



# **The crypto challenge:** Boosting institutional trading in a fast-evolving market



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# The crypto challenge:

## Boosting institutional trading in a fast-evolving market

*In this article, Mike O'Hara and Adam Cox of The Realization Group examine the prospects for more widespread adoption of cryptocurrency trading in the institutional space. There are plenty of obstacles, from infrastructural issues to uncertainty about standards and pricing to questions about regulation. But there is also no doubt about the appetite for more institutional participation. Mike and Adam hear from a large group of experts and crypto pioneers, all of whom are at the forefront of efforts to bring crypto trading into the mainstream. They speak to **Tal Cohen** at Nasdaq, **Kapil Rathi** of AlphaPoint, **Carylyne Chan** at CoinMarketCap, **Dave Weisberger** of CoinRoutes, **Jeanine Hightower-Sellitto** of Gemini, **Mark Daly** of Seed CX, **Adam Zarazinski** at Inca Digital Securities, and **Peggy Sullivan** at Vela. This wide-ranging group, representing the trading, exchange and vendor community, sees some formidable hurdles for an industry that could still be said to be in the embryonic stage. But they are unified in the view that the challenges can be overcome and that institutional trading of crypto assets will only increase over time.*



### Introduction

It's been dubbed the "Next Big Thing" of finance. It's been compared to options trading in the 1980s. It's been described as an innovation with revolutionary implications for the marketplace. Perhaps less favourably, it has been called a kind of Wild West of the capital markets, where opportunities and dangers abound in equal measure. It has captivated the business press, with endless headlines about the exploits of entrepreneurs and new ventures.

The "it" of course is cryptocurrency trading. The impressions this new market have made vary considerably with different participants, and there are unquestionably a large number of misconceptions about how it actually works. But those who are in at the ground floor see a market that deserves all the hype it's getting.

However, the problems getting in the way of more institutional participation are substantial. Agreed standards are needed for how pricing is arrived at and how price discovery should take place. Regulators have yet to make their presence felt in a meaningful way, causing some players to sit on the sidelines. Interoperability is severely lacking, with a dizzying array of new platforms and exchanges that do not adequately talk to each other or follow the same protocols, in much the way that different computer operating systems did not work together in the 1980s.

Addressing all of these issues is not so much a question of technology but one of time. What is still needed for institutional adoption to take place, say experts, is more cooperation among the rising number of firms that are jumping into the market, and a process of consolidation. How long all of that will take is a matter of some debate, but the market's early adopters are acting as if it will be sooner than later.

### The need for liquidity

For those institutional participants that are interested in trading cryptocurrencies – and their ranks are increasing by the day -- the key factors can be divided into those issues that will make it possible and those that make it desirable. In terms of the former, this includes issues such as market access and the ability to trade in scale. In terms of the latter, this includes factors such as being able to trust pricing methods and being able to compare pricing on different venues. All of these are critical to fostering the liquidity that is essential for institutional participants to take part.

“Liquidity begets liquidity, and this is what the institutional market is keen on seeing,” says **Peggy Sullivan**, Chief of Staff at trading and market access provider Vela. “In order to have more mainstream adoption of the cryptocurrency or the digital asset space, we need to make it easier for the institutional markets to enter into the market.”

*“Liquidity begets liquidity, and this is what the institutional market is keen on seeing”*

Peggy Sullivan, Vela



**Mark Daly**, Senior Business Development Associate at Seed CX, a Chicago-based licensed institutional digital asset exchange, says it is paramount that exchanges should operate in much the same way as other parts of the financial ecosystem. “The important thing here for us is the familiarity with what they’re used to. It’s got to be seamless. You’re not going to attract institutions by having them go through an unfamiliar onboarding or technical integration process.”

This is one reason why Daly says market participants place such store in standards such as FIX connectivity. They need to know that they will be using the same APIs and the same protocols as they do in the markets that they are used to trading in.

Sullivan of Vela also emphasises that point. “There’s a reason that FIX is so popular in the institutional market space. It has to be fairly easy for major institutional players to be able to onboard different exchanges, and they have to be nimble and quick, given changes in liquidity. There is no standardisation within this digital asset class with these APIs, and there are also security concerns that still exist in cloud infrastructure that need to be rectified before you see holistic adoption.”

