

Walmart Inc. (WMT)

Citadel Securities Retail Edge Conference 2026

April 7th, 2026 11:45 AM EST

Company Participants

- Mark Hardy - Senior Vice President, Walmart Data Ventures

Conference Call Participants

- Ryan Preclaw - Citadel Securities

Presentation

Ryan Preclaw

Citadel Securities

We have with us Mark Hardy from Walmart. I'll let you introduce yourself, your background, and how you found your way to Walmart.

Mark Hardy

Senior Vice President, Walmart Data Ventures

I'm Mark Hardy, SVP of Walmart Data Ventures. If you're not familiar with it, you can look up at our website www.walmartdataventures.com. Our remit is to create value out of Walmart's data. That data comes in a lot of different forms. Initially, it was, how do you commercialize data? Most people's minds go to commercializing data as putting together a bunch of data and selling it by the pound. And when you're going to create value out of data, we really want to be able to focus on how do you create product or productize the data so that you get growth over time and not just one transaction. So that was the remit for Walmart Day Ventures 5 years ago when I started. So how did I get to Walmart? I have a little bit of an unusual background, not the typical retailer. I started at Proctor & Gamble. That's where I got my CPG experience and then towards the end of my tenure, as I was getting promoted, I went on a special assignment. And my assignment was to be a part of the first category management team at P&G.; I was given this portable computer. Now, back then, this was late 80s /early 90s, and a portable computer, just so you know, looked like a sewing machine. You would flip the bottom down. It had a green screen and two floppy discs. You try being cool. Quickly, after that, we went on to the Toshiba T-1200, and that's how I got bit by the data bug. After P&G;, when I left there, I ended up creating a career of about 30 years, a little over 30 years, in the data, analytics, and technology industries. Jumping into really cool stuff. But I saw was... The ones who are going to win aren't the biggest. The ones that are going to win are the ones who know what to do with the data. And whoever has the most data wins. And so that's how I progressed my career, and I've done all kinds of data sets, hopped on a company called IRI in its early days, which was POS data, point of sale data. And I've evolved my career, either helping turnarounds, usually for life stage events or early-stage companies, with my last one being in virtual reality. I joined Walmart 6 years ago in Store Number 8, which was our incubator, for initiatives and technology that we foresaw would have an impact on the retail industry. My first assignment was computer vision AI, how to create a business out of it. That lasted about a year. And John Furner came to me, knew my background, having spent 30 years in

data and analytics, and he said, hey, would you create a business for us around our data? That's how data ventures started 5 years ago.

Ryan Preclaw

Citadel Securities

Where does [Walmart Data Ventures] sit within Walmart?

Mark Hardy

Senior Vice President, Walmart Data Ventures

It sits in the growth org, led by Seth Dellaire, which has a few different businesses, but they're all tied together. It has marketplace. It has advertising, has Walmart+, data ventures, and now Vizio. It really brings together engagement, data, and commerce. With data being the connective tissue across all of them.

Ryan Preclaw

Citadel Securities

We talked about this, you've been building this thing out. How has that gone? It's been 5 years?

Mark Hardy

Senior Vice President, Walmart Data Ventures

Five years now.

Ryan Preclaw

Citadel Securities

Five years? What's been the story of those 5 years? The same every year?

