Inside Market Data

November 9, 2015

Volume 31, Number 2

ORGANIZATION & STRATEGY

3 Symphony Begins Hiring Spree

EXCHANGE WATCH

 Euronext Eyes App Expansion to Institutional Clients, Third-Party Content

INDUSTRY ISSUES

6 FISD Updates FIA Data Certification Content

DATA DISPLAY & ANALYTICS

- Eagle Alpha Targets Analytics
 Expansion, US Ops with New
 Funding
- 7 Trendrating Adds Optimization Tools
- 8 Infront Targets Terminal Upgrades at Buy Side, Wealth Managers

DELIVERY TECHNOLOGIES

8 McObject Unveils V7 of eXtremeDB Financial Edition

OPEN PLATFORM

11 The Very Long Engagement of Market Data and Big Data

COLUMNS

4 OPENING CROSS

Utilities Will Get Data Management Out of the Closet... And to the Dry Cleaners?

5 HERD

6 SCROLLING NEWS



TR, Systex Eye Sale of AFE to Capitalize on Success of 'Connect' Cross-Border Projects

Hong Kong-based data vendor AFE Solutions has been placed up for sale by joint owners Thomson Reuters and Taiwan-based IT infrastructure provider Systex Corp., in what appears to be a bid to capitalize on growth generated by the Hong Kong-Shanghai Stock Connect venture and demand from Mainland Chinese data providers for Hong Kong data and ways to serve international markets.

Earlier this year, Thomson Reuters and Systex engaged New York-based investment bank and

M&A advisory firm BDA Partners to explore a sale of the company. In its fact sheet about the offering, BDA codenames AFE "Project Altesse," and describes the vendor as "a leading regional financial data and trading solutions provider headquartered in Hong Kong with additional operations in Thailand and Vietnam... offering a full suite of multi-market and multi-instrument platforms for information, stock trading and settlement."

An industry observer familiar with the >3

OneMarketData Acquires Tick Data for Cloud-Based Content-Analytics Combo

New York-based tick database and complex event processing software vendor OneMarketData has acquired Great Falls, VA-based historical tick data provider Tick Data Inc for an undisclosed sum to offer cloud-based, integrated content and analytics, and to expand its reach among financial firms.

The vendors closed the deal last Friday, Oct. 30. Tick Data becomes a wholly-owned subsidiary of OneMarketData, though it will remain in Virginia with its existing management. Over the next 30 to 60 days, the two will integrate Tick Data's content with One-MarketData's OneTick analytics platform to create a cloud-based solution offering ondemand access to swathes of historical tick data and the ability to run analytics against that data on the fly. Between now and then, the vendors will create a "sales culture" so that any salesperson can sell any product from across the two companies, in addition to the integrated solution.

Users Slam ABS Singapore Benchmark Fees

User firms in Asia are criticizing the introduction of fees for the Singapore Interbank Offered Rate (SIBOR) and ABS Swap Offer Rate (SOR) financial benchmarks last month, saying that the fees were introduced too fast and that the new fee licenses are an administrative burden.

SIBOR is a daily rate based on the interest rates at which banks offer to lend unsecured funds to other banks in the Singapore wholesale money market, while the SOR is the expected forward exchange rate between the US dollar and Singapore dollar.

In June, ABS Benchmarks Administration-

a subsidiary of the Association of Banks in Singapore, which was setup in June 2013 to own and administer the SIBOR and SOR benchmarks—announced that it would begin charging new usage fees from Oct. 1 "in line with global development on benchmark data usage." At the same time, ABS also announced that it had appointed Thomson Reuters as its official calculating agent, responsible for calculating the ABS benchmarks, and for managing administration and billing on its behalf.

Under the new commercial model, users and applications that receive real-time SIBOR and/or SOR data via market data termi- >12

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TR, Systex Eye Sale of AFE

<1 situation says AFE's strengths are that "Its terminals are at every local bank. It is the leading Hong Kong vendor," and that-unlike its local peers-it distributes full-depth data from Hong Kong Exchanges and Clearing (HKEx). Indeed, the BDA document notes that "The company has developed a stable backend system and infrastructure, and can offer more reliable delivery mechanisms than its peers." This comprises a multi-purpose network based on BT Radianz's IP Multicast network to support not just streaming data but also audio and video news and commentary from Thomson Reuters and other partners, according to AFE's website.

A key factor in the decision to sell AFE appears to be growth in demand for Hong Kong data and trading capabilities following the introduction of the Hong Kong-Shanghai Connect cross-listing and trading program last year by HKEx and the Shanghai Stock Exchange. The BDA sale document notes that this program lifted HKEx average daily turnover to a four-year high, and cited similar initiatives that may further boost AFE's business. "Other upcoming programs include Shenzhen-Hong Kong Stock Connect, and the Taiwan-Singapore stock market link. This continuing phenomenon significantly broadens Altesse's addressable

market and the company is well positioned to capture the growing demand by capitalizing on its strong foothold in Hong Kong, the financial gateway between China, US and the rest of the world," the document states.

It is this position that the industry observer says could make AFE an attractive acquisition to any number of Mainland Chinese data vendors seeking to gain clients outside their domestic market. "I imagine there is a lot of Chinese interest in buying it to get a foothold outside China," the source adds.

According to the document, the vendor expects to achieve revenues of US\$17.8 million and EBITDA (earnings before interest, tax, depreciation and amortization) of US\$1.8 million for full-year 2015, and forecasts that these will grow to US\$20.5 million and US\$2.64 million, respectively, in 2018, with EBITDA margin anticipated to rise from 10.1 percent to 12.9 percent over the same period. Around 80 percent of revenues are recurring, and the vendor's key clients have been customers for an average of more than 10 years, the document adds.

AFE was founded in 1983. Thomson Reuters and Systex became joint owners in 2000. Thomson Reuters and BDA decline to comment.

