

# Building Technology to Improve People's Lives

**An Interview with Tarek Sherif,  
Co-Founder, Chief Executive Officer, and Chairman, Medidata Solutions**

**EDITORS' NOTE** Tarek Sherif has led Medidata from a start-up to becoming the leading global provider of cloud-based solutions to the life science industry and one of the largest public technology companies founded in New York City. Prior to Medidata, he co-managed and managed equity funds focused on public and private technology and life sciences companies, as well as holding various positions in finance. Sherif received his B.A. in economics from Yale University in 1984 and graduated from Columbia Business School in 1991, where he earned a degree in business administration and finance.



Tarek Sherif

**COMPANY BRIEF** Medidata ([mdsol.com](http://mdsol.com)) is the global leader in collecting and managing clinical trial data and supports trials in more than 120 countries, while defining the vertical cloud company business model. Medidata's mission is to power smarter treatments and healthier people.

**Will you talk about the vision around the founding of Medidata Solutions?**

My co-founder, Glen de Vries, with whom I've shared an office for 16 years, and I wanted to build cool technology that ultimately helps improve people's lives. Our focus is on the drug discovery industry, and I'm proud that we've become the leader in our space. We have a unique vision for how technology should be leveraged in the development of medical treatments, and every day we work with pharma companies, biotechs, and device manufacturers around the world to accelerate innovation and bring important medical breakthroughs to patients.

Through our cloud platform, we provide the technology infrastructure that allows life sciences companies to speed the development process and therefore save costs. Medidata also focuses on quality and risk, making sure that our clients have the data necessary to make faster decisions about whether a medical treatment is working or not. A foundation of our product strategy is building and continuously growing our data assets, which are already, by far, the largest set of clinical data in the world.

We started Medidata as a seven-person company in Midtown, when the Internet bubble was about to peak. We had some innovative

thoughts about how the development process could be improved using technology. Back then, people were using spreadsheets and faxing information. We started working on how to collect data from doctors' offices when they were seeing patients in a clinical trial, and how to manage that data and report it.

Sixteen years ago, the industry didn't use the Internet to effectively relay information and provide instantaneous feedback. Changing that, and therefore improving the quality of the

clinical data being collected, was the core of our business, and it all started with a product called Rave. Today, it's the industry standard for data management.

We got there by taking a user-friendly, customer-centric approach. Rave was different than the typical business software in that we had numerous doctors and nurses entering information into the system. We focused on the user experience, making data management through Rave easy and efficient. To this day, we are the preferred technology for clinical researchers in doctors' offices.

Over the following decade, the market continued to expand. More people thought Rave provided a great way to collect data, and many of our competitors weren't as flexible and innovative as we were, so our business accelerated. By the time we went public in 2009, there were about 800 people working at Medidata.

We built Medidata on \$13 million of capital before going public, and we still had \$10 million on our balance sheet when we went public. At the time, we were \$100-plus million in revenue and had a recurring revenue business model well on its way to profitability.

Today, we're approaching half a billion in revenue, all from cloud-based subscription revenue and the services that support it. We have about a \$3 billion market cap. This arguably makes us one of, if not the, largest tech company in New York City that has ever gone public.

Our current focus is much broader than providing a single product solution. We look at the complexity of the entire clinical development process, be it how to select the doctors one should have in a clinical trial to data collection and analysis in a much more sophisticated way.

We also look at how to manage all of the different processes that happen in a trial. People who support the trials need to visit the doctors, clients need to ship drugs to different locations around the world as inventory is being resupplied for the trial, and doctors need to be paid. We get involved in all of these logistics. Anything that is a process point in drug development is something we're either handling today or helping to figure out how to handle better in the future.

Because of our business model, we're gathering an enormous amount of data, which is homogenized, through the cloud. Five years ago, we started to get data rights from our customers to look at their data on an anonymous basis. Today, we have an amazing capacity to look across our entire industry, which nobody has ever been able to do. This allows us to understand who is most efficient from a process perspective, what some of the pain points are, and if there are teams within one pharma or a specific therapeutic group that could be performing better compared to their peer group. Increasingly, we're looking at the scientific data and seeing interesting trends across the industry, which we're able to identify for our clients.

It's exciting to see Medidata evolve and our focus broaden from infrastructure to more of an information and analytics company.

**How important is brand awareness for you in this space?**

Brand awareness is always important, and we're well known in life sciences, the industry we serve. We work with more than 700 companies and 17 of the top 25 pharma. Our infrastructure is responsible for helping them innovate on products that generate trillions of dollars in revenues.

