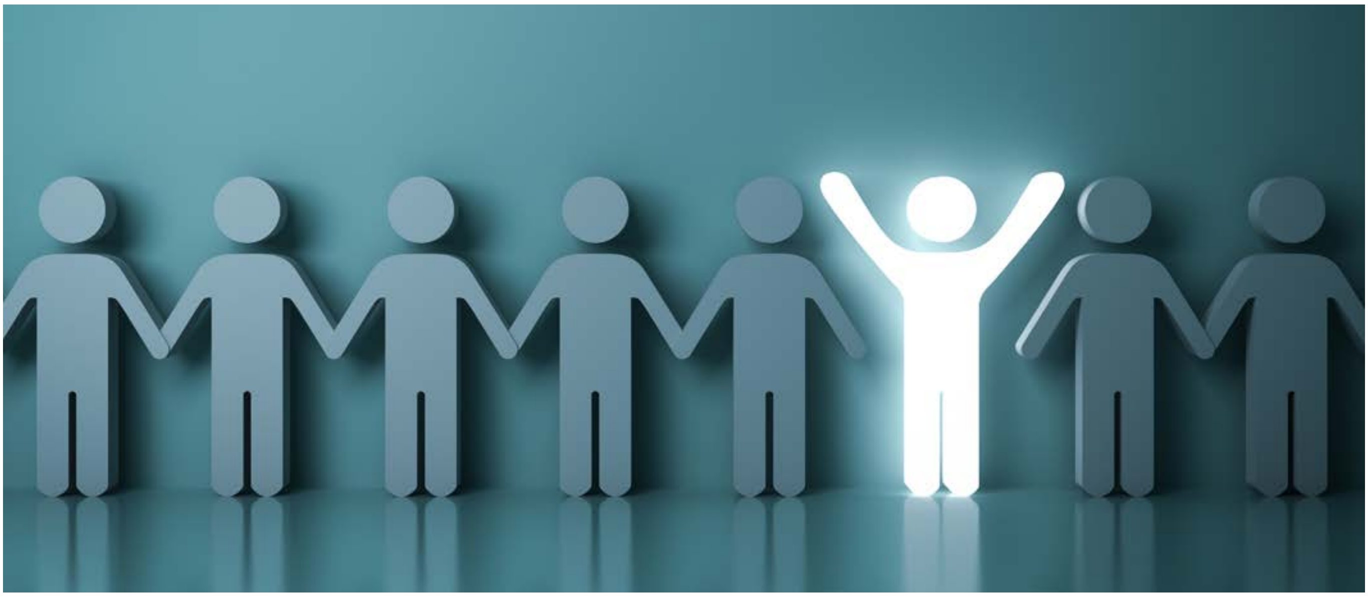

Challenging the status quo

MerQube, a next-generation index provider is set to transform the index industry

The move towards increasingly complex and customised indices is gathering momentum as benchmarks and indices become more solutions-based. Yet with so many new players entering the market, there is a danger that those index providers that have traditionally focused on equity-based products are being left behind.

"It's no longer a case of providing indices with simple beta-like exposure," says Vinit Srivastava, co-founder of MerQube, a new and innovative index provider which launched in 2019. "We have now reached a stage in the evolution of indexing when investors require increasingly complex and customised indices, yet many of the existing systems and platforms are not designed for this."

It is not just the bigger players like asset owners who want customised strategies; those investors who don't have a large pool of assets are looking for that degree of customisation too. In order to provide flexibility and scale for a wider range of investors, MerQube is taking a different approach, both in terms of designing the systems and running them.

"Our focus is on innovation and our role is to disrupt the status quo in order to build new, faster, more cost-effective index solutions and thanks to advancements in cloud-based technology, the entire process can be automated," says Srivastava.

Clean and accurate data is fundamental

"First and foremost, it is all about the data," he explains. "That has always been the case, of course, but now to keep up with the next generation of indices it is even more critical that a player actually has the ability to absorb and map out the new as well as the existing data sources."

This is the case for ESG and other new data sets, particularly when predicted inflows into ESG assets are estimated to reach USD1 trillion by 2025 according to Bloomberg Intelligence, and in 2021, inflows are on track to surpass the projected USD115 billion – with over 65 per cent of the inflows already recorded in the first half of the year.

