EP. 56: REDEFINING THE DATA & ANALYTICS LANDSCAPE WITH GEN AI

AUDIO TRANSCRIPT

[00:00:00] **Priya Raman** Hello everyone. I am delighted to be here. My name is Priya Raman and I serve as the corporate data and AI leader at Accenture, with a focus on being our own best credential. We do what we advise our clients, or what I call drinking our own champagne. It's a privilege to introduce our esteemed guest and my very good friend, Pinar Doelen. Pinar holds the distinguished position of Chief Analytics Officer at SAP. I'll hand it over to Pinar to share more about herself and her role.

[00:00:34] **Pinar Doelen** Yeah, thank you very much for the kind invitation and this conversation. As you captured, I'm leading analytics function at SAP. SAP is an enterprise software company. So similar to your case, me and my team, we are leading data analytics internally within the SAP, and we drink our own champagne, implementing our solutions and capabilities internally in SAP towards an AI and cloud transformation. Thank you for the kind invitation and the dialogue.

[00:01:04] **Priya Raman** Thank you for being with us here, Pinar. And I would like to kick it off with our first question. How would you define generative AI and what distinguishes it from other forms of AI?

[00:01:17] **Pinar Doelen** Yes. Generative AI is, first of all, only one branch of AI. AI is a bigger context. Generative AI is a continuum within that bigger context. If I directly jump into the enterprise context, the traditional machine learning methods will continue to play an important role in many use cases, like supervised learning for customer churn prediction or demand forecasting, or unsupervised learning methods for customer segmentation, etc., etc. When it comes to AI strategy, it's very important to not forget about those traditional machine learning cases and continue to invest on them and benefit from them. Now, when it comes to generative AI, at its core, it represents a subset of artificial intelligence technology that focuses on creating new content, be it text, images, or even code, based on learning patterns from the best array of existing data. Now, historically, we have seen automation of repetitive tasks, and with Gen AI creative work that we would normally attribute to knowledge workers is getting democratized. That's how I see the role of Gen AI. What do you think, Priya?

[00:02:33] **Priya Raman** Very well said. You know, to add, we see generative AI as the next step in the progression of artificial intelligence. It is going beyond analyzing or classifying existing data to generate new and progressive content, including text, images, audio, synthetic data and more. I usually wait a bit, Pinar, as you know me, to see if something is a fad or not, and I can see it's not as there are two things at this moment of generative AI that are game

changing. First, large language models have cracked the code on language complexity, which in previous phases of AI was not the case. Now, for the first time, machines can learn language, context and intent and be independently generative and creative. Second, after being pre-trained on vast quantities of data, whether it's text, images or audio, these models can be adapted and fine-tuned for a wide range of tasks. This allows them to be used, reused, repurposed in many different ways that we've not even thought of right now. So that's the reason why we call these as foundational models. And it's very exciting, where it'll take us, the flexibility of what we are encountering now, with generative AI will cut across multiple domains, offering unprecedented potential for innovation and advancement. So, like you, I'm very, very excited to see what generative AI can do for our businesses and for our customers.

[00:04:13] **Pinar Doelen** Priya, this is really totally exciting times. Can you elaborate? What's the role of data and generative AI in the business transformation and enterprise context?

[00:04:24] **Priya Raman** You talk about something that's really very close to my heart. Data, which is at the core of everything and anything that we want to do with AI, generative AI, and how we want to change the future. We are asked about the role of data and generative AI in business transformation a lot. Data provides the foundational insights for understanding market trends, consumer behaviors, operational efficiencies, and generative AI that is powered with this data will fundamentally transform everything from business to science to society itself unlocking new performance frontiers. So, most companies will need to customize large language models and AI models by fine tuning them with their own data to make them widely usable and valuable. We at Accenture often say, "cloud is the enabler, data is the driver, AI and Gen AI is the differentiators for the companies moving forward." What's important to understand is that the data at the core needs to be stronger than ever before, which means that we need to

ensure usable, trustworthy, single version of true data more than ever before. And I would like to understand, Pinar, how are you thinking about it with regards to building the GenAI capabilities with the data of being the transformation power behind it.