Mark Hardy

Senior Vice President, Walmart Data Ventures

It's not a startup, but this is probably the biggest "startup" I've ever done in my life. We've had double digit growth every year and every quarter, quarter after quarter. We have a commercial product. Our flagship product is called Scintilla. Scintilla's Latin for Spark, a core part of Walmart culture. If you go on to the data ventures website, you'll see it there. But what Scintilla is, is an intelligence ecosystem for Walmart. And it's for Walmart merchants to be able to collaborate with their suppliers. What we do in Scintilla is we can look at the journey of a product from source to shelf, and the journey of a customer from home to store. Digital or physical. And we get to understand what actually happens at that point of conversion. When there's a product off the shelf, put it into the basket, check out. That's what we built in Scintilla. As I said, it is a, it is a SaaS platform, which is commercialized to our suppliers, and our internal stakeholders use it to drive their business. We have visibility of our customers. And we start with mindsets that then allows us to understand their behaviors, which then leads us to an outcome, which is, are your sales going up or down? And you can actually reverse the data and be able to look at it from how's my business performing, and then what are the behaviors that are driving that performance to exceed expectations or lag behind my expectations. And then what is challenging the behavior? What is driving that behavior? Was there a mindset shift in the consumer? What that allows us to do, and all this data is near real time. It allows us to really think about the innovation, renovation cycle, and how we choose to get the right product on the right shelf at the right time. Scintilla is a SaaS platform. It's a multi-year subscription. Five years out, we still have 100% renewal rate or retention. It's a choice. It's not something that is mandated by Walmart. But

what we have seen is the suppliers who subscribe to the Scintilla platform are outpacing non-subscribers by 15% in terms of growing their business. And really what it comes down to is that you are able to connect the dots between the customer and your business and understand how to be able to drive more efficiently, ultimately getting the right product, right place at the right time, which is a huge challenge.

Ryan Preclaw

Citadel Securities

It's been 5 years. Did this come together how you saw it the 1st day you stepped into the seat? Or has this been like a little bit of an evolution?

Mark Hardy

Senior Vice President, Walmart Data Ventures

I've been in this thing for 30 years and Walmart's definitely not the first to figure out how to commercialize their data. You can go back 25 years ago, you had Tesco, you had Kroger, you had a lot of companies across the retail landscape worldwide who had been doing this. Sometimes there's an advantage to being late to the party. The advantage is you can figure out how to build it with today's technology, and you can understand what worked and didn't work over the last 20 years. Plus, when we put on the lens, the customer today is very different than the customer 20 years ago. 20 years ago, what I bought was what was available in the store in my neighborhood, in my town, wherever I drove to. I walked into products on the shelf. That is what I had to take home. Today, we as consumers, I just grab my phone, I can pick what I want to buy from wherever I want to buy it and have it delivered whenever I want. And if I don't like your experience, guess what? I just go to another (web)site, another app. Customers are finicky. For us to win in this environment, we have to provide that right experience. That right experience is what will build trust with our customers and ultimately make Walmart America's favorite place to shop. Data Ventures is now global, so it's across all our markets. That's how the world has changed and that's how we design. To answer your question, 5 years ago, it was already in my mind. And I had this template, and I wrote this out for John Furner. I said, this is what we want to build. We looked at it last year and it was eerie. Some of the names changed because of branding, but it was eerie how disciplined we were in the last five years to build exactly what the roadmap was. Now, what I will tell you is in that journey, businesses are not built by one person. Business are built by the collaboration of a team. As we built out our team and brought in new skill sets, new ideas, everybody collaborated, bringing in ideas that we didn't know back then, that might have not been in that original roadmap. That's what makes this such a dynamic business, because we are constantly building and evolving it.

Ryan Preclaw

Citadel Securities

Let's talk about the ways that you built and evolved it. Let's start with what are the data sets that you brought together in Scintilla?

Mark Hardy

Senior Vice President, Walmart Data Ventures

When we talk about the journey of the product, we look at inventory. We look at sales. We look in the store itself, what's on the shelf? What's available in the back room. What's available, top stock. What's available the shelf. On the journey of the customer, we're looking at de-identified, anonymous data that is the aggregation of our credit card purchases. We don't have a loyalty program within Walmart. We do in

