

ATP005 - Deutsche Bank

Announcer: Voices in Business presents The Algorithmic Trading Podcast, sponsored by Sybase, Show #5.

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Announcer: Hello, and welcome to The Algorithmic Trading Podcast, a series of interviews with leading practitioners and experts on algorithmic trading, brought to you by Voices in Business and sponsored and supported by Sybase. On today's show, we have an interview with Thomas Chippas, head of Autobahn Equity North America for Deutsche Bank. Autobahn Equity is Deutsche Bank's electronic equity trading platform, encompassing direct market access and algorithmic trading.

Tom has a fairly unique perspective on algorithmic trading, being a client of the exchanges and a provider to many buy-side firms. In this interview, Tom is speaking with Greg Grimer of Voices in Business, and Sinan Baskan of Sybase.

Greg Grimer: Welcome gentlemen to The Algorithmic Trading Podcast. Thanks for being with us today, Tom. Could you give us a very quick overview of your background and how you ended up at Deutsche Bank running market equity?

Thomas Chippas: Actually I run North American Autobahn Equity. The Autobahn is the firm's brand for our electronic trading products. So I'm responsible for equity, algorithmic and direct market access trading in North America. And as a firm, we offer electronic trading globally, 55 similar markets worldwide, DMA and algorithms. My background, amongst other things, I ran Global Sales and Account Management for MacGregor at the time when we were building out the FIX network and really expanding the growth of the trade order management system there.

From there, I made a move over to Bank of America Securities when they acquired a technology provider and wanted to build out their own trade order management and execution management system, and distribute their algorithms. I then came to Deutsche Bank in July 2006. I've always had a real desire to be involved internationally; I've lived overseas. And certainly, Bank of America is a fine institution, but their focus is by no doubt domestic, whereas Deutsche's focus is very much international, and so it's been a real good fit for me.

Greg: It's very hard to describe this because if we just described trading volumes, we're going to talk about trades getting smaller, so that doesn't necessarily have a meaningful measure. But could you give us a rough idea for the listeners how much of the overall algorithmic trading is done, say in the U.S. market vs. the rest of the world? In other words, how big a piece is this local market for you?

Thomas: If I were to split up the globe into three regions - U.S., Europe and Asia Pacific, which you'd probably ought to split off Japan, but we'll keep it simple in the three markets - disproportionately, I would say you would see something along the lines of a 50:40:10, a 50:30:20, depending on how aggressive you wanted to be about Asia. I think algorithms are a bit nescient in some areas, and we get into a real vocabulary problem here. Is creating a trading tactic and then calling it an algorithm a new algorithm? It depends how you define these things.

So when I'm saying an algorithm, I'm referring to the core basic practice of selecting a benchmark, specifying parameters about how you'd like to execute your trade to meet or exceed that benchmark, and then letting an algorithmic service provider engine take that order, 'slice it up' to use the common term, and push it out into the market - as opposed to perhaps creating a trading tactic, which is really more akin to a smart order router, or something that's an interesting piece of workflow. So I think we get a little confused in the market space here, but that's what I mean when I say a core algorithm, and that's the statistics I'm referring to.

Greg: Excellent, thank you very much.

Sinan Baskan: One of the problems that we lived through over the past year is this disconnect between pricing of the trades and structured instruments, and the valuation of the underlying assets and collateral that emerged as an 'Achilles' heel', if you will, in the credit markets. What have you been doing to alleviate that in your organization, especially vis-à-vis your clients?

Thomas: In the equity world, it's probably important to break it down a little bit by market. I would argue that in North America, there are very few fundamental arbitrage opportunities, and by fundamental I mean the difference between a listed derivative and the value of the underlying. There are still strategies that people trade that take advantage of that disconnect, but that disconnect tends to be a) very fleeting and b) very, very small.

So in that market, for the service folks that are finding those differences between the derivative instruments and the underlying, it's important really for them to have access to two things: One is a fantastic source of market data. And as we have discussed at length in the past, processing the amount of market data in this space is difficult because of a) the amount and b) the frequency.

I believe OPRA, the options pricing authority here in the U.S., which consolidates the options pricing data is predicting upwards of 900,000 updates per second, if you consume the entire feed, which is radical by even standards of 12 months ago. They put out a series of alerts over the past year warning people about the increase in market data for just the options; we haven't even talked about futures or other instruments.

So access to a robust, fast market data source and then access to a fast path for order execution. So you've seen an interesting genesis throughout the last 12 or 18 months of how people have approached the execution side of things. Historically, before Reg NMS,

you had trading shops take advantage of co-location opportunities at venues such as NASDAQ or Archipelago.