[00:05:52] **Pinar Doelen** Yeah, I totally agree. And I typically classify enterprise use cases for GenAI around three pillars. That's my way of simplifying the totality of the possibilities. Let's put it this way. One of them is creativity companion. The second one is coding companion. And the third one is companion for employees and customers, customer service. Now, with these three capabilities, GenAI is reducing time to value significantly and making everything faster because the barrier of entry for those domain expertise is significantly lowering. Because I'm a data person, I will directly jump into an analytics use case first. If a user needs to analyze data, he or she needed to know details of data, models and the tools and the data structure itself deeply. This requires a certain expertise and building that expertise requires certain amount of time and that's the whole cycle of building those skills and capabilities to be able to benefit from them. Now, with GenAI, this expertise, can be significant. It can be companioned by Gen AI capabilities because Gen AI can make this whole data and analytics experience conversational. A user can start analyzing your business question by nature language, by asking a question and getting an answer, probing further questions and literally elaborating the data and insights with that conversational agent. And even finally turn those insights into a dashboard. Almost everything on natural language, I would say. And these analysis can be run on structured data which, has been historically what enterprises many of us have been working on, as well as unstructured data, which is opening new doors for analyzing new insights. Now I gave an analytics example because that's close to my heart. But the same companion experience also applies to many other use cases as well. For the commercial knowledge worker to work with Gen AI to create a sales pitch or a marketing

campaign. These are all becoming much and much easier. And thanks to the unlimited computing, those sales pitches or marketing campaigns can be actually hyper personalized. Similarly, the typical customer experience for support will also change as well because a customer can exchange with an agent, ask many of the questions that he or she would ask a customer support expert can be all run with a GenAI agent, and that's really making everything faster and easier in my experience. So that's why in the enterprise context, we have just seen the tip of the iceberg. In my point of view, in the use cases, more automation is coming on our way.

[00:08:54] **Priya Raman** That is just an amazing number of use cases that you shared over here. And it's so exciting to see the kind of use cases that you're talking about and that can come to life in a hyper personalized manner, in a contextual manner to enhance customer experience which leads me to my next question. How should an organization assess their readiness to integrate Gen AI at their organization and ensure that investments are set up for long term viability?

[00:09:30] **Pinar Doelen** Absolutely. That's super important because actually you have only seen, as I described, the tip of the iceberg and more and more capabilities are arriving. An organization needs to actually prepare for the future. So that's a topic that is very close to my heart. I would like to start answering this question with two levers, Priya. One of the spectrum is, again, data analytics because I'm a data analytics person. But I will also try to answer for the complete digital landscape as well. For data analytics landscape, if I take a few steps back, data analysis was a very technically sophisticated skill in the past. Maybe 10 or 15 years ago, it would require a lot of technology knowledge, details of data manipulation and processes as well. And because it was quite technically sophisticated, tooling and capabilities were not largely available for everybody, organizations would create a central group of people, data analysts, and they would pretty

much answer the business questions that were coming on their way. The more technology became easier to adopt, the more data became accessible. Those data analysts started to be federated, in the functional domains, and closer to the business questions. Fast forward to today, I believe data and analytical skills cannot be confined to some people in the organization. Actually, ability to analyze data needs to be accessible to everybody. That's why in SAP, we are taking a strategy to democratize access to data and insights and make sure that everybody is equipped with the data and analytical skills. Now, I did this very long history about data analytics because generative AI with this conversational experience is opening the door to the next generation of democratization of data and analytics. And that's a very big breakthrough in terms of democratizing access to data analytics. Having said that Gen AI, especially in the context of data analytics, will only be successful if we are able to build it on top of fundamental capabilities. Let me explain how we are preparing our landscape to this feature in SAP with three pillars. The first one is actually data management. In SAP, we take a point of view that data needs to be managed as a product. What we mean by that one is, managing the data, collecting, storing, organizing, maintaining data in a way that we ensure accuracy, reliability, accessibility, integrity, security, privacy. And because all of those practices need to be embedded in the design of the data from the very beginning and creation and maintenance and continuous improvement. We call this "Managing data as a product". Now this piece is super important because without making data accessible the whole AI capabilities will be very dry, generic and not delivering a competitive edge to the enterprises. The second pillar for this AI ready world is what I call "Technology piece," moving into a composable and cloud architecture. Why is that so important? And what do we mean by really composability? In my mind, composability is, modularity, interpretability, reusability, scalability of the application landscape and making sure that applications and capabilities are decoupled and, loosely coupled and being

