

EPISODE
05

A masterclass in people-first AI

Guest: Jessica Baker, Chief Data Officer, Tennessee Valley Authority



JESSICA BAKER: At TVA we talk about, you know, people power American energy. And we don't just talk about that, but we live it. So, when we started our AI journey and we started crafting our AI strategy at TVA, that was our strategy from the beginning. It was starting with workforce, then moving into adoption, and then really scaling that value across TVA.

VOICEOVER: Outwitting complexity starts here. Welcome to The GuideLine.

STUART BROWN: Jessica, welcome to GuideLine. It's great to have you on the show. You know, we're here today to talk about AI transformation, but I think there's a lot I'd like to go through here. You know my history when it comes to utilities and tech transformation, and other things. But what I love about you is talking through, sort of, what it means for people. So, I'd love to start with your story. You spent your career working across, seems like almost every corner of the Tennessee Valley Authority, from business planning, supply chain to nuclear. Can you tell the listeners a little bit about yourself and your journey and how you got here and your current role at TVA?

JESSICA BAKER: Sure. Thank you, Stuart. First of all, thank you for having me. Excited to have this conversation with you today and love what the podcast is really bringing to your listeners. So, thanks for having me. I've been at TVA nearly twenty-five years. It's been just an amazing journey for me being able to serve and the mission of TVA is what brought me here and what keeps me here. Started out in the financial space and the trading floor, the power trading floor, and was able to move across different areas of the financial sector.

Of course, I started out running simulation models and doing analytics and old school analytics from a long time ago. And really just gaining the knowledge across the financial side of the business then brought me into the operational side of the business. So,

supporting operations in multiple different roles, working out at a nuclear plant, was a fantastic experience. And like you said, inventory management, supply chain, customer relations, transformation. And now I find myself in IT, leading our enterprise data analytics and AI organization at the most opportune time.

But what I'll say is, you know, moving around the business, moving around a utility like that, it really had all common themes for me. It was connecting people, process, technology, and data from every angle of the business. And that's why I'm excited to bring all of that business knowledge now into an IT organization.

STUART BROWN: No, I love that journey and it mirrors, in a lot of ways, mine, in my relationship with utilities because I went through the deregulated days and then I did some of the big CIS implementations and then I was part of the risk management part and investor management. I was all over the place through my career and including dealing with trading floors and dealing with, you know, de-reg utilities and others. And well, starting out in trading, that's the crucible right there. That's the most real-time piece of the utility.

But it's, I like where you went with really understanding the people. I mean, I think that gives you a unique perspective to understand how a utility operates and how work gets done. And it is also, you know, I talk about with AI, and I'm going to get to a specific utility question that, I was recently named in the new role as Chief Transformation Officer of the CXO, and they're like, "Why transformation?" I'm like, "Because application of AI and technology is all about human usage." It's like, how do we transform how we do work?

How do we transform how we serve our rate payers and our customers and our employees, and others. And so, it's interesting that utilities is at this moment. You know, I was the Global Cloud Lead for a while driving utilities back in 2015, 2016, and I said it was like selling holy water to vampires, right? I mean, CapEx versus OpEx and all the things that went there. But now we are at this impetus where utilities are seeing the potential of what AI can bring to them and how it can change their employees' lives as well.

So, why is this moment different for utilities? What does AI mean in your mind for what we can do inside the utility space?

JESSICA BAKER: Well, Stuart, you said it. We've been around this industry a long time and TVA has always prided itself on being an innovation company since 1933. But we were innovating by harnessing the river system. We were being a leader in nuclear development. We were looking at engineering advances. And now energy is one of the most strategic commodities. The entire global economic development is based on electricity these days. So, utility now finds itself at a forefront of, kind of, IT type technology along with the rest of technology.

And you know, what's interesting specifically about TVA, yes, we're a power utility, we're also a federal agency. And if you really look at the push from the federal side and the administration over the last couple of years on having an AI-powered workforce, having AI dominance, you know, really leaning in on that, from the public power side of utilities, which is even more unique, we're at one of the best moments we've ever had to use our energy, use what we do to really power economic development in a whole new way. It is really, really an exciting time.

