



AI LEADERS PODCAST: MODERN DATA PLATFORMS ON CLOUD

AUDIO TRANSCRIPT

SHAIL JAIN: A platform that is built to address a variety of needs, the volumes that we have, locations we have and has this approach of turning the corporation inside out from a culture perspective. How do we enable a culture? I think that is the right platform to today.

ARNAB CHAKRABORTY: Hello, everybody. I'm Arnab Chakraborty, Managing Director for Accenture, the Applied Intelligence Practice. I'm here today with Shail Jain, who is the Data & AI Global Lead at Accenture. Shail, glad to have you here today and looking forward to our discussion on modern data platforms on cloud.

SHAIL JAIN: Arnab, it's my pleasure to be here. It's always good to be talking to you. And especially today, we'll be talking about the latest and greatest in data platforms. I am pretty excited about this conversation we're about to have.

ARNAB CHAKRABORTY: Awesome. Awesome, Shail. So, Shail, I think just to take a step back, I think last 18 months has been phenomenal in terms of the level of unprecedented change that all of us have seen, both in the professional life, as well as in our personal lives because of the pandemic. And we are seeing a tremendous acceleration that's happening with respect to the digital transformation. So, as we think of that, just to set some context, love to get your perspective as to what kind of trends have you been seeing in the market, especially with our clients, about their view around data and insights and the role it will play in the future of their business? And in that context, why do they need to

think about these modern data platforms on cloud? So it'd be good to get some perspectives on the trends and signals that you've been seeing from the market?

SHAIL JAIN: So, these are signals that we've been seeing for a while now, which is the whole notion of competing on analytics. So as the digital native companies have disrupted many industries, more and more brick and mortar companies are realizing how do we effectively compete with these companies? And it turns out that the biggest asset that they have, the digital native companies have, is their handle on data and analytics. So it's almost passé to say today that you need to have your house in order from a data perspective to effectively compete on analytics because that's where you compete on these analytics these days.

And that has become a reality for many corporations and their start on the journey a while back. But what they're realizing is that it's not just a question of doing basic analytics and dashboards. You have to be able to do predictive analytics as well. And that requires you to really scale up your infrastructure to a point where you can handle a lot of volume and variety of data that comes your way for you to be able to do these kinds of analytics. And people are also realizing that it just can't be a sort of a slap on. It has to be an inside out view, which is what we, at Accenture, are calling data led transformation. And this truly is a reinvention of the company from the inside out.

So with digital, you could actually put the digital front ends to your company, you can digitize your channels. I think when talking about data led transformation is a reinvention from the inside out that requires you to think of not just technology, but



ARNAB CHAKRABORTY: Well, that's fantastic, Shail. That's fantastic. And I think it's very encouraging to see how the conversation probably has now shifted, as you said, which used to be a CIO or a CTO conversation or maybe a business officer conversation, to a board conversation, to a CEO conversation, right? I think that's really, really fascinating. And this journey is not an easy journey. It's quite a hard journey. And there are, as you said, the digital natives have done that. And now the beacon models are trying to actually see how they can actually compete on analytics like a digital native.

So in that, Shail, any North Star example in your mind across the industry that you're seeing? You may not have accomplished the whole journey, but they're able to show that promise, any example you can share with us that is one of your favorite?

SHAIL JAIN: So, I mean there are many examples, but as you know, companies that are like Capital One. This is a company that actually when it started, it started as a company that was going to compete on analytics. And this is a company that has kind of set the trend for many other companies that have come after. But they took on the established financial industry with the premise that they're going to collect data and they are going to find their policies and their products are going to be based on data as well. So I think Apple, one, is a great example of how to compete on analytics using data.

ARNAB CHAKRABORTY: Yeah, yeah, absolutely, absolutely. I think Capital One is a great example and it shows how you can create breakaway leadership in your industry with the power of data, which is fascinating. And I think you probably see that. I see that in our discussions with our clients saying that this is great and we have a great proof of concept we created and now we want to scale it. And that's where the hell is breaking loose because we are tied to our legacy structures, we are tied to our legacy data structures in place, and we need to modernize that. So how do we go about that and what needs to be true as you think of modern data and analytics platform that can enable as well that transformation? What needs to be true? And when you have a legacy and you have to move into a more completely modern structure, what needs to be true? What does the journey look like?