And it wasn't an insider's game because that has a negative connotation to it. But definitely, it was not something that was on the general tour; you really had to understand it. The rules around using it were a little bit inconsistent and still are. I think there's pending NASDAQ and SEC notices about what to fine sponsored access that have yet to be resolved, and I would encourage them to resolve that because it definitely causes some problems in the industry.

But that being said, you need a path that is fast and direct to the point of execution. And where Reg NMS complicated that in the U.S., specifically, was I no longer could go to, for example, Archipelago because nine times out of 10, I found it the fastest, and that one time where there it wasn't the superior trade, it wasn't worth the technical difficulty of me trading other places. But now, you're required to have that low latency connectivity. Whereas people started at co-location and then spend a lot of time talking about proximity hosting last year, I think we've gone full circle and come back to either co-location or a new form of proximity hosting, which says put your trading engine somewhere very, very fast where you have the inbound market data. But then make sure you have high-speed links, and maybe take advantage of sponsored access. So it's actually a hybrid solution I think people are pointing towards in the U.S.

With respect to Europe, they are not quite as advanced as we are in the US in terms of fighting physics and trying to defeat the speed of light problem by just halving distances. There certainly are folks that are starting to offer high-speed latency market data. You have probably less of an issue in markets such as Vertex or others that are quite slow in terms of execution, doesn't matter how fast you are consuming it. You can only fire-off 50, 60 orders per second.

But there is a growth industry with respect to proximity hosting in Europe, especially as people here in the US who now have a physical presence may want to export their models to that market.

I think in Asia, we are still a way away, but like many cyclical developments in our industry, what will happen is the uptake time will occur later, but the time to market will be significantly shorter in Asia because we will have done it twice. We will have done here in North America, we will have done it in Europe, so we will pretty much have it down to a package and people just have to apply themselves.

So this is already happening. There are market data vendors that have high-speed products built in the US and exported to Europe and they are building the feeds in Asia, no one is really consuming them in a big way yet, but they are getting ahead of the game.

Greg: Will it be an exact carbon copy or will the fact the way exchanges are distributed in Europe make a difference? Presumably you will have to tweak the architecture slightly for each market as well?

Thomas: I think it is deployment of the same technology and if architected appropriately, you are really talking about configuration and localization. So rather than building a tick database, you are going to deploy that tick database, but now you just need to build your LSE or your Deutsche Borse connector for the data as opposed to having to build the whole thing from scratch.

Sinan: Are you offering more analytical services on the post trade side?

Thomas: Well, I think looking at the genesis of how people consume these services, I look back fondly not too many years ago when simply producing a scorecard on an automated basis, on a daily basis; you were way ahead of the curve. Weekly or monthly basis, you got high marks. And that was something that went from being: well that is a nice added service and it gave a point of dialog with the electronic trading desk as well as with their client.

And then that has matured into reading - a lot of people are not even reading the automated scorecards anymore because they don't need the data, they might be getting it themselves and not uncommon for the buy-side to engage a third party, but now people are looking for customization. They wanted a bespoke service that is specific to them. I trade globally, so looking at my benchmarks on a global basis. I trade in an emerging country and traditional benchmarks really don't make sense because spreads are much higher, so I am going to have greater market impact if I wanted to get that order done.

I am looking at my slippage versus a different benchmark, a local benchmark of some kind perhaps, so we are definitely seeing the demand. For us, as a firm we are trying to take the infrastructure that we have built to gather the tick data, to gather the execution characteristics for our clients. And for us it is a global problem we are solving because clients do trade with us 24/6 passing along desk to desk and using us in every country.

So I think we are in A) in a position that not many other people are and B) that gives us a lot more data to consume. And the trick is making sure that you not only made it a bespoke service for the global head of trading, but you need to deal with the regional heads as well too. So it is a combination of consuming that data and having the analytic tools, but it requires people.

As much as everyone likes to automate everything, we have chosen to invest in people. So we actually have a bespoke post trade service that actually has people that understand trading, not so much so technology, but actual trading that for customers that warrant it through the type of business they do with us, we actually will provide them that bespoke service, which some third parties provide as well too.

But I think more and more people value and look at brokers as being capable of providing independent analysis. And this is a great place for it. It is analytical. The number is the number, so it is kind of either you fudge the number, in which case you will never get the chance to fudge it again or you provide good value. It is not something that is more esoteric and certainly I think that there is a demand for these types of services.

Greg: In the different regions, do you find that customer demand varies from say customers choosing from a la carte menu or template or customers coming to you and saying, we want customization, we want you to develop a new trading strategy for us. Is there a significant difference say between US-based customers, European and Asian customers in that sense?

