

Pivot – Cross Border Commerce Podcast Series

Data and why it's mentioned in almost every presentation?

Hosts:

Mike Robertson - Head of Transactional FX Trading, Global Banking and Markets at Bank of America
Douglas Houser - Head of Transactional FX at Bank of America

Guest Speaker:

Dan Wright, CEO of Data Robot

Mike Robertson ([00:00](#)):

Welcome to Pivot, the Bank of America Cross-border Commerce Podcast Series. Pivot refers to a moment, where due to an impactful event within the business environment, one is set on a new path and a new series of possibilities arise. In this series, you'll hear competing discussions with industry leaders and key figures in the cross-border payments ecosystem and learn how they pivoted when the situation demanded it. I'm Mike Robertson, Head of Transactional FX Trading, Global Banking and Markets at Bank of America. And I'm joined by my colleague, Doug Houser, Head of Transactional FX at Bank of America.

Doug Houser ([00:35](#)):

Hey Mike!

Mike Robertson ([00:36](#)):

Great to have you again, Doug. And for today's podcast, the subject is, *Data and Why it's Mentioned in Almost Every Presentation*. And we're joined by our guest, very excited by this, Dan Wright, CEO of Data Robot.

Dan Wright ([00:48](#)):

Hey, great to be with you today.

Mike Robertson ([00:50](#)):

Great to have you here, Dan. Thanks very much.

Doug Houser ([00:52](#)):

Dan, first of all, congratulations, newly-minted CEO of Data Robot, and we like to kick off these podcasts with a bit about your personal journey. But also, could you discuss a little bit about what you see as the future of Data Robot, considering you're new in the position right now of CEO?

Dan Wright ([01:12](#)):

Thank you for the congratulations, but to start with my background, so I actually was a lawyer, and realized I wanted to do something different with my life. And it was kind of looking at some of the startups I was working with and watching founders take just enormous risks, but build impactful companies that had a really positive impact on the world and on the lives of everybody around them, and so, I actually jumped into an early stage startup called AppDynamics and joined the company when it was around 150 employees and scale it to the point where we had thousands of employees all across the world. And then we got the company ready to go public in 2017. And two days before our IPO, we got a call from Chuck Robbins, the CEO of Cisco, and he said that he wanted to buy AppDynamics for what at the time was a record multiple that anybody had ever paid for a software company, obviously since then that's changed. And that looks like a bargain now, but at the time it seemed like a great offer. And so we ended up taking that and from there joined Data Robot.

Doug Houser ([02:21](#)):

So great! I want to get into our topic, which is *Why is Data Mentioned on Every Presentation*, and how the data space has evolved since you've been a data robot, and also, you know, since you been in technology.

Dan Wright ([02:35](#)):

So, you know, companies have more data than ever, and as the volume of data is increased, the cost of compute at the same time has decreased to an all-time low. And so that combination, more data than ever, also changing more rapidly than ever, and the cost of compute being at an all-time low means that companies have a massive opportunity to leverage the power of their data, to make meaningful business decisions and enter AI. And now what we're seeing is companies really unlocking the power of their data, leveraging their data, to transform how they make critical business decisions using predictive AI driven business insights. And I always like to say, it's the difference between, you know, reporting the news and helping to create the news. And that's really where this technology is going and it's going to have a massive impact. I mean, PWC forecast that it could contribute up to 15.7 trillion to GDP globally between now and 2030. And that's more than the current output of China and India combined, so just a huge impact. And, you know, I'm really seeing this every single day as many of the top banks like Bank of America are using this across every part of their business. And it's not confined to banks. It's really the top retailers of the world insurance companies, healthcare companies, and even the government, you know, we've been working with the pandemic response with the government to help with that. There's really an endless number of use cases in every industry, all across the world. And it's really just about who can adopt this technology fastest to unlock the value there.

Mike Robertson ([04:17](#)):

The momentum seems astonishing. What are your thoughts around artificial intelligence? What does that even mean and how does that happen?

