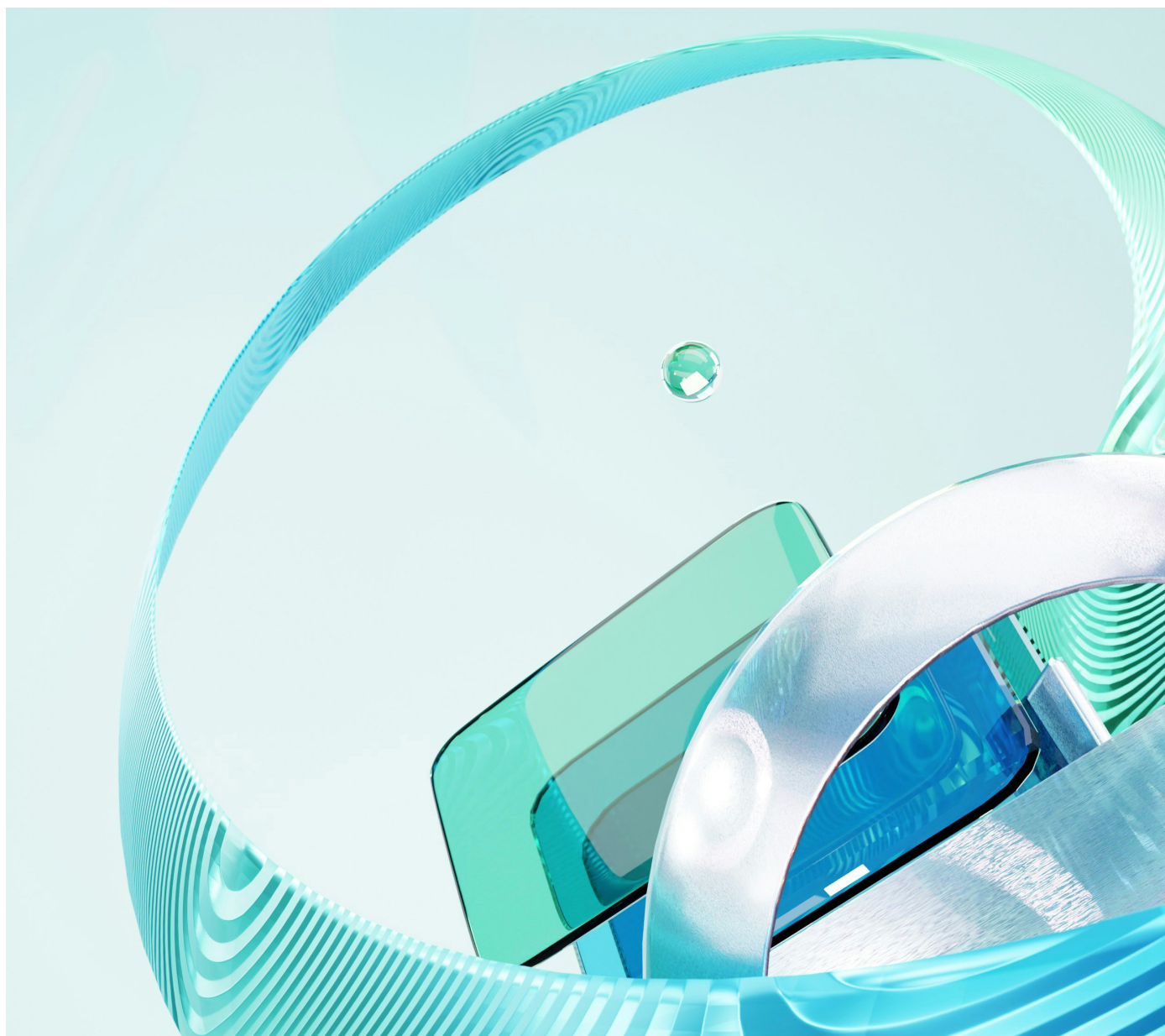


From latency to flexibility

The evolution of LSEG's real-time data business

LSEG continues to build out its real-time market data business across an industry facing rising data volumes, growing complexity and shifting client demand, increasingly supporting firms' push toward managed, cloud-based solutions. By prioritizing trust, scalability and flexibility, the firm aims to help its clients address legacy constraints while simultaneously future proofing their data strategies.



