## Institutional Investor

## D.E. Shaw Spin-Off Arcesium Brings Precision to Posttrade Analysis

Hedge fund giant D.E. Shaw launches an independently operated company to provide sophisticated software and services to handle asset managers' posttrade activities.

BYMICHAELPELTZ



In the wake of the financial crisis, and the raft of regulation that resulted from it, investors have been pushing hedge funds to provide greater transparency. As managers step out from the shadows, they are devoting more of their time and resources to shadow accounting — replicating the books and records created by their third-party fund administrators to ensure their accuracy. To do that, hedge funds have had to build out their back- and middle-office operations, utilizing

technology from a variety of providers to monitor their posttrade activities. The challenge is getting the disparate systems to work together effectively and efficiently, so managers can take a comprehensive look across all the different asset classes and investment strategies in their portfolios.

D.E. Shaw Group has a solution. Today the New York-based firm, which manages \$36 billion in hedge funds and other investment vehicles, announced the launch of an independently operated company named Arcesium that will offer software and services to handle asset managers' posttrade activities. The Arcesium platform supports all aspects of the trade life cycle after a trade is executed, including trade capture, asset servicing, collateral management, pricing-related services and portfolio data warehousing.

"It's a completely modern platform that will be a hosted solution," says Arcesium CEO Gaurav Suri, 44, who had been head of information technology and software development at D.E. Shaw. "It's designed so a single platform can cover a wide range of asset classes and geographies and can deal with the performance or scale requirements that customers have."

D.E. Shaw developed the platform to provide sophisticated support for its own posttrade activities — not an insignificant task for an organization that does everything from high-volume statistical arbitrage trading to highly structured private equity deals. Suri, who joined D.E. Shaw in 1996 from Bell Laboratories as a programmer in its equities trading group, says the firm has invested hundreds of person-years into building both the technology and the services. "Starting in 2010 we did a complete overhaul of both our technology infrastructure and our financial operations processes," recalls Suri, whose team collaborated on the project with D.E. Shaw CFO Christopher Zaback and his financial operations group. "Soup to nuts, we looked at every one of our operational processes, making sure that they were appropriate for how the business was evolving and also trying to make sure they were a lot more efficient. Alongside that, we did grounds-up reengineering of our technology platform that supports those operations."

By 2013 D.E. Shaw had created a highly automated, exceptions-driven platform — meaning that its back- and middle-office staff only had to get involved in posttrade activities when there was a problem to solve. It didn't take long to come up with the idea of opening the platform to other firms. "A little over a year ago, we started looking at it and said, 'Hey, we really built something that isn't only industry-leading but is actually unique," Suri explains. "So we asked ourselves, 'Is there an opportunity to commercialize it and build a new business?"

Few companies have a richer technology history than D.E. Shaw, which was founded in 1988 by former Columbia University computer science professor David Shaw. Leveraging work that he did in massively parallel computing, the firm was an early pioneer in quantitative investing and became known for its cutting-edge algorithms and wickedly smart people. D.E. Shaw's interests weren't confined to hedge funds. The firm launched multiple technology-based businesses, including e-mail provider Juno Online Services and FarSight Financial Services, one of the first online brokerage firms. Although Shaw, 63, stepped back from day-to-day operations in 2001 to pursue research in computational biochemistry and molecular dynamics, he left behind an entrepreneurial culture that lives today. "In some ways the launch of this new business is really in the DNA of our firm," Suri says of Arcesium. "The whole idea of investing in technology and spinning out or launching new technology-enabled businesses is something we did in our earliest days."

Ironically, the biggest challenge that Arcesium may face is its association with D.E. Shaw, majority owner of the new venture. Potential hedge fund clients may be reluctant to share their trading positions with Arcesium, regardless of the quality of its platform, for fear that parent D.E. Shaw might have access to their information. Chicago-based hedge fund firm Citadel encountered that problem when it spun out its Citadel Solutions fund administration business in 2007, later rebranding it as Omnium. The name change did little to quell managers' concerns. "Omnium has some pretty neat technology," says the CTO of a large hedge fund firm who evaluated its offering. "But none of us could get past the Citadel smell test." In 2011 Citadel sold Omnium to Northern Trust Corp.

Suri is confident that Arcesium can avoid the Omnium problem. He says the new firm,

which employs more than 300 former D.E. Shaw technologists, accountants and operations staff between its offices in New York and Hyderabad, India, will be both physically and technologically separate from D.E. Shaw. But potential clients don't have to take his word. They can ask Blackstone Alternative Asset Management — Arcesium's first customer (outside of D.E. Shaw) and the world's largest discretionary investor in hedge funds, with \$64 billion in assets in such vehicles. "D.E. Shaw is beyond reproach in a lot of different ways, at least in our opinion," says Brian Gavin, chief operating officer of BAAM's hedge fund solutions group. "They always do things by the book."

Gavin, a CPA by training who oversees BAAM's hedge fund operational due diligence, has a long history with D.E. Shaw. Prior to joining Blackstone in 2002, he was the firm's auditor as a partner at Arthur Andersen in New York. "They are not looking to cut corners to make a few extra dollars," Gavin says. "As someone who was on their audit engagement for many years, I can tell you that they go through so many levels of review just to issue a financial statement. The amount of precision that they apply to their business is pretty impressive. That's why we're comfortable being one of their largest clients." As part of its relationship, BAAM is taking a small minority ownership position in Arcesium.

BAAM will be using the Arcesium platform for its multibillion-dollar direct trading and

special situations businesses. "We have very complex trades on our end, and D.E. Shaw is probably the most complex hedge fund out there in terms of all the different asset classes they trade," Gavin says. "We were quite impressed with how Arcesium will be able to handle all of our positions."

Arcesium's platform combines software and service. Suri says that some clients will keep their own people and buy the technology, whereas others will tap both Arcesium's technology and its solutions team. The SaaS (software as a service) platform was also designed to be modular. Asset managers can pick and choose which parts they want to use, including trade capturing, treasury and portfolio accounting. For hedge fund clients, Arcesium is not looking to replace firms' existing fund administrator but rather to play a shadow role. "We don't want to get into fund administration," Suri explains, "but we can provide customers with an independent version of their data, to enable them to integrate well with their administrators."

In keeping with its tradition, D.E. Shaw came up with a suitably geeky name for its new business. "Arcesium" is based on the element cesium, which was discovered more than 150 years ago by two German chemists, including Robert Bunsen (the inventor of the Bunsen burner), and is used in atomic clocks to measure time. Suri and his team at Arcesium hope to bring similar precision to the world of posttrade analysis and services.

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