SHAIL JAIN: One of the best examples that I can see is McDonald's. This is a company that is dealing with a modern time where this pandemic has hit and things like Uber Eats and Postmates, they're sort of threatening the business, fundamental business model for McDonald's. So they had to do something to really come of age, and their CEO, Ex-CEO, decided that they are going to compete on analytics and they put together a data environment and analytics to the point that it has become the envy of the industry, where if you are driving to the restaurant, they would know by geofencing how far you are and when to put your burger in the furnace, so that when you get there, you will get your fresh burger for pickup. When you drive up to the restaurant, depending on the weather, depending on what your past preferences are, they can actually serve up a menu to you that is specifically tailored to your needs and your family's needs. They can even change prices. So this is where they are taking their business and purely based on data and analytics.

You see more of these companies adopt such a business process of engineering through decision process re-engineering, if you will. And we see that a lot across the industry.

ARNAB CHAKRABORTY: I love the term decision process re-engineering. I still remember the era of BPR in the 90s, and I think this is a new era of decision process re-engineering with powered with data, powered with AI. And the thought that comes, you know, a lot of clients actually talk about, okay, I'm going to set up this big data platform, enterprise data platform and that will help us unlock value, like the example you just shared, Shail. What in your mind would organizations need to think about when they are actually setting up an enterprise-wide data platform? What are the critical functionalities and features that should be designing it for, so that it really unlocks the transformative value?

SHAIL JAIN: Great question, Arnab. So, as you know, the data today comes in different speeds, shapes, sizes and locations. So what do I mean by that? You know, it's not just a question of batch data, it's a question through real time streaming data that's coming from social media, for example, coming from IoT. It's in different shapes as well, because to do certain type analytics, you may want a rectangular shape, which is miniscule, or you may need a star



schema, if you will, and different shapes required for machine learning. It's also in different locations. So a data could be on prem, it could be in the cloud, or it could be on the edge because the proliferation of IoT devices. And finally, it's also a different science, right? There's still a notion of small data and big data, but the volumes vary as well from time to time.

So you need a platform today, it can handle these different aspects of data. And not only that, it should be able to handle the different consumption needs because you still are going to do descriptive analytics, predictive analytics and prescriptive analytics. So you need a converged data platform that can handle those consumption patterns. And I would say, there are different needs for the data warehouses from a data architecture perspective, and there are different needs for machine learning. It's got to be able to handle those as well.

I think automation is key in any platform you build today, because as you know very well that a large portion of any data and analytics project is actually in data wrangling, data preparation, data curation, whatever you want to call it. And if you have automation, you can actually shrink the size of the iceberg that's below the water, and that allows you to get your data scientists to focus more on the analytics rather than on the data engineering. So I think automation, high levels of automation, is very, very important.

And I would say one other thing which is, we just did a survey, Arnab, as you know at Accenture with MIT and the top two challenges that came out as the clients are facing. We interviewed CXOs. This includes CEOs, CFOs, CDOs, CTOs and CIOs. And the top two challenges are culture and change management are the top two challenges. Now, while we can use the traditional approaches in terms of some deft sociological approaches to handle change management, executive commitment and those kinds of things, I believe the new technologies that I think platform can help you with culture and changing management as well. So think of Slack. People, companies that have implemented Slack have actually brought about a new culture in the company. I mean you can do the same thing with the right platform.

So imagine a platform that is like Amazon, so your data has a catalog that you can understand as a business, you can search through it. You can figure out who's used it. What has this been used for, how frequently it's been used for, what other people are saying about it? You can play with it. You can experiment. You can discover the data and then look at all the analytics that were done on it and see, oh, I don't need to develop it. I can go do this.

