

Building the Data Infrastructure to Power Your Business



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CEOCFO: Mr. Walker, what is the concept behind Astronomer?

Mr. Walker: Our company is an early stage tech company that helps companies build data pipelines. Most people don't know what data pipelines are, so I usually like to explain it a little: basically, data pipelines are what we need to pull data from external resources and get into companies' databases or warehouses to power data science, analytics and business intelligence. With our technology and team, that's really easy. We work with companies like Duke Energy and other large organizations, as well as earlier stage companies, to help them move data from one place, process it, and put it in another place. Like an oil pipeline, data is flowing these days in the same way.

CEOCFO: What do you understand on a fundamental level that allows you to provide an easier, faster, cheaper and better service?

Mr. Walker: One of the things that differentiate us is that we use open source technology. There is an emerging world of data tools that have been open sourced from a lot of big companies. One of our core technologies (Airflow) was created by Airbnb and open-sourced last year. We are now able to integrate these amazing bits of software into our platform. Not only are we relying on components that have been reviewed and tested by an entire community of developers, but open source is typically built to “play nicely” with other components, which allows us to build a platform that's highly adaptable. Even though open source has been around for a long time, I think most organizations and companies are not still really using it to their full potential.

CEOCFO: Why is that the case?

Mr. Walker: I come from a software development background and am now the CEO of a tech company, but I think it takes time for ideas to take hold. Marc Andreessen said, “Software is eating the world” and that has since been adapted to “Open source software is eating the world.” It takes a long time to eat the world.

CEOCFO: What are the different services you have available?

Mr. Walker: Our platform has quite a few different use cases. With the proliferation of big data, there is a growing need to get data from clickstream, Internet of Things (IoT), webhooks, APIs and even third parties and take it to databases, data lakes, analytics tools and other destinations. Data can only take that journey along a data pipeline, so we build the pipelines a company needs. Take IOT data collection, for example. More and more, devices are being connected to the internet and reporting on themselves. A data pipeline makes that reporting possible. At Duke Energy, it used to be that data was recorded once a month. A person would walk around, read meters, record the data and bring it back to the home office. Now, many of these meters are reporting data once a minute through an internet connection. It is a totally different world and if you could imagine millions of houses reporting data every minute, that becomes a pretty high challenge—a large amount of data to have to ingest and make use of. We are most valuable to a company that knows they need a certain type of data and sends us to go get it for them.

CEOCFO: *Are people confident that machines can do the job?*

Mr. Walker: I think so. For example, a machine-based company I admire, called [X.AI](#), is basically a virtual system that sets meetings for me. I email Andrew, which is the name of my virtual system, and say “Hey, I need to get a meeting with Jane; please set it.” Andrew sends the emails and gets the meeting set far more reliably than any human assistant. I remember when I have had humans try to help me with such things. They would set up some of the meetings, but other times, my request would go into a black hole. With Andrew, it never goes into a black hole because machines don’t get distracted. X.AI is a really nice startup. It’s a ninety-person company that’s put a lot of effort into making its bot work. I think that is the future. You will see companies using technology to automate routine work, which is what computers are really good at: routine things that don’t require a lot of thinking and creativity.

CEOCFO: *How are you reaching out to potential clients?*

Mr. Walker: We subscribe to a philosophy called account-based marketing. It’s really a sales technique more than a marketing technique. It’s an old idea, relabeled by Silicon Valley to be new. The idea is that you establish a list of targeted accounts and do things to make yourself look good to those accounts so that they decide to be your customer someday. We have identified certain companies we would like to work for. We’ll communicate with them, invite them to events and try to become someone they want to work with. That’s our strategy.

CEOCFO: *Are you finding it hard to give up control or is it still small enough to keep control?*

Mr. Walker: I am a master delegator. I love delegating; it is one of my favorite things to do. Delegating to someone who does not know how to delegate is where I am seeing some challenges. I assume that since everything is on the internet, everyone has every skill. You can Google everything, but there are certain soft skills that can only be developed through experience. We have to figure out solutions to get our people skills like delegation.

CEOCFO: *What do you look for when you are hiring?*

Mr. Walker: I think alignment with our core values is critical, as well as a high learning agility. We have certain principles like openness, fun and thought leadership. When people demonstrate a lot of those values independently before they join us, it’s a lot easier to expect that they will behave that way after they join us. Also, our space is a very technical one. There are a lot of competitors, and if you really want to understand how we stack up to a competitors, you have to be pretty technical or at least have the ability to ingest a lot of information and make sense of it. I think learning agility is a critical skill—someone quick on their feet to understand new concepts. It’s hard to test for that, but one thing we like to do is set up a little bit of a “date”—a full day of working together in the office, getting a sense for how quick someone is to pick things up. You can tell a lot based on the first day of how the relationship might work out. It is similar to personal relationships.

CEOCFO: *Are there types of data that you are not able to reach yet?*

Mr. Walker: We talk about easy to reach data and hard to reach data. For example, Kroger is based in our city and they are a big company with very valuable data that they sell through their subsidiaries. We may have a chain of people in between us and Kroger, which means if our customer wants Kroger data, they would have to have *their* customer buy it and so on down the chain. There are certain scenarios, often with big companies, in which the valuable data might be three or four hops away. Not only is it a challenge to get, but it’s costly. Basically, expensive data is generally the hard data, especially if it is a few hops away from you. But it’s not unreachable. We save companies the headache by reaching the hard-to-get data for them.

CEOCFO: *Are you funded for your next steps or seeking investment?*

Mr. Walker: We have raised two million dollars of investment capital, primarily from Midwest investors. That’s not easy. We are on a venture path that requires us to raise more money next year. Once you start, you never stop. The moon or death: those are your choices each year.

CEOCFO: *Why choose Astronomer?*

Mr. Walker: You have to understand what data pipelines are and why you want them, but once you have that basic understanding, and many of our customers do, we aspire to be like the Chipotle for data pipelines. When you go into Chipotle, you choose exactly what you want, quickly, and leave happy. We think that many technology companies are creating the opposite experience and making it difficult to extract value. We have a recipe to do give our customers what they need. If there is data out there in the world that you need for some initiative you are working on, call us up and we will help you get it, painlessly. That is our value proposition.