Sam's, but on Walmart. So, we have to use credit card data. We can actually look at longitudinal analytics of the household. What have they purchased over time? And that gives a good perspective on behaviors. What switching is happening, what's in the market basket or in the basket itself? How is evolution happening online versus in store? And what is that omni-presence? We also have built-in for understanding the customer, the clickstream data. The clickstream data allows us to understand pre-purchase behavior. How did they get here? How did they search for something? What did they look at? When they went to a product description stage, did they then abandon it? Did they continue? What went into the basket? Did they ultimately purchase, or did they not? Because we convert them, or did we not? That gives a lot of perspective and insights on what is that purchase behavior or even how consumers are thinking about both online and store. But I mentioned earlier we think about mindsets. How did we build in mindsets? Well, we built a community of Walmart shoppers. Now, these are not Walmart fans. They shop Amazon, they shop Target, Kroger, Safeway, as much as any other representative panel in the United States. But we built this community so that we could get the voice of the customer in every decision that we are making. And when I say "we," I mean suppliers and Walmart together. We can engage them, not only in surveys, but we can engage them in video shop alongs. We can also send products to their house and have them do product testing. Give us their feedback on what they thought about as a product concept. We can also involve them in shop alongs, not only digitally, but also take them into the store and understand where they would find a product. How would they think about it? What was their mission? All that insight coming together is what makes us different than what it has ever happened in this industry before. Because we can do all this near real-time, and be able to make those decisions. Think about the complexity. Walmart's promise? Our goal is to be America's favorite place to shop. That's great. Now how do we do that? We have to deliver on experience, and our goal this year is to deliver, to 95% of customers in under three hours. Not bad if all I had to do was think about 120,000 items that are in my store. The problem is, when someone shops online, we have over 20 million items in our distribution center. Customer doesn't care whether it's in a distribution center or in a store. I placed an order. I want it delivered. Think about that complexity, now, being able to be that good at being able to deliver an experience to the customer in under three hours to 95% of U.S. households. Regardless of whether the products in our store or it's in a distribution center. That takes data. That takes ability to have clean data that can allow us to predict what's going to happen, where it's going to happen, how it's going to happen.

Ryan Preclaw

Citadel Securities

All right, we're going to come back and talk about clean data. We had a whole conversation talking about clean data. I want to keep the focus on the on the platform for a minute. First question for me is, do suppliers only see data on their own product or can they see something a little bit broader?

Mark Hardy

Senior Vice President, Walmart Data Ventures

When it's when we talk about sales and inventory data, that is only on their products, it's proprietary to them. But when we talk about customer behaviors, they can see their entire category. They can see what customers are buying from competitors' brands. We look at switching or trends happening. So, I'll ask a question. How many people have gone to a restaurant and have seen brussels sprouts on the menu? Pretty much everybody. How many of you grew up eating brussels sprouts? Ooh, nobody.

Audience Member

Audience

Only my mom...

Mark Hardy

Senior Vice President, Walmart Data Ventures

...and you're gonna get it for breakfast. So that's the point. We can look at trends that are happening with customers, over time, that helps us understand how our data can be used. As we start thinking about helping plan menus for households, being able to give them ideas of how to pull together a whole plate. We can look at trends of what is happening and be able to surface them up that way. We are pulling together that customer view and our operational view. But the only thing that a supplier can see is their own data when it's inventory and sales, but a customer, they have full view of what they're buying.

Ryan Preclaw

Citadel Securities

Ok, so they have full view of their own inventory sales. How do you think they're using it? How do you know that they're using the platform?