Dan Wright ([04:24](#)):

It's funny you mentioned that. Artificial intelligence term, I think, is very misunderstood, and I think the, you know, the term is actually it invokes feelings of fear, oftentimes in people is what I've noticed when I bring up that I work for an AI company. People, you know, they seem like, you know, the Terminator might be coming after them and that's not the case. That's why our mascot is a very friendly robot. We actually talk about AI in the context of augmented intelligence, which is taking machine intelligence and combining it with human intelligence and empowering humans to do things that otherwise never would have been possible, right? And that's true in a number of ways. One is just the accuracy of the decisions that you're making, so being able to more accurately predict the, you know, staffing needs of a hospital or the rebates that you need to give for a

car, or what is the best optimal pricing of a security? Like there are so many different things that you can optimize if you leverage machine intelligence, but then also you can have the human in the loop to make sure that it's guiding the machine intelligence and also for things that humans are just better at like creative things that machine intelligence is not optimal for. And so I think, you know, this idea of AI generally needs to be clarified. And you'll hear us talking a lot more about augmented intelligence being what is happening out there in the world and the idea of, you know, general intelligence, I think, we're not quite there yet, but certainly you can picture a world where AI takes on almost human-like characteristics and there's some things that actually exist in our platform along those lines, but we're just scratching the surface and that's still a ways out versus where we are today.

Mike Robertson ([06:16](#)):

That's interesting because you've touched on something there, which I think is a relatively human aspect that you mentioned the fear around that, you know, aspect of things, and one can sort of see how, if you think of the augmented world and how, I guess decision-making and processes is actually embedded in the day-to-day environment, such that you may not even notice it. Where does the fear factor come with that in humans? Why do you think humans have a fear of that, so to speak?

Dan Wright ([06:41](#)):

I blame Hollywood. No, I really do think, you know, it's funny that movies like the *Terminator* and *AI* and all these different movies that have come out over the years and novels, right? People have internalized that, and they think that, you know, AI and that machine intelligence is out to get them, and in fact, the interesting thing is that it's really the inverse. AI is humanity's friend and is solving problems that were previously impossible. And I see that every day, you know, I mentioned some of the things that we've done with the pandemic response, lives have literally been saved that would not have been possible without machine intelligence in a very large number of lives. And also, things like figuring out what can we do to more quickly, more precisely stop the spread of forest fires. One of the things that we did through our AI for Good Program is we worked with a company down in Chile that installed sensors on trees and was able to take in all the particles in the air and using Data Robot, we could predict if a fire was going to break out and, you know, make sure that the response was significantly faster to limit the damage. And I'm a resident of California, I'd love to see that across our entire state and believe me, I'm trying to make it happen. But there's applications in healthcare, more accurately diagnosing diseases, right, before they're not as treatable. And, you know, even things like demand forecasting, things like impact real humans in terms of making sure that there's, you can get what you need, when you need it, and taking a lot of the guesswork out of all of these different things. And then there's just the time that it saves everybody. If you're doing these things, using automation and machine intelligence versus manually, without the data science, and so I think, again, it's kind of Hollywood has caused the problem, and I view it as part of my job to kind of dispel some of those fears and those misconceptions about AI. And we can do it through one telling positive stories about the impact that we're having in the world, but also, you know, helping to democratize AI and bring it to the masses so people can see for themselves the value that it can create.

Doug Houser ([09:08](#)):

So building on that, I'm going to flip that a little bit and also talk about the other phenomenon that sometimes you see. Which is the data made me do it, right? The aspect of data being used, as not only, when people say data driven decisions, that's great, but your decisions also should be driven by strategy, by experience, by a lot of other things. So how do you look to balance that?

Dan Wright ([09:36](#)):

