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LEADERSHIP & BUSINESS PODCAST

EPISODE 109: JENNIFER ENGELHARDT – ARTIFICIAL INTELLIGENCE

Ken White

From the College of William & Mary in Williamsburg, Virginia, this is Leadership & Business. The podcast that brings you the latest and best thinking from today's business leaders from across the world. We share the strategies, tactics, and information that can make you a more effective leader, communicator, and professional. I'm your host Ken White. Thanks for listening. Artificial intelligence may become one of the most important and transformational technologies of our time. AI can affect just about every aspect of business, including leadership, results, and the bottom line. Hiring, retention and culture, decision making, and innovation. While we see and hear a great deal about artificial intelligence for many professionals, the topic remains somewhat of a mystery. Jennifer Engelhardt knows the ins and outs of AI. She's a partner at IBM Global Business Services. She spent years in the life sciences space, where thanks to AI, some amazing breakthroughs are occurring regarding therapies, patient care, and cures. We sat down with Engelhardt last week. She explained artificial intelligence, how organizations can embrace it, and how it can be used to make meaningful decisions. Here's our conversation with Jennifer Engelhardt.

Ken White

Jennifer, thanks for taking the time to join us. We're about to join about three or four hundred William & Mary Alumni here in the hotel in Northern Virginia, and you're kind enough to sit down with us and share your time and expertise. Thanks for joining us.

Jennifer Engelhardt

Absolutely. Glad to be here.

Ken White

So we were going to talk about artificial intelligence, and right before we started to record, as we were talking about it, you really kind of threw a curve because you approach this. You have a very interesting background in terms of AI. Can you share that?

Jennifer Engelhardt

Sure. So I've been with IBM almost 21 years, and I spent most of my time working in the life sciences space. So with all the major pharmaceutical companies. So health care is a big passion of mine. And what I see happening in the AI space and Watson in particular. We have a Watson Health business unit now. Watson is, of course, the platform that won against Jeopardy several years ago. So if you look at what's happening, if we take the example of oncology and see what's happening in that space, I'm just incredibly passionate about it because it's really about improving experiences as humans human health. Basically, what it does is if you think about data and how data historically needs to fit into discrete rows and columns in a spreadsheet or in a database, but the other 80 percent things like conversations and medical images and books and lectures and so much other input that 80 percent is just kind of goes into the ether and is not really used. So if you look at you know Joe cancer patient every week, the oncologists will get together with these tumor boards, and they'll talk about that specific patient, what clinical trials might be relevant and what is the best course of action. You know what are the best therapies to get the best possible patient outcome. Well, it doesn't take into account. I mean, obviously, these doctors have limited time, and there's 160,000 clinical trials every year. And obviously, these doctors can't read all of them, so what Watson does is it looks at that individual's unique genomic data. So is this person a smoker? How old is this person? What is their BMI? What is their patient history? And then, it looks at all of the data relevant to that particular case. If this patient has leukemia, what are the relevant clinical trials that might be relevant to this? And what it does not replace the doctor, but it gives the doctor insight into what therapies would be most effective. So if you take that and look at what's happening in healthcare, and that can be applied to so many other areas of, you know, areas of discipline.

Ken White

Sure.

Jennifer Engelhardt

Like with the environment, with fraud detection and banking. It can be applied everywhere, really. But I'm really passionate about the health care space because obviously, curing cancer is a pretty lofty ambition for any organization. We actually have as a benefit now at IBM access to Watson oncology, so we can get. We have I believe we have 12 content curators for Watson who work in Cancer Institutions like Memorial Sloan Kettering, and they actually help train Watson so that it can provide the most accurate information and data to help health care professionals make the best decisions for patients.

Ken White

So a physician using this has just gone from local to global.

Jennifer Engelhardt

That's right.

Ken White

Amazing the results that can happen.

Jennifer Engelhardt

Yes.

Ken White

What other areas of life sciences are you seeing any other examples that are using AI? I'm sure they're endless.

Jennifer Engelhardt

They're endless. Yes. I mean anything from other diseases that are being treated to what you know what is the best therapies for patients in developing countries where we can't, you know, we can't necessarily get to them the way that we can in the first world and then things like gosh anything from trying to think of a good example recruiting. So what is the best candidate pool to use if you're looking at a specific industry? For example, so the average employee these days. I was giving a speech at a conference recently, and I read that the average employee these days stays at a company for four-point six years. The average millennial stays for two years. So attracting and retaining the top talent that is one of the biggest challenges organizations face these days.

Ken White

Right.

Jennifer Engelhardt

So you know, Watson and AI can help us determine which universities to recruit from and what profile what demographic to go after in order to find the best candidates to meet our business objectives.

Ken White

So no doubt, we're smarter, and we're more efficient because of it. How do you see it affecting the professional? What kind of skills does a professional need? Maybe. How have you changed, in other words, from the beginning of your career to now? With AI, what's needed?