Rather than building an individual product for each client, Srivastava explains that the method should be to extract the commonality in order to create building blocks while maintaining a centralised and clean data management system.

For example, MerQube obtains real-time data from CME Group and Refinitiv, both of which offer the data set on the cloud in real-time. CME Group has a 10-year partnership with Google Cloud to migrate its technology infrastructure to Google Cloud, which will change the way global derivatives markets operate with technology. Google is also making USD1 billion equity investment in CME Group.

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Benefits of cloud native architecture

Technological innovation is at the heart of MerQube's proposition too. Using the most advanced index tracking technology, MerQube has designed a platform that is entirely cloud native. The Cloud Computing Foundation defines this as an immutable infrastructure – containers, service meshes, microservices and APIs – that allows engineers to make high-impact changes frequently and easily. What this means in practice, says Srivastava, is that the entire platform is not only run on the cloud, but has been designed on the cloud. Ultimately this means that MerQube can interact seamlessly with the data flows from CME and Refinitiv, fewer resources and hardware are needed, and the process is more cost-effective. "Building a cloud native platform has very important implications for cost and scale and will enable us to bring products to market faster," explains Srivastava. "Our clients not only benefit from our state-of-the-art cloud-based systems but find their costs are lower too."

MerQube uses a variety of open source or licensed software such as Amazon Web Services and Google Cloud. "Instead of going through files, we disseminate our information all through APIs and all our real-time data streaming processes are run using Airflow in the cloud: technology which was in fact developed by Airbnb," he says.

Essentially, it is about how easy it is to absorb cloud-to-cloud data and how using the cloud can mitigate some of the heavy costs associated with indexing. Srivastava concedes that while many providers are also moving to the cloud – getting rid of all servers and data centres and migrating to the cloud – it is not the same. This is because their technology is not developed on the cloud, even if they migrate to the cloud, so inevitably they will use more resources.

"Our system is unique because it allows us to design and build systems and processes on the latest stack. Having said that it is not just about using the latest software because it also involves best practices too," he adds.

Governance already built-in

This issue of governance is another area that Srivastava and his team focus on. While there is benchmarking regulation (BMR) in the EU and UK – improving quality of data input and methodologies is an important part of both the EU and UK BMR – index providers are not regulated in the US. The complexity as well as the fact that indices have around USD15-18 trillion of assets tracking them, means that regulators are now taking more of an interest. In May 2021, SEC Commissioner Hester M Peirce stated that she was open to exploring a regulatory framework for index providers.

MerQube's policies and procedures adhere to IOSCO's Principles for Financial Benchmarks. Also, its index methodologies are clearly written and understandable, and are as comprehensive as possible in detailing the actions to be taken in all foreseeable scenarios.

Added governance using blockchain

Added to this is MerQube's use of blockchain technology. This allows for secure storage and transfer of information and in fact The World Economic Forum has stated that blockchain has the potential to become a powerful tool for tracking and transactions to minimise friction, reduce corruption, increase trust and empower users.

"We write everything that goes into the creation of the index into a block. If there are any changes that happen later, we can pinpoint why that happened: whether the inbound vendor changed the price or if our system failed, everything is logged," says Srivastava. "It is increasingly important that proper governance and controls are built into the structure of the platform."

"Making good use of the cloud with robust automation and with the right people and expertise really helps you to ramp up to get to that scale," he says. However, as processes become more complex and customised, scale can only be achieved by automation.

Process is everything, but people matter

While people can fix things that happen in the market, we will always look to enhance our systems first," he says, adding that the advantage of building the system on the cloud from the beginning means that "we get it right."

The team at MerQube invests a lot of effort into error checking on incoming data as well as error checking on the data that goes out to the indices and analytics. "It is our core philosophy," Srivastava adds.

When it comes to cloud-based engineering expertise, MerQube certainly has the right people. MerQube co-founder and CTO, Praveen Yalagandul, one of Silicon Valley's biggest names in the space and Pankaj Sethi, formerly a leading engineer at Facebook, bring their extensive experience in technology, while Keith Loggie, co-founder and COO, and Srivastava bring their finance expertise.

