The Future Is Happening Now:

Industry initiatives that will shape your business

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www.fixtradingcommunity.org

The Use of FIX by Regulator

- Regulators such as ASIC and IROCC are now taking regulatory data from market operators in Australia and Canada.

RECOMMENDED RISK CONTROL GUIDELINES

FPL Americas Risk Management Working Group

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Are you on the hook?

Is the Hong Kong regulator going to come knocking on your door?

With the release of the Hong Kong Regulator's (the Securities and Futures Commission) conclusions on its recent consultation paper on the regulation of electronic trading, the institutional trading community in Hong Kong, and those who trade into Hong Kong from abroad, began to look at their new obligations. A principal area for concern are the new efforts by the SFC to have buy-side users of algorithmic trading strategies, and the brokers who route those strategies, to have documented due diligence and training on the use of those algos, including areas such as responsibility for orders, adequacy of systems, risk management (internet trading and DMA), qualification, testing, and risk management (algorithmic trading), for when the regulations come into effect in January 2014. As Robert Laible, Division Director at Macquarie and Co-chair of the FPL Asia Pacific Exchanges and Regulatory Working Group says "users need to understand exactly how [their algos] perform and what they should be used for. I don't think you can say "I relied on my broker-dealer and he told me it was a good algo" anymore; those days are gone."

Jessica Morrison, Head of Market Structure APAC at Deutsche Bank, and also Co-chair of the FPL Asia Pacific Exchanges and Regulatory Working Group adds "the SFC has come to focus on the risk controls, testing process, documentation and audit trail, including looking to assign responsibility to people in a more defined way. The SFC basically want to make sure that algos are being rolled out in a thoughtful manner and have been tested properly, and if they do have a negative impact on the market, who is responsible?"

The burden

As with all new regulation, there is an inevitable burden to be placed on market participants, and as is often the case, much of this burden will sit with the sell-side. But, as Ashley Alder, CEO of the SFC said in a recent interview with GlobalTrading "The answer is that you absolutely need to check out [the system you use] – because if you don't, the risks you are taking on are unknowable; you would be flying blind."

However, Rob Laible contests, "most firms have been doing this to a large extent, but it may not have been a formalised written policy. Now things are going to have to be much more formal and there is a greater element of record keeping, implying there will be added cost." The difficulty for sell-side firms is the control of what comes through their infrastructure, especially if they didn't write the algorithms in use themselves, and doubly so if the buy-side firms employing these algos are based outside of Hong Kong. Jessica Morrison explains, "Where the client writes their own algo, the broker is expected to have a good understanding of the electronic trading systems and algos the clients use. This will get quite hard for the brokerage community, particularly where those clients are offshore. With some offshore traders that have sophisticated strategies not being directly regulated by the SFC, how willing will they be to attest to their broker on how their algos have been developed and tested? A concern for the brokerage community is that there could be brokers willing to take on those clients without proper due diligence, and this could put pressure on others to also lower the standards bar as no one wants to lose a client. But you also don't want a client that puts you at regulatory risk, so the brokers have to consider the balance very carefully."

Testing environment

One practical aspect being closely examined by market participants

Ashley Alder,
CEO, Securities and Futures Commission of Hong Kong

Rob Laible,
Division Director, Macquarie

Jessica Morrison,
Head of Market Structure APAC, Deutsche Bank

ASIA PACIFIC EXCHANGE & REGULATORY COMMITTEE
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Background
Post-trade Processing Initiative

- Identified the need/opportunity for improvement in post-trade processing
    - Single point of failure
    - Significant manual intervention
    - Multiple proprietary protocols
- Decided now was the right time to develop industry standard best-practices for post trade processing via FIX

Why Now? FIX Post-trade Processing Initiative

- (Past) Single centralized proprietary facility made sense
  - Variety of order communication mechanisms
  - Central order-independent mechanism was valuable
    - Find and match-up blocks
    - Confirm transactions

- (Now) Equity trading environment is almost entirely electronic and standardized on FIX
  - Substantial benefits have been realized from placement via FIX
  - Opportunity to realize similar benefits in post-trade processing
    - Leverage FIX placement data
    - Utilize in-place FIX infrastructure and knowledge

Who?

- **Buyside firms** are leading initiative:
    - American Century Investments
    - BlackRock
    - Capital Group
    - Fidelity Management & Research
    - GMO
    - RBC Asset Management
    - Wellington Management
    - ___YOUR_NAME_HERE____

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Buy-side Driving Allocations And Confirmations

Examining the latest developments in post-trade, with Darrin Vallone, Vice President Investment Operations, Capital Group.