It's such a good question because we believe; I believe it is critical that you do a couple things, if you're looking to adopt AI. One is you have to build a system that has trust built into the very foundation. And that's something that we talk about at Data Robot, and we're going to be talking more about this idea of augmented intelligence. One of the pillars of that is this idea of trust. That in order for a model to be put into production, you have to be able to know that it will only help you, and it will never harm you. And how do you do that? That the AI actually has to be humble. And so we have something that we call Humble AI that will alert you if there's any sort of anomaly in the data that might throw off your model, or if there's another issue with the data that might, you know, cause an issue with the model, the prediction and the decision intelligence that it generates, so that you, as a human can say, maybe before I just blindly rely on this, I should actually dig into that and decide if I want to do that or not, right? So this is another great example of the need for collaboration and the combination of human intelligence with machine intelligence. The other thing that I tell everybody is its incumbent upon you, if you're looking to adopt this technology, to make sure that you have a strategy for your data, you know garbage in garbage out remains true. And so making sure that you are able to gather your data, and you can do that in a variety of ways. There are a number of data platforms out there. You know, for example, we have a great partnership with Snowflake, which made its first strategic investment in Data Robot, you may have heard of Snowflake as, you know, their record setting IPO last year, the largest software IPO ever. And at the same time, we have our own catalog of datasets and we can pipe in data from any source. So what I always tell people is get your data architecture right, and then make sure that you have an AI system that is end-to-end. So, you know, there's going to be no leakage of data and it can go across the entire life cycle all the way into having models in production and constantly updating those models. And then, you know, secondly, you need to make sure that that system has trust and this humility, which again is almost a human characteristic built into the foundation of the system itself.

Mike Robertson ([12:08](#)):

So that trust aspect is one of the fascinating aspects around it, because it takes us in a way to the regulatory environment because clearly, you know, our data, my data, your data, the data that companies collect on us it's a hot topic. To what extent, in the US, does a lack of federal level guidance around data and data management, storage, usage, etc., impact what's possible versus, let's say, what's different States are allowing you to do, how do you guys tackle that particular challenge?

Dan Wright ([12:38](#)):

Great question! So, one thing is it's important, especially in financial services or really any heavily regulated industry to understand not only what is the current state of regulation, but where's it going? And so one thing that we do is we're actually working with the regulators, and with the international bodies that are helping to shape policy around AI to make sure that A. makes sense if they're going to regulate this. And, you know, we have lobbyists and others in DC helping to make sure we get to a good answer here. But also we are making sure that all of our clients, all of our partners that we work with can see around corners that they can see what is coming so that they're not surprised because as I mentioned, there is a tremendous amount of value from a company's data. It's incumbent upon you to adopt technologies like AI, so you can realize that value, but at the same time, if you're not thinking a couple of steps ahead in terms of what is coming from a regulatory standpoint, you are really missing a trick and you're setting yourself up for, you know, potentially some serious liability down the road. And so we are very, very focused on, again, this aspect of trust. I am hearing and seeing, I go to DC frequently, and I talk to our team there frequently. I'm hearing and seeing that there's likely to be more regulation in this area, in the future. And so we're very focused on making sure that we have the most

trustworthy AI in the market and that it's perfectly positioned to help all of our clients if, and when this becomes more heavily regulated.

Doug Houser ([14:21](#)):

And following up on that, what do you think is an ideal state for the regulation of data? Because obviously you can approach it from plenty of different angles, right?

Dan Wright ([14:31](#)):

It's something that it's important to separate out the different things that we're talking about. Cause data regulation is such a broad topic. We could talk for much more than 45 minutes about that topic, but if you separated out there's my personal data, right, PII, and that I think has been much talked about. There's, you know, a lot of regulation in that area. And I think there are good reasons for that. And there are also ways that you can deal with that I think allow you to apply technologies like AI and machine learning to get the value from the data while still respecting people's privacy. And I can talk some more about that. The second area that you talked about is data residency. And similarly there are ways now to deal with those requirements, while still getting the value from your data. And then the third is really what I was talking about more before is the actual regulation of machine learning models. And that is an area that is a hot topic in Washington where there's some people who would go so far as to say that you need to sort of certify and audit every one of your models, every time it's updated. And I, you can argue whether that's too far and then there's others that would just say, and I think this is more, where I would fall, that you just need a system that has things like trust and bias and ethics monitoring, and ML Ops to constantly monitor the accuracy of your models. You need to have a system that accounts for those things, in order for you to actually be able to responsibly rely on these models for the types of predictions and decision intelligence that you are going to want to rely on them for. And so, I think it's important to separate these things out in the area of personal data. There's some very interesting things that are happening with, for example, synthetic data that also help with data residency. And you can apply a lot of the same technologies, a lot of the same workflows while still respecting, you know, those requirements. And so I think what you'll see in the areas where the policy is more settled, is that technology will evolve to adapt and allow society to get the value of the data, while still addressing the concerns that underlie those policies in the first place. And I think in areas that, you know, maybe currently less regulated, like the actual machine learning models themselves, that you will see an emphasis on platforms that have this idea of trust built into the foundation and that, you know, are really, again being built with these things in mind.