Max Bowie

ORGANIZATION & STRATEGY

Symphony Begins Hiring Spree

Startup secure messaging provider Symphony Communication Services is embarking on an "aggressive" hiring campaign across all functions of its business to grow take-up of its messaging platform and develop an app store for market data services.

The vendor is actively hiring for positions in engineering, operations, business development and sales in locations across the US, Latin America, Europe and Asia to increase its staff from 40 at present to 100 or more over the next year.

The expansion will be funded by a

combined \$100 million invested in the platform last month by Google, venture capital firm Lakestar, French asset manager Natixis, Société Générale and UBS.

"First, we will continue to invest in and enhance our secure communication and workflow platform. We are aggressively hiring the best of the best in all regions, specifically engineering and sales talent," says Symphony chief executive David Gurle.

The vendor will also leverage the \$100 million investment to expand its global footprint by opening new >12

ORGANIZATION & STRATEGY

OneMarketData

Tick Data president Neal Falkenberry says the deal came about following an evaluation of Tick Data by New York investment bank SenaHill Partners, to help the vendor better understand how clients can mine its data. "From there, we were introduced to OneMarketData, and then we spent about six or seven months in talks," he says. "The marriage of content and analytics is compelling, and the ability to manage data [in OneTick] will give more firms the opportunity to leverage high-frequency data."

Initially, Tick Data wasn't committed to selling the company, and was only looking for strategic partners, Falkenberry says. Indeed, OneMarketData wasn't necessarily looking for an acquisition. "We've announced partnerships to expand our services... and we've been actively looking to license and aggregate content, but Tick Data gave us an opportunity to buy key assets that we wanted to own," says Jeffrey Banker, senior vice president at OneMarketData. "It's a very unique asset that would have taken a long effort to replicate."

Banker says integrating Tick Data's historical and intraday time-series content with OneMarketData's existing cloudbased version of OneTick will open the vendor up to new audiences. "The feedback we've received is that OneTick doesn't fit every client need, but if we put it in the cloud and populate it with data... it becomes a utility platform that enables us to do analytics in a manner that reaches different audiences with different propositions at different price points," ranging from those who want to install OneTick and Tick Data's content on-site to those without the technical resources, to support those platforms in-house, who would rather access them on a one-off basis in the cloud, he says.

The Tick Data content will also help OneMarketData create other new services. For example, OneMarketData plans to roll out a back-testing module that is currently in the final stages of testing with a client, and which will leverage Tick Data's content to allow users to back-test strategies against specific timeframes of tick data, Banker says.

Max Bowie

OPENING CROSS

Utilities Will Get Data Management Out of the Closet... And to the Dry Cleaners

This week, Inside Market Data and Inside Reference Data return to Hong Kong to host-in partnership with industry association FISD-the Asia-Pacific Financial Information Conference. I've always been a big fan of the event (if not the flight), which manages to address market and reference data issues from across a region more geographically and culturally diverse than Europe or North America, where each country has distinct financial systems and regulatory regimes. And I've always been impressed by how the local data executives handle all these diverse and competing requirements, usually with far smaller budgets and staff than their colleagues in other locations.

In fact, it was at APFIC a few years ago that a panel of data professionals clearly enunciated why they so often get stuck with tasks relating to new regulations and compliance requirements, rather than their colleagues in risk management or compliance. The reason, they said, is that regulatory issues are generally data issues, and functions such as reporting and proving compliance are straight-up data issues, where a firm must delve into its databases, capture the correct data points and present them in a usable way. To do this for the plethora of complex regulations out there, firms can't rely on manual processes-that's simply too repetitive and time-consuming. What they need is better data governance strategies to ensure data is not just stored, but also properly managed, indexed, crossreferenced, etc., to make it usable. It's one thing to meet a requirement that data must be stored indefinitely, but quite another that the data should be usable and that you should be able to present specific data points within a set time.

This kind of governance structure isn't just a requirement for regulatory compliance, though that may have driven most of the spend in these areas over the past few years; it's also a necessity to be able to leverage Big Data and the kinds of analytics now becoming more commonplace in different areas of the financial markets (see Charles Fiori's Open Platform elsewhere in this issue). Think of all your data as an enormous collection of clothes in a tiny closet: without a good structure for organizing them, how can you expect to find an item, let alone find the matching sets, or to create a properly coordinated outfit?

However, there are many aspects of data management that don't add any competitive advantage, such as basic instrument data management, and cleansing and scrubbing. Think of these as your dry cleaning: it's inefficient for most people to have a massive dry cleaning machine at home, so we have someone else do it. And the data world is now becoming more open to sending out its cleaning—quite literally—with the emergence of the new Securities Product Reference Data initiative, spearheaded by SmartStream Technologies, Goldman Sachs, JP Morgan and Morgan Stanley.

For a detailed discussion of SPReD and other utility-related issues, check out

the special report on the topic that will be distributed with the November edition of Inside Reference Data. The argument for a utility approach is that a single entity can perform the same role that is currently duplicated across each and every financial firm-all of whom have to ensure clean and accurate instrument data and have to prepare data for regulators-but can leverage economies of scale and eliminate those duplicative efforts and costs. These tasks are non-competitive. and add no revenue stream, so why keep them in-house? The challenge to a utility achieving its aims will be how open data providers are to implementing flexible commercial models to reflect a utility rather than many individual consumers. But either way, firms should still save on the cost of resources.

So in future, regional offices with smaller budgets and staff should be able to take advantage of utilities to focus on other initiatives—either making money from new product development, or saving money through cost management—that do make a difference to their bottom line.



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4

Euronext Eyes App Expansion to Institutional Clients, Third-Party Content

European exchange Euronext plans to expand the content available via the upcoming premium, chargeable version of its Market Data App slated for release next year (*IMD*, Aug. 14) by adding a range of realtime, third-party datasets to the app, which exchange officials hope will extend its use from retail investors to institutional traders.