Darrin Vallone,
Vice President Investment Operations, Capital Group

Status Quo

At Capital Group we have a proprietary trade processing system that we've developed internally. We've always done local matching both for non-US, as well as US equities. For the past 10 years, we have been using FIX on the trading side and as well as to send allocations for non-US equity transactions to our brokers. For the US, and other regions within the Americas, we would use domestic OASYS to send the allocation. Everything is traded over FIX. For confirmations, we've used OASYS Global for all of our non-US confirmations and we have a pipe directly into DTCC for DTCC confirmations. We match at the allocation level. Today, we don't do any block-level matching.

But that's just the current landscape. What drove us to this project was Omgeo's decommissioning of OASYS Global.

Going forward with FIX

Though we can see some of the benefits of what Omgeo is trying to do with CTM and central matching environment, we decided to look at other alternatives in the market for how we can confirm trades and that led us to FIX. FIX has been in the market for many years. We were already doing allocations via FIX, so after a lot of analysis on our side, we said a natural continuation of the FIX execution and allocation would be the confirmation space. Then in speaking with some of our peers, there was, for different reasons and actually for different markets, a further push for FIX allocations and interest towards FIX confirmations.

> "The buy-side has been growing receptive to it; just trying to have something different, a cost-effective solution and complementing the existing lines that they have today within FIX."

Where we are today is we are slowly putting some brokers on the CTM, that are still in an allocation-based workflow, but we're not doing blocks. Our big push with our bigger broker dealers, is to have them on FIX confirmations. We have a project that has been going on since summer 2012, where we put a lot of emphasis on trying to develop a FIX specification that would be used across counter-parties, by many investment managers, trying to put a common specification playbook out there that everyone could use to create consistency in the marketplace. We've been developing to that specification since. We completed our development last month and in May and we went live with our first broker.

As we were going through the specifications within the FIX Trading Community working group, we benefited from the participation from other investment managers and the sell-side, as well as some vendors that would be supporting this as well.

There was a lot of work being done in various meetings to bring everyone together and really try to harmonise the specification. The goal being that the sell-side didn't want to have a lot of customisation and were looking for a standard.

Any sticking points?

I would say it wasn't necessarily an easy task; as there's already been investment put into the existing systems, so there was a bit of a sticking point in that this working group was introducing another way to confirm, and it was going to require a build for every single broker. But that said, the brokers saw the value of having another means to confirm, leveraging what's

GLOBAL POST-TRADE WORKING GROUP
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Where Do Your Orders Go Before They're Executed?

Capital Group's Brian Lees is driving efforts to ask more questions of brokers, and for more data on where an order is shown before it executes, but can the buy-side handle the resulting deluge?

Brian Lees,
Associate Vice President,
Capital Group

BUY-SIDE WORKING GROUP
www.fixtradingcommunity.org

The current work you are doing on venue reporting analysis

Our first push was simply to try to collect information about 'where' we were executing and a little bit about 'how' we were executing, namely, did we post or did we take liquidity. So having done that, the question was where do we go from there? And as such, the topic of requesting more data on where we didn't execute and what order types were used started to be raised by some representatives on the FPL Americas Buy-Side Working Group. Some participants had already started down this road with brokers, asking for information relating to post-trade about where their orders were sprayed out to by the algorithms and what types of orders were placed on exchanges and also which exchanges they were on, etc. So that's where the conversation began and that's where we reached out to Jeff Alexander and Linda Giordano, because Barclays had already spearheaded this conversation.

What we are looking to achieve either in real time or post-trade, is whether we can standardise a format for brokers to tell us how our order interacted with the market, including when the order was placed, what order types were used, where it was placed in the markets and whether or not we got hits. The concern with this is not so much can we get it, because if we sign enough non-disclosure agreements we can get the information from the brokers. Some brokers have concerns about that information getting out and somebody reverse-engineering their algorithms, but from the buy-side perspective, I think the biggest concern is whether we can manage the volume of data that we would get.