Because of where we started as a business, we've always been known for data capture. We're beginning to also be known for our unique analytics work, which is a much higher value-add as we think about the next decade of growth.

**As you continue to grow, is it harder to maintain the culture and that entrepreneurial feel?**

I'm really happy that we've maintained the culture that defines us and makes Medidata such a special place to work. The core elements of our culture are very strong. That's why we get many great people to join the company and our attrition rates are extremely low.

Our culture has evolved, but we haven't lost the core tenants of it, which are customer service, tenacity, and the spirit of innovation. We have a team that really believes in our mission.

As the company grows and we scale for the future, we're putting more processes in place to keep that innovative edge. It's always a challenge to do that and maintain a start-up, entrepreneurial culture, but we're meeting it well.

With regard to the speed of innovation, Medidata has atypically accelerated as we've gotten bigger. We spend almost a quarter of our revenue on R&D and are able to do that because we have a highly profitable business model. This gives us a great opportunity to help our customers be successful and, ultimately, to positively impact patients' lives.

When we were seven people, we couldn't make a statement about wanting to help improve patients' lives and back it up with much conviction. Looking at where we are today, and where our opportunity is, we really can have a dramatic impact.

To give some context, there are many interesting things going on within pharma right now and people aren't as aware of some of that dynamic. There is not a week that goes by when we don't hear about a revolutionary drug coming to market or the success of a clinical trial where they're not just providing palliative care – they're providing a sustainable solution and helping save somebody's life from, for example, a form of cancer that has not previously been treatable.

We went through a long period of time where there wasn't much innovation happening and now we're at the beginning of a long wave of it. We're going to cure diseases that we thought were incurable, but it requires a very different process getting those drugs to market.

Now, we're targeting drugs to increasingly smaller groups of people based on their genomic and phenotypic profiles, so drug development needs to evolve and the economics do as well.

As we develop Medidata's business over the next three to 10 years, our focus is on how to more quickly and efficiently get drugs to market and how to improve the quality of those drugs for the patients who need them. Technology will increasingly play a bigger role in that, enabling life sciences companies to gain valuable insights from more objective clinical data.

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**It seems that much of the innovation is coming from the smaller biotechs. Do you see it at the larger pharmaceutical companies as well?**

We do. Large pharma went through a rough period when they were facing patent cliffs. They pulled back on their operations and focused on cost cutting and streamlining, but they've come out of that period of time and they're reinvesting in innovation.

We see a lot of innovation happening in the biotech sector but also in the large pharmas.

The big companies have brought some interesting drugs to market and their pipelines are filled with other drugs that will have an impact.

Biotechs are more visible because when they get it right, the company goes from being tiny to being a rocket, whereas for the larger organizations, their successes are part of a broader portfolio.

**Is this a global company that happens to be headquartered in New York or are you a New York company that does business globally?**

We don't just happen to be headquartered in New York – we are here by design. Glen is a New Yorker. I have lived here for 31 years. We live in the city and get to walk to work every day.

Medidata is a global company, powering clinical trials in over 120 countries. Our roots are in New York and we are very proud of that. Despite our struggles early on when the

Internet bubble burst and not having much of a tech start-up culture here initially, New York has been good to us. We do R&D around the world, but our core is in New York and we love it here. The unrivaled access to talent and resources here has been a key part of Medidata's success over the years.

We try to bring some of the feel of our New York headquarters to all of our offices and we do that well. But, at the same time, our offices around the world are integrated into their own local communities and cultures. We're not transplanting New Yorkers, but there is a New York feel that we bring to what we do worldwide.

**Will you talk about the role of the Partnership Fund and why you felt it was so important to commit to that?**

As we became more successful and as we established ourselves here, Glen and I always felt that it was important to give back to the community.

We are proud New Yorkers, and we feel a strong sense of attachment to the city. Years ago, New York was a different place without the tech community and infrastructure we have today and it's great to see the changes that have happened because of organizations like the Partnership Fund.

Our intention is to give back to the city in a meaningful way, contribute our skills, and share the success we've had. The Partnership Fund seemed like a great match because of its mission. It's why I joined and ultimately accepted the co-chair role.

With the Fund, we're trying to help the city's economy evolve by supporting new businesses and creating opportunities. At Medidata, we've hosted several Partnership Fund accelerator kickoffs and mentored start-ups. It's easy to do and has a meaningful impact.

Because the mandate for the Partnership Fund is so broad, it's a great vehicle in that we can invest in a biotech start-up in the city and turn around and invest in something else totally unrelated, like Citi Bikes.

I get to work with a great board that really cares about the city and brings its resources and networks to the table. It's fun to work with really smart people with a common mission. ●