STUART BROWN: I couldn't agree more. And it's part of the reason why I actually came to Guidehouse because I knew that transformation was coming on the federal side and the idea of being part of that, which has such downstream impact, just like what TVA has had for, you know, for the regions that it serves and why it was created, which was to really empower, you know, a part of the country that wasn't empowered as electrification was going. And I think this is where it gets interesting because, you're right, without power, none of the AI ecosystem happens. You can build all the data centers you want. If we can't put juice into them, they don't work.

Power is the most important commodity, just like data for us is the most important commodity for a corporation. So, I think it's really interesting, especially with TVA's mandate and how you make power, that actually makes it even more interesting when it comes to data center locations and other stuff. Where do you see utilities having unique opportunities or advantages with AI? Like, what do you think it sort of really differentiates?

JESSICA BAKER: Absolutely. So, if you think about even just basic culture of utility, safety is always first. It's a top priority. It's not something we talk about, it's something we live every day. So, you think about AI, most important thing in AI is responsible use of AI. How do you know you're using it safely? How do you know the data's safe? And then you just go to data, massive operations from the grid to the different technologies to the generation to all those other support roles. So much data in our organization.

And maybe in the past those were in different technologies and different systems, but AI allows you to connect those now like never before. And then the utility industry, particularly in places like nuclear, just so good at sharing and really coming together, you know, across the grid, across different companies and being able to work together. And again, what's the basis of AI? It's really this kind of collaborative look at how you look at workflows across different areas of a business.

So, I really do think utilities are in a unique space from the data we have and just from our basic risk management type culture to excel in a space like AI.

STUART BROWN: You know, that's a great point and one that may be lost in some of our commercial friends is that the relationship between utilities in North America is quite tight. Actually even globally, but really North America is quite good, you know, with groups like Unite with the CIOs and others who share across, you know, lessons learned because as owning territories, it becomes, it's not a competitive landscape in the transmission distribution space generally.

And you know, the idea of, how do we deal with post-storm damage assessment? How do we deal with vegetation management? How do we deal with proactive outages and other things, which are, you know, unfortunately part of the things we have to deal with. I think those lessons learned across are really interesting. And as someone who lives in Florida and deals with hurricanes all the time and sees how the utility family gets together when there are disasters and the ability to quickly, you know, engage together, that requires data, that requires integration.

And, you know, I think even inside of a utility itself, and I'm sure TVA is no different, like you said, we had all these various systems and then we had these, you know, and there were silos of data that were untapped. And I think this allows us to get the intelligence of the system across. I was with a utility recently where we're helping with that across the board, and another one, and it was, you know, how do we pull the transmission data and the distribution data and the vegetation management, all those things together? What are you doing at TVA around sort of building that construct at the corporate level, at the siloed, what used to be siloed levels, but then also how are we going from being a compliance organization to someone in influence and pulling that data across? What are you seeing at TVA?

JESSICA BAKER: Yeah, well, Stuart, you know this is going to be the first thing I say, but it starts with the people, starts with the workforce. And so we start by bringing the people together from across different business units. And I know, love to tell you more about some of the programs we built here in a little bit.

STUART BROWN: Yes.

JESSICA BAKER: But that's where we started. We started by physically bringing the people together to learn AI. So, from the beginning, how do we bring our data together? You know, we've got some initiatives around our data lakehouse. We know that that's part of the key from a data perspective to really unlocking these opportunities is modernizing how we manage data.

So, we're bringing people together to create these data domains in our lakehouse. We're bringing the people together to learn AI, to learn how it can scale. So I think you start by bringing the workforce together, then the way we manage data and the way we see AI is

really democratizing AI. So, a federated model where the execution of AI is in the business with the knowledge owners, with the business owners, but then we centralize our governance and our platforms, so that we can bring all that together and really use that in a better way.

STUART BROWN: That's a Harvard business case way to describe it. That was perfect. I mean, I think that's exactly the right way to do it. I think, and I want to go into the examples now because I think, I talk about this a lot, right? We need to get AI to people in a way that they understand how to work and that feels natural to them. We can't be forcing them to become technologists. We will find people that will want to be, but frankly, if we don't make it native and natural to them, it's not going to get adopted.