Thomas: I would actually say there are three factors that I will consider there. A lot of them can be organized regionally. So because of some of the numbers we talked about earlier and just the usage pattern, I think that folks in Asia that have only traded in specific Asian markets, probably don't have the same exposure to the customization capabilities that folks in the US and now Europe are more akin to having at their disposal.

So as they become more exposed or as you cross-pollinate with folks from different regions, the expectation goes up. And I certainly can think of several clients that have moved traders from London, from New York and move them to Tokyo, move them to Hong Kong and they are demanding the same sorts of services. But that moves me to the second factor, which is, the market doesn't always support these types of customizations.

And when I say that, I can talk to a client here in the US and we can talk about smart order routing and talk about use of exchange-specific strategies perhaps for some of their trading. The exchanges don't have the robust number of order routing strategies in Asia, in Europe that we have here in the US. So we are always offering a palette of services within the client self-direct using our technology, using us to get to the exchange or ECN site technology.

There just isn't dialog to be had about trading in Singapore and do I use SWIM from NASDAQ or do I use some other strategy. Those strategies don't exist, which then leads me to the third factor of it really comes back to what are people actually going to be customized. And it is no different than what I find the experiences from a consumer product perspective. You don't create a page on MyYahoo and start with a blank screen. They pre-fill a bunch of the bits in for you. And then they tell you what other people have done and have you tried this or here is what's hot today.

I think that same concept applies to the consumption of these services in the US, in Europe and eventually in Asia which says, "OK, I have some thoughts about what I'd like to do, show me what you can do, let's get a dialog going and on the back of the dialog, we will take what you have and make some tweaks." There is a subset of folks in this market that they want that blank screen and they are going to tell you very specifically what they want, where and how they'd like it.

But I'd say for the most part, this is the MyYahoo or the Starbucks mass customization model where they are saying, you are giving me 10, 15, knobs, dials and switches, I want a 16th switch and this is where I want the other ones set. I think that is the type of dialog you end up in when you talk about customization in algorithmic trading.

Sinan: Do you get a lot of requests from customers to have services or analytics to do risk pricing?

Thomas: So you typically would find that from people looking for guaranteed execution, which tends to be a service people consume from a program trading desk for example. So I myself, typically other than making the correct introductions, not involved in that. And I think that will be typical of most of the marketplace because there is a real concern around privacy and data access. People look at electronic trading desks as being a desk of agency flow.

Once you get into risk flow we're talking about principal trading and they like to have some separation between the two. We certainly have customers that consume both types of products and there's a real fitness for purpose question that clients ask themselves about which product they prefer. To that end we're always connecting people to the right place so they can get their trade to the desk they can trade the most appropriately. But you usually don't see an agency electronic desk, and certainly not my desk, engaging in this sort of principal trading. That just would be something people would not be terribly comfortable with.

Sinan: You alluded to Reg NMS and MiFID being one of the drivers. You end up collecting a lot of data because of that. Do you have other uses or leverage for that data other than regulatory requirements and what you do with the data to generate some additional value add?

Thomas: Other than wishing I was a Storage Area Network salesperson? Yeah, it's staggering, the amount of data that's actually produced on a daily basis. I mean, you're literally down to calculating times to transfer data between different systems because you want to analyze them in different ways and use different tools internally. It's really amazing, the amount of data that's created.

There are, without a doubt, opportunities to monetize that data but just because you can doesn't mean perhaps that you should. I would put this topic firmly in a very similar bucket to the topic we just discussed about guaranteed type of trading. We have a lot of information about how clients trade and I think that clients find it interesting to the extent that we can make it not personally identifiable or not attributable to a particular firm and we can provide aggregates.

I think people find that information of interest. Now, that being said, there are some clients that are very explicit, that opt out of having their data included in any sort of aggregation other than their own. Those are few and far between and it's akin to someone who always downloads shareware but never wants to pay for something they've used that saved them five hours of ripping CDs but they don't want to pay for it.

There are people that want to opt out for a variety of reasons but I think, from the community perspective, most people like data in the aggregate, to show trends and give them food for thought. So, most people are OK as long as the data isn't specifically

identifiable. My concern would be that for me to monetize this in some other way and redistribute it back out, it would present two difficult questions.

One would be privacy. Clients would be very concerned about access to their information and for those that have sort of taken a generalist approach to it. Secondly I think it would be very difficult for someone to connect the value that you could derive from that information and how you attribute that value to each individual piece of data you got from a client and the inevitable question -- because traders are traders -- of: "Well, what does that mean in terms of reduction of my commissions? Because you're now actually benefitting commercially from the distribution of this data."