Srivastava started out as an engineer with Oracle in what he calls "the heart of Silicon Valley," but after an MBA at the University of Virginia and joining S&P Global in 2012, he took over as S&P's Global Head of Strategy, Volatility, and ESG Indices Product Management overseeing the growth of these products in London, EMEA, APAC and the US. In fact, from 2012 to 2019, he was involved in almost every one of S&P's ETF launches from product design to licensing.

"Because of my background on the West Coast in technology and my finance experience at S&P, I could also see what technology could do to the indexing space and that the balance between two is critical," states Srivastava.

He credits this delicate balance between finance and technology to their proposition. "We understand the markets and we have the ability to build systems that can quickly cater to that demand."

MerQube takes the lead on innovation

It is testament then, that investment banks such as JP Morgan and Citigroup are queuing up to do business with MerQube. It has recently partnered with JP Morgan along with principals of a hedge fund, and ThirdStream Partners LLC, a venture-capital firm focused on financial technology, and raised USD5 million in a Series A round. "This is a huge endorsement," he adds.

Srivastava explains that when it comes to designing new indices, banks have tended to take the lead as they are more on the cusp of innovation with respect to products and ideas. And because they don't find an alternative with the traditional index providers. Defined outcome and intraday strategies are two strategies that are growing in popularity amongst the banks, and MerQube is at the forefront of both in terms of expertise and innovation.

– Defined outcome ETFs

Defined outcome, which is options-based, is still in its infancy in the US with around USD9 billion dollars, but these strategies are only accessible to HNWIs. However, in the EU, structured products as they are otherwise known, tend to be bought from bank branches – amounting to a USD7 trillion market[1]. Products have historically focused on protection but they can be designed for growth and income.

A defined outcome ETF makes a lot of sense, partly because it protects the downside but also because in an ETF wrapper, the product is cheaper, transparent and you can trade in and out at any time, unlike traditional defined outcome products which are difficult to redeem. Srivastava emphasises that it is a new class of product, not just another version of a risk-based ETF.

MerQube provides the benchmarks for almost all the defined outcome ETFs in the US: Defined Outcome Accelerated, Defined Outcome Floor, Defined Outcome Stacker and Defined Outcome.

MerQube has also designed outcome index strategies for Citigroup although "we are yet to see this as an ETF because that requires a little more complexity than most ETF providers are willing to take at this point," adds Srivastava.

Srivastava believes that while defined outcome ETFs are not available in the EU, it is only a matter of time for one of the big European ETF sponsors to bring these out to market.

– Using intraday data in indices

There are also opportunities for new types of strategies that aim to monetise intraday data price movements, something that has long been the domain of sophisticated investors. Essentially, trading intraday data allows an index or strategy to take advantage of price movements during the day. By reducing the lag between observation and execution time, indices are more reactive and more accurate in achieving their purpose.

Previously, there was no one who could create indices and rebalance them during the day. It was only banks that did this for their institutional clients. But now, because there is a greater focus on risk and clearly some premia existing in intraday strategies, a new category of ETFs and products is springing up.

As a result, MerQube has partnered with global exchanges to calculate and transmit index signals and calculations on a live basis and works with more innovative index providers such as First Trust and Innovator.

A next-gen offering

While Srivastava defines MerQube as an index provider, albeit in its early stages, it is the big techs that he is most inspired by. He cites Apple as a prime example, not because of the company's obvious success but because "it is staggering that Apple can produce something with such a degree of complexity behind it, yet appears so simple on the surface."

He compares this concept to indices today. "Investors' objectives are simple; to protect their money and generate income. But the mechanics of how to do that has become more complex. Going back to an era where things were simple is not the solution any more. We need to not just embrace the complexity and find ways to do it well but also to do that in ways that makes it as simple as possible for investors."

What differentiates MerQube from the rest is that it addresses the newer spectrum of the index industry. "We are the provider that clients think of when they are offering multi-asset products or customised equities like thematics, defined outcome, intraday and risk-based ETFs.

"We are well-positioned and will continue to build our platform to serve an important client need in this space," says Srivastava. MerQube may well be the new kid on the block by comparison to the traditional providers, but Srivastava and his team are the trailblazers for the next generation of index investing. ■

merqube.com

1. *https://www.bloomberg.com/professional/blog/sure-time-to-grasp-the-potential-of-structured-products/*