And it's not dissimilar to how we would run any big system implementation. You know, I go back to my CIS days in utilities and, you know, and you would go find those folks that would be the influencers to drive the change. And so that's where I want to talk about the AI Ninja Network and your change agent network. Because I think it's brilliant of how do you build enthusiasm and then have people look at those folks as their champions to help them make that change. So maybe give me a little bit about A) how you went about it. I'd like to understand how you sold it within the organization because you've got to sell that across the board and what the reception has been like building it out.

JESSICA BAKER: Absolutely. So, I think it starts with, you have to have that fundamental belief that AI does not take people out of the equation. It is the tool to empower people. And it really is about just another way to leverage their knowledge, their skills, their value, their creativity. So, I think it definitely has to start there.

At TVA we talk about, you know, people power American energy. And we don't just talk about that, but we live it. So, when we started our AI journey and we started crafting our AI strategy at TVA, that was our strategy from the beginning. It was starting with workforce, then moving into adoption, and then really scaling that value across TVA. And not only is it a core belief for us to start with people and adoption, but you know, when you heard some of those early stories in the AI days of, you know, 90% of AI use cases are failing, and this isn't going to work.

You know, we really took that as a lesson learned. Another great thing that utilities are great at doing is looking at the world around them, lesson learned, root cause. What we really felt strongly and what our executives at TVA agreed with is that the sustainable value, really using this for the long term, would be driven by the people.

So, by the time we go after those high value use cases, you can create something today and you can create it quickly, but if we don't have the people that know the business and run the business long term really engaged and learning and understanding, that use case might produce value from day one, but it's not going to last. So, what we started with is

probably like a lot of people started, let's just start grassroots. Who out there is interested in AI? So, we started what we called an AI change agent network. And it was just an open invitation, who is passionate about it, who wants to learn about it.

And we would create, kind of, monthly conversations and learning. And we grew up to about 250 people from across the company that just kind of self-paced, wanted to learn more. So, then the CIO and myself, we talked to our Chief Administration Officer, Will Trumm, and he just had so much passion and energy. And his challenge to me, and you'll resonate with this, his challenge to me was, let's build an AI learning program that feels like a nuclear senior reactor operator license.

Well, that was a tall order. How do we do that? But what I took from that was it had to be meaningful, had to be immersive, you know, it had to be really a dedicated learning that not only am I going to learn this, but this is what I'm going to do from now on. This is a commitment. So that's where, like you said, we started our AI Ninja Network, because we wanted it to feel different from the beginning. So, you start by making it something unique.

And then we developed this as a twelve-week program, where you fully dedicate someone from your business unit to this program for an entire twelve weeks. We have different learning curriculums. So, we start with the core. You know this, everything in AI, it's got to start with data, starts with cyber, responsibility, learning the basics of how do you know when you start using AI, you can use it well, you can use it safely. Then it gets more advanced, and you know, you get into machine learning, you get into Python coding, you get into some of our advanced tools. And that was something that's unique, too.

We wanted to bring in external expertise because we know that that's part of the value. So, we partnered with our vendor partners for the tools that we use today. We brought them in to really be the experts to teach. We actually partnered with our local university, University of Tennessee Chattanooga, brought them in as local professors and local experts. And then we also brought in our own TVA experts. Because something that was important to us is our employees aren't just learning generally about AI.

They're learning how to apply AI at TVA. So as they go through the curriculum, there is classroom learning. They are sitting in the classroom, they take exams, and they have to pass the exam to proceed. So, we did try to make this a little bit more intense. And then at the end, in order to graduate, we have a full graduation ceremony. We required a capstone project. And this really became the heart and soul of this Ninja program. The capstone projects brought people together into teams and they had to, from the ground up, design and implement an AI solution by the time they graduated.

Some people who had never actually worked directly on AI from the beginning. So, it was a little intimidating to start. But by the end, not only did we develop real capstone projects that are really going into deployment for TVA, adding value to their business unit, but the

employees were just, like the real transformation you saw when they're presenting their capstone projects at the end, they're telling you, I didn't think this was possible.