Jennifer Engelhardt

Yeah, that's a great question. And I've spent my career working in the ERP space, so SAP, Oracle, Microsoft, Workday, and what I found a lot of times I've actually worked with CIOs and CFOs who sponsored these programs and oftentimes they're not very happy with the outcomes. So I actually spent a lot of time working with angry executives who put in the capital appropriations request the board, and they're not seeing the return on their investment. And if you look at the reason why it's the same problem that you would have with AI and that is that that the issue of user adoption. So if you have these great tools and write analytics, if you're not using those to their maximum capacity the maximum use, then you're not getting the return on your investment.

Ken White

Right.

Jennifer Engelhardt

So there was a conference in Dallas a couple of years ago, and they said let's look at these advanced analytics tools and what they found was that only the project teams get very excited about them. But the end-user is only using about 22 to 28 percent of that functionality, so if you want it, so if you look at other examples outside of healthcare, how to make. How do your production planners make a more accurate forecast, or you know how do you reduce the amount of time a buyer spends creating a purchase order that they're not using the data there to make better-informed business decisions. Watson and analytics it's all about enabling employees to make better decisions based on the data and tools that they have.

Ken White

Right.

Jennifer Engelhardt

So if we just have the data and tools there but people aren't using it or don't know how to slice and dice or don't know what the different capabilities it provides. It's just a system.

Ken White

Right.

Jennifer Engelhardt

So the user adoption is a piece that we're very interested in understanding what metrics we're trying to achieve and then holding people accountable for those metrics and then rewarding them for achieving those metrics. And that's what really helps us get the value realization from these platforms.

Ken White

And it's training, I assume.

Jennifer Engelhardt

Training and its training its ownership. So who owns the procure to pay process and then within the procure to pay process? Let's say that you're trying to reduce the amount of time a buyer spends processing a purchase order. If you're trying to reduce that from three minutes to two minutes, so if we ask somebody who owns that. How are we rewarding that person for attaining that KPI that key performance indicators? If we're not, we don't have owners. You know what gets measured gets done. So if we don't have owners and we're not measuring, it's not going to get done. Not only do we need to measure, but we need to incentivize those people.

Ken White

Right.

Jennifer Engelhardt

So give them a stepping stone on a promotion if they meet that metric or give them a financial bonus or do something. But if we just say this is what I want you to do without having the ownership and the rewards and recognition, those two other pieces are essential, and they're often overlooked.

Ken White

Yeah, it's just one more thing to do right on an already full plate.

Jennifer Engelhardt

Exactly.

Ken White

We'll continue our conversation with Jennifer Engelhardt in just a minute. Leadership & Business is brought to you by the Center for Corporate Education at the College of William & Mary's Raymond A. Mason School of Business. Businesses and organizations from across the world turn to the Center for Corporate Education to help them with executive and leadership programs that develop top talent, explore new ideas, and address specific business challenges and opportunities. Programs are customized to meet the needs of each organization, and they're taught by William & Mary's award-winning business school faculty. If you want to take your organization to the next level, think about William & Mary's Center for Corporate Education. Visit our website wmleadership.com. Now back to our conversation with Jennifer Engelhardt.

Ken White

What about the training? Is the ramp-up difficult for most people to learn how to do it?

Jennifer Engelhardt

I think you know training is much more. We call it micro learning. It's much more, you know, podcast, for example. Yeah, you know, learn about AI in 15 minutes, very digestible small pieces. And it's really about more than just training. It's really about creating a culture of continuous improvement in social. There's been so much buzz around social but no one, you know, it's hard to find organizations that really have implemented a social platform where they get results, and I'll give an example, so if we have Joe production planner, who is using AI to make a more accurate forecast. And you know his buddy at another plant is also making forecasts but not necessarily as accurate. You know this person can continue doing the work that they want. In other words, they don't have to use those analytics. They can still get the job done. The lines are still going to be running, product is going out the door, purchase orders are coming in. But how do we get Joe to take this best practice and share it with all the other plants across the enterprise? Because historically, you know it's been you and me sitting down at lunch and saying, oh, have you tried this or have you done that. That's how people share best practices. So the training is one piece, but it's really post-go-live. So, what do we do to get Joe to share that best practice? So the training group. The training groups becomes think of the training group now as a center of excellence. And so what we do is we want Joe to fill out a very simple form that explains what report he's using to get a more accurate forecast. Sends that form over to the training group. The training group puts together a two-minute podcast and pushes it to everyone with that security profile. So why does Joe want to go through the aggravation of doing this? He's a busy guy.

Ken White

Sure.

Jennifer Engelhardt

Well, if Joe does this, he gets a badge, and when he gets five badges, he gets lunch with the CIO, or he gets a financial incentive. And why does Jerry at the other plant want to take this podcast? Well, Jerry also gets a badge, and so that's why I say we need to have think of training more as a center of excellence.

Ken White

Yeah.

Jennifer Engelhardt

Give ownership, so who is the procure to pay lead. Give people ownership and then incentivize them. Put the rewards and recognition in play something very simple. People love badges.

Ken White

Sure.

Jennifer Engelhardt

You see all over LinkedIn now.

Ken White

Absolutely.