So having that and the social aspect of it, and you can even gamified it with the right platform where you can have gamification of who's data quality is the best, which departments, which individuals, right? And then you can say which algorithms are doing the best predictive aspect of it. So you get gaming fire, and that's how you create a culture as well.

So I think a platform that is built to address a variety of needs, the volumes that we have, locations we have and has this approach of turning the corporation inside out from a culture perspective. How do we enable a culture? I think that is the right platform today.

ARNAB CHAKRABORTY: Love it, love it, Shail. Love it. I think the different dimensions you talked about for the platform is very, very interesting. The piece that got my attention as you talked about the change management and the culture, I think that is so right. You know, every data led transformation is actually a cultural transformation program for the company.

And that kind of brings me to a point about as we try to drive adoption inside the company, we have to enable the people inside the company, so that they can appreciate and they have a common language that is established to be part of that transformation. And to me, that indicates the whole topic around data literacy. And as to how we are actually empowering the people in the organization to have a common language when it comes to data. So I want to get your perspective, Shail, in your role, that you're playing inside Accenture, what is your view around that topic as we work with clients? And then if you can also share what are some of the efforts you are diving within Accenture to elevate the literacy of the overall company?



SHAIL JAIN: Absolutely. So to me, every culture has a language. So if you're trying to drive a data culture, it has that digital language and that's where the literacy comes in. And literacy to me is how well an organization, a corporation, is able to read, write and interpret data. And it goes beyond understanding how to access data, it goes into how do I interpret data? For example, is this the right quality of data? Do we have the right ethics involved, like do we have the ownership of this data? What can I do with this data? And how can this data be used for my business process improvement that I'm working with or the other way around is like, what data do I need to improve my business processes? What data am I generating? What data is being generated in some other places? And what is being done with data in other places as well? It goes back to the platform thing that I was talking about, which is the platform can help with literacy as well.

But then you need this literacy at all levels of the corporation, not just at the grassroots level. You need at the executive level as well, and it's a different level of literacy for them. There the literacy for the executive levels is more about how can this data help me improve my business performance? Do I need to buy data from outside or I can rely on the first party data? Do I need to participate in a data ecosystem where I have second party data and I collaborate with other companies? For example, I've had conversations with several of our clients who compete with retailers, online retailers like Amazon, and they're saying their biggest strength is data and the analytics that drives it. Why can't we all come together in an ecosystem, pull our data together and then effectively compete with a like of an Amazon, if you will? And those are the strategic sort of imperatives. Those are the strategic thought processes that the executive management of a company has to become literate on.

And I think if you cover from top to bottom and get this as a part of the culture and also part of the measurement of the company as well, for example, we talk about the citizenship, right? There should be a concept of data citizenship, where you are responsible for the data that the company has about you. And if you are a leader in the company, you're responsible for the data quality of the people, the processes, the products, the partners that you deal

with. So you sort of distribute the data quality responsibility as well, and that becomes a part of the measurement. So the literacy is not going to happen because you just put a video course together and says, go take this course. I think it has to become a very much an embedded part of the culture, which goes all the way from objectives and measurements and the policies that you set and the tools that you make available to people as well.

ARNAB CHAKRABORTY: Yeah, very, very well said, Shail, very well said, and I think what you are getting at is that this needs to become the top leadership priority. It has to start with the CEO and the C-suite, and they need to be actually role models of holding up the literacy agenda within the company. And that's how you really start seeing walking the talk. You know, I think I also get that sense from your narrative here, which is extremely important.

I think to round it off, Shail, for our audience, would love to get your advice on a few key innovations that is happening in this space, right? That leaders need to be paying attention to for today and for tomorrow. I mean there's so much of innovation happening in this space. Every six months, something new is happening. So any advice on the top three innovations that is happening in this space that leaders need to pay attention to?

SHAIL JAIN: I was going to ask you, how much time do you have because I tell you this space is rocking. It's absolutely rocking the innovation. So I guess as I think of what's coming down the pike in the future in the data world, the one trend that I'm seeing and this trend has emerged over the last few years, which is remember, the apps used to be centralized on a mainframe and then we went to a distributed architecture? Well, that never really happened effectively with data. The data has been only getting centralized. We've never really thought about federation or data distribution. And I think we are seeing a trend that, as they say, too much of anything is not good and too much centralization is not good as well.