The app currently carries delayed data on Euronext's cash and derivatives markets and indexes, as well as some other delayed European and world index data. However, next year the exchange will introduce a real-time version of the app, which will be a premium, fee-liable option. Over the coming months, Euronext will move from rolling out the delayed data app to adding real-time and third-party content—some of which will be free of charge, and some of which will become fee-liable as the app develops, says Mike Bournes, business development manager for information services at Euronext.

For example, data from Indian news analytics provider Heckyl—which was last week named as the first third-party provider of content to the app—will be free of charge for the first half of next year. The deal will provide retail investors with sentiment data, market intelligence and trending news for Euronext-listed companies, which Heckyl mines from hundreds of thousands of webbased sources and turns it into actionable intelligence, officials say, alerting investors to changes in the public's mood towards a company before its stock price moves.

Euronext will also roll out the content across its data, listing and retail websites over the next three, six and nine months. "The aim of this partnership is to expand our offering to our retail clients. There are a number of market data apps out there already that provide prices and indexes. This is a way of differentiating ourselves through additional content," Bournes says.

However, Euronext will monitor the app's traction among retail users, and use this period as a "trial" for whether it can also serve the exchange's institutional clients. Though Euronext will not add sentiment data to the exchange's real-time feeds at this point, Bournes says it will form part of an offering in the future for professional clients.

"We'll add the Heckyl content to our market data website, and we'll look at further development and distribution for the institutional market," and whether a different delivery mechanism may be needed, he says. "Initially, we will concentrate on the delivery of new information on our app and on our website. In the future we may look at including this data in our real-time feeds."

Euronext is also looking at partnerships to bring in additional content from providers that are mining "original and interesting" content, rather than "traditional charts and analysis," Bournes says. "Here is a requirement for exchanges to communicate with their user base and keep them informed and interested in what is happening in the market. The content you deliver has to be suitable for an app. You don't want very complex charting that you're never going to be able to read. It's a matter of ... showing Euronext keeping up with the times, developing an app, and adding new content to it that is different from something you would get from a traditional vendor," he adds.

Joanne Faulkner

HERD

Eagle Alpha Swoops on Weir

Social media sentiment analytics provider Eagle Alpha recently hired Melinda Weir as head of US sales to help the vendor boost its US presence. Before joining Eagle Alpha, Weir spent 17 years at Citigroup in New York and London, where she was a managing director in its US and European credit sales business. In her new role, Weir reports to Eagle Alpha founder and chief executive Emmett Kilduff. The vendor will use part of a \$1.8 million seed funding round announced last week to build a full US presence around Weir, Kilduff says.

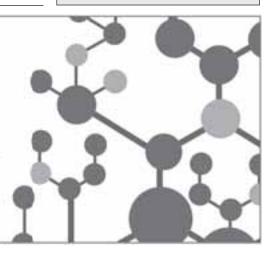
Metamako Taps Fixnetix's Richardson for EMEA BizDev

Australian low-latency switch vendor Metamako has hired Alastair Richardson as head of business development for the EMEA region, reporting to Metamako founder and co-chief technology officer Dave Snowdon. Richardson joins Metamako from data and trading infrastructure provider Fixnetix, where he was responsible for business development and worked primarily with investment banks and global hedge fund clients. He has also held roles at Barclays Capital, where we was a member of the quantitative product development team and worked in client services for the bank's BARX derivatives trading platform, and also worked as an IT contractor at Credit Suisse. Richardson's appointment follows significant growth for the vendor since launching in 2013, particularly in North America and Europe.

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FISD Updates FIA Data Certification Content

Industry association FISD has updated the syllabus and examination for its FIA (Financial Information Associate) professional certification program to reflect changes in the financial markets and market data industry since the program was first introduced.

David Anderson, program director at FISD and principal of UK-based Atradia Consulting, says that almost 1,000 individuals have sat the FIA exam since it was introduced in 2012, with a pass rate of around 75 percent, but says FISD—with input from members, notably Aegon Asset management's John Visti Madsen, Black-Rock's Guillaume Goussault, CUSIP's Matthew Bastian, HSBC Securities Services' Chris Johnson, and Robeco's Tristan Dehaan, among others—has updated the syllabus and exam questions to reflect new issues and areas that have become more prominent than in the past.

"A lot of the basics of market data are still the same. There are more changes in the 'Issues and Trends' section, such as market and regulatory changes—but that only represents 10 percent of the available marks for the examination," Anderson says. "In the regulatory area, we originally focused on MiFID and Reg NMS, and now we're hearing more about MiFID 2, Dodd-Frank, the Volcker Rule, Solvency II, AIFMD, BCBS 239—we're now including this whole plethora of regulation that has now come to the forefront."

In addition, reference data has a more prominent role in the revised syllabus, whereas the real-time arena is "more commoditized and better understood," Anderson says. "EDM didn't feature so highly in the original course. That's largely driven by regulation: Over the past two years, almost everything has been driven by cost containment or regulatory compliance, and reference data is very important to a lot of these regulatory initiatives," he adds.

Other changes include updating terms and names—such as changing references to UK regulator the Financial Services Authority to the Financial Conduct Authority—and reflecting M&A activity, such as Euronext's spin-off from NYSE.

The updated exam is available for candidates to sit immediately, and will run in parallel with the old exam—for those who have already studied the older syllabus until the end of January 2016. However, FISD made drafts of the updated syllabus available early to those who run FIA training programs, enabling these tutors to update their training materials to reflect the 2016 syllabus.

