Tech show branding sequence begins with montage of colorful graphics interspersed with closeups of circuit boards and hardware tools. Cut to a digital clock on a desk as it strikes midnight.

Transition to a residential garage door with the words Lenovo Late Night I.T. prominently displayed.

The garage door opens to reveal an open workspace with a relaxed environment. Show host Baratunde Thurston and one of his guests Pamela Rucker sit at a large wooden bench in the middle of the garage. His other guest Rob Enderle appears on a large monitor to the left of the table. Cut to a closeup of host Baratunde Thurston speaking. The shot pans out as he turns towards his guests.

Baratunde Thurston (00:10):

Welcome to Lenovo Late Night I.T., the number one tech show filmed inside a garage. I'm Baratunde Thurston. For years, IT companies have been led to believe that they have to choose between going green and making green. But what if this is a false choice? What if sustainability isn't just good for the planet, but also good for business? Here to tackle that question is industry consultant, Pamela Rucker. Pamela runs an advisory services practice that helps companies frame their digital challenges, reassess their offerings, and reinvent their business models. She's advised numerous Fortune 500 firms and coached leaders at some of the world's most recognizable brands, including Microsoft, NBC, Kaiser, the Federal Reserve, get money, get money, Cisco, and Chevron. She also teaches at Harvard University and is the expert in residence for their women in leadership program.

Also with us tonight is Rob Enderle, president and principal analyst of the Enderle Group, an emerging technology advisory firm. Before he founded the Enderle Group, Rob was the senior research fellow for Forrester Research and the Giga Information Group, where he worked with companies like Microsoft, IBM, HP, Intel, and Sony. Rob, Pamela, welcome to the garage. Thanks for being with me.

Pamela Rucker (01:23):

Thank you for having me.

Baratunde Thurston (01:24):

Good to have you. Good to have you, Rob. I want to start with you, Rob, and ask what the heck is green IT? We have a lot of hype around all kinds of sustainability efforts across many industries. So, can you offer some examples of what it actually means in the IT industry to go green?

Rob Enderle (01:41):

Sure. I mean, what it means is you're using some type of sustainable energy generation to power IT. And then the equipment they're using is fully recycled and recyclable, at least increasingly so. Part of the effort is to protect the environment and drive for a sustainable future.

Baratunde Thurston (01:58):

Pamela, if you have anything to add to that as far as examples, I'm curious. I'm also curious what the motivation is outside of environmental goodness.

Pamela Rucker (02:07):

Well, that's the problem we have with most CIOs, right? That they aren't motivated to necessarily do green IT. The challenge is when people try to do green IT, they usually do it for one of a few reasons;

either they were pressured into it, and that might be that they have a partner or supplier or a customer or even a regulation that says they have to change. Or it could be that that's a real ethos for them; that they really believe in saving the planet. The challenge is most CIOs aren't necessarily motivated to do that. They're motivated to fulfill the wish of their CEO, which is speed and agility. I have to move fast. I have to respond fast. I have to be flexible to the marketplace. And oftentimes they don't think, as you said in your introduction, that those two things might go hand in hand.

Baratunde Thurston (02:49):

And what do you think?

Pamela Rucker (02:50):

I think that they do. I think they go hand in hand. I think you have to think about the products and services that you are creating and how you might be able to use these sustainable technologies to your advantage. And oftentimes, people think of it as more of a political topic than they do a competitive topic.

Baratunde Thurston (03:06):

What do you think Rob, about the politics of green IT versus the business motivation of green IT? Where do you stand on that?

Rob Enderle (03:14):

Well, they're kind of flowing together from my perspective. Most of the large OEMs reporting an excess of a billion of revenue connected to their green efforts now. Companies are choosing OEMs to build their hardware that are demonstrably green, that are doing things to approach the circular economy. The customers, particularly millennials, are looking for companies that are actually making progress and making a difference. So, it's one of the reasons why we've got a big upswing in the use of ocean-borne plastics, for instance, is that's one way to keep those plastics at least for a cycle out of the oceans and then hopefully at some future point, keep them in current rotation all the time so they never make it into a landfill. They never make it into the ocean.

Baratunde Thurston (03:59):

So Pamela, when I hear that, that sounds like better business, you know? Not wasting things, recycling materials, this kind of closed loop. But we live in a culture of disposability. What are you observing in terms of how business leaders are seeing the possibility of a circular economy when it comes to tech?