As demand for high-quality data from across the industry continues to grow, LSEG's real-time data business has never been more crucial than it is currently to the organization and its substantial buy- and sell-side clientele. It is no secret that capital markets firms are continuing to struggle in the face of surging data volumes, rising client expectations and the growing complexity of their own technology and data estates.

As Matt Eddy, LSEG's global head of real-time, tick history and low latency, notes: "We are focusing on three key qualities in our strategy to address these demands: trust, scalability and flexibility."

Core to the firm's value proposition is a simple idea, which is fundamental to its overall data philosophy: market data should be reliable enough to meet clients' needs. "Our real-time business has been built from the foundation up over decades to embed trust, reliability and resilience, which our customers now expect," Eddy explains.

That long-standing pedigree, combined with the breadth and depth of LSEG's data coverage, is one of the key differentiators that few, if any, providers can match in an increasingly competitive market.

The build versus buy conundrum

For large numbers of capital markets firms, the decision to rely on specialist third-party providers for their market data infrastructure rather than build it internally is now less a question of preference or competitive advantage, and more one of practicality.

While some firms initially consider the build option, Eddy notes that the practical implications of such a move tend to become apparent only on closer inspection, when the reality of the undertaking fully hits home. Firms may initially decide to build their own internal ticker plant, for example, but when they realize on the back of a proof of concept that a fit-for-purpose, real-time market data stack entails more than just speed, the build option loses its luster.

"It's about permissions, resilience and data consistency—all of the

operational considerations that become critical when systems are put under real-world pressure," Eddy explains. "That's usually when firms reach out to us, having assessed the trade-offs and value of partnership."

This scenario, where capital markets firms are increasingly looking to rely on third-party providers for their data and plumbing needs, mirrors a broader industry trend highlighted by LSEG's managed services, where firms are moving away from capital-intensive, in-house solutions toward consumption-based models that offer scalability and predictability. As seen in other parts of LSEG's business, clients are increasingly prioritizing time-to-market, cost control and operational resilience, all of which are difficult to achieve independently.

Eddy is clear in his assessment that time-to-market has become a decisive factor, leading firms to work with providers such as LSEG for the provision and management of their data rather than acting alone. Firms no longer have the luxury of multiyear build cycles, particularly as market conditions continue to evolve and new data requirements emerge. Instead, they are seeking partners that can deliver immediate access to high-quality data, backed by a proven track record. Trust, in this context, is not just a differentiator—it is a prerequisite.

A heterogeneous market

It goes without saying that the financial services industry and its market participants are far from uniform. There are diverse needs and requirements across the buy side and the sell side, where, according to Eddy, large global banks want "unfettered access to massive amounts of data in a frictionless manner", while smaller sell-side firms with more modest tech and data budgets tend to prioritize cost efficiency and targeted datasets.

The buy side is a similar story, where, for example, sophisticated hedge funds operate at the cutting edge of latency and data consumption, while more traditional investment managers often value simplicity and normalization over speed.



Matt Eddy
LSEG

This heterogeneity has led the real-time data business to adopt what Eddy describes as a "latency spectrum" approach, offering multiple ways for firms to access and consume various types of data at different speeds, depending on their needs and use-cases. The aim, he says, is to provide flexibility without compromising quality, from ultra-low latency feeds for high-speed and high-frequency trading firms to consolidated and optimized services for less time-sensitive applications. He uses a Formula One analogy to illustrate the point: "Some people need all the telemetry from the car, while others just want the lap-by-lap updates," he says. "In other words, not every client requires the same level of granularity or speed—but they all require reliability."

Growing data volumes

Delivering on these expectations is no trivial undertaking for data providers as volumes continue to grow at an unprecedented pace. LSEG recently revised its own data forecast up from its current year-on-year rate of increase of 15% to 20%. Peak message rates, Eddy says, are currently around 20 million a second, but are expected to reach 50 million by the end of this decade.

This relentless growth is mirrored within client organizations, many of which are under pressure to keep pace with the industry's rate of change for any number of reasons. "We're all trying to deal with the same problem of consuming data at volume," Eddy explains.