Anderson says FISD will update and refresh the syllabus every two or three years rather than annually. Also, those who pass the exam receive the certification for life, rather than having to re-train or re-sit the exam on a regular basis. "We did wonder whether this should be a continuous performance evaluation-like how doctors or pilots have to do some re-training every year to maintain their professional qualification. But we decided that for this basic qualification, you don't need to re-train or re-qualify. However, we are already investigating further certification programs... and with those, we may introduce a recertification element, based on input and guidance from the community," he says.

WALLBOARD

Nov. 11–12: Asia-Pacific Financial

Information Conference. Organized by

Incisive Media and FISD. Details at:

waterstechnology.com/apfic

Nov. 17: European Trading Architecture

Summit. London. Organized by Incisive

Media. Details at:

waterstechnology.com/events

Nov. 26: Cossiom European charity

event. Paris. Organized by Cossiom.

Details:

event2015.vendor@cossiom.com

Nov. 27: European Ipug meeting.

Paris. Organized by Cossiom. Details:

European-meeting2015@cossiom.com

Dec. 7: Waters USA. New York.

Organized by Incisive Media. Details at:

waterstechnology.com/events

Dec. 7: The American Financial

Technology Awards. New York.

Organized by Incisive Media. Details at:

waterstechnology.com/events

SCROLLING NEWS

>>Danske Bank Taps OneMarketData for Tick Capture

Denmark's Danske Bank is to use tick database and complex event processing software provider OneMarketData's OneTick platform to capture and store real-time market data to perform analysis of the bank's trading activity. OneTick will capture and store real-time market data in its enterprise time-series tick database. Danske Bank will also use OneTick to capture and store customer orders and executions. Danske's team of quantitative analysts will be able to use this information to create snapshots, modify ticks, and calculate execution quality analytics. Users are able to apply OneTick analytics to historical and real-time data queries to create a single code-set for historical analysis and real-time signal generation.

Max Bowie

>>ICE Preps SFTI Bandwidth Upgrades, Wireless Net for 2016

Intercontinental Exchange has announced several initiatives to increase the capacity and speed of its SFTI (Secure Financial Transaction Infrastructure) network next year.

In January, SFTI will expand fiber connectivity between New Jersey access centers in Mahwah, Secaucus and Carteret to provide lower latency and better resiliency. In the first quarter, SFTI will increase customer connection speeds to Mahwah to 40 Gigabits per second, which it recently rolled out for connection to datacenters in Chicago, New York, Secaucus and Carteret, and will also introduce a wireless network between Mahwah and other US access centers, as well as wireless connectivity in Europe between its Basildon datacenter and

Eagle Alpha Targets Analytics Expansion, US Ops with New Funding

Social media data analysis provider Eagle Alpha is to expand the analytics available on its platform and build a New York sales operation to target US clients for its data, after raising \$1.8 million in seed funding from around 15 new and existing individual investors to help asset managers draw value from "alternative" data sources.

The vendor will channel the funds into new product development, primarily focusing on adding proprietary analytics to its platform via an "easy-to-use" interface that will allow it to analyze large numbers of datasets that clients would not be able to analyze themselves without using complex programming and query languages, says Eagle Alpha founder and chief executive Emmett Kilduff.

"Our customers don't have to have the ability to write computer languages," Kilduff says. "There are lots of interesting data sources on the web—for example, the US Food and Drug Administration where there can be very interesting information, but to query the data sources you have to have a data science language like Python.... Most people I know on Wall Street don't use those languages, so they can't query the FDA to say, for example, 'What are the most registered complaints by US doctors about Pfizer's biggest drug, Lipitor?' We're solving that problem by creating new interfaces for our clients so they can query lots of different alternative datasets."

In addition, Eagle Alpha will use the funding to establish an office in North America next year, following the hire of Melinda Weir as head of US sales in September to help the vendor boost its US presence (*see Herd, this issue*).

"We'll build a team around her to penetrate the US market, which will clearly be our biggest market in due course," Kilduff says. "New York hedge funds are leading the push into alternative data, and it gives a flavor for the kind of data types that they're looking for. But what's interesting is that we're seeing the very large asset managers also begin to get involved in alternative data.... It's not just the more data-literate hedge funds that are exploiting alternative data; it's also now the big asset managers getting involved."

Developing its platform and sales force will "put us in the right position to complete a series A funding round, which is our next key milestone," Kilduff adds. He declines to say how much he aims to raise in series A funding, but says the vendor is now looking to attract investment from asset managers rather than just individuals. "The process [of beginning to raise series A funding] starts in two weeks and typically it takes three to six months. The first thing we'll do with those funds is to build our team from 20 people to 75 people over a 24-months period. The key types of people we're looking to hire are data scientists, engineers and more research analysts," he says.

Joanne Faulkner

DATA DISPLAY & ANALYTICS

Trendrating Adds Optimization Tools to V1.2 of Analytics Platform

Lugano, Switzerland-based momentum analytics provider Trendrating has released version 1.2 of its Trendrating Momentum Analytics Platform, to allow fund managers to more easily incorporate smart momentum into their portfolios.

Trendrating originally released the Momentum Analytics Platform in 2013 to help fund managers take advantage of momentum investing, where a trader takes long positions in assets which have demonstrated an upward trending price, and short-sells securities that have been moving downward.

The platform consumes closing prices and volume data for global equities, exchange-traded funds and country and sector indexes, and runs the data through a proprietary Smart Momentum Model, which is designed to identify trends early and to eliminate short-term fluctuations in volatility. The model then attributes ratings—from A to D—based on whether the stock is moving upward or downward.

Version 1.2 includes a range of new features to help users identify alpha strategies based on momentum ranking—where users such as active managers select stocks based on momentum—and smart beta strategies, which have exposure to the whole market but can be tweaked based on momentum.

For example, a new alpha strategy now available in the platform identifies problematic stocks, and then proposes alternatives in the same sector with similar market capitalization, says Trendrating chief executive and founder Rocco Pellegrinelli. "This saves a lot of time and offers the opportunity for fund managers to exit the losers and move into the winners. It's amazing how it can add a few percentage points just by making sure more money is going to the winners."

