order books (CLOBs) and electronic communication networks (ECNs) have long been part of the trading landscape, their adaptation to digital assets presents both challenges and opportunities.

In this article, we will explore the features and functionalities institutional trading firms now require, the factors influencing the platform selection process and the pressing technical and business considerations shaping the future of digital asset trading.

THE CHALLENGE OF BUILDING AN INSTITUTIONAL TRADING PLATFORM

Institutions operating in the digital asset market demand features that

Meeting market demand: Diverse and reliable execution venues for institutional Digital Asset trading



Crypto trading operates on a 24/7/365 basis, requiring unparalleled system reliability and efficiency

mirror the sophistication of traditional finance while accommodating the unique requirements of crypto. These include ultra-low-latency execution, deep liquidity and flexible infrastructure. However, meeting these demands is no small feat, particularly in a market where volatility, fragmented liquidity and regulatory uncertainty abound.

Adding to this complexity, crypto trading operates on a 24/7/365 basis, requiring unparalleled system reliability and efficiency. Unlike traditional asset classes, which adhere to standardized lot sizes, digital assets can be subdivided into infinitesimally small increments, introducing new challenges for risk management, order matching and settlement.

The need for real-time processing and continuous market access pose uniquely daunting challenges, necessitating institutional crypto trading infrastructure that can handle both high throughput and precise trade execution at all times.

KEY REQUIREMENTS FOR INSTITUTIONAL TRADING PLATFORMS

To meet these complex needs, institutional trading platforms for digital assets must seamlessly blend advanced technology, reliability and adaptability to specific market demands. They must deliver access to deep liquidity and enable fine-tuned execution to support unique strategies. Furthermore, they must account for industry realities like increasing regulatory scrutiny and the rapidly expanding diversity of digital assets.

A few more details:

1. Speed and performance: High-speed execution is critical. For example, the CROSSx crypto ECN matches 99% of trades in single-digit microseconds and can handle up to a million orders per second, rivaling the fastest platforms in any asset class. Any platform that cannot process orders at near-instantaneous speeds will struggle to compete in institutional markets.

2. Minimized spreads and Market Impact:

High-speed execution and market data that inform trade activity in real time, high-capacity throughput to support growth and spikes in volume, no restrictions on quotes and orders to empower market makers to price aggressively and compete for flow, liquidity tailored on a per-participant basis – these are key ingredients to achieve tight spreads and reduced market impact, and are hallmarks of the ECN model.

3. Diverse execution models: The era of one-size-fits-all trading platforms is over. Institutions need the flexibility to choose between execution models – from traditional CLOB setups to more tailored ECN configurations – depending on their strategies and liquidity needs. ECNs provide independent market data sessions and liquidity pools for each taker, eliminating many inefficiencies inherent in traditional models. This model enables greater flexibility, so firms can fine-tune their execution strategies, and can even be configured to behave like a CLOB. Conversely, a CLOB cannot easily be configured to operate as an ECN – that would require a ground-up rebuild.

4. Regulatory adaptability and settlement considerations:

Institutions require fungibility in liquidity access, but they are often limited by incumbent venues that bundle credit and settlement services. The structure of these services influences the level of liquidity available and, in turn, the choice of trading technology. Market participants must have the flexibility to integrate with third-party credit and settlement solutions that align with their risk management strategies.

These demands underscore the complexity of delivering institutional-grade digital asset trading platforms that can withstand the challenges of this rapidly evolving market.

CLOBs VS. ECNs: A FRAMEWORK FOR DECISION-MAKING

CLOBs: Firm yet restrictive

Central limit order books are defined by their simplicity: participants post firm bids and offers that are matched directly at visible prices. When clients opt to buy or sell, the order is matched right then and there, with the current bid and ask (and spread) displayed to all participants. Market makers stand ready to post firm orders at or near these prices, providing crucial liquidity to participants. It's a straightforward model that doesn't require much routing of information. If you see liquidity you want, you can take it on a first come, first served basis.

But while the centralized nature of this model can offer simplicity, that's not always a good thing. It doesn't matter how many or what kinds of participants are competing on these venues – everyone sees the same exact prices, market depth and liquidity. If one executes a huge trade, the others will be impacted. There's nowhere to hide: the CLOB is the CLOB and the prices are the prices.

This seemingly democratized marketplace means that in practice, there's really no such thing as makers or takers – participants can make and take liquidity. This can create powerful conflicts of interest. Instead of focusing on providing a crucial service to the market – quite profitably, in many cases – market makers are incentivized to execute trades against existing orders, at times operating as takers on the platform, which puts them in competition with other takers.



ECNs deliver an incredible amount of flexibility and choice for participants, helping all sides of the market attain success

This dynamic also poses a challenge for the market makers who are actually making markets. Because they never know who their next counterparty will be, they are forced to price to the lowest common denominator – because when HFTs act as takers, market makers often end up losing a lot of money, and fast. This is why many CLOB-based venues rebate their market makers. The model makes it difficult to turn liquidity provisioning into a profitable business, so the incentive to do so must be created artificially.

CLOB-based trading is the default structure for nearly every crypto exchange because it is easier to build and deploy. However, this model does not address the need for independent liquidity pools, tailored liquidity or high-throughput execution, all of which are critical for institutions. The rigidity of CLOB structures also makes it difficult to accommodate the precision pricing and custom order sizing that digital asset markets demand.