Few people know as much about changing the way Wall Street works as **Dave Weisberger**. He personally built one of the market’s first programme trading systems, more than 30 years ago. Now, as Co-Founder and CEO of CoinRoutes, a firm that provides smart order routing across multiple crypto exchanges, he argues that the different platforms that have sprung up will eventually need to start acting more as parts of an ecosystem, and less as cut-throat competitors. “Right now, different exchanges price their merchandise without regard to all the other exchanges,” says Weisberger.

What that means is that market participants are often not in a position to even try to get best execution. Weisberger’s firm is aiming to change that, but he notes that, for now, many of the institutions that have become interested in crypto assets are trading via over-the-counter desks rather than via exchanges. “It can be cheaper to trade on exchanges, but OTC desks simplify the process for clients, which is why the crypto exchanges are losing to the OTC desks,” he says.

One solution is for the exchanges to let their broker-dealer arms trade on other exchanges, a move which Weisberger says would allow the exchange marketplace as a whole to compete with the OTC marketplace. “Right now, we’re still in the Wild West of crypto. So, people hear that and they get unnerved.”

In such an environment, the industry has to undergo intense soul-searching. **Tal Cohen**, Senior Vice President, North American Equities at Nasdaq, describes the current situation as a standards war. “‘What smart contract do I use?’ ‘What version of blockchain do I use?’ ‘I don’t want to use different versions for every bank that I do business with’,” he says, voicing the concerns that participants have. Such concerns, he adds, are hardly unusual for markets that are starting out.

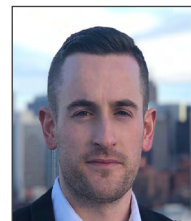
### Financial forensics

Beyond the problems of connectivity and getting to a point where order routing begins to resemble that which can be found in mainstream markets, many of the fundamental issues for crypto come down to information flows. Institutions need access to reliable, complete and accurate data.

But that is easier said than done. One immediate issue is that the market is so fragmented, making it more difficult to bring together all of the necessary data. “This is probably the largest fragmented market you have ever seen,” says **Kapil Rathi**, Global Head of Trading at AlphaPoint, noting there is no Reg NMS execution requirement in this market.

*“As a trader, one of the first things you need is reliable market data, delivered to you in a format that you can use easily”*

Mark Daly, Seed CX



There is also debate as to what sources of information should be included, particularly given the differing methodologies and procedures various firms use, not to mention the fact that there is no established process for new platforms to be validated and approved.

Daly at Seed CX recognises the scale of the challenge. “As a trader, one of the first things you need is reliable market data, delivered to you in a format that you can use easily. Each exchange out there reports their data in different formats.” He says Seed CX provides market data in both binary multicast as well as packet-size FIX format. Both formats are widely known and supported in the financial industry. In addition, Seed CX provides data feed redundancy and the ability to replay/recover market data. These are features that institutional clients are used to receiving from leading traditional exchanges.

**Carylyne Chan**, Global Head of Marketing at CoinMarketCap, which provides data on more than 18,000 markets, says it is vital to be all-inclusive. “It’s important for us to incorporate all crypto markets into the current financial landscape, because that’s probably the only way that we can really gain massive mainstream adoption,” she says.

Eventually, crypto experts say standards will need to be established concerning how assets are priced. This is all the more the case due to the volatile nature of the market and due to the fact that it operates 24/7.

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Carylyne Chan, CoinMarketCap



To achieve the transparency that CoinMarketCap believes is critical for the crypto market to succeed, Chan says her firm follows some basic tenets, such as being neutral and independent. CoinMarketCap tracks the markets it includes and it has adopted some due diligence processes, establishing a system of reporting so that issues regarding data can be rectified. These may be raised by crypto stakeholders, by exchanges or by users.

“Every day we get thousands of tickets from people reporting, whether it’s what they see as inaccurate volume, or what they see as any suspicious activity,” Chan says. “Then we use that on top of our programmatic ways of tracking for abnormal data, to really triangulate any issues with the data as well.”