The resources to store and analyse data and make some sort of good use of it

With the original data that we were getting, on where the execution took place, we talked a lot about this with smaller firms who were using TCA vendors to help them analyse this information. With this type of information, if we went a step further, the brokers would not want us sending that out to TCA firms, because it shows their methodology for how their algorithms behave. I was in New York several weeks ago and took the opportunity to meet up with Jeff and Linda while we were there. We invited Jeff to join one of our conference calls for the buy-side committee, which he did, and he talked about what they've been proposing. He showed proposals for both the real-time collection of data, via FIX messages, actually proposing a whole new FIX message to be created for this purpose, which could then be sent in real time. Or, alternatively we could standardise a format for collecting the information post-trade which, as a spreadsheet, would then tell us what we want to see. We're trying to standardise how you ask for the data and what format it is going to be in, by creating best practices for how to get the data from the brokers. That way the brokers don't have to keep coming up with a different format for every client that asks for it. The best practices do specify that the ISO MIC codes would be the standard for identifying the exchange that you executed on, but we said nothing about what you should do with the data once you get it.

Exchange involvement in the conversation

We did talk to some exchanges when we were first trying to standardise how to identify the exchanges, because when we first standardised the MIC codes, they did not cover all the exchanges, this was due to the fact that they hadn't all registered with the ISO organisation and we wanted them to.

We had a little bit of trouble in differentiating the dark order books from the lit order books and some of the exchanges that have both. These exchanges consider themselves a hybrid book, and they didn't want to be known as two different things. We didn't have a way to differentiate the dark and the lit flow without introducing yet another FIX tag. That back and forth added to the conversation as part of the registration authority's decision to come out with the new market segment concept, which says you can have an exchange

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Standardising TCA

Mike Caffi, VP and Manager of Global TCA Services, State Street Global Advisors, and Mike Napper, Director and Head of Global Client Analytics Technology, Credit Suisse and EMEA Client Connectivity Technology, Co-Chairs of the FPL TCA Working Group, examine the motivations for, and the progress of the TCA reference guide.

TCA WORKING GROUP
www.fixtradingcommunity.org

What is the history of the FPL TCA project?

Mike Caffi: The industry has been lacking in any kind of standards for TCA, and that's not a new problem. I have seen some really good TCA white papers over the last five to 10 years that have tried to address the subject, but eventually these fade on the shelf because there is no follow-up support or interest. What we've always needed was some independent group to be able to take ownership of this, but how does one get that started? It never really came about until about a year and a half ago, in September of 2011, with the formation of the OpenTCA group. The group was a collaboration of four sell-side firms in London and EMS and TCA vendor TradingScreen, which was the glue that put them all together.

When I read their white paper I got really excited because I saw a group of individuals who were trying to promote at least what appeared to be an essence of a global standard. They held a conference in London, and then they came to Boston and I contacted the person who was heading the public relations at TradingScreen. They invited me to be on a panel to talk about the benefits of standards, and that was in November of 2011. At this meeting TradingScreen had really tried to move this along, but I saw the need for a larger group to really take on this challenge as well. So that's where I felt a group like FPL would be perfect.

As a matter of fact, when I was at the conference, I related this back to the early beginnings of the FIX Protocol when I was involved 15 years ago. We needed the collaboration of industry participants within a neutral body such as FPL, to take ownership of TCA standards. I even posed that question to the audience: "who would be willing to form a group, putting up a small amount of money just to get the essence of a working group together?", but there really wasn't much reaction at that particular time. Given that the holidays were approaching I decided to let it simmer down until after the New Year.

By early March I contacted John Goeller, FPL Americas Regional Co-Chair, and ran the idea by him to see if FPL would be interested in hosting a TCA Working Group. John liked the idea and soon after he ran it by the organisation's Global Steering Committee, who also thought it would deliver strong

Mike Caffi,
VP and Manger of Global TCA Services, State Street Global Advisors

industry benefit and liked the idea. From there, FPL leaders opened discussions with TradingScreen and due to strong FPL member firm interest in addressing some of the key business issues impacting the TCA environment, it was agreed that FPL would create a TCA working group. Representatives from TradingScreen joined this parallel activity.