Pamela Rucker (04:16):

I think it sounds great. Right? And I think a lot of us are enamored with the idea of doing that, but one of the things I find when I work with organizations is that they might have a bit of misalignment in their organizational identities. So, they like to say that they want to do these things. But if you work in the organization and pull back the cover or open the kimono, you recognize that the way that they work in actuality is not in a way that lets them do that. And it might be because it's difficult for them to find ways to do projects that will allow them to meet the goals that we're talking about. And it may also just be because people feel like I have to move fast. I have to get things done. A lot of times, the space that I live in is working with organizations to help them uncover some of the things that are limiting the way that they work, so that they can get to more sustainable practices.

Baratunde Thurston (04:59):

Rob, are you seeing debates like these play out? And if so, when are they being resolved in favor of doing more green IT?

Rob Enderle (05:07):

When you've been doing something the same way for decades and all your incentives, your motivations, your promotions, efforts are all tied to consumption. Making a pivot to a circular economy is pretty difficult, because everything you built up before is based around this idea of consuming products and then discarding them. That's got to be changed, and the only way you can do that is first belief from the top, and then driving that belief hard into your community of employees so they believe as well, and they're looking for ways, creative ways often, to create a sustainable difference.

Pamela Rucker (05:43):

Yeah. I want to add to that, because I think that it's easier for people to believe that larger organizations can do this because they have the profit and have the pressure and they have the presence in the industry that says, "I need to do something about it." But when you think about how this gets back down to Main Street and to the everyday person or even to mid-size organizations, one of the things they will say is, "I don't have the resources for that. I can't do it. I can't work on that," or "It's not a priority." And so I often find that one way to get them to get engaged in that is to put them in an ecosystem where they're working with a larger organization that says, "This is the way that we work. This is what our partners have to do." And that's the reason that I said one main reason I see them doing it is pressure, because if they can no longer operate the same way, then they may change.

Baratunde Thurston (06:26):

So, I want to get a little closer to tactics on the ground. There's a wide spectrum of things a company could do to be more green. What do you see as some of the easier possibilities, Rob, for going green versus things that might take a much longer time and be more challenging to pull off?

Rob Enderle (06:42):

Well, certainly the easy path to doing simple things that are green is first do an assessment of what it is you are doing with regard to disposal. You need a baseline. You need to know just how green you are to start, and then create a hierarchy of those things that are relatively easy to fix. Do you really need to consume that much paper? How about your electricity? How are you sourcing it? Could you switch to a greener supply? Then looking at your suppliers. Which of your suppliers are greener than the other, which ones are on board, and which ones are not? And then start making your purchase decisions at least partially on those green efforts, not always on the lowest bidder, but partially on those people that are both treating the raw materials properly and treating their employees properly. As we've known with regard to sustainability, we do kind of broaden that with regard to diversity as well, just to make sure that your suppliers are doing what you want them to do to create the kind of environment you'd like to have and see in the world.

Baratunde Thurston (07:43):

Are there ways to measure some of this stuff? I mean, I'm imagining someone has the decision to make. Price is easy to look at, you know? Terms of a service agreement are relatively easy to look at, depending on how long that is, but greenness level could be pretty fuzzy. What have you found in terms of how people are able to make such an assessment?

Pamela Rucker (08:02):

I mean, there are a number of ways to look at it outside of just your carbon footprint itself. You could look at your as-is state and look at what you're consuming right now, and then look at your 2B and see where you might actually want to go in the future. And I also think you could look at, to this point, what you're doing with paper. I cannot tell you the number of people that I work with who are trying to implement AI, machine learning, big data, and they still operate largely off of paper, or they've not gone through a workforce modernization at all. And so they're using old clunky machines to work on or old servers, and there are a lot of places that they could actually give their organization a green facelift and benefit from that.

Baratunde Thurston (08:40):

A green facelift. It sounds like a spa day. I like that.

Pamela Rucker (08:45):

But it works in your favor, right? In the same way that that facelift makes you look better, green is good for the company. Green is good for you because it can give you growth. Green is good for you because it can make you more competitive.