I never knew you could do work this fast. These are things I always wanted to help my team in the field, and I was never able to be given this information. I can't believe we can do this. So, real time within twelve weeks, we saw not only great advancements and a 3x return in value on our investment from the capstone, which is fantastic, but we saw people change. We saw true ingrained transformation of understanding.

It's not just talking about AI, it's like the AI experience. Like I actually understand what this can do now. So, we've already started class two. We're halfway through class two. And our demand was so big, we already have three more classes scheduled.

STUART BROWN: That's amazing.

JESSICA BAKER: So we have every business unit in TVA trying to get in. We'll have over 150 ninjas by the end of next year. It is just absolutely fantastic.

STUART BROWN: I mean, Jessica, I said it before, it's a Harvard case that people should study, I mean, people who listen to this podcast should just take the process you went through and write down what you just said. Because it is, it is a masterclass, and I credit you and TVA in doing this, of the way to get adoption that's going to stick. And that's where you were going earlier. What I saw early on in my utility days, and I was, as you know, I was in front of a lot of the boards, because when AI first hit, I would get pulled in to, sort of, tell us.

You know, the board would say, "what is this AI thing?" And the CIO would be like, "come in and talk about this." And we'd go talk about it. And I would stand in front of the boards and the C-suites and say, this is about change in your organization. It's probably the biggest change you're going to see since Y2K, right? Because it's going to touch all parts of your organization. You need to think about the adoption. But too many people thought about it as POCs or even a COE. Like we're going to do these things. These things are going to change everything. But things don't change things. People do. And the way you just described it was exactly right.

You built out a curriculum that didn't just teach them what AI was mechanically or technically. And this is the arguments and conversations I would always have with the AI, ML, data science guys. "We've been doing this for years." I'm like, you do, but it's more mechanical. It's not human, right? It's the human element of this. We need datalakes. We need data lakehouses. We need all those things. But what you just laid out was exactly it. We have trapped data value in our organization, intelligence data we're not using.

And we also have trapped knowledge in our employees who are generational employees who know our systems backwards and forwards. And if we don't have that person on the call or we don't have access to that data, are we always making the right decision in the moment? The AI allows us to look across the organization and have someone who has 20 plus years of experience in utilities go, that's not right.

I think something's wrong. We need to go dig into it. So, you know, we talk about how you measure that impact. And people always want to have, utilities are really good at this. We want scorecards. We want OKRs. We want dashboards, whatever. I think I know the answer to this because you almost sort of said it. How do you measure success here? I mean, everyone wants to talk about, everybody starts with cost reduction, and that's the wrong way to look at it. I think for me, we have more work than we have time for our people to do. Not that there's not cost reductions and efficiencies, there are, but how do you measure success of the program?

JESSICA BAKER: Yeah, so many good things. I'd love to pull the string on there, Stuart. So, you know, I'm also TVA's Chief Data Officer. And so, one of the jokes I like to say is, all of our AI programs are really just a data governance program in disguise. But really, a lot of it is about there are way more and better ways that we're able to use our data now. But what you said is important, not just selling it to the board, being able to build programs like this and really how do you get the buy-in from that. It is about how you measure success.

So, it, I'll go back to the strategy, workforce, adoption, value. So, the first way we're going to measure success is the engagement of our workforce. How are they learning? How are they... we take surveys in our training programs, we look at maturity, we really focus in on how well are we doing engaging our workforce. So, we've got the Ninja program, we've got Change Agent Network. This fall we're going to kick off Data & AI Academy, because the reality of utilities, we're a 24-7 operation.

And not everyone can do that kind of dedication, but we know that everyone can be empowered to apply AI skills to what they do every day. So, our Data & AI Academy will be more accessible, it'll be more self-paced learning, it'll be something everyone else can do. So, in all those ways, we're really making sure that first we measure what matters most, which is how are we engaging, empowering, and helping people learn. And then it goes to adoption.