Mike Robertson ([17:20](#)):

Which makes absolute sense and maybe that takes me to something that's quite topical, you hear it all the time now around the crypto world, more specifically distributed ledger and Blockchain and so on, so what about data in that particular environment? How do you see data evolving as those technologies in evolve?

Dan Wright ([17:37](#)):

I mean, I think it's going to be very interesting to see, you know, with crypto and Blockchain, they've really gone mainstream over the last few years, and one great example was actually in the news today. I don't know if you saw that the Coinbase IPO. I was not involved with that company, but many of my friends were early investors in that company and, you know, so I've been tracking it over the years and I think that's a great example of crypto going mainstream, right? And I think with that happening, you can expect increased regulation. You know, certainly there's been a ton of talk about that already. But I do think there's a reason why companies like Coinbase, you know, exist and why crypto has, you know, and Blockchain has continued to advance the way it has and that's that it has intrinsic value for society. And at the end of the day, I think that those things will

continue to prevail. And, you know, regulation, it's one of those things, and I can say this as an ex-lawyer, it doesn't always hit the mark the first time, but typically it shakes out over time where there, you know, the policy concerns that underlie it get addressed, but at the same time, technology and innovation will always win out in the end of the day. And we'll find a way to get the value there. So I expect, you know, when it comes to crypto and Blockchain that we'll see more regulation, but I also think companies like Coinbase will continue to do incredibly well. And that we'll see more innovation in these areas in the years ahead.

Doug Houser ([19:12](#)):

And speaking of innovation, right? I mean, that's really what it's all about in this data space. What do you see is like on the horizon, that's an innovation that is fairly near term that should really change the way companies think about data?

Dan Wright ([19:29](#)):

I'll give you a couple of examples of areas that I see a lot of opportunity in the future here. And really in the near term, one is taking new types of data. So previously, when people talked about AI, they talked about a more limited, you know, set of types of data. It could be just text for example, but the way I think about it and the way that we approach it at Data Robot is that just like a human being takes all different types of data, whether it's text, audio, visual, smell, your AI should be able to take in all those same variables and combine the same way the human brain combines them to generate predictions, and I'll talk about this in a minute, decision intelligence. And I think that that is definitely a massive, massive opportunity and we've invested there, right? So just last year, we released visual AI, so, the ability to apply AI to images, and also geospatial, what we call it Location AI. Taking geospatial data and there's time series data, and we're working on other types of data as well. And what's exciting about that is it opens up a whole new world in terms of the types of use cases that you can address. And actually a great example of that is the work that we've done on COVID, where we actually were able to combine a massive number of different datasets and different types of data, including texts, but also images, geospatial data: tracking the movement of people all around the country, and generate decision intelligence. We were informing using applications built on top of our AI platform, policy decisions, decisions about, again, how many tests do I distribute to this specific County in Ohio, given, you know, what is going to happen with the pandemic? That sort of intelligence is something that previously had not been possible, right? And it's taking these different types of data and being able to ingest massive quantities of data and generate that type of decision intelligence, and then constantly updating the models as data's changing. So market's also moving towards continuous learning and Data Robot has heavily invested in that area. The other area that I'm very excited about is decision intelligence and that was, kind of, the segue there, but again, I think people think of AI in terms of predictions and predictions are valuable, right? Insights into what is going to happen into the future are very, very valuable, but their highest value is in how they inform human decisions. And the more that we can suggest better decisions based on what the AI is telling us and what the data's telling us, that's a massive opportunity. And so that's a huge area that we're investing in now. And that really is the last mile for, last mile for value for people who are not data scientists, who just want to be able to make better decisions and do their jobs more effectively, to be able to understand the power of their data and also of AI.

Mike Robertson ([22:57](#)):

When you talk about how people want to make the better decisions, it's really perhaps not so much the volume, or indeed the speed of change, the velocity piece of it, but really that sort of long tail of variety, which we all sit within our business, we can often see the obvious things, but then this obvious things are sort of more deeply embedded. How are firms dealing with that sort of long tail of variety typically?

