



high-cost rent-to-own models to purchase household items, or being forced to use expensive, cost-per-transaction, pre-paid card providers.

Limited access to banking services and loans, perhaps due to poorer credit scores, is also indicative of this group. These individuals often find themselves side-lined by mainstream banks, and so resort to expensive pay day lenders typically charging between 800-1200% APR when they need to borrow money.

Access to affordable, responsible finance is at the heart of eradicating this status quo. Namely, giving the financially excluded better access to bank accounts, debit cards and lower interest loans so they are paying similar costs as the majority of borrowers and not facing long-term, crippling debt. incuto's technology and partnerships empower credit unions to offer a viable alternative to high-interest, pay-day loans and bank charges.

Community-based banking and lending

Credit unions and communitybased banks and building societies are well placed to support individuals and families in a post-Covid world, but they must innovate and transform the service they offer to Members.

For example, credit unions have traditionally offered their

Members limited branch networks (some have no more than two branches servicing a given geographical area), plus they struggle with legacy technology and paper-based systems which make their service extremely inaccessible, especially compared to high-street banks and pay day lenders. It seems unthinkable in our digital world that you would have to physically go into a branch to either withdraw or pay in money, but this is still the case with some credit unions across the UK

Any technology solution for credit unions must be all encompassing. After all, it's not just enabling people to manage their money or apply for loans online in a faster and more efficient way. incuto's technology offers credit unions and community-based banks paper-free, automated applications; automated communication to increase engagement; 24/7 access including pre-authorised amounts and rates, pre-filled applications and e-signatures; automated ID verification, AML, affordability and credit scoring and underwriting; plus a self-service web portal for Members to view and manage their accounts.

Fintech for credit unions is about giving Members financial freedom and access to services, plus the ability to pay in money at a wider network of outlets and the same level of interaction and

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individuals who may have struggled to access financial services"

engagement that they would receive from a high-street or online bank.

Fintech for social good

The link between Fintech and promoting social good isn't always obvious, but innovation in this space has a key role to play in financial education and inclusion for millions of lower-income individuals, families and households across the UK. We tend to think about financial technology only in the context of challenger banks or improved services for the average banking customer - but what about the 1.5 million people in the UK who do not have a bank account. Enter new technology which is already helping the 'unbanked'. Fintech for social good is levelling the playing field for individuals who may have struggled to access financial services, something that many of us take for granted.

Clearly, many credit unions, community banks and community development financial institution (CDFI) have taken steps over recent years to digitise what they offer, regardless of the pandemic.

Those with larger membership bases have worked to offer Members a better online experience, with 24/7 access to their accounts, the ability to complete transactions online, access to a banking app and online loan applications. Equally, many of the credit unions we work with have taken up services such as improved digital communications and marketing, access to cash via the Post Office Banking Framework, Open Banking and Faster Payments, all of which enhance their existing Members' experience and make them a more attractive

proposition to a wider audience.

Of course, for smaller credit unions or those relying on in-person interactions to complete transactions, there was an urgent need to implement digital services very quickly at the start of the first UK lockdown. Members needed access to their accounts without the health risks of coming into a branch. Although many offices did remain open for Members who needed to visit, the speedy uptake of mobile and online services including online withdrawals, loan applications and e-signatures was necessary to ensuring these credit unions could continue their obligation to Members.

Becoming more competitive through innovation

The solution is now available. Open up the services credit unions can offer and give access to a wider audience through technology. Better branch access via partnerships with other branch networks, plus a debit card, bank account and sort code (rather than simply a Membership number) would allow the financially excluded to access additional services at the same price as the wider population and better online access and automation.

It's been fantastic to see credit unions - big and small - pivoting their approach and services in order to continue supporting their Members during an extremely difficult period. While it is arguable that many of these changes would have played out in time anyway, the need to adapt and work remotely which Covid-19 created presented an opportunity to improve credit union services across the board and open up access even further in the vear ahead.





ver the last 12 months the business of capital markets trading has become even more closely entwined with technology than ever before. During recordbreaking market volatility and volumes, firms have also faced the novel challenge of having most of their global staff working from home, that challenge continues in 2021 and has accelerated digital transformation. With this backdrop we have seen accelerating demand for increasingly sophisticated monitoring and analysis of trading | fractions of basis points in overall

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Clive Posselt Commercial Director, Instrumentix

> plant performance from liquidity venues, banks, brokers, and proprietary trading firms alike.

For the sell side, having the correct insights into the performance of their trading systems and client experience, allows them to make optimizations to their stack that can make a critical difference to financial performance. As the buy side has become more data driven and systematic in their approach to how and where they execute their flow, the use of advanced data sets and algo customization has continued to increase. This means that





execution performance can mean the difference for a sell side firm being ranked as a top broker or being cut off entirely.

We have seen organizations responsible for electronic trading execution, not only seeking more high quality execution metrics, but they also want more context into exactly why specific outcomes have occurred. Understanding the relationship between execution plant performance and execution outcomes is evolving into another arms race around execution alpha. The insights born from that understanding can drive the changes needed to both deliver against clients expectations and optimise P&L and the firms with superior execution analytics, intelligence and understanding will be the winners.