I think that's an unanswerable question that we would have to confront. That being said I think MiFID probably has shown us some interesting opportunities for how people could use a collection of this type of information. The pricing services and sort of the outsourcing of demonstrating that you've met your best execution requirement, from Thomson to other folks there's a lot of people that are offering these services to brokers in Europe so they don't have to build it themselves. I think that can only be achieved if they have access to this consolidated, large dataset.

Greg: This data is presumably only going to get greater and greater. So you see any slow down in the growth of it? It is growing but is it going to slow down or do you think we're going to have a Moore's Law situation where...

Thomas: It's a great question. I would break it down into a couple of different types of data because I think the trend is that there's different levels of variability among the data that's produced. One is tick data, that's not slowing down. Tick data, you may have peaks and valleys but I think the range of those valleys are going to be tightening up significantly and the peaks I think are going to get higher.

If we continue to have a high VIX measurement that by definition tells you that there's a bit more activity taking place and there's a bit more of a disconnect or disjoint between what the market feels something is worth and what people are actually paying for it. So, I'd say from a tick data perspective that number doesn't go down unless there's some massive market cataclysmic change... By cataclysm I don't mean some negative event, I mean there's some massive, fundamental change in the way markets are connected. I just don't see that happening.

So, data is going to continue to increase. I think the US... I can't over-emphasize having lived in Europe and built businesses in Europe I'm not trying to make it a US conversation but empirically it's hard to argue that the US doesn't produce the most amount of this data and we've gone through these changes before everybody else. As you get more market centers by definition you're going to have more market data.

So, even with this addition of Chi-X in London you've now created two different places to get a quote and that doesn't stop. There will be more market centers. So, I think from a

tick data perspective it keeps going up and occasionally throttles back in traditional slow periods, perhaps, but that's really going to be a blip on the radar.

Greg: There's lots of players, aren't there? You've got BATS; you've got Turquoise over in Europe. What's your view on where these things are heading with this shake-up? Where could you see it in two years' time?

Thomas: It's easy to focus on the cost of execution and the spread between rebate fees and liquidity fees in payments and I think that there's a segment of the market that is supremely interested in that. What I've always liked about the BATS approach, for example -- to speak to your question -- is it's very simple. I know what I'm consuming, you log into their website faster, cheaper. Great!

I'm not debating anything else there, it's faster and cheaper. Now, there are other esoteric qualities to it and other explicit qualities to it if you start to analyze their data about matrix and some things of this nature that are quite positive but in our sort of soundbyte world it doesn't take a lot to consume. You know what they do, you know what their focus is. Unrelenting focus at that and I think the growth in their share of executions show that.

That being said, there's a world outside of pure execution. The NYSE is still the leader in listings and listings revenue is an enormous part of what they do and the globalization of listings, which I think is still forthcoming to some extent... Certainly, if you listen to some of the comments originally from Thane and now from Duncan Niederauer, there's a whole other business there that those of us on the trading desk probably don't pay as much attention to.

But the listings business is huge and people such as BATS aren't involved in that, people such as Direct Edge aren't involved in that, and even if BATS becomes an exchange I haven't seen them publicly state that listings is an area they will pursue aggressively. So I think that the pricing and execution, it's going to be very difficult to have that type of spread and the value of the hybrid models -- one that, in my mind, still needs to play out. It's a very difficult message to get across to people about what the value of hybrid could be. And I don't know that the market data shows it, that it is of high value yet.

But that being said, they are still tweaking it. I don't, I think it's a long way away from saying it's gone. But certainly it has caused people to reevaluate where they trade, how they trade, how they preference those smart order routing mechanisms and what their expectations are. We here, as a service to our clients produce some information about where things trade. And I'm always amazed that people that are in the bowels of electronic trading on a daily basis, how some of them still haven't analyzed the data closely. I had a client in a Latin American market who was looking to do ADR arbitrage. And this client had said, "You know, I'm really - let's get into the guts of your NYSE connectivity because that's where the majority of my trading is."

I said, "Well, what are you trading?" And he gave me a list of the names. I said, "Well, let

me ask you this. If you are so concerned about the speed of that connection in NYSE, why are you trading there? Are you trading more than 40 or 50% of the volume? Because 40 to 50% of the volume of let's say for the sake of discussion, these 20 names actually trade on NASDAQ, ARCA and BATS, so if you want speed there are other places to go. Why else do you want to trade NYSE?"