So again, the reason that you train and empower people is so that now they have this new tool, this new capability that they can use. So, you have to measure, are they using it? Are they using the tools that we provided? And so we do measure adoption, and we see how many people and how many more people are not only using the tools, but even reusing and sharing use cases and ideas is really part of adoption. And then finally, you do get to the value. And this is my favorite part because we've talked about this before. AI is actually not about AI.

STUART BROWN: Right. Thank you. Thank you for saying that.

JESSICA BAKER: And at TVA, everything, everything goes back to our mission. Yeah. So, our measure of value is the measure of value of utilities. It's our scorecard. It's reliability, it's resiliency, it's economic development, environmental stewardship. It's serving our customers and the people of the Valley. So, AI measure is not different. It is, I'll know personally, that AI is wildly successful at TVA when I can see the TVA scorecard, the things that matter to our mission have been made better because of AI. That's the answer. It's really not about AI itself.

STUART BROWN: That, again, brilliant. And I love, that's why I titled my title CXO instead of CTO or CAIO or something else. Because I think it is that transformation. I think it's, there are indicators that we're going in the right direction, but you know it when you know it. It feels different. And also I think you do see enthusiasm. I was, I wrote this in one of my articles recently, I was at Microsoft Build Conference with all the developers and it was, you would think AI is eating coding's lunch, and so they're going to be the most depressed group. And you know what?

They were the most excited. You know why? Because they could do more and they're excited. And it was almost, I felt like I was 24 again, just coming, you know, just really because it's like, the enthusiasm of what could be done. And when you see someone who has, how we empower them with AI unlocks their ability to do more and get more of what they believe their value is out into their job. I mean, people and especially in the utilities industry, to your point, it's a 24-7 job of which we don't get thanked all the time for what gets done.

But it is critical and we understand that, and the mission is very important to people that work in utilities. And the ability to get more of that out there and get their knowledge out there and iterate with their people and others is really, I mean, you feel it, right? And I think, I love the way you put that. It is a people thing and I think it's important.

Well, let's talk about where you think it's going, because now you're going to unlock, and I love, by the way, I love that you're getting the more self-paced thing because you're going to identify your next ninjas out of that group and they're going to, you'll see them self-select, right? The next generation. There's two things I want to pull on the trigger on here. Number one is, I love the partnership with the universities. I'm on the board of mine and I'm very active in pushing an AI agenda there. And so, utilities is one of those industries it's hard to get newer, younger generation in, especially you know, that's not already in the network, you know, whether their father, mother, whatever is already working. So how are you going to attract that new talent in and then really bring a new fresh start as this new generation of AI-enabled students are going to come in? And then where do you see this all evolving from an agentic perspective when it comes to TVA and its mission?

JESSICA BAKER: I think it's a fantastic question, Stuart. And you know, I think it's one of those moments where you realize the world has changed around you. So, I would say maybe in the past it might have been hard to talk about utilities, and maybe people thought about utilities a certain way, but I think that's changed. I think the energy is powering our economy at such a great level.

I think at, even at the university level, we have AI Tennessee, is just an amazing partnership that we're part of, and it really brings the academic all the way from K-12 to the university level to industry to utility, we've all come together and said, how do we make this work across the state of Tennessee, across our valley, our region? And like you said, even across our industry. So, I really do think this is a renaissance for the energy industry and we're getting a lot of excitement. We're getting a lot of excitement at the university level. And you're seeing what, one thing that I love to see, University of Tennessee, for example, has a new AI program.

And it's a multidisciplinary program. So, even at the university level, they are coming away from it just being a computer science major or a technology major. And we are partnering closely with them to see, it really is a multidisciplinary approach. And it's the technical skills that these students need to learn, but even more importantly, the human skills. So again, I go back to the point of AI really is all about people, the critical human skills that will actually only be growing in importance with AI, critical thinking.

You know, how do you think about crafting a problem with context and nuance and all the things it takes to lead and be part of a great team? It really takes to have a great prompt. And certainly when you get more into agentic AI. And you know, how do you know, how do you make sure that the people who remain involved and will always remain involved in AI, even with agents, really understand how to orchestrate, how to sequence, and how to understand whether the results they're getting are real.