The platform also includes "smart beta" features that allow users to upload their portfolios and overlay momentum on top, enabling fund managers to decide how to weight their portfolio in terms of momentum, and recalibrate the weightings every month or quarter, Pellegrinelli says.

"Smart beta is an interesting trend in the industry. The idea of smart beta is trying to have a tilt to the portfolio and tweak it in a way that exposes it to a specific concept. The two main smart beta concepts are value and momentum, and it's all about adding an additional level of intelligence," he adds.

Over the past five years, the market has trended upward, where most stocks move with positive momentum, Pellegrinelli says, though this trend may change, and as such, firms need tools to help them implement momentum analysis. Reflecting this need, adoption of smart beta investing has increased significantly, he adds.

"The industry will adopt smart beta more and more in future," he says. "The idea is obviously trying to follow trends in an intelligent way. The problem before was that there wasn't any adequate technology to implement the concept in a simple and fast way."

The platform is aimed at customers across a range of market segments, including mutual funds, EFT providers who are adopting smart beta strategies, and wealth managers who are looking to control risk and identify interesting investments.

Faye Kilburn

Infront Targets Terminal Upgrades at Buy Side, Wealth Managers

Nordic market data vendor Infront has enhanced its terminal to support the entire wealth management and investment management workflows of its clients, from portfolio benchmarking, P&L calculation and comparison, through to market monitoring, risk analysis and trade execution, as buy-side firms continue to digitalize their workflows.

This latest release adds an improved alerting capability that monitors activity in securities on a user's watchlist or within an industry index or other benchmark. Significantly, the vendor has also improved how the terminal displays benchmark interest rates in response to increased client focus on this area, says Martin Holtet, product manager at Infront. Users can receive alerts via their terminals, mobile devices or by email.

The new terminal also offers improved risk analysis capabilities, with new tools for yield curve and currency conversion. These tools, combined with existing news and contributed research services, will provide buy-side firms with analytics to act on business opportunities as they are identified, officials say.

Infront continues to target wealth management clients as an industry sector that has not only experienced growth over recent years throughout the whole of Europe, but also a "revolution" that has seen wealth managers having to incorporate technology into every aspect of their work, says Julija Pauriene, sales director at Infront. "Everyone is digitalizing, everyone is trying to improve their workflows. That's where we come in...[the terminal] allows advisors to talk to their clients in a very efficient way, share data, and inform the clients about whatever instruments they are interested in," she says.

The vendor is also seeing a growth in

the geographic spread of assets that wealth management professionals are dealing with, Pauriene adds. "It's not just enough to have access to a specific list of instruments; they have to have the freedom as well to find other types of things that their clients are interested in.... We have taken this one step further to help those guys do their work with improvements to the creation of charts and the way you can compare different instruments and currencies," she says. "The whole industry is interested in [changing] technology. Historically, [wealth managers] are very deep into Bloomberg types of systems, but they see a definite need to become more modern and efficient in the way they work We're a strong terminal in terms of market data, but it's a trading-enabled terminal as well, which many buy-side firms use to basically have 'flow' with their clients."

Joanne Faulkner

DELIVERY TECHNOLOGIES

McObject Unveils V7 of eXtremeDB Financial Edition

In-memory database provider McObject is releasing version 7.0 of its eXtremeDB Financial Edition high-performance database management software, with new outof-the-box functionality to make it easier for customers to roll out the platform, as well as additional support for the SQL database programming language.

Officials say the improvements are intended to improve the speed and scalability of eXtremeDB, which can be used for algorithm back-testing, real-time risk analytics and reporting, and real-time consumption and analysis of high-volume market trade data.

Previous incarnations of eXtremeDB Financial Edition leveraged an in-process database architecture—where database functions are embedded in the application code, and the software executes from within the application process—so there was no communications overhead between eXtremeDB and applications. However, setting up the database was difficult, so version 7.0 of the software features a new architecture with separate database server and client application components, so the software can be deployed out-of-the-box.

Ted Kenney, marketing director at

McObject, says the new setup enables customers to more easily implement distributed query processing, whereby the database can be broken up into different pieces—called "shards"—that can be processed on separate instances of the server.

"This will enable customers to parallelize processes and better leverage the bandwidth of their existing infrastructure, since firms often don't take full advantage of all the memory or bandwidth they have. Any operation with market data is likely to be limited by some factor such as the CPU bandwidth... [but] this new architecture allows multiple cores to work on the same task," Kenney says, adding that the McObject added this functionality to meet demand from the financial community.

A second new feature of version 7.0 is "k-safety," which provides database backup in case of outages. Customers can opt for k-1, where each shard/server has one fully synchronized copy of the database; k-2, where each shard has two copies; and so on. "Each database has a redundant copy of itself in case the primary goes down, which is kept synchronized and can be stored on separate hardware nodes, locally or on the same node," Kenney says. "Financial companies like to be able to heighten uptime."

Based on feedback from clients developing capital markets systems, McObject has made the SQL programming language eXtremeDB Financial Edition's principal interface. SQL improvements in version 7.0 include upgrades to its open database connectivity (ODBC) driver; overall optimization for financial calculations; better utilization of multi-core processors; and support for new SQL commands.

"For a long time, we have offered multiple ways to talk to the database, including SQL, and this release is evolving to a state where SQL is emphasized to a greater degree. SQL is able to deliver recordsetting performance. It is a widely used language, and reduces time for development, so it makes sense," Kenney says.

eXtremeDB Financial Edition 7.0 has been in development for the past year and was recently tested by the Securities Technology Analysis Center (STAC) under an audited STAC-M3 Benchmark report. The database is available at no additional cost to existing McObject customers as an optional upgrade.