able to run, independent from each other. That's very important. First of all, this composability largely comes with cloud capabilities. So that's why, in my mind, composability and cloud capabilities go hand-in-hand. Why is this so important? Because, in the upcoming years or maybe even faster, because everything is moving faster in the AI world, the new capabilities, innovation and fast-moving AI capabilities will be coming very fast into our landscape. In order to be quickly adopting those new capabilities, organizations need to prepare their infrastructure architecture for cloud and composability. And the last piece of that, overarching AI readiness is around people. I'm talking about data literacy and understanding fundamentals of prompting so that all people are ready to work with AI. As I described, AI is becoming a companion to the knowledge workers, and knowledge workers need to know how to use AI capabilities and how to, kind of, collaborate with the AI capabilities. Those are the three pillars that I would call as enablers for the technology departments.

[00:15:01] **Priya Raman** That's really amazing to hear, Pinar. I know you and I have talked about how the three pillars can be working well with data technology and people. I would like to add some things that you and I have talked about earlier as well. You know, from a data perspective, companies need to test and adjust approaches to data privacy, model accuracy, bias, fairness, and learn when human in the loop safeguards are necessary. I know we have talked about data products and making data democratized and available to everyone. The other thing that I would emphasize, based on, on the conversation around technology, is that there will be very high compute demands with LLMS and generative AI. So, we need to keep a close eye on the cost and more importantly, the sustainability of energy consumption around those as we go forward. And finally, you spoke about data literacy and, the way we talk about it internally at Accenture, is a "People First" approach. You know, success with generative AI requires that equal attention on people and training, as it does on technology and data. And

companies should be ramping up this investment in talent to address the two distinct areas. One is creating AI and on the other, using AI. And what you mentioned before is how humans can work with AI to create value in a very collaborative manner. So, it's really amazing to see how we are thinking around these topics in a very similar manner within our organizations. It's really great to get your perspective around those.

[00:16:59] **Pinar Doelen** Totally agree. Totally agree, Priya. And by the way, as you describe, data and analytics is one domain that is benefiting from generative AI and overarching AI capabilities. But the totality of the digital landscape is equally evolving as well. And the same principles apply in the totality of the application architecture as well. Good data management, composable and cloud architectures, and preparing people for that new future. Totally agree, and I know your team is a frontrunner in generic capabilities in Accenture as well. Would you share how you apply those capabilities internally in Accenture?

[00:17:39] **Priya Raman** I would not call ourselves a front runner, but we definitely experiment a lot with Gen AI capabilities at Accenture, so we added a very exciting phase. We are using AI to create tools that enhance productivity and value for our organizations, similar to what we would advise our clients in the area of generative AI. That is a high demand. As you pointed out, Pinar, earlier as well, in customer services, where large language models can offer personalized responses to customer queries globally and generate viable solutions. Additionally, we are exploring personalized content based in advertising where a single prompt can generate diverse images and audiovisuals for different consumer segments, reducing the need for new content creation. And there's a lot of active experimentation, active work that we are doing internally and with our clients in this area, something that's even closer to home. And you mentioned how we are using generative AI in the area of data analytics. This this is really close to

