Lenovo Late Night IT

Season 2

E3 Automation As Produced Final Transcript

Automation Final Transcript

Isaac Sacolick: a lot of this is not just deploying a technology, but educating people around what's the impact for them? I'm not just automating something that they're doing and taking 10 hours of their day away. I'm freeing them up to go and do more intelligent work, more thinking, work around that.

Baratunde Thurs...: Welcome to Lenovo Late Night IT, where I sit down with the top minds in tech for unfiltered conversations about trending topics. I'm your host, Baratunde Thurston.

Tonight we're talking to Max Cheprasov, a 20 plus year veteran of the digital economy, and one of the world's leading authorities on intelligent automation. In fact, he was the first chief automation officer in the entire industry. A CAO. Yeah he was a cow. He's also an in demand speaker and advisor to investors, founders, and top firms. Or at least he was until he automated all that too.

Baratunde Thurs...: Joining him is Isaac