Mark Hardy

Senior Vice President, Walmart Data Ventures

Yeah, so it ranges from operational to innovation. And I will start with operational. So, DSD, which is "direct store delivery." These are categories like bread, soda, chips, things like that. When their [supplier] trucks, Coke truck, Pepsi truck, or any of the others, would show up at the store, they would have to sit outside in the parking lot, wait 30 minutes until they could get a bay, go find somebody in the store to let them in. Then they bring their product in on pallets. And it's taking about 45 minutes to check it in. And this whole time, we're trying to get product to shelf, but it's a long process. What we do today in this, we can actually take Scintilla In Store, which we just announced in February. This is now taking the data down into store operations. That truck can signal us when they're leaving their distribution center. We know what time it's going to get to the store, and we're waiting for it. When it backs itself up, we have what's called priority pass right now, so they can actually check in their items in 15 minutes. There's no more waiting. What does that do? Well, it frees up our labor in the stores, because we don't have to be waiting for people. We don't have to wait for that check-in. It frees up labor from our suppliers. So now they can cover more Walmarks, more stores, get product to us faster. The most important thing is that because that product got into the store and checked in quickly, we can get that product to the shelf. Creating that right experience, when the customers orient, whether it's online and we're fulfilling from our stores, or whether they're walking down the aisle, they're able to have that product there. That's one example on the operational side. On the innovation side. And again, keep in mind the we've democratized this data. Over half of the subscribers to Scintilla are small or emerging brands. We democratize the data. One great example is Kinders. If anybody here ever buys Kinders, they started as a little spice company. Actually, it started with a deli. That led into a spice company. They, by being able to look at consumer trends, they started looking at some very mature categories that were... ho hum, not a lot of excitement in those categories over the years. They were able to then jump over to sauces and marinates and up their business. And you would think, okay, that was logical. But as they looked at the customer and the consumer, actually engaged with our community, what they heard over and over from the consumer is, we want restaurant, grade, bold flavors, in the rest of our foods. But we don't always get that. And especially in some categories that are very mature. So Kinders

then jumped into... wings. You wouldn't think that they'd go into wings, but they did. And their sales went straight up. And then they jumped into frozen French fries. If you've never tried their French fries, I would tell you too. It's what you get in a high-end restaurant. They figured out how to put spices onto frozen French fries and wings that really takes them to the next level. This is a small company that 5, 6, 7 years ago, just had a couple spices on the shelf. And today, they've crossed into different categories, because they're collaborating with our merchants and thinking about innovation and renovation, and how to disrupt categories. Small companies, really challenging the large companies out there. But we're also seeing large companies rethink what they were doing. A great example is Bayer. Bayer, who is a large company, has their processes for bringing innovation out. Once they got ahold of our data and our community, because it's in real time and so well connected, they were coming out with a new product, I think it was two years ago called Fizzy Melts. It's an anti-acid. If you think about pop, pop, fizz, fizz, it means in the middle of the night, I have to go down, grab a cup of water, plop that thing in there. Wait. Drink it, then try to go back to sleep again. So, Bayer came out with Fizzy Melts. You just literally pop open the package, put it on your tongue, it dissolves and goes away. When they came down to talk to Walmart, they were saying, well, you know what, this is going to cannibalize some of our business and the category so it's not completely incremental, very low incremental. When they then were challenged by a merchant to go, wait a minute, that doesn't sound right. I want you to actually do your research again through Walmart Data Ventures and use their data. When they did it, what they found was that the consumer actually saw this as totally incremental. They said, I'll still keep my pop, pop, fizz, fizz, for the daytime, but at night, I'll put it on my bedside stand and have my Fizzy Melts. I don't have to get out of bed. It was 100% incremental to the category. Bayer went back to their agencies and said, from now on, all our major national launches, we are using this data in order to decide how we're going. And this is how we're really disrupting and making changes with our suppliers who partner with us, because we're helping them think different and get timely data that's never been available to them before.

Ryan Preclaw

Citadel Securities

You talked about a couple of different ways than that people see and measure the impact and the value of the data. Is it people are measuring sales, or are they using other measures to, measure the value of using Scintilla?

Mark Hardy

Senior Vice President, Walmart Data Ventures

I think when you look at ROI, that's a lot of it always. Sales is probably the predominant measure. If you don't get paid, how do you pay back? With Scintilla, we are connected to Walmart Connect. Walmart Connect is our advertising business. We have AI built into Scintilla that is constantly monitoring customer behavior. And when there's an anomaly, it has a recommendation engine that is constantly surfacing ideas to the supplier. Here are opportunities for you to build awareness, acquire, or retain customers based on the patterns it's seeing. If a supplier says, 'hey, this is an interesting anomaly, I want to activate it.' You can look into understand how the engine came up with a recommendation. It's not blind. It'll walk through and display this is the data points we use, and here's what we're seeing. If it's something of interest, fits with the strategy of the supplier, they can actually hit the button and say, "activate," and it sends it over to the Walmart ad center, and from there, they can activate that opportunity for a campaign. So that's how we're now taking insights into action. And we're doing the same thing at retail as well. Being able to, when you go