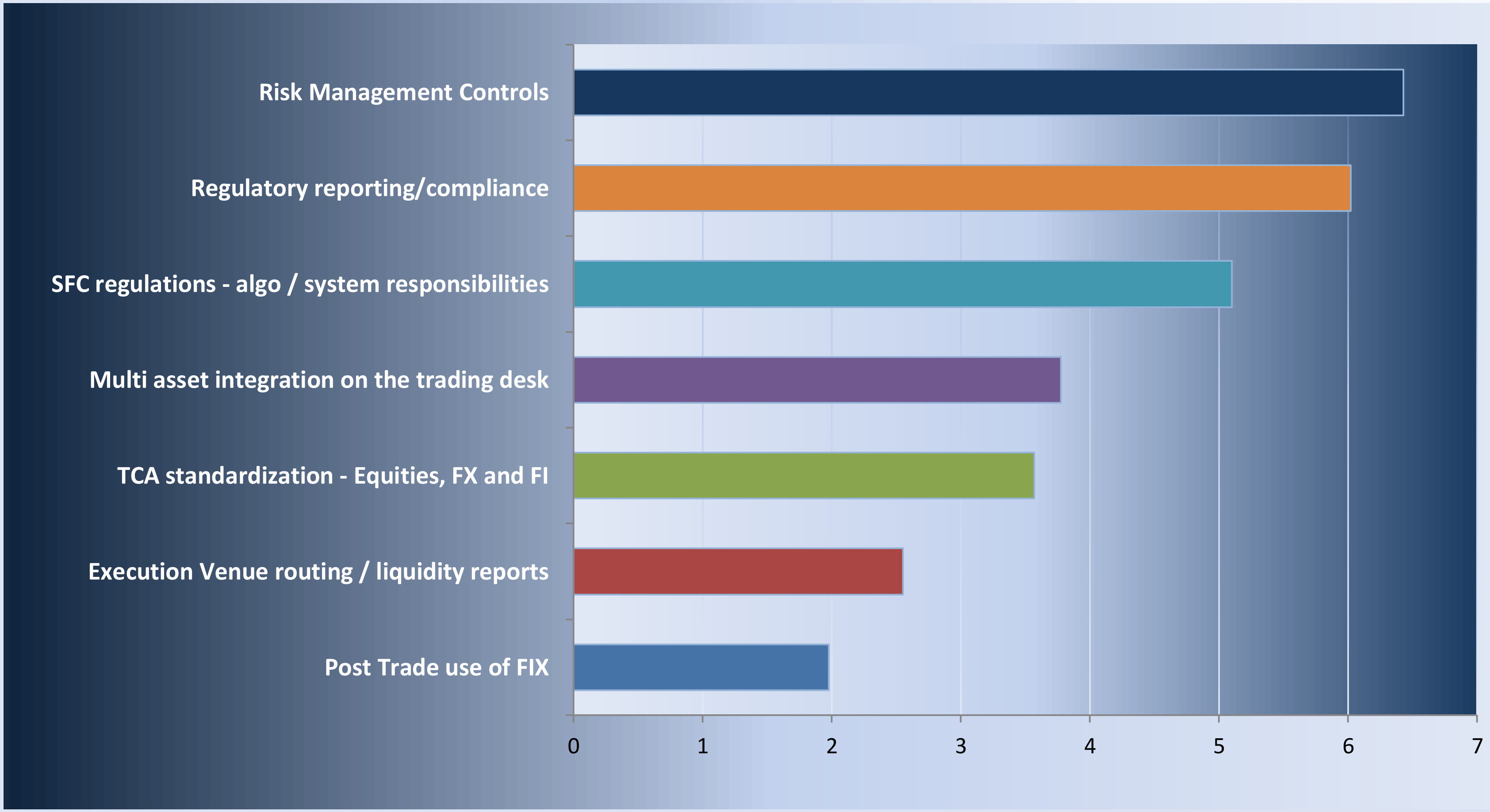
So it was agreed to put out a call for participation, and on the first pass we had about 70 people sign up. We had our first meeting in June of last year, and that is when we got traction; at

Trends in TCA

- Continued and increasing demand for transparency and efficiencies around the execution of investment decision across the industry.
- This is now expanding beyond equites to other assets classes: increased demand to manage costs and improve performance.
- As the trading environment becomes more complex with different types of venue, consistency of measurement is key.
- Pending regulation across the region around electronic trading and dark pool only re-inforce the message of transparency.
- Focus is on reducing noise of individual orders and defining trends that can then be addressed. Presentation of data must be intuitive and value adding. It is no longer enough to just "show the numbers".
- Fastest areas of growth include:
  - Venue analysis – including comparison of dark pools, different lit markets, and even different algo strategies
  - Real-time TCA – enables traders to adjust their strategies on the fly as markets change
  - TCA for other asset classes – in particular FX

Prioritization:

Issues focused on by FIX Trading Community, ranked in relative order of concern



*Taken from mini survey at FIX Trading Community 's Singapore Buyside Dinner, 29th Aug 2013