Faye Kilburn

8

Exchange Data Revenues Continue Rises

Market data continued to prove an increasing source of profits for exchanges, as major venues across Europe and North America posted financial results for the three months ended Sept. 30, all reporting healthy profits from their data divisions, including index and benchmark businesses, even in those cases where overall exchange net profit fell.

In Europe, Deutsche Börse saw its net revenues sore with the German exchange group posting revenues of €594.4 million (\$645.5 million)—an increase of 20 percent compared to €495.6 million (\$538.2) for the same period last year. This increase was driven in part by positive developments in its Market Data + Services and its index business, as well as administration of securities (Clearstream) and high equity market volatility. Market Data + Services revenue rose 12 percent from €92.5 million (\$100.5) for Q3 2014 to €103.5 million (\$112.4), of which real-time and historic market data generated €37 million (\$40.2 million). Deutsche Borse's index business also performed well. Since July 2015 both Stoxx and Indexium have become wholly owned subsidiaries of the group, fuelling the growth. Investor appetite towards "passively managed financial products, such as ETFs, led to an increase in assets under management in these products," which has meant higher licensing revenue for the MD+S division, exchange officials say.

European exchange group Euronext declared a 3.7 percent decrease in overall net profit compared to the same period last year, posting earnings of \notin 47.7 million (\$51.8 million), though market data and indexes revenue for the quarter was \notin 24.4 million (\$26.5 million), up 1.2 percent compared to Q3 2014. This was due to a positive start from its new global index server, which debuted at the end of September.

Spanish exchange Bolsas y Mercados Españoles (BME) posted net profit of €40.9 million (\$44.4 million), up from €38.5 million (\$41.8 million) compared to Q3 2014. Earnings for the exchange's market data division totaled €8.6 million (\$9.3 million), up 25.4 percent year-onyear, mainly driven by a higher client uptake numbers, more direct connections, and more subscribers to information from primary sources at the different levels, which rose 3.4 percent compared to the same period last year.

The London Stock Exchange Group reported a 44 percent increase in its information services revenues to £133.7 million (\$203.8 million), up from £93 million (\$141.8 million) year-on-year. The group's FTSE Russell Indexes business pulled in £90.7 million, with the index businesses now managed and reported as an integrated business. Total revenue rose 93 percent following the Russell acquisition to £566.1 million (\$862.8 million) from £292.7 million (\$446.1 million) last year.

Across the pond, Nasdaq's net revenues for Q3 also rose, with the exchange posting a six percent increase year-onyear from \$497 million to \$529 million. Information Services, which makes up 25 percent of the exchange's total revenues, bought in \$132 million for Q3, up \$18 million from Q3 2014. The exchange attributes this to a \$12 million operational increase and a \$9 million increase from index provider Dorsey Wright, which Nasdaq acquired at the start of 2015. The exchange also saw increases in the revenues for its data products from proprietary and shared tape revenue plans and higher audit collections.

It was a similar story at Canadian exchange operator TMX Group, which posted total revenues of C\$175.9 million (\$132.2 million) for Q3 2015, up from C\$170.2 million (\$128 million) for the same quarter last year. Of that, information services—which includes revenue from the group's microwave network business Strike Technologies Services and Razor Risk—brought in \$51.2 million, up from \$45.9 million last year.

Finally, Intercontinental Exchange (ICE), which acquired market and reference data provider Interactive Data for \$5.2 billion in October, posted a 24 percent revenue increase for its data services division, bringing in \$209 million. The exchange attributes the increase to higher data services fee revenues, primarily due to the addition of new users, value capture related to expanded product offerings, and the addition of SuperDerivatives and ICE Benchmark Administration. Overall net revenues for the exchange grew 10 percent year-on-year to \$816 million.

Joanne Faulkner

SCROLLING NEWS

c6 other facilities in London, Slough and Frankfurt. Then in mid-2016, SFTI will increase the capacity of its network backbone from 40 Gbps to 100 Gbps to meet growing client demand for higher capacity, officials say.

>>Deutsche Börse Adds Access to New BSE Feeds

German exchange group Deutsche Börse's Market Data + Services division has extended its partnership with BSE India (formerly known as the Bombay Stock Exchange) by licensing three new BSE market data products to Deutsche Börse clients. The new "Ultra" products deliver the full chain of pretrade information and complete post-trade data, disseminating bids and offers as soon as they occur up to five levels of order book depth. The new feeds—BSE India Spot Markets Ultra, BSE India Derivatives Markets Ultra, and BSE India Indices Ultra—are delivered via leased lines connecting directly to BSE India's T7 trading infrastructure.

>>HKEx Offers Market Data Free Trial to Demonstrate Value

Hong Kong Exchanges and Clearing (HKEx) has introduced a program to offer potential clients a three-month free trial of its real-time

and historical market data to more widely promote the value of its data to market participants. The promotion, which will run from now until Oct. 31, 2016, includes HKEx's premium and full-tick datafeeds for its securities and derivatives markets for new direct connections placed by end users. The data is restricted to program participants' internal use, and participants must meet HKEx's "new client" requirements. Separately, HKEx is also offering a trial of its historical "full book" securities and derivatives data to new clients who have not purchased the historical "full book" data in the past 12 months.

NovaSparks Adds BrokerTec ITCH Feed in First Fixed Income Foray

Paris-based FPGA feed handler and market data appliance provider NovaSparks has added support for interdealer broker Icap's BrokerTec electronic fixed income trading platform, in response to ongoing electronification of the fixed income markets and to meet customer demand for FPGA-accelerated market data on US Treasury bonds.

Following a three-month integration project, BrokerTec's low-latency ITCH feed is now available via NovaSparks' NovaTick ticker plant, with average wireto-wire latency of 1.1 microseconds. NovaSparks standardizes the BrokerTec data so customers have the same normalized output format across the other 38 equity and derivatives markets that the vendor currently supports.