And so, we went from the world of data warehouse to the data lakes, the data oceans and people realize that that is not necessarily the best thing. If you want to be a very effective, very mature data organization. And so, we're seeing a concept and I



call it distributed or federated data, some people call it data mesh, but a concept where just the way you have a domain that handles a set of applications, you have a domain-based data distribution, where if there is a claims organization, so the anything to do with claims they will handle data because they understand what data quality means in the claim context. They understand what sort of analytics are needed to be driven.

So they would drive - this domain would drive the data that produce their domain and then they will publish their data environment in terms of data products. So, as you've seen, there is a notion of a product orientation in the data world as well. So you published that as a data product catalog, not a data catalog. I think people talk about data catalog, but now we're talking about data product catalog. And so, other people, if I am part of sales and I need to understand claims, I would go into this established contract that I have and pull up the data product, which is not just data, also has algorithms processing that goes with it as well, okay, and it has all the qualities, much like you would have this in a micro service, if you will. And I see that as the future where you have domain led and product catalog-based approach to federating data throughout the organization.

So that's one big thing that I see. The other thing is really, what data is done to AI, AI has to do that same thing to data, which is how do we bring intelligent automation into the data processing, the data munching, data wrangling that has to take place? And I'm seeing some good trends in this area. I'm seeing trends like auto classification of data for privacy, for quality purposes, even auto quality, meaning you can do auto healing of data through AI and obviously, things like auto labeling of data. So you can do labeling is a big part of machine learning, right? So how do we use auto labeling? I think that's a second trend.

I think the third thing I see is that we're going to be talking about more and more converged data platforms, not data warehouses, not data lake separately or ODSs. It'd be more converged data platforms. For example, things that companies like Databricks are doing. Databricks has come up with this architecture that looks very promising. They call it Lakehouse, which is a combination of data

warehousing and a data lake. So I think we see more of that happening. It'll continue to happen.

And lastly, I would say with any technology there is sort of associated harm, much where nuclear technology is great, but it has potential for doing a lot of harm and data and AI have the same thing, so I see innovation coming in that area. So how do we make data more private? How do we make it more fair and unbiased? And I see innovations in that space as well. For example, on the privacy side, Accenture has invested in a company called TripleBlind, which does symmetric multi-party compute, which is an alternative to homomorphic encryption, which is basically simply saying that how do I work on data that is encrypted because I want to protect the privacy of the data? So I don't want even my data scientists to find out, okay, to be able to by accidentally see what's in the data. So I can to encrypt the data and then the algorithm has to work on the encrypted data. And that's happening very well now and I think we've invested in a company as well to that realm.

So I think these are some of the areas where I see innovation and there are many more and looks very, very, very promising.

ARNAB CHAKRABORTY: Well, thanks a lot, Shail. I think you touched upon a number of areas when it comes to modern data foundation and the value it can create for the business and what are the different considerations organizations and leaders needs to keep in mind as they go into that journey. So, great discussion here, Shail, and I really appreciate your sharing your insights and then also talking about the innovations that we should be paying attention to. Before we round up, Shail, any last word of advice for our audience?

SHAIL JAIN: I think the best advice I can give you is that pay attention to the sociological aspect of this technology, like any other that we've dealt with before because technology would have its bumps here and there. You can overcome them. But the real issue is this social aspect of this technology, you know, how do we get this embedded in our culture? How do we get people to believe in it? How do we get people to believe and trust the data that they have as well and believe in the power of this technology by protecting people, customers,



employees, customers and partners from the harm it can do? So just pay attention to the sociological aspect of data as well.

ARNAB CHAKRABORTY: Thank you. Thank you, Shail. Great conversation with you and a big thank you to all of our listeners. Please subscribe and share the podcast with your friends and colleagues and reach out to Shail and myself for any follow ups that you would like to have. Thank you again.

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