Albeit he had asked the right question of how fast is your connection, he hadn't asked the next question. So despite the fact that there are a lot of us that spend probably far too much time looking at market microstructure, there are still a lot of people that pull the trigger on the trade that haven't done all this analysis.

Sinan: There have been quite a few articles in the press about the pricing power constantly progressively shifting disproportionately to the buy side. Do you agree with that observation or do you think it's more or less in a state of equilibrium?

Thomas: I think we went through a period of about two, two and half years of violent change in terms of pricing. And I think it has leveled off for now. I wouldn't be comfortable saying that it isn't going to move again. My general issue is this. Consumers of any service, whether it's algorithmic trading, cellular phone service or any other sort of service, if price is purely the criteria on which you're making a decision you tend to be making a short-term decision. Pricing is a criterion. It is a component of your metric of determining where you execute.

I also think that you have to bear in mind that the number of buy side shops that are purely looking for execution, that have discretionary budgets to do so, I think that group has found their price level. They are always looking for less, but there is not a lot more to give. I think for folks that are more full-service oriented, that are consuming research and other services, I think that those folks realize that you can't continue to drive the price lower because we will then no longer have access to some of those things.

You know, I'm not going to comment on whether or not that method for compensating investment banks for providing research is accurate or the best one that exists. It is the mechanism we have nowadays. So I think that while that exists, people are still going to have to compensate their providers for access to research, for access to management and these sorts of things. And they need to do that in trading.

What's happened is I think people have become more comfortable with their mix of trading and they are finding the best tool for the job. And now that I think firms have matured on the sell side, you know any firm that still has a disconnect of, "well, that's a trade with an electronic desk versus a trade with the program desk or the cash desk", any firm that still thinks that way, you know their time to be around is short.

Most firms recognize that customers have different buckets they want to use, different tools they want to use. These tools are used to pay the firm. Say you need to look at that holistically. Most firms have gotten to that place. So I think during the two, two and a half year shakeout, you still had a lot of systemic resistance at the firms because the firms

hadn't changed the way they viewed the client paying them. Now that everyone has made the appropriate changes and can perform and consolidate the measurement, that's why I think we have reached this sort of level point.

You know, I don't see it going down precipitously unless again there is some sort of massive upheaval in the marketplace. People are paying pretty low rates sometimes for electronic execution. There is not a lot left after paying the market center, paying the custodians and a lot of other fees.

I love when clients characterize it as keeping the lights on. Well, we like to keep the lights when we occasionally like a cup of coffee too. So, you know, there does reach a point where you sort of cut too much into the bone. And I think we have reached a nice stable point for now, which I hope stays so we can focus on building out services, not on cutting more costs. We have seen such another coming shift in how people are using electronic trading to meet their goals today, because the traditional tools that have been designed don't per se accommodate the volatile trading market, we are in.

Times are turbulent and the combination of historical market data in real-time feedback loops to generate trading throughout the day work well. And it's great to have specialty data sets for an ECB day, an FOMC day et cetera. But even that doesn't fit the bill anymore.

So now we see clients demanding that their algorithms be more adaptive. And to be adaptive when you have a very high VIX level, high volatility - we are using VIX as a definition of when things are turbulent and volatile - you know we are seeing that you need a tool that can A) remove emotion and say that look, RIM may have traded in blocks of 5000 for the last three years. Guess what? The RIM's block size has been redefined. It's 7000. It's 2000. And you need to have an algorithm that can react to that.

And we are finding customers demanding that they want access to an algorithm that can do what a trader has done for a long time, which is hey, I put in order in the box in the algorithm. I'm letting it trade. But if market conditions change I'm going to take part of it out and I'm going to go trade this manually or take an algorithmic order and trade a chunk of it DMA.

People want tools that can do that on an automated basis. So they are demanding both the ability to react - I'm trading GE but if the S&P 500 moves by two bips, three bips, half a bip, I want to react with a DMA order overlay here that it's either more or less aggressive because of the movement in an index of which this is a constituent.

I could come up with hundreds of examples that interplay those different parts. But to summarize, people are looking for algorithms that can help them accommodate their trading in these turbulent times without them having to manually trade it. They want the inputs to be there. And they want the ability for the algorithm to take action once those inputs warrant a change in course.

That's certainly something we are seeing clients demand, not just in the US but anywhere there is trading with algorithms.

Greg: Tom, thank you.

Thomas: Great to see you.

Greg: Thanks for making time today.

Thomas: All right, great, thank you.

Sinan: Thank you very much.

Announcer: That was an interview with Thomas Chippas, Head of Autobahn Equity North America for Deutsche Bank.

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Thanks for listening. Goodbye.

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