TOM LEHMANN: Welcome to Driving Digital in Biopharma and this byte sized episode focused on one of the trends identified in Accenture’s 2021 Technology Vision. For more than 20 years, Accenture has developed the Technology Vision as a methodical review across the enterprise to identify emerging technology trends that will have the greatest impact in the coming years.

Our 2021 vision survey revealed that leaders don’t sit back and wait for the “new normal.” They build it themselves. Big changes today require bold, innovative leadership that prioritizes technology. And it’s not just about fixing the business, but upending convention and creating a new vision for the future.

Each of the five trends:

1. Stack Strategically
2. Mirrored World
3. I, Technologist
4. Anywhere, Everywhere
5. From Me to We

are rooted in the disruptions and demands caused by the COVID-19 pandemic that set a high bar for life sciences companies—with many meeting or exceeding expectations.

Even with extreme levels of instability, 2020 shattered industry norms and showed what is possible when technology is driven by a renewed sense of purpose, focus and commitment to patients, customers and the general population.

In this series of short episodes, I’ll talk with five Accenture Life Sciences leaders who helped shape our industry perspective of the Tech Vision to inspire life sciences companies to embrace a new mindset to shape a better future. Their thinking is backed by a survey of 100 biopharma business and IT executives across seven countries that helped identify the key issues and priorities for technology adoption and investment.

One of the key tech trends leaders must embrace to forge a better future is “Stack Strategically,” which is the topic for this episode. I am joined today by Shalu Chadha, who is Global Technology Lead for Life Sciences at Accenture. Welcome, Shalu, to Driving Digital in Biopharma.

SHALU CHADA: Thanks, Tom.
For today's discussion, let's explore the trend that we call “Stack Strategically,” as it is trend number one and will get this series of bite size episodes underway. On this podcast series, we've talked in previous episodes around the need to have a very aligned digital strategy and business strategy. But even as I think about that, maybe aligned is not enough, right? If they're side by side, there's still the opportunity for divergence across the two of those.

And maybe there's not that level of alignment. So why don't we go deeper here and talk about the importance of this concept of Stack Strategically and what it actually means when you think about strategy formulation and also what businesses should be thinking about.

Awesome. That's exactly right, Tom, and I know we've been discovering that with our clients over the year and recent. But what was absolutely outstanding with the research was, it collaborated where we thought our clients were getting—in specific 92% of the executives agreeing that their organization's business and technology strategies are now becoming inseparable, even indistinguishable, and yet again, the highest across the other industries surveyed.

So I think that is just such a compelling, what I would love to recognize as a cause for change or an acceleration within our biopharma clients, of what could be the art of the possible. And so when you look at us as a science-based industry, we've always relied on technology. What I think has changed is now this recognition that technology is now about being end-to-end, and breaking down those silos is one component of enabling that end-to-end.

So whether they're digital technologies like wearables, implants, digestibles, that we can now show how a therapy is actually working, that could help make the digital biomarkers more richer in detail. We can use those insights to get better indication of whether the drug is helping. How we've talked about—I know you've talked about with your guests earlier—even about how digital biomarkers are actually allowing for digital clinical trials.

And as we know more than ever, and I think the biopharma executives are actually even more reliant than ever on the ecosystem partnerships. And one of them, as we want to even take as an example, the regulatory bodies. So as we know, many clients starting to even look to automate their processes of regulatory filing, and even anticipating that the regulatory bodies will actually be looking for digital submissions. This whole thing is going to amplify all of these digital experiences. And not just digitizing, but looking for different models is going to need what I would describe as interoperable architecture.

You're going to have to have an architecture that can enable. And what that means is, you're going to need to be able to have the ability to recast all processes, which means the underlying legacy systems—whether it's in the lab, in the research, in the safety areas—so that you can respond; so that the business needs can be serviced at that speed where the functions are needing it to be for that disruptive innovation.

And so our take away, one of our first takeaways in the stack strategically, is actually emphasizing the need to build that flexible architecture through use of micro services and the cloud that will enable many parts of the biopharma, including R&D functions, to actually innovate at the demand at which they're seeing and pressurized. So notwithstanding, again the research tells us that 96% of the executives actually believe that their organizations to generate business value will increasingly be based on limitations and opportunities of the their technology architecture.