The implications of this growth extend beyond infrastructure, affecting everything from system design to operational processes and staffing models. Legacy technology—the bane of an industry overly reliant on systems that were never designed for today's data-intensive, always-on trading environment—is a particularly significant constraint. Eddy explains that legacy stacks "slow everything down", limiting firms' abilities to onboard new datasets, scale capacity and, crucially, innovate.

The shift toward longer trading hours is another factor further exacerbating these challenges. Systems that were developed around fixed market hours are now being forced to accommodate continu-

ous operation, placing additional strain on technology and human resources. Eddy illustrates the challenge: “It’s like trying to stream Netflix through a fax machine,” he says. “Technically, it’s a pretty cool thing to do but, actually, is that how you want to live and provide support on an ongoing basis?”

While it might be technically possible to adapt legacy systems to modern-day rigors, doing so is neither efficient nor sustainable. As a result, many firms are adopting what can best be described as a “dual-track approach” where they maintain their existing infrastructure while simultaneously investing in transformation initiatives.

Continuity and innovation

LSEG supports both above-mentioned tracks, ensuring continuity for current operations while crucially also enabling future innovation. This approach requires a delicate balance between backward compatibility and forward-looking development, particularly given the dependencies many clients have built up over decades.

Data quality and consistency, which LSEG sees as its bread and butter, represent another critical area of focus. In a real-time environment where manual controls are not viable, ensuring accuracy at scale is a daunting challenge, which, when married with the vast quantities of data, including billions of unique identifiers and trillions of data points that LSEG produces every day, intensifies the challenge. “It’s like trying to check every raindrop in a storm for problems,” Eddy explains, illustrating the futility of attempting to monitor large volumes of fast-moving data manually.

LSEG has therefore adjusted its approach to quality control, shifting from reactive validation to proactive engineering by embedding governance and observability into every stage of the data life cycle, with the view to identifying and mitigating issues before they can impact clients. In this context, observability is a key priority for LSEG, where even minor issues can have repercussions as data is passed through dozens of “hops” from source to end point.



Consequently, clients are now demanding greater disclosure and transparency into potential disruptions, allowing them to make more informed business and operational decisions.

Cloud partnerships

In recent years, LSEG has also invested significantly in its cloud-based infrastructure through its partnership with multicloud providers including Amazon Web Services (AWS), a multiyear initiative that reflects a wider industry move toward cloud adoption.

Historically, market data systems were built on physical servers designed for maximum reliability and, while effective, the approach lacked the scalability and flexibility required in today’s ever-changing market. Eddy highlights the importance of these two criteria in practical terms. Clients, he says, may need to access new markets or significantly increase their data consumption at short notice—whether because of market opportunities or disruptions with other providers. “Being able to quickly respond to that is a game-changer,” he says.

For instance, the partnership with AWS also reflects the notion that LSEG’s focus remains exclusively on its core competency—delivering high-quality data to its clients—much in the same way that its capital markets clients focus on their money/investment management commitments while leaving the provision of data to LSEG. “Our differentiator is collecting, normalizing and distributing high-velocity market data—not running a datacenter,” Eddy says.

By leveraging multiple cloud providers for elements of its infrastructure,

LSEG can concentrate on delivering value where it matters most, while maintaining the levels of resilience and performance required for critical market data services.

Changing market structure

It goes without saying that the evolution of market structure will continue to shape LSEG’s strategy. The move toward extended trading hours and potentially even continuous markets presents both challenges and opportunities. “The markets don’t respect office hours anymore,” notes Eddy, referring to an industry driven by global events and real-time information flows in which traditional trading practices have become increasingly eroded and blurred.

In response, LSEG is focusing on providing clients with more choice and flexibility. They can opt for what Eddy describes as “the fire hose” of raw data or more curated, tailored datasets, depending on their needs—an approach that aims to future proof the firm’s offering, underpinned by cloud-driven architecture.

Eddy emphasizes that LSEG and its clients are ostensibly on the same journey, where both are navigating the challenges of modern market data against a backdrop of rising data volumes and continually evolving market structures. However, by collaborating with clients, LSEG aims to help them not only stay abreast with these changes, but ultimately turn them into something of a competitive advantage. “We’re all on the same journey,” he says. “We might be solving it in slightly different ways, but we can learn from one another.” 

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