Dan Wright ([23:21](#)):

Great question! I, you know, I'm seeing people rush to adopt this technology and the really encouraging thing to me is that people are looking to do more with their data. Like I mentioned, not only the quantity of data and making sure that they have a solid data architecture in place, but also the different types of data that can be collected. And I think what I am already seeing that we'll see a lot more of in the next few years is, again, this idea of decision intelligence, automating all of the critical decisions that you're making in the business. And there will be a human in the loop. But if the machine intelligence can use all of your data to predict what is the best possible decision in this situation? There's a couple of things that happen, one is it increases the velocity of your decision-making, but the second thing is it increases the accuracy of your decision-making and that that's very impactful. I was talking to a major retailer the other day to the chief data officer there. And they were saying, if they can improve the accuracy of their demand forecasting by half a percent at their scale that is billions of dollars in ROI to them annually. And those types of decisions, being able to have that little bit of accuracy really moves the needle substantially. But the other thing that that does is something that's very human, very personal, it frees people up, it frees up their mental capacity to be able to innovate on new things or to do things that are more creative. And that's what excites me, because I know, for me personally, and I think others who are just experiencing what's going on in the world, there's more data than ever coming at you before. And if you're just relying on your brain all the time, unaided to be able to process all of that and make decisions and focus on what matters the most, it can be overwhelming. It can be exhausting. And so I really view this technology of helping to, you know, liberate people and free them up, so that they can focus on their highest level work, so that they can be more creative and even so that they can spend more time at the end of the day with their families. And those are the sorts of things that excite me.

Mike Robertson ([25:41](#)):

Indeed, as you mentioned, you speak about a chief data officer, you know, some firms have them, some firms don't. It brings me to the thought of this coming together of, and developing new skills. To what extent do business people, as a distinct from the data officer or the data team, need to learn data, so to speak? How do those get together as a set of commonalities that makes sense for the overall business strategy?

Dan Wright ([26:05](#)):

I think it's absolutely critical. I think that if you're relying solely on your chief data officer or on your data scientists to drive these types of critical decisions to drive the adoption of AI, you're going to fall behind because the technology is at a place, now, where we've automated so many things that were previously done manually by those types of people and enabled things like decision intelligence, where literally the system is just recommending a decision to you and you don't need to be a data scientist. It's very, very important at a company level that you, we like to talk about democratizing AI and enabling what we call citizen data scientists. And my belief is anybody can be a citizen data scientist, you only have to have intent. You have to intend to learn. And it's the barriers to that learning are so small; now, it's really just a matter of wanting to do it. But if you look at the companies who are having the most success with this technology, they are really driving a cultural shift where everybody across the company is realizing that they can create value with this technology. And they are internalizing that they themselves now are citizen data scientists, they themselves now are using platforms like this one able to create values, make better decisions than they ever could have in the past. And that's why, you know, even when I talked to C-level executives that some of the largest companies in the world, they're looking at this as a strategic priority and they themselves are saying, how can I get this type of decision intelligence for every critical decision that I'm making on a day-to-day basis? And there's even dashboards now that are able to visualize all of this. And so, even as just a business person, if you take out maybe even an interest in your data or an interest in AI, what should interest you is the value that you're creating. And we are

able to visualize that with dashboards that, similar to dashboards that people have used for business intelligence that, you know, again, we'll just reports the news. We can show you how you're using predictive intelligence to actually drive incremental value that was never possible before. And that's really powerful, again, at a personal level for people who are not data scientists, to be able to show that to their colleagues, to be able to show that to their management team, to be able to show that to their board of directors. And we've already seen countless number of people really change their own lives and be seen as the citizen data scientists, oftentimes they're promoted, they're elevated within the organization and they're having a huge, positive impact on their companies.

Doug Houser ([28:56](#)):

So to that point, data culture, data processes, data governments, across those three, where do companies usually fall down when they're trying to implement? What are the biggest mistakes you see, and what can they do to avoid them?