into a store, Scintilla In Store is a mobile app. Walmart stores get covered by third parties. Some of them are the suppliers retail teams, so they're employed by the suppliers and they're in there helping do merchandising. And then there's also a huge ecosystem of third parties that are contracted by the suppliers to come into our stores and merchandise - help pull products out of that room, out of top stock, put it on the shelf. What we can do through Scintilla In Store is when they're walking down, they'll actually know what inventory is in store, and they can actually look at the shelf and it will tell you what products are going to be out of stock in the next 24, 48 hours. It's really easy to see an out of stock when there's a hole in the shelf. Now I know I have to go back and get it. But if I'm now looking at my app and it says, hey, this product's going to be out of stock in 24 hours, it also tells me there's a case of it in the back room. Or there's a product on the top stock. So bring it down. It goes back to the customer experience. We need to make sure the products on the shelf. So when the customer wants it, it's there, digital or physical.

Ryan Preclaw

Citadel Securities

Let's talk about that more holistically. Is there an example of it being available in the supply chain? How does it connect the supply chain altogether? You talked about suppliers being able to drop things off. Are there other points of connection as well?

Mark Hardy

Senior Vice President, Walmart Data Ventures

Yeah. The example I used was direct store delivery. It connects straight into our DCs and our warehouse. We know what products are in our DCs, what's actually on a Walmart truck in transit to the store. And we also know what's in the back room and top stock. So that entire journey is what we are tracking every step of the way. We know what's there and what's not. And it's not just DSDs dropping off their product. We have categories that like bread, gift cards. We never knew what was in our store until it sold. It's called Paid From Scan. When it scans at the register, we go, oh, there's a Wonder loaf of bread. I didn't know I had that in my store. Think about in your e commerce experience. I go in to look at bread, if the retailer doesn't know what's on the shelf, because we never took possession of it. It's actually the possession of the supplier still. How do we actually know that we can tell the customer that the bread's in store or not? Very difficult proposition. What you usually do is to say, yeah, it's always there. If you ever order bread and you don't get the right bread, it's because that bread was never there. What we do now, what we enabled, is through APIs, every single one of our distributors who are pay from scan, and part of paid Scintilla, they can actually, the minute they are dropping off product in the store, they send us through an API what's there. And we then tie it right back into Scintilla In Store. So we actually know what products are in the store or not in the store. And you talked about ROI. How does this translate? We're breaking myths. There was this myth, and I remember talking to a merchant, and they said...plants. Nobody will ever buy a plant online. They will just never come pick it up, 'cause I need to see the plant. Plants was one of those things that was drop off. We didn't know it was in the store, because it was paid from scan, and we didn't know until it was sold. So, we actually flipped that so we could receive what was in there and we actually put in real time inventory. And guess what started happening? Plants were being ordered for pickup. So here comes your groceries. At the same time, there's a plant coming out. We drove the growth of that category last spring. We're looking forward to this spring as well.

Ryan Preclaw

Citadel Securities

This sort of strikes me. I didn't understand, maybe I still don't. So maybe you should talk about this. Does Walmart have its own merchandisers and they use Scintilla in their work? Or is all of it you have vendors and they do all the merchandising thinking? How does that connect?

Mark Hardy

Senior Vice President, Walmart Data Ventures

Yeah, so there's a merchant who is the person who does the buying and the strategy of the category. And then in store, we have our own associates. Our own associates are providing the labor to replenish the shelves. But if you think about the size and the volume that Walmart does, it's not just for Walmart. Whether it's a supplier retail team or whether it's these third parties, they help do coverage across all retailers in North America. So that's not something new and something just special for Walmart.

Ryan Preclaw

Citadel Securities

Okay, interesting.