Not surprising, 96% of our executives actually have responded to say—and believe—that their organization's ability to generate business value will increasingly be based on limitations and opportunities of their technology architecture.

So I think that frames in the best way, we as our biopharma industry know that we will compete on our architecture. And then teasing on to the point that you made, it's not just about the architecture, but the success is going to be about how the function will actually execute integrated business and technology strategies. And so a second take away really emphasizes the need of a culture of cross-functional and IT teams, what we would broadly be describing as moving away from project centric to product centric. And so, we've all historically in IT, how we would operate, we build a system, we'll
deliver and we’ll move on to the next thing.

But now IT needs to work in conjunction with the business functions so that the individual digital capabilities being released under the projects or the POCs that are built, they’re built with that end-to-end roadmap and architecture, to actually be able to orchestrate digital innovation in harmony, as I would call it. So architecture is important.

We don’t want to leave a place where we have proliferation of automation or bots, data lakes that nobody owns, and cloud and BM instances. And so therefore, appreciating that end-to-end; tying it up with the business strategy of working together in that culture of seamless teams, is what we’ve brought together in our trend Stack Strategically.

**TOM:** When you reflect on those takeaways, which are very much aligned with the overall trend here, how prepared is the industry—or certain players in the industry—to act on this? At the end of the day, as you talked about the architecture, you talked about the culture, you talked about this concept of a product centric model. Where is the industry at this point broadly?

**SHALU:** Yeah, it’s a good question and a good framing. I think the industry has many, many making the leap and what I call the leap into much of those. And so there are many that have gone more from experimenting to making a conscious effort of actually tying those pieces together, while many others are still in the experimenting.

So I think we’re in a unique place of, one I think, probably appreciating that more than ever it’s needed and some trying to execute more powerfully than others. And so as I reflect on your question in terms of where clients are, I also think about the implications, Tom, and how we see what are the steps ahead.

**TOM:** So maybe just to bring this all together then and to look forward, what are the top few recommendations that you would have then for biopharma organizations at this point?

**SHALU:** So we look at it as broadly three things: One, making sure that business executives with their technology teams and executives are investing on a

Second, to look at that digital architecture with a vision across functions, across research, clinical, regulatory, and then as the organizational construct demands and has already demanded, across manufacturing, commercial as well. And go from the siloed approach and one off experimentation to actually a programmatic, systematic and initiative.

And then lastly, this concept of making sure we’re embedding that culture of working in those pod teams and IT teams; being able to move with the culture of closely aligning the end business goals and the function roles with how technology can be scaled and drive the innovation.

And so what that does is allow that sustaining of that talent, decision-making architecture decisions that are so critical to the business functions in this case for R&D executives, to innovate at the pace that is needed.

So those are our three actionable, call for action that we actually have elicited coming out of this research.

**TOM:** Excellent, I appreciate you running through the Stack Strategically trend with us today.

I think where we ended this discussion is always useful with a specific set of recommendations. I think we both agree that across the industry there are different starting points, depending on what actions have been taken. But I think collectively the opportunity is there to take a step forward and this becomes an enabler to many of the other trends which we will explore in future episodes.

So, Shalu, thank you for joining us today. Appreciate the conversation, it’s been great talking with you.

**SHALU:** Thank you. It’s been…it’s been a lot of fun.

**TOM:** I hope that you enjoyed this byte sized episode of Driving Digital in Biopharma. I encourage you to listen to the whole series of short episodes focused on the trends coming out of Accenture’s 2021 Tech Vision, including the next one in our series where we will explore the tech trend of “Mirrored World” The essence of which is the emergence of the Digital Twin, the progress that has been made and the unrealized potential that remains.
I thank you all again for listening to this episode. Please remember to like and subscribe to Driving Digital in Biopharma on your favorite podcast platforms so you don’t miss an episode. And until next time this is Tom Lehmann, with Driving Digital in Biopharma.