Dan Wright ([29:15](#)):

It really does fall into some repeatable patterns. I mean, one thing that I see, and I'm seeing this less, but I certainly saw this more, even a year ago, people trying to build their own systems for data in-house and that inevitably fails, you know, and you lose really valuable time. The systems that are developed, they don't scale, and they also don't have this concept of trust built into the foundation. And so, you know, inevitably what happens is that they fall down and then you're back to square one. And with any technology, there's a first mover advantage, but with AI that's even more so because of the feedback loop you get, where the algorithms are constantly improving. So if you fall behind, and if I'm in banking, you know, I may never catch up, and the same thing, if I'm in retail, or if I'm in insurance or healthcare or automobile manufacturing, or you name it airlines. And so, you know, that is definitely one area where I have seen people fall down and, you know, I try to point people away from that just because I've seen the damage it can cause. The other thing is using a combination of point solutions or open source that isn't truly end-to-end and also not enterprise grade. And so, where I see people are most successful is when they're using an end-to-end enterprise grade platform to go all the way from data to value. And maybe you have, you know, a few partners, right? So you could have a Snowflake, for example, plus a Data Robot. That combination is very powerful. There's other combinations or, you know, Tableau or ThoughtSpot, you know, maybe you want to visualize some of the intelligence that we generate through those types of platforms, we enable all of that. But pick, you know, those two or three really strategic partners when it comes to your data and then treat them as partners. The other thing that really strikes me is when people, and oftentimes it's the same companies that are using point solutions or just Open Source, they're not focusing on what is the value that I'm getting from my AI at the end of the day, and it really is experimental. I talk about experimental AI being, you know, again with these point solutions and open source, doing data science projects, but many of those models never actually make it into production. And the ones that do aren't monitored or managed for accuracy, and they're not evaluated for the value that they're creating, you wouldn't treat any other type of your business that way it's just not responsible. It's not tolerable. Why would you do it with your data? When I think everybody agrees, your data represents a massive, massive opportunity, maybe the biggest opportunity that any company has right now in any vertical to drive significant value. So those are the things I would point to, don't build it yourself, look for an end to end platform that has trust built into the foundation, and then measure the value that you're creating all the time. And one of the things that we also do with customers is we do an AI council where we'll go and we'll bring their executives and the ones that do this really well. They actually bring C-level executives to these AI councils. And those executives ask the question, which again, should be an obvious question. What is the value I'm getting from my AI, and where are there opportunities to drive more value?

Mike Robertson ([32:55](#)):

It's such a great point. I'd like to sort of conclude this with a final question really. What is no one thinking about with regards to data, and what should they be thinking about if they aren't?

Dan Wright ([33:06](#)):

That is a great question. So I think people aren't proactive enough when it comes to their data. And I think that's a common theme that you've heard throughout this conversation. And I mean that in a couple of ways, one is there are categories of data that have been almost completely ignored, whether it's the type of data, you know, how many people have even talked about audio data and the types of use cases there, or, you know, sources of data, you know, now we're able to apply this technology to satellite imagery or x-rays, and there's just so much opportunity there. Not being proactive enough when it comes to having a strategy around your partners, your architecture, when it comes to how you get value from your data, or not being proactive enough when it comes to, especially in financial services, what's coming from a regulatory standpoint? How can I make sure that I can get the value from this technology? But also one be able to trust the technology, which I should be focused on anyway, and two make sure that in that context, I'm well in the right, when it comes to any pending regulation and that I don't run into issues down the line. So I think in general, and this is why, you know, I love podcasts like this one, and I hope that many people listen to it. In general, people just need to be more proactive about their data. And hopefully, some of these conversations can spark the initiatives, spark the interest that allows people to be more proactive and really dive in and take an interest in this.

Mike Robertson ([34:47](#)):

As you say, it is a fascinating topic, and productivity is so important. Dan, it's been fascinating, thanks so much for your time today. And it's really been a fascinating look into the world that you occupy, and all of us do, probably without even knowing it. So thanks very much.

Dan Wright ([35:03](#)):

Thank you very much. It was great being with you look forward to talking again soon.

Mike Robertson ([35:07](#)):

Cool. And thanks so much. And Doug as always, mate thanks very much for being with us.

Doug Houser ([35:11](#)):

Thank you Mike.

Mike Robertson ([35:12](#)):

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