Mark Hardy

Senior Vice President, Walmart Data Ventures

So that's incremental.

Ryan Preclaw

Citadel Securities

So then how are your merchants making use of this? Because you talked about the external stuff.

Mark Hardy

Senior Vice President, Walmart Data Ventures

Yeah, it connects into an app for Walmart Associates, which allows them to do a lot of their functions: looking at their compensation, looking at health benefits and all the rest. It's called My Walmart and what that allows you to do also in the app is to do all the inventory and sales. The same data that's being shown in Scintilla In Store to a supplier is actually being shown to the Walmart associate as well. We do look to maintain the same level of data at the same kind of data. Because part of what happens in Scintilla In Store is stores also use it for store security. We know it's geofenced when someone comes close to Walmart, this rep, third party, checks in and checks out. We know who's in our stores at any given time. What that also does is it now provides a notice to our associates in store. Here's who's in your store. Because they have to come sometimes, hunt you down and ask for permission, to pull product out, to build a display, whatever it may be, change pricing. For the in-store personnel, I actually know who's in the store, who they're representing at any given time. So that's how we link everything together. There is visibility by our associates in store.

Ryan Preclaw

Citadel Securities

All right, that's super interesting. Something you touched on earlier, I'd like to pull out a little bit more, Walmart, Connect, and Vizio, these ads and advertising platforms. Give a little more, more depth into how those work, how people have found them in terms of use and productivity.

Mark Hardy

Senior Vice President, Walmart Data Ventures

Tell me a little bit more. I'm not sure.

Ryan Preclaw

Citadel Securities

You mentioned that people are able to see anomalies, they jump on this opportunity, but sometimes those ads can get presented to people. How does that work?

Mark Hardy

Senior Vice President, Walmart Data Ventures

When we identify an opportunity and if that opportunity is actioned by the supplier, then it's sent to Walmart Ad Center, Walmart Connect.

Ryan Preclaw

Citadel Securities

Wait, what is the Walmart Ad Center?

Mark Hardy

Senior Vice President, Walmart Data Ventures

Come on, you don't know?

Ryan Preclaw

Citadel Securities

Turns out, turns out this one is new to me.

Mark Hardy

Senior Vice President, Walmart Data Ventures

Walmart Connect has their ad center, which is their technology that then puts the ads onto Walmart Connect and the Walmart app. It displays the ads. So that's their ad center, and so all ads go in there. What we do is we send it there, but before it gets activated, you have to apply creative to it. You then have to apply all the targeting, you have to do all the manual stuff to make sure it gets shown to the right people at the right time. And then also that's where the financials go into, such as, what are you bidding on? Where are you going next? We send it over to the ad center and then the Walmart Connect team takes over and they work with a supplier in order to make sure the right creative is in there, the right messaging.

Ryan Preclaw

Citadel Securities

Is it essentially saying, there's an opportunity here for you to advertise? Like this is a ripe spot for you to have.

Mark Hardy

Senior Vice President, Walmart Data Ventures

Yep!

Ryan Preclaw

Citadel Securities

All right, great.

Mark Hardy

Senior Vice President, Walmart Data Ventures

They've got a pain. We've got a solution. Here you go. And it's continuous. So that's what the ad center is. When you talk about Vizio, and again, I think Vizio is more of, think about the future. If you think about the future, we have media. We can then provide the commerce, and we have the engagement in between it. When you start thinking about Vizio and being able to understand what people are watching, how they are engaging with product, with shows, being able to understand how they're engaging with advertising. And then what they're ultimately buying. It allows us to get even more visibility into the world that we're living in again. We always think about de-identified data, anonymous data, and any data that we have, we have to respect the privacy of our customers. That's the number one thing we do. But that aggregated data at the footprint scale of Walmart; we do 150M transactions a week. That gives us real good visibility about how to influence or how to think about customers' patterns, whether it's trends or behaviors, and how to be able to fulfill them.