But the company is careful not to go too far and begin, as Chan puts it, to “censor” data. CoinMarketCap wants participants to be able to build their own cases and make their own decisions. That is not to say that anything goes. If the company receives proof of malfeasance, it will take steps to remove data.



For example, if it were impossible to draw funds or input funds into the exchange, prices might not be reflective of a free market. Chan says the firm has even received police reports as evidence to consider when looking at contributors.

"It is important to provide a secure, safe and regulated place to buy, sell and store cryptocurrency," says **Jeanine Hightower-Sellitto**, Managing Director, Operations, Gemini.

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Jeanine Hightower-Sellitto, Gemini



Hightower-Sellitto believes that the industry needs to move from just saying it is secure to actually demonstrating its security. A SOC 2 type 1 report, which is common in the financial services industry, is one way to validate that level of confidence. "For Gemini, achieving this level of compliance review from a firm such as Deloitte, which covers both our exchange and custody platforms, raises the bar for security and compliance standards of the crypto industry," she says. "It is what retail and institutional consumers should require of any cryptocurrency exchange and custodian they do business with".

### **Crypto fundamentals**

In fact, a background in policework proved vital for one crypto start-up. **Adam Zarazinski**, CEO at Inca Digital Securities, met his firm's other co-founder, Evgeny Dmitriev, while working at INTERPOL. Inca Digital Securities provides data and analysis for trading crypto assets.

Zarazinski says it is not enough to look at simple figures like a cryptocurrency's market capitalisation. "People fixate on market cap when trying to value crypto projects, but it's super misleading," he says. "Honestly, it's like judging the quality of Justin Bieber's music based on the number of Twitter followers he has. It actually doesn't do a whole lot."

*"People fixate on market cap when trying to value crypto projects, but it's super misleading"*

Adam Zarazinski, Inca Digital Securities



What Inca Digital Securities has done is created a series of what they call crypto fundamentals. This involves looking at traditional measures for thousands of coins. "But all that data needs to be correlated with other data sets, some of which are considered alternative data to traditional financial institutions but are actually fundamental to crypto," he says.

An example might be developer activity. Since most digital currency projects are open, it is possible to analyse developer activity, such as the rate of change in open and closed issues, or the size of the developer community around different currency projects. "All this is something we use in the creation of our reference prices, and we weight them in different ways," he says.

Fundamental data could include factors such as the average contributor account age, or the code base maturity. The firm also might conduct sentiment analysis of what developer communities think about certain projects, looking at blogs, Twitter feeds, media articles and other sources. All of that could indicate the strength of a project or, conversely, whether development infighting points to something that crypto buyers might want to consider.

"The assets are completely different, and you need to look at the assets in a different way," says Zarazinski. "These are open source development projects, so they're fundamentally different than, say, a company that has proprietary assets."

The pricing and the financial data may be important considerations, but so too will be other categories of items such as natural language information and technical information. For funds that want to tread in these waters, this kind of visibility becomes critical, but it is a very different way of looking at a market than what most trading firms are used to.

"The idea is, aggregate all this information, analyse it, provide it in its raw form through a set of data streams on a normalised basis, and provide interesting analytics that combine, or multiple sources of these different types of data, to help people better understand the complexities and the nuances of these crypto fundamentals that really drive the industry," says Zarazinski.

Rathi at AlphaPoint says there is no simple rule that can be applied to create transparency, but he says efforts to build data sets can help. AlphaPoint is planning to launch its own index to provide a benchmark that will enable customers to judge whether they are getting a good price. "We're still far away from the mature asset classes," he says. "That is an issue and it is going to take a while."

### Forward-looking

At the moment, crypto vendors say a lot of the adoption is coming from the hedge fund community, where firms have more autonomy than institutional funds do. Also, family offices are showing enthusiasm, taking the view that having some percentage of their portfolios in the digital asset space only makes sense.

Another wave of adopters, says Sullivan of Vela, is likely to come from online broker-dealers. These firms support the retail market, which has already shown strong appetite for crypto assets.

Chan at CoinMarketCap says derivatives and exchange-traded funds represent a big opportunity in the crypto space, and Daly at Seed CX echoes that sentiment. "There is a huge demand out there right now for derivatives, and especially for options," he says.