NovaSparks added the BrokerTec feed after receiving requests from larger electronic market makers and quantitative trading firms who wanted to trade across asset classes and consume FPGA-accelerated data from Icap's \$12 trillion market--particularly BrokerTec's highly liquid on-the-run US Treasury securities, says NovaSparks chief operating officer Olivier Baetz.

"The ITCH feed is BrokerTec's lowlatency, per-order feed, which provides the most detailed view of the market. A number of securities are traded on the platform, but the main ones of interest are on-the-run US Treasuries," Baetz says. "We handle the feed, and customers can select the securities they want."

By adding BrokerTec to its ticker plant, NovaSparks can provide customers with access to fixed income data via the same API they currently use for equities and futures, reducing technology footprint and implementation time. Baetz says the feed was not difficult for the vendor to integrate since it leverages Nasdaq's ITCH protocol, which the vendor has already written to before to support other feeds from the exchange. Similarly, in the coming months, NovaSparks plans to add support for Nasdaq's own eSpeed US Treasury bonds trading platform, which also uses the ITCH protocol.

Until now, NovaSparks has supported equities and derivatives markets, but the addition of BrokerTec and eSpeed marks the vendor's entry into the fixed income markets, which are becoming increasingly commoditized, Baetz says. "If you're talking about junk bonds on some company that isn't liquid, then... there isn't really a need for low-latency data. But the US treasury market is extremely low latency, and is increasingly attracting more and more electronic market makers," he adds.

Faye Kilburn

DELIVERY TECHNOLOGIES

Metamako Bows Network Tool With MiFID 2-Compliant Timestamps

Australian low-latency switch vendor Metamako has released a new software tool, dubbed MetaWatch, which consolidates network tapping, aggregation, buffering, MiFID 2-compliant timestamping and time synchronization onto a single software application, to help firms simplify network monitoring and analysis.

MetaWatch sits on top of the vendor's MetaMux data aggregation and network tapping device, launched last November, and its MetaApp application development and hosting environment, announced in June, to enable third-party vendors and financial institutions to build customized network applications. Whereas Metamako's switch products are primarily aimed at high-frequency traders, MetaWatch is targeted at any firm that needs to comply with MiFID 2's timestamping rules.

The software can be used by trading firms that need to monitor every piece of market data that comes into the organization, and to diagnose problems and analyze latency between different points on a network, says Ciaran Kennedy, business development manager at Metamako. Firms can also use MetaWatch to capture market data for back-testing or analysis of historical data, Kennedy adds.

MetaWatch combines a range of data capture and network analysis functionality, including network tapping and data stream aggregation so users can capture all data to one analytics device. In the past, firms typically deployed multiple platforms, optical taps, aggregation switches and timestamping devices to carry out all these processes, but the new software collapses everything onto a single application, Kennedy says.

The software also includes a large data buffer to guarantee capture of all data even during microbursts when traffic suddenly peaks and data is usually lost because data capture architectures buffer the feeds for a couple of seconds, he says.

In addition to data capture, the software includes nanosecond-level timestamping functionality to enable firms to comply with timestamping accuracy requirements specified by MiFID 2, where each participant in a trade will be required to timestamp every "reportable event" in the lifecycle of a transaction. The vendor provides a timestamp as soon as market data hits the device, and monitors it across the network, after which it can be stored or archived.

"There has been a lot of back and forth

between the European Securities and Markets Authority and market participants over the level of accuracy for timestamping. Currently, the ruling is that ESMA will require millisecond resolution for most firms and less for certain organizations such as voice traders. We go over and above with our nanosecond timestamping with five-nanosecond accuracy across the device. We can timestamp every packet without changing the network," Kennedy says, adding that while the regulation will primarily impact European-based firms, "Any firm that is going to implement high-resolution timestamping will be looking to do so across their global enterprise."

Metamako launched a beta version of MetaWatch this week to all existing customers, and will launch a production version as a software update in January 2016. Customers can install MetaWatch on existing Metamako switches with a software update. Meanwhile, firms deploying Metamako for the first time will be able to run the devices on top of their existing technology stacks, though they will need to replace their existing legacy optical taps and timestamping devices, he adds.

Faye Kilburn

The Very Long Engagement of Market Data and Big Data

Adoption and usage of Big Data technologies is becoming more mainstream, opening up Big Data for uses beyond trading that can augment existing uses of traditional data, such as for KYC and AML monitoring and compliance, says industry consultant Charles Fiori.

For a long time, I was very disappointed in the rate of acceptance of the concepts and advantages of Big Data by the larger financial services community. Wise people with whom I have spoken are completely in agreement. But the recent annual Buy-Side Technology North America Summit in New York, hosted by *WatersTechnology*, proved that this disappointment appears to be dissolving.

At the Summit, panelists discussed Big Data and even the Internet of Things the latter not being something that I would normally associate with Wall Street. Separately, my friend and collaborator Bob Leaper, founder of PanoVista. co., published an important and comprehensive article in which he and his partners discuss "Data Owners and the New Data Realities in Financial Services." So, the ball is rolling!

If someone asked what was my first thought on hearing the phrase Big Data, I'd think about an ecosystem designed to get sellers of products and services closer to their buyers and employees, anticipating their tendencies, wants, and needs. I wouldn't get into discourses about storage methods, Spark versus Hadoop, etc., leaving those choices and discussions to enterprises looking to develop a data strategy.