Ryan Preclaw

Citadel Securities

All right, that's very cool. Did not know that about Walmart. You talked about the future just a second ago, and we've talked a little bit about AI with other folks. How is this data getting plugged into the future input into AI, and then how are suppliers using it?

Mark Hardy

Senior Vice President, Walmart Data Ventures

So I think across Walmart, I don't think there's a single meeting that you don't hear the word AI. And what's amazing in the transformation that I'm seeing AI driving is that it doesn't matter your role. Everybody's involved doing something with AI. And I think a lot of it is that we're going through that exploration period. And what I see at Walmart is we're constantly encouraging our associates to go explore. It doesn't matter where you are. I remember a year ago, I read an article that said 'Engineers, as you know it, are dead. The profession of the future is prompt engineers. You better hop on that.' I'm sitting here looking back now, going, pretty much everybody I know is a prompt engineer of some sort. I don't know that that's going to be a real career. Maybe it will. But what I'm seeing at Walmart is just that encouragement. How do we use AI? Explore, think different, right? And again, I think we're in that hype cycle. And I think we're coming to the tail end of the hype cycle, which now we start understanding, how do you operationalize this and create value and drive it to the next level. Well, what we've actually done in Data Ventures is be able to really accelerate time from data to insights and then insights to action. And to us, that's an advantage. It's that speed. It still requires a human to say, I agree with the outcomes. And that's where we're going. And that's why one of the imperatives for data boundaries. We talked about this, you know, probably driving it in a different direction, it's clean data, right? The problem with AI today, AI is a tool. This is my point of view. AI is a tool. Fantastic tool. But it's based on the premise of garbage in, garbage out. The higher quality of data that you can feed AI, the better the output. And why I say better, it's consistent. It's consistency and it can tell you where it's coming from. But more important, and it's something that I don't know how many

companies are actually measuring. There's a cost to this. And if you have clean, good data, you're going to get good responses, and use less compute, less cost to get there. If what you're doing is allowing any or all data that is unvetted, what you're going to do is get a lot of anomalies. And that's going to cost you a lot. What we're focused on is allowing exploration, and then where we find the right applications of AI, we are then scaling into our business to really drive efficiencies and drive that path from data to insights to action so that we can get better at driving the experience for our customers.

Ryan Preclaw

Citadel Securities

And are you making those models available as a service to your suppliers? Or is that the stuff that you're doing internally to understand things?

Mark Hardy

Senior Vice President, Walmart Data Ventures

There's a lot of demand from our suppliers and other companies as well, especially companies who don't compete with Walmart, don't have relationships with Walmart. The level of data that we have, and the granularity and the quality level that we put into place, allows something very unique. A lot of you may know, you know, Gartner identified this new space that we're going to towards, which is domain models as a service, which requires you to be able to have the data and drive or train models consistently to be able to then apply to other data sets or other needs. We're looking at that as a possibility. Today we're not giving that out. We're not commercializing that in any way, but there is a lot of demand and we're trying to figure out what is the best way to be able to leverage the data that Walmart has. It's unique to Walmart. It really gives that perspective of the customer. In other areas as well that we're looking at, whether it's supply chain or transportation. Can you use that data and put it into models that then we can actually help empower other companies?

Ryan Preclaw

Citadel Securities

That's great. All right, we're near the end, so this is going to be one last question, which is: what is in the pipeline? What is coming next, that you're able and happy to share?

Mark Hardy

Senior Vice President, Walmart Data Ventures

You've heard a lot about Scintilla, but I think you're going to start seeing a lot more connectivity between the different Scintilla platforms. I mentioned Scintilla In Store and then there's Basic Scintilla. You'll see a lot more growth into other markets. Scintilla Data Ventures is now into data organizations in Canada, Mexico. You'll continue to see expansion into other markets Walmart plays in so that we can leverage data to help drive those markets and drive the customer experience in those as well.

Ryan Preclaw

Citadel Securities

All right, Mark, thank you very much for coming.

Mark Hardy

Senior Vice President, Walmart Data Ventures

My pleasure.