So, I think you're seeing both of those skill building happening. And we just had a fantastic partnership getting people excited across TVA and certainly in the area of AI. I don't think we have enough roles to fill for people who just want to get into AI in the energy industry right now.

STUART BROWN: I love it. And I love your comment on prompts because I've said the same thing. I said I was like, maybe two years ago, three years ago now, where I wrote a LinkedIn piece around you know, and I wrote a Substack recently around sort of, because my university, UCF, was where the lady was booed on stage during graduation. And I said, stop, stop booing, start building. Right. I'm like, you know, and what I meant by that was all those kids that booed used AI in college. We all know that, right? But to me, I think AI needs to be used in every classroom. It's not cheating if we do it right, because I think the idea of, I want your critical thinking.

I want you thinking how to get more out of the full level of intelligence you have access to. Because I want your brain driving this data. And that's where you're training that in TVA, which is outstanding. If we just think about outage management, vegetation management, you know, turn on, turn off, customer service, permitting, all the kinds of things that are where we're interfacing with people every day.

The trapped knowledge of people that do this job every day, they probably have some ideas that can start iterating, but maybe they don't know the person in this group or all the data nuance. But I'm excited about the idea of trapped value and differentiation intelligence that sits in organizations that is sitting dormant because they either don't know the right people or they don't know how to or they're not even, they're not you know, maybe outward enough to go drive it. And I think this gives us that chance.

Very, very excited to see TVA leading in this and you driving this strategy. I've been across many industries over the last 30 years, but really over the last four years, AI across many industries, and this is one of the best articulated value strategies I have seen. So highly impressed on what you all are doing.

Love that it's in an industry that is critical to the mission and also to, you know, what we do in America and I love that it is a federally-aligned organization because I think it shows others these things can be done. So, getting to my final question I ask everybody, which is, what is your guideline? And I think I know where this is going to go, but you know, based on your experience in leading AI adoption and data and what you've been doing in the organization, what would you like to leave listeners with when it says, when you want to want your AI transformation to stick, what is your guideline?

JESSICA BAKER: I love this question. I loved hearing you know past people that you've asked and their answers to that because again, you just take away so much from everyone. Biggest encouragement I have, there's a lot of hype, there's a lot of excitement with AI. My encouragement would be, leadership in data, leadership in AI is fundamentally still leadership. It starts with basic leadership. It's about investing in your people, their value, their ingenuity, their creativity, that's what drives results.

It is a culture of safety, which we have in the utility industry that applies to AI. It's the culture of learning, it's a culture of collaboration, and it really is truly investing in building skills, building the technical skills, of course, which we have, but building those critical people skills.

Because again, this is not going to happen without people, right? America's energy future, it doesn't just depend on megawatts. It depends on the people who are really driving and creating those megawatts in the way that matters. So, I would say go back to it is

leadership at its core. It's investing in people, it is building a system and a culture by which you're allowing those people to learn and generate results for you. And then you apply the power of that community to point back to your mission, to point back to, you know, for us: Low cost, reliable power for the ten million people we serve.

STUART BROWN: Jessica, thank you. I think it's leadership at the core, 'all about people,' I think is the quote and maybe the title for this podcast. Thank you so much for coming on. Thanks for sharing your journey. Thanks for sharing the story. I'm excited about the direction you're going in and learning more and you know, hopefully how we can be a part or I can be a part of it. I'd love to help. But thanks again for your time.

JESSICA BAKER: Absolutely. Thank you so much for being here, Stuart. Enjoyed our time today.

The GuideLine is a podcast brought to you by Guidehouse. [Subscribe](#) wherever you listen to podcasts so you never miss an episode. To see more from Guidehouse, head to our website, [guidehouse.com](https://www.guidehouse.com).

About Guidehouse

Guidehouse is a global professional services firm delivering advisory, technology, and managed services to the commercial and government sectors. With an integrated business technology approach, Guidehouse drives efficiency and resilience in the healthcare, financial services, energy, infrastructure, and national security markets. [guidehouse.com](https://www.guidehouse.com)

© 2026 Guidehouse Inc. All rights reserved. This content is for general information purposes only and should not be used as a substitute for consultation with professional advisors.