Crypto derivatives are important not only because they represent a new set of instruments for participants to trade, but also because they are central to making it possible for many of those participants to get involved in the first place. Rathi at AlphaPoint says that in order for many players to trade crypto, they need to be able to hedge it.

*"No buy-side or private wealth office in New York will invest in any asset class unless they are able to put a hedge on it"*

Kapil Rathi, AlphaPoint



"If I'm an institution and if I want to get into crypto, I don't want to go in unhedged or have no downside protection for my acquisitions," says Rathi. "No buy-side or private wealth office in New York will invest in any asset class unless they are able to put a hedge on it." But Rathi points out that margin requirements on crypto derivatives are extremely high, currently around 35% to 45%. That makes hedging a trickier proposition because participants are unable to get much leverage, and that in turn is keeping the market from gaining more institutional traction.

One question still to be resolved, meanwhile, is regulation. Firms such as Nasdaq of course are closely regulated and a number of the many companies that make up the crypto universe are as well. But regulators have yet to lay down the law as to how crypto trading should be conducted or what should or should not be allowed.

"Regulators and the traditional exchanges have embraced this product as a tradable instrument but they haven't really embraced the product as an investable instrument," says Rathi. He personally has had extensive experience setting up new markets, having started the options business for Bats Global Markets. He also worked on the first Bitcoin Futures Exchange at Cboe, a product designed to cater to institutional funds.

The lack of regulatory clarity has held the market back so far. Whether it's the Securities and Exchange Commission, the Commodity Futures Trading Commission, the U.S. Treasury or other entities, firms in the United States are unlikely to make big bets until they have that clarity.

For instance, rules on transparency and pricing probably need to come from an authority and not simply be the result of a long, evolutionary process. "I think it needs to be mandated by somebody that has authority and there needs to be consequences if it doesn't happen," Cohen of Nasdaq says.

*“Without a regulatory mandate, it’s going to be really tough to get true price discovery the way that we see it in equities and in other assets”*

Tal Cohen, Nasdaq



“There are plenty of tools in the world that exist that attempt to help with surveillance and with other things. But without a regulatory mandate, it’s going to be really tough to get true price discovery the way that we see it in equities and in other assets.”

Daly says he would like to see the crypto market adapt to current regulation, rather than have new regulation be formed for crypto. But one way or another, a standard for categorising assets needs to be set. “Having sufficient structure for applying the Howey Test<sup>1</sup> to digital assets is something which is needed”, he says.

In fact, Weisberger at CoinRoutes says that in this regard, Wall Street understands better than the world of technology how cooperation among competing firms can lead to more success than the crush-the-competition mentality that many tech firms have due to the nature of their business. “Wall Street gets this,” he says, with the market having learned in the 1960s how an efficient settlement infrastructure would translate into more money for all involved.

And it is in settlement that Weisberger sees the greatest potential impact, albeit over a much longer timeframe than many firms are used to dealing in. “Think about the essence of crypto and you think about the essence of blockchain, and you think about the efficiency that the entire capital markets gain,” he says.

*“It takes a lot of time for entrenched, very profitable franchises to give in to disruptive technology”*

Dave Weisberger, CoinRoutes



A central depository still has errors and these become choke points. “Think about what blockchain and what crypto-style trading settlement can potentially do,” he says. “My opinion is that it will revolutionise the entire capital markets. There will be no assets that trade on single exchanges, in single currencies, at all in 25 years. I say 25 years for a reason: Because it takes a lot of time for entrenched, very profitable franchises to give in to disruptive technology.”

A quarter-century is probably much longer than most people involved in this market want to wait. In the meantime, Sullivan at Vela sees potential for the industry to try to forge its own future, in coordination with authorities.

The key, most agree, will be dialogue.

“We do want to be part of the conversation as this evolves in the US and European spaces, and APAC as well,” Sullivan says. “And if there are items that we’re missing, our client base is welcome to engage us, and not only for market adoption but to help them work through any of the road blocks that they may have.”

Such Wall Street-style cooperation, laced with fierce competitive behaviour, is what will define the future of crypto. The conversation that Sullivan describes has only just begun.

<sup>1</sup> <https://www.investopedia.com/terms/h/howey-test.asp>

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