While firms focus on more accurate data and sophisticated insights to improve trading outcomes, they are also faced with the ever increasing challenges of data lineage and the need to be able to augment, manipulate and transform data that can be captured from the wire. Fundamental to being able to achieve this is the ability to manage the multiple protocol changes that naturally occur as orders traverse a typical trading infrastructure. This is where the ability for a trade plant monitoring and analytics platform to be easily integrated with other systems and effectively act as middleware is critical. Clients are demanding true multi-hop performance analysis that allows them to really understand tick-to-order and tick-to-trade timeframes not possible with legacy solutions. To deliver against this it must be possible to compute complex and integrated calculations in

real-time as the norm.

Increasingly demand for trade plant analytics is not just coming from infrastructure and network teams as has historically been the case. As the race for a competitive edge has accelerated, easy integration with other systems ensures that the data and analysis produced can be leveraged by multiple user groups and stakeholders across an organisation, whilst ensuring that the output they interact with either via a user interface or API is tailored to their specific needs. For example, the network team will want to receive both different metrics and also differently formatted insights to that demanded by the trading technology team or by the trading desk themselves. Due to our unique framework any external data source can be rapidly integrated with xMetrics to create both user defined fields and functions not inherent in the raw data and additionally to be analysed alongside the massive amounts of data that xMetrics produces to display a truly holistic view of an entire global trading plant.

We have also seen expectations around alerting frameworks evolve rapidly, with SLA based alerting being superseded by adaptive multi factor alerting that relates real-time changes in behaviour vs historic and multiple inter-related performance metrics. These alerting frameworks also need to be integrated with clients messaging platforms of choice.

Another question that capital markets firms have been increasingly wrestling with is the best way to manage resourcing constraints. All firms have

extremely knowledgeable experts within their execution and technology businesses, but across the board these key team members are time poor. Deploying and maintaining a real-time trade plant monitoring and analytics platform can be complex and time consuming and in order for clients to make the most of the goldmine of data and insights available, we are increasingly being asked to provide our platform as a managed service. This is something that we would not have expected when deploying in large global organisations only a few years ago, but over the last 12-18 months it has become the norm.

2020 was challenging for the whole market, but a very busy one for Instrumentix and this has accelerated as we have gone in to 2021. The world has definitely shrunk and technology firms have had to rapidly digitise their marketing and sales processes which has meant that in many b2b environments it has been easier for buyers to get information and run evaluations of new products. Even without the ability to interact with clients in person we have seen strong growth in our core markets and also formed new partnerships that have allowed us to onboard our first clients in Latin America for example.

We see data at speed and scale being the continued key to success for trading businesses, but it is only useful if traders can trust the source and that is why data taken from the wire is so critically valued. Finally, the advanced contextual analytics needed to interpret existing, new and unstructured data sources to optimally manage trading businesses has rapidly become as critical as finding the data itself.

TRANSFORMATION IS DIGITAI



Matthew Cheung **CEO**, ipushpull

inancial services have accelerated digital transformation as Covid-19 has forced staff to work from home while maintaining the same level of service to their clients and dealing with volatile markets. Staff have needed to access data from their homes and share information with remote colleagues and clients. However, data sharing in capital markets

has historically been a manually intensive process, involving emails, file sharing and copying and pasting between documents.

Ipushpull allows firms to remove these inefficiencies and reduce the potential of errors by providing Data-as-a-Service (DaaS) to automate the movement of information, both internally and externally, and improve the service to clients. The technology was

originally built for an electronic trading company to facilitate sending data to mobiles. Matthew Cheung, chief executive of ipushpull, realised there was a ga in the market for a product that allowed a group of people to easil share live data and the firm launched in 2017.

The fintech 'pulls' the required information from a database, a platform or even a spreadsheet and 'pushes' it to recipients in applications they already use, such as Excel or a chat platform without them having to change their workflows.

Capital markets firms have traditionally built their own technology but using a managed service allows them to focus on their core competencies and be more responsive and agile. Making data interoperable enables live collaboration and this

THE MOST INFLUENTIAL FINANCIAL TECHNOLOGY COMPANIES OF 2021

> creates a faster path to innovation, giving firms a more agile decisionmaking process as they will have the right data at the right moment and in the right format. The shift to a more data-driven culture also lowers risk and costs and leads to increased revenues.

> Ipushpull uses cloud technologyso firms can 'plug-and-play' and easily share data in any application. There is full compliance with capital markets regulations as DaaS has built-in the required security controls and audit trails.

Another reason for using DaaS is the explosion of both structured and unstructured data in capital markets which requires specific expertise to identify, collect, cleanse, store, maintain and distribute. Each stage presents a challenge, for example, storing large amounts of data can cost hundreds of thousands of dollars per month in each region. As a result, ipushpull accelerates the speed to market as the firm has the experience and expertise to meet each of these challenges.

Ipushpull can also meet customer preferences on whether they want to receive data that is live, streaming or on-demand.

For example, NatWest Markets has used ipushpull to distribute tens of thousands of daily axes to clients more efficiently than through phone calls or emails. Automating the process means the axes are always up-to-date, actionable, relevant and easy to access by clients. The bank sends a stream of live data to the ipushpull cloud and clients can pull the data in their preferred format, such as excel, a chat on a messaging platform such as Symphony, or a mobile app.