home, and we are implementing a lot of these solutions as we speak in integrating conversational AI with data analytics. The goal of the exercise is to embed data in decision making in a very simple conversational manner. Normally generative AI does not compute on top of data. It's a language model. It's language model based. But what we are doing with that the data and analytics that we are creating across the organization is producing natural language and generative language on top of it to ensure that complex questions like, how is my profitability doing? Why is my profit of profitability going down? What are the drivers? What can we do differently to drive profitability? are answered in a simple manner versus people having to go through reams of reports, looking at different reports, different analytics across the organization to get to their own answers. So, these questions can be answered with people going in a chat kind of an environment and asking the questions in plain simple language, like the leaders ask on a day-to-day basis. Where are we? Where are we going? Why are we here? What can we do differently? It provides insights in a conversational day to day language manner which is powered by usable trustworthy single version of true data. So, no matter if Julie Sweet, our CEO, is asking the question or it's one of our client account leaders in the field asking that question, it provides that single version of truth to drive reliable decision making. We have the version one launch, and our leadership teams are just loving it. Everyone wants data driven insights, and they find it very simple to ask the question, get an answer, and drive outcomes for their businesses in a data driven manner, which has been a little difficult for because you have to go through reams of data or tables or analytics to be able to answer those questions reliably and reliably. Take the decisions that you need to take. So, it's a great use case of how we are using generative AI to drive decision intelligence in a very simple conversational manner. And we are talking to our clients about it as well. And I know, Pinar, you and I had a conversation about this as well. You, you instantly talk about the power of what this can do for large, complex organizations and

how decision making with data can be made simple across the organization. So, we're very excited about it. We look at this as being the best credential that we cannot just share with our internal stakeholders, but with our clients as well. Truly excited about it. Can't help to explore this further with you.

[00:22:11] **Pinar Doelen** By the way, that's a use case that is very close to my heart. And also, in the same we are working on the same use case as well. We actually have some capabilities that is coming in our product line on the analytics side in the coming months, and my teams are already testing them. So that's a use case that is very relevant. And I think all of us are working on the same way towards democratizing and making access to insights easier and faster for our organizations. So, love this. Love this use case.

[00:22:44] **Priya Raman** That is great, and I can't wait to share notes on, how we are going through, how we are kind of, going through all the challenges, getting to the right answers, given that there are variations with generative AI models, etc. so look forward to that. Which actually leads naturally to the next question that I wanted to ask you, talking about deploying large language models. Could you provide more insights on the strategy for deploying large language models that are tailored for enterprise environments?

[00:23:20] **Pinar Doelen** Absolutely. I believe that will be a tiered strategy. What I mean by that one is tier one is what I call embedded AI, because enterprise software providers are embedding LLMs into their software, and accordingly, enterprise software's are becoming what I call conversational and intelligent. As SAP, we are deliberately enhancing our products into that direction. My team is testing some of our products in the beta mode already, so that's a very exciting area as I describe. And accordingly, technology departments will bring many alarm capabilities to their organizations through their partnerships with their software providers. And here, of course, the partnering

with the right software provider that can innovate fast, scale fast, and share the same privacy, security and integral considerations is very important. So, one piece of the equation is that let's say partnership around embedded AI. And as a result, of course, in order to bring this tier one embedded AI capabilities, going back to our conversation a few minutes ago, orchestrating an architecture that is composable, cloud based and then able to connect all these applications is going to be very critical. That's where composability and cloud solutions come into the place. Second tier is retrieval augmented generation. I think it's going to become a new competency. Retrieval augmented generation is an AI framework for retrieving facts from an external knowledge base, like the corporate knowledge base of an enterprise to ground the large language model with, and then creates a human like conversational experience. Now that domain is evolving. Actually, there are a lot of practices going on. Large language models are bringing more and more capabilities to be able to do more grounding with larger datasets, larger tokenization, etc. And in this tier, of course, organizations will need to kind of create their own knowledge base and be able to leverage their own knowledge base to ground generic large language models and be able to architect these models. So, that's why I call the tier two. And in this tiering, it's very important that organizations look into where do they follow the embedded AI capabilities with their software partners and where they see the need to do the retrieval, augmented generation and grounding on their own model? I would say, many, many, many capabilities will actually come with the embedded AI capabilities as well. This is going to evolve. But of course, the second tier, the RAG will continue to become important for very specific industrial use cases as well. That's my way of articulating that strategy and giving a bit of a framing to the totality of the evolution in the landscape, because there are a lot of stuff happening in the fastest manner ever, we have seen. So, Priya, what do you think? How do we approach these, strategies on your hands for Accenture?