Jennifer Engelhardt

Give them a badge give them some sort of financial incentive give them some recognition at a town hall. That is tactically how you plant the seeds of social, and that's going to be what's important because AI is going gonna be out there just like SAP's out there, Oracle. But the amount that you're going to profit and benefit from it is going to be the degree to which you get your employees to fully utilize its capabilities.

Ken White

It starts at the top.

Jennifer Engelhardt

It starts at the top. Absolutely.

Ken White

Big buy-in at the top, and then there is a better chance better likelihood of everyone else buying into it, especially with the incentives.

Jennifer Engelhardt

Exactly.

Ken White

Now how is it changing in terms of skills? What does the worker need today that maybe he or she didn't have 20 years ago? Now that AI is like Joe. You just talked about what skills does he have to have now?

Jennifer Engelhardt

You know it's, and it's interesting, I had a conversation this morning with a nurse who wanted to go into Watson Health, and she says you know what, Jen, I don't have an IT background I said, you don't need an IT background you need to be able to take that data and use it to make better informed medical decisions. And so it's really about taking what information that you have and being able to apply it to your work. And again, making sure that you have the different pieces in place if you're a leader. Make sure you have owners, you have clear metrics, you measure them, you have owners of those processes, so people are accountable and that you're rewarding and recognizing the right behaviors so that you're building this culture of knowledge sharing and continuous improvement.

Ken White

Which really isn't different from what we've done right. You collect data, and you make the best decisions.

Jennifer Engelhardt

Exactly.

Ken White

But now the data are really good.

Jennifer Engelhardt

That's right.

Ken White

Interesting.

Jennifer Engelhardt

That's right. One of the things you have to worry about a bit is when I think about adoption. I think historically. People say well; the training has not been there, so people aren't really adopting it. But there's other issues as well, things like data mistrust. So if people don't trust the data, they're not going to use it. So what we try to do is we try to find out what are the root causes for lack of adoption in different pockets. And so if there's, you know, lack of trust in data, what we can do is we can establish that data czar, and that person's job is to put interventions in place to help people trust the data and to use it. There can be things like political resistance that could be part of ownership in legacy systems. You know, people don't want to use the new system or the new platforms, especially with the different demographics that we have the different age demographics that we have in the marketplace in the workplace these days. So you have to understand where the adoption gaps are, and you have to focus relentlessly on adoption. I mean, the

coding piece, you know that part is the easy part. It's getting people to use this in the way that you want to. That's the challenge.

Ken White

In your experience, is AI and what we're talking about still new? Does it have to be? Do some people have to be persuaded, or is it we got it, and we've got to use this.

Jennifer Engelhardt

You know, I think it's just such the most overused word in a phrase. I mean, we called it Watson. We called it artificial intelligence, augmented intelligence. You know, at the end of the day, it's really, really good data that's going to help us make better decisions. And that's what it is. And it's getting data and turning that data into insights that people can really use and then getting them to use those insights to make better-informed decisions. That's what it's about.

Ken White

And your example going right back to when we first started of cancer. For crying out loud, it's there for us. We just have to learn how to use it.

Jennifer Engelhardt

That's right.

Ken White

Yeah.

Jennifer Engelhardt

Yeah.

Ken White

Are you seeing a difference between the generations? We talk a lot about the generations in the work in the workplace. Are younger folks quicker to embrace than older are you seeing any generalizations or anything across the board?

Jennifer Engelhardt

Yeah, I think there's some of that. But I also think that as it relates to reports and data, you know, I think that sometimes the generational gaps can be overstated. I think any worker wants to be able to use this data, and being able to use a report to make a better-informed decision is not rocket science. I mean, we're not asking, you know the boomers to start coding you know we're asking them to take some you know take these data use it to make some informed insights. Use those insights take action, and those actions again

can be measured against certain KPIs, and then they should be rewarded for achieving those KPIs. So it's really a matter of, you know, gone are the days of two day, you know PowerPoint driven classes for training don't even think about that anymore. It's really about using AI to make these better-informed decisions and then post-go-live once these platforms are up and running. It's about a relentless focus on getting the maximum value out of those reports and that data insight. So I would tell people not to be scared. I think there's a lot of confusion around what AI is. I think that there are, you know, tons of buzzwords out there that can be intimidating, but I think this is all a good thing, and I think once people see the power of it, they're really going to latch on.

Ken White

That's our conversation with Jennifer Engelhardt, and that's our podcast for this week. Leadership & Business is brought to you by the Center for Corporate Education at the College of William & Mary's Raymond A. Mason School of Business. The Center for Corporate Education can help you, and your organization meet and exceed your goals with business and leadership development programs that fit your needs and get results. If you're interested in learning more, visit our website at wmleadership.com. Also, if you have any feedback or suggestions pertaining to the podcast, we'd love to hear from you. Email us at podcast@wm.edu. Thanks to our guest this week, Jennifer Engelhardt, and thanks to you for joining us. And finally, a special congratulations to the William & Mary Class of 2018 and to new grads everywhere. As we record this episode, we're just a few days away from graduation ceremonies here at William & Mary. Congratulations, you did it, and we're proud of you. I'm Ken White. Until next time have a safe, happy, and productive week.