Baratunde Thurston (08:55):

Let's talk about why it's better for the business. What are the things you've seen in terms of business performance, customer retention, some other more tangible method that a CEO and a board would respond to or shareholder would respond to that says that green investment is paying off?

Pamela Rucker (09:10):

If you think about who we are selling to today, we are not selling to our parents any longer. We are selling to a much more aware culture who is going to ask, "How are you operating, and are you using sustainable practices?"

Baratunde Thurston (09:25):

Or are you destroying my whole [crosstalk 00:09:26]?

Pamela Rucker (09:25):

They're going to hold you accountable. And so there are people who either won't buy from you, but there are also people who will consider you just because you say you build and make things in a sustainable way.

Baratunde Thurston (09:36):

Leadership is something you've brought up a number of times, Rob. And so I want to look inside that org chart and think about the leadership in the CIO room, in the CTO room. Are you seeing CIOs and CTOs drive some of this move toward green IT?

Rob Enderle (09:52):

The driving effort often comes from customers that are demanding it. And most often, at least where I've seen the greatest success, from the very top, from the board and the CEO who are demanding the companies be more green. Even investors are starting to look for green companies and preferring them

over companies that are seen as polluting. When that differentiation is made, they're made aware of that differentiation. It does imply the company is more forward-looking, and investors invest in the future. And I guess right now I'm arguing that they're investing in their future as much as everybody else's at the moment.

But it's got to come from the top. In smaller companies, you can get a grassroots effort, but the grassroots efforts I've seen started in larger companies often don't survive executive oversight if they don't get that backing at the higher levels. Each one of the large computer OEMs has claimed in excess of a million dollars of extra revenue that's resulting from their green effort. Typically between one and two billion dollars is where it resides with projections that it's going to be far higher as we go forward, because as we get younger buyers coming into the IT space, they are demanding this. And the large companies that are doing this are now not only working on their own green efforts, but they're requiring their suppliers to be equally green, to be equally sustainable. And I should again point out, it's not just sustainability here. It's diversity and inclusion that are all being worked into this mass. They're trying to solve all three problems at once and proving that you can do more than one thing.

Baratunde Thurston (11:25):

Go ahead.

Pamela Rucker (11:25):

Well, I was going to say that's really important because when you think about the triple bottom line, it's people, profit, planet, right? And so I think we often think about the profit a lot and we...

Baratunde Thurston (11:33):

Of course.

Pamela Rucker (11:34):

... push green IT and think about the planet. But we have to think about how people can work in more sustainable ways.

Baratunde Thurston (11:38):

Well, Rob, what you said about that sort of use and discard-based economy, that's been true of raw materials. It's also been true with people.

Pamela Rucker (11:46):

Absolutely.

Baratunde Thurston (11:47):

Right? We've burned people out and we haven't retained them...

Pamela Rucker (11:47):

Absolutely

Baratunde Thurston (11:50):

... because we've used and abused them. So how do you have a more sustainable attitude toward your workforce and your employees, not just your suppliers and your raw materials? Well, I want to expand this conversation to people in an emotionally connected way. We're going to take a break from our conversational flow and play a weird game together.

Pamela Rucker (12:07):

Okay.

Baratunde Thurston (12:09):

Tech insiders often forget that most people have no idea what on earth they do. So we created a segment that challenges our guests to explain their jobs in plain English. Here's how it works. You're going to take turns explaining your jobs to each other as if you were on a first date. Now, depending on how well you do, maybe you'll get a second. It's time again for date night IT. All right, y'all. You heard the rules. It's pretty simple. I'm going to have you go first, Pamela. You explain your job to Rob as if you're on this awkward first date, and then Rob, you'll have a chance to kind of reflect on what you heard. I might have some comments and notes myself, and then we'll do it in reverse.

Pamela Rucker (12:50):

So, Rob, if I did not like you, I would describe myself as a real live Pinky and the Brain that's trying to use technology to take over the world every day and put you in an awful Black Mirror episode. That's how I would describe myself. If I did like you, I would talk to you about how I use technology to save the planet, to help it create better products and services. And I help explain difficult concepts to people who might want to use technology to make the world a better place to live in.

Baratunde Thurston (13:19):

Rob, how did you receive that pitch? What are some notes? What are your thoughts here?