ECNs: Flexible and adaptive

ECNs, on the other hand, are designed to offer greater flexibility, seeking to combine the best attributes of simple aggregators and CLOBs while going one step further. Not only can these venues cross one taker to another – they can also run a quote-driven model on configurable liquidity, creating a far more efficient market.

Each taker on an ECN sees an independent market data session and liquidity pool, with customized spreads and market depth suited to their needs. Market makers cannot act as takers – their prices are available only to designated taker participants, so all entities can transact on a more level playing field.

These features reflect the fundamental nature of market making, where success is defined by two primary factors: speed and access to data. Because CLOBs force all market participants into the same pool, it's impossible to tell where



With trading Digital Assets the build-versus-buy dilemma looms large

orders originated – and, by extension, to price with precision. A firm might make a huge profit on retail flow one day and then lose far more the next day because an HFT increased its activity – their behaviors are so distinct that the aggregated CLOB-wide data is essentially meaningless. ECNs remove this uncertainty by providing data on each individual entity. Firms can analyze the behaviors of anonymized participants, make assumptions about how they will react to a given price and avoid transacting with those counterparties as they see fit.

Meanwhile, the quote-driven nature of ECNs enables market makers to operate far more aggressively and flexibly. If a firm's fill rates aren't satisfactory, it can continuously adjust its prices and make an optimal trade based on current market dynamics. The risk of being caught on the wrong side of a lopsided transaction is far reduced, giving liquidity providers the security they need to quote the prices the market is looking for. In this way, ECNs deliver an incredible amount of flexibility and choice for participants, helping all sides of the market attain success.

By creating segmented liquidity pools tailored to specific participant types, ECNs enable more efficient and equitable trading dynamics. Market makers can provide liquidity with precision, while takers benefit from bespoke pricing and execution options.

Crypto's unique attributes – such as the lack of standardized lot sizes and the need to support 24/7/365 trading – make ECNs a superior execution model. The ability to process trades at near-instantaneous speeds while enabling firms to fine-tune liquidity access means ECNs are the ideal infrastructure for institutional crypto trading.

BUILD VS. BUY: A CRITICAL DECISION

For institutions considering their trading infrastructure, the build-versus-buy dilemma looms large. Most retail brokerage platforms were not designed for 24/7/365 trading, which is why very few firms attempt to build their infrastructure in-house. Adapting a legacy trading system from equities, FX or fixed income to handle digital assets is an immense challenge – one that often results in suboptimal performance.

Platforms built from scratch specifically for crypto have a significant advantage in terms of throughput, configurability and speed. Partnering with an established provider specializing in digital assets can offer a faster path to institutional-grade execution while avoiding the complexities of developing new technology from the ground up.

THE FUTURE OF DIGITAL ASSET TRADING PLATFORMS

The digital asset market has exposed institutional demand for real-time risk management and settlement. Unlike traditional markets that operate within limited hours and have standardized lot sizes, crypto has demonstrated the feasibility and benefits of continuous trading. Institutions now recognize the inefficiency of legacy settlement processes, where a margin call on a Friday night cannot be addressed until Monday morning despite funds being readily available. This inefficiency – exposed by the crypto market – has led many to question why real-time settlement is not yet standard across the capital markets.

Additionally, the precision of price and size enabled by crypto markets is increasingly appealing from a risk management perspective. Traditional financial markets have relied on standardized lots, but digital assets prove that precision trading offers clear advantages. Institutions are beginning to embrace the idea that breaking away from these historical constraints can improve liquidity efficiency and trade execution quality. As digital assets continue to evolve, institutional trading platforms must focus on high-speed execution, deep liquidity and next-generation ECN mechanics. The ability to integrate seamless, real-time settlement and precision trading will play a heavy role in determining which platforms will win in the coming decade.



Got Questions?



Suggested Searches

- what products do FXSpotStream support?
- who was the fastest growing FX service in 2024?
- does FXSpotStream charge clients?
- is it true that FXSpotStream has 18 Tier 1 LPs available?
- which vendor partners does FXSpotStream support?
- does FXSpotStream offer a GUI?
- does FSS have an Ultra Low Latency Network?
- which algos do FXSpotStream support?

We've Got Answers

www.fxspotstream.com



FXSpotStream provides a multibank FX streaming and a matching service supporting steaming of pricing in FX Spot, Forwards, Swaps, NDF/NDS and Precious Metals Spot and Swaps. Clients can access a GUI or single API from co-location sites in New York, London and Tokyo and have the ability to communicate with all Liquidity Providing banks connected to the FXSpotStream Service.



*Connecting
opportunities*

Elevate your trading experience ☰ with IPC's high-speed ☰ **CONNECTIVITY SOLUTIONS**

- Low Latency connectivity service provider connecting key FX Sites LD4, NY4, TY3 and CH2
- Trust in our award-winning managed colocation and hosting service available in all key FX Liquidity centers
- A thriving community with 7000+ on net end points, including FX Traders, FX Liquidity Providers and FX ECN's
- Enjoy peace of mind with our proactive monitoring and support
- Now certified as AWS Direct Connect, Azure Express Route and Google Cloud Interconnect partner

Learn
more