[00:26:47] **Priya Raman** I couldn't agree more. The tiered model absolutely makes sense. Enterprises that are considering LLMs as we are considering using LLMs we weigh the cost and benefit of training specialized models versus using general purpose ones. The specialized LLMs we see will offer more tailored solutions but are going to be expensive and data intensive. So, a tiered approach can be effective in looking at where we use generalized with a specialized kind of models. I also see partnerships with technology providers like SAP and others will also be crucial to effective LLM integration and ongoing scalability. So, we look forward to partnering together to do a lot more with that as we go forward. So, which leads to my next question, which is switching the gears a little bit. You know, you touched upon culture and data literacy early on. How would you view the role of people and culture in this new world, not just of AI, a generative AI as well?

[00:28:08] **Pinar Doelen** Right. It's obvious that Gen AI is a great enabler and a companion for the knowledge worker. And in this new world, having a very specific technical knowledge will be less critical in my view. But curiosity, adaptability, learning agility and asking the right questions will be the key skill, actually. So that's why I think we are entering in a world where, not the traditional T-shaped profiles with deep knowledge of a topic will be critical, but people who can kind of look for the general views and understand the bigger picture will be more critical. Those have been the cultural aspects of the democratization of the technology. And I would argue that they are not new skills, new capabilities, along the spectrum of the democratization of technology. We have been investing and seeing the need to invest in these capabilities culturally long, long time ago. And we have been investing on them now, creating the culture and the talent management practices around those topics. That's why they are not new, but they are becoming more and more important. That's why I think every organization is recognizing the need to double down on them even further. SAP included, and of course, data literacy. I would like to kind of underscore that

one because, again, ability to understand data, reasoning and logic are still the skills that belong to human. Actually, large language models are still not good in logic. They are very good in language, right? They are speaking better than many of us, but they are not good in reasoning and logic. And therefore, I consider that our investments on data literacy with the logic, with understanding data, with good reasoning, and being able to see the strategic insights from the data continues to be is super important. So those are the two pillars of how I see, culture and people playing in this new world. And of course, the whole chapter of ethical use of AI as we see the need to use data, and now AI ethically respecting privacy, respecting security and avoiding bias. And in a similar to your explanation, human centric way is going to be extremely critical. I would say that's a whole chapter of itself, that requires a deep dive of itself. But that's super important in the horizon ahead of us.

[00:30:52] **Priya Raman** And, you said what was on my mind. You know, ethical, responsible AI is a critical theme, and I know, you're right. It's a podcast topic of its own. And it's even more important with the advent of generative AI, where we are looking where we are dealing with hallucinations and What it that it is going to use the wrong kind of data to give us the answers. And, secondly, something that you touched upon, the humans, right? Humans working with AI is a critical topic to address as we go forward. The speed at which AI is taking over, and the use cases of generative AI are taking over, it will be really critical to ensure that humans and AI can work seamlessly to create a better future. You know, earlier I said something when I said that cloud is the enabler, something that we use at Accenture a lot. Cloud is the enabler. Data is the driver. AI is the differentiator. And to that, I would add culture is the sustainer. And if we want to create the right kind of culture, we if we want to create the right kind of environment, then we need to ensure that we have the right responsible AI guardrails. And we also want to ensure that we are training and creating the right kind of cultural environment for humans and AI

to work together seamlessly. Without the negative impact drawing down the positives that this can drive for the world as a whole. Wow, this has been such a great conversation. Thank you, Pinar, for joining me today.

[00:32:51] **Pinar Doelen** Thank you for having me, Priya. It was a great conversation.