Rob Enderle (13:24):

Well, now I'm trying to think of whether she likes me or not about the ... I got both, so clearly undecided at this particular point. Certainly the Black Mirror thing is kind of concerning. It motivates me to be a great date because I don't want the bad outcome.

Pamela Rucker (13:42):

Right?

Baratunde Thurston (13:42):

Yeah. Pamela, I like how you're using your management systems behavioral approach.

Pamela Rucker (13:46):

Right. I'm sending messages.

Baratunde Thurston (13:47):

Yeah, it's trying to incentivize a certain behavior that won't lead to Rob's destruction.

Pamela Rucker (13:52):

Yes. Yes.

Baratunde Thurston (13:52):

Good job. Rob, it's your turn. Why don't you tell Pamela what it is you do?

Rob Enderle (13:57):

I'm still kind of recovering from the whole Black Mirror thing, but yes.

Baratunde Thurston (14:00):

Take a minute if you need it.

Rob Enderle (14:03):

Yeah, I might take a couple. Mostly what I do is I take complex concepts and translate them into things that people could easily understand. That's what I do today. My background is really working between technology and users, and letting users know what it is they can do with the technology they're getting and making sure they understand the risks that they're taking. So, much of what I try to do is help people get to the solution that they want, not necessarily to the solution the person's selling them.

Baratunde Thurston (14:32):

What did you think of that, Pamela?

Pamela Rucker (14:33):

So, I see eye to eye with the idea of taking complex solutions and helping people understand them, because that's what I do. So I feel like I'd identify with that a little bit. So from one evil genius to another, there might be some connection there.

Baratunde Thurston (14:45):

I like that. Also, it came across as very compassionate, Rob, which is a great strategy for a first date where you're almost like, "I sacrifice myself to help other people. You don't need to call me a hero, but that might be a word that might occur to you when describing what I do in the world." So, way to humble brag on yourself, Rob, without sounding like you're bragging on yourself. Thank you both for playing date night IT.

Pamela Rucker (15:09):

You're welcome.

Rob Enderle (15:09):

Thank you.

Baratunde Thurston (15:11):

What are the battles that you're seeing play out with respect to a business getting more environmentally sustainable?

Pamela Rucker (15:18):

Well, the things that I have seen have been around people's perception of what that means, right? So what I try to do is try to help organizations frame it in a way that is good for their organization, and it has nothing to do with the politics of green IT. And while I don't believe it necessarily has to be political, that doesn't mean that you don't think that that carries a bunch of baggage with them.

Baratunde Thurston (15:39):

Right. Rob, what kind of battles are you seeing playing out? Similar to what Pamela brought up, or some other element of conflict?

Rob Enderle (15:46):

Well, the difficulty often is that there's a perception that sustainability means higher cost. And in a competitive environment, higher cost is death. And so you reach a certain amount of resistance towards doing something that's right for fear that by doing that right thing, you're going to be less competitive and maybe go out of business. That's no longer really true. The sustainable technologies have advanced to a degree where you can actually be sustainable and save costs. Most noticeable during this pandemic time has been a shortage of raw materials and supplies, particularly chips. Being able to move to a more sustainable supply chain is actually a much more reliable supply chain as well because you've got better metrics in the supply chain, and you can better anticipate shortages as opposed to being pummeled by them.

Baratunde Thurston (16:31):

My last question for both of you, Rob, I'll start with you. Why do you care? Why are you concerned? Why are you spending time on, why are you invested in making this part of the industry more green?

Rob Enderle (16:42):

Well, as I get older, I recognize that there's going to be a moment where I'm going to look back at my life and wonder if I did anything meaningful. So I believe in this because I want to leave the world a better place than I found it. I think that's the one thing I could say in my last moments that was successful.

Baratunde Thurston (16:58):

Same question to you, Pamela.

Pamela Rucker (16:59):

Yeah, I have to echo that, that as you ... When you first start out in your career, you think about what you can do to be successful, how you make the organization successful. And now you're thinking about how you make the world a better place. And having fallen in love with technology in fourth grade, I still feel like technology is an answer to the world's problems. If you use it effectively, it can change the world that we live in for good.