One very important area for exploration by financial services firms should be in their compliance departments, where data analytics (what we used to call "number crunching") could provide important insights in the effort to comply with Know-Your-Customer (KYC) and Anti-Money Laundering (AML) regulations. How? By analyzing patterns resident in customer data to see what markers would indicate possible violations. Think of risk and personal profiles, typical timing of and sizes of cash flows and transactions, characteristics of associated businesses, of anything that just

might smell bad. When you go to buy paint, the clerk can create just about any shade by mixing other shades in very specific amounts. Same here: The profile of a bad guy, which can and will change over time, is established by looking at the data regarding previous shenanigans by bad guys. Different types of bad guys will have different profiles, different mixes of paint shades, but given the complexity of the activities, a firm needs high-end data management and data analytics to establish and codify the patterns to make it all much easier to follow. Think of the useful proactive procedures that could be undertaken by looking at Big Data in this manner. It is called a digital footprint, similar to keeping track of what stores you visit, what you purchase, and how frequently.

Data has been used to build trading strategies for a long time. The more data that is analyzed and plugged into algorithms, the smarter and more anticipatory the algorithms become-and, presumably, the more money that is made by those on that side of the equation. As quickly as the use of data can shape a profitable trading strategy, it can also help build an effective risk management model. It's all about the patterns! Importantly, firms likely use only a very small percentage of data that they create and control. Though more uses will indeed be found, much more data will also be created (note that more data has been created globally in the last two years than in all of recorded history before that!)

The market data world is, in fact, much better than the Big Data ecosystem in one important factor—establishing values for datasets. *Inside Market Data* regularly highlights purchases and sales of market datasets, and describes who buys the data, what they will do with it, and the important features of the data. This is something rarely seen in Big Data, where



the concept of data having a GAAP value, a place on the balance sheet as an asset, or even value in a transaction is fairly foreign. A recent item in the *Wall Street Journal* described Comcast seeing value in the data that the cable company can capture from its set-top boxes and suggesting who might be interested in buying it.

Market data, as already stated, has long been used by analysts to study patterns in price movement-originally to create and support trading strategies, and now increasingly for compliance and surveillance applications. Big Data Analysis is still being sniffed at by what I like to call "luddites and naysayers"-those who think Big Data is all hype and not worth the effort to understand it, and that it is "not for everybody." How sad! All that information waiting to be tapped like sap in a maple tree, with the end result of knowing one's customers and employees and products better, yet there are still plenty of senior people who just don't care or want to believe.

The trend in market data is clearly to develop more and more robust use cases to maximize the value of a readily available asset. Given the infrastructure already in place, it seems clear that this is a great time to be involved in market data, especially if you are clever and creative. Some of the impetus will come from the unstructured world of Big Data, and some will come from the traditional, structured world of market data, but growth in usage will come. The technology will support anything you may want to do with the data you have, with one key caveat: Before you do anything, get support from everyone in the C-suite, because even the most well thought-out Big Data strategies have failed because those driving the effort haven't built a support structure through their respective organizations.

ORGANIZATION & STRATEGY

Symphony

Gotting offices in Europe and Asia Pacific to meet demand from customers in each region, while also increasing sales support, and expanding its marketing programs and go-to-market strategy.

Currently, Symphony has more than 45,000 individuals using its messaging platform, roughly 40 percent of which are buy-side professionals. Since launching its offering for small to medium-sized businesses in September, the vendor has received "great interest for the product, and [we] are deploying now with a growing number of buy sides," Gurle says.

Symphony is now embarking on the "second chapter" of its growth, developing its presence and growing its user base in financial services in 2016, Gurle says, adding that the vendor also expects to see more content providers join the platform, following the addition of Dow Jones, S&P Capital IQ and Selerity in September.

"We want to be a platform to consume content, not to be an aggregator, creator, or distributor. This means that our end users will be able to choose the content they want like an app store, and that relationship of subscriptions to content is direct from the end user to the content provider," Gurle says.

Faye Kilburn

INDUSTRY ISSUES

ABS Singapore Benchmark Fees

≤1 nals or internal applications will be required to pay monthly fees of US\$5 per user per benchmark. In addition, monthly non-display fees for use of the benchmarks in valuation and pricing activities-such as collateral calculations, pricing curves and interest rate fixing-will be \$1,500 per benchmark for a global license. Data delayed by 24 hours will be available free of charge, though firms using delayed data for non-display usage will still be required to pay the \$1,500 fee. There are also new fees for redistributors of SIBOR and SOR data of \$5,000 per benchmark per month for real-time redistribution, and \$2,000 for delayed redistribution.

ABS did not respond to requests for comment. However, in a statement earlier this year, Ong-Ang Ai Boon, director at ABS, said there is increasing work, oversight and investment needed to strengthen the robustness, transparency and efficiency of the benchmark contribution process in Singapore. "We will continue to ensure that the governance processes of our benchmarks remain robust and acceptable to all market participants," she said.

Last year, user firms were involved in a lengthy negotiation process with international interest rate-setting association Euribor-EBF (European Banking Federation) over a new commercial model that sought to introduce fees for real-time Euribor rates for the first time, and establish a 24-hour interval for delayed data.

The head of market data at a securities brokerage firm in Tokyo says he believes ABS "rushed" the introduction of fees to avoid the same problems that Euribor faced. "When the Euribor fees came in, the changes were communicated in data notifications from Thomson Reuters for a long time—enough time for us to go back to the Euribor board and complain—but for SIBOR and SOR, we didn't get a lot of notice," the head of market data says.

A regional head of market data at a tier-one bank in Singapore calls the new fees "monopolistic," adding that fees for benchmarks tend to increase when new calculation agents come on board.

So-called "SIBOR panel banks" that contribute rates to ABS are exempt from the fees. However, a market data manager at one SIBOR panel bank says the new fee schedule has created a lot of administrative work for his team. "If we consume the data via a vendor such as Bloomberg or Thomson Reuters, they don't have a model where they can give it to you free of charge. They have to charge it and then reimburse it, which is not clean. Money doesn't actually change hands, but it creates an administrative burden," the data manager says.

Faye Kilburn

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