Baratunde Thurston (17:21):

If you use it effectively. Thank you both for making this garage a better place, bringing some great ideas to light. We have one more trick up our sleeve before we wrap. If we want to build a more sustainable future, we need well-informed citizens. We've got to be mindful of what technology does to the world all the way downstream. So, we're going to play a friendly game of green tech trivia. Now, the winner is

going to get a statue of Rachel Carson made out of polystyrene and maybe a lifetime supply of single-use penguins. I kid. That's a terrible thing to joke about, but are you ready to play a silly game with me?

Pamela Rucker (17:55):

Yes.

Baratunde Thurston (17:56):

All right.

Rob Enderle (17:57):

Sure.

Baratunde Thurston (17:57):

So, a couple rounds of trivia. I will ask a question. I'll read off the multiple choice. I'll get a response from both of you, and I will deem one of you worthy and one of you not. First question, how often does the average American buy a new computer? Every year, A. Every three years, B. Every five years, C. Or every 10 years, D. So one, three, five or 10 years, Rob.

Rob Enderle (18:26):

Well, it really kind of depends on who you're talking to, but I'll say five.

Baratunde Thurston (18:30):

Rob votes five.

Pamela Rucker (18:32):

My vote was for five.

Baratunde Thurston (18:33):

You're equally wrong. It's three. Well done. We're moving faster.

Rob Enderle (18:37):

It's funny. Three is what we tell people to do, but IT is typically rotated on a five-year cycle.

Baratunde Thurston (18:43):

Ah, but I guess we're talking to average Americans, not IT employees.

Rob Enderle (18:47):

You're talking consumer and, yeah, not IT.

Baratunde Thurston (18:50):

Not people responding to the priesthood. Next question. What percentage of the power consumed by data centers is for air conditioning? Your options are 5%, 10%, 20% or 40%. We just doubled.

Pamela Rucker (19:08):

I'll say 40%.

Baratunde Thurston (19:09):

You're going to say 40. Rob?

Rob Enderle (19:11):

I'm going to say 20.

Baratunde Thurston (19:13):

Pamela, you are correct. It is 40%. Yeah. And I like sleeping in a cold room, but that's ice cold. Next question.

Rob Enderle (19:21):

Great, I'm zero for two.

Baratunde Thurston (19:23):

You're O for two. That's great. You're one for two. How many tons of e-waste were created globally in 2020? Four tons, 16 tons, 39.6 tons, or 43 tons.

Rob Enderle (19:40):

I'm going to go 43.

Pamela Rucker (19:41):

I Would say 39.6 because it's just so specific.

Baratunde Thurston (19:44):

Yep. The specificity fooled you. It's 43. Rob, you got one on the board. Well done. That’s 16 pounds per person, and it's expected to double in 10 to 15 years, making it the fastest growing kind of domestic waste in the world. So I believe you're both one for three now, so we've evened things up. And I've got one more question. Compared to the national average, median wages in the renewable energy industry are A, 10% lower, B, the same, C, 35% higher, or D, 50% higher.

Rob Enderle (20:23):

35% is where I'd say. 35% higher.

Pamela Rucker (20:27):

I would say 35 too, but I'll change it to 50.

Baratunde Thurston (20:31):

Should have stuck with your gut on that one.

Pamela Rucker (20:33):

Aww.

Baratunde Thurston (20:33):

Now Rob's in the lead. It's 35%. They also tend to have better health plans and retirement benefits, making them more sustainable not just for the world, but for the individual in that job. You know, I got one more for you, Rob. I think you're going to really enjoy this question. Obviously, Pam, play as well, but bitcoin mining emits as much carbon each year as which country? The United States, New Zealand, Monaco, or Vatican City?

Rob Enderle (21:04):

Whoa. It emits a lot. I don't think it'd emit ... I'll say New Zealand.

Pamela Rucker (21:11):

I'll go with Rob.

Baratunde Thurston (21:12):

That's wonderful, because Rob was right, which makes you right. I like the strategy, tying your fate together, as all of ours are in this interconnected world. Thank you both for playing these games and bringing your A games to the table. Appreciate you.

Pamela Rucker (21:27):

Thank you for having me.

Rob Enderle (21:27):

My pleasure.

Baratunde Thurston (21:29):

That's our show. Thanks to our guests, Pamela Rucker, and Rob Enderle. And thanks to you, the faceless online masses, for joining us. I'm Baratunde Thurston, and I'll see you on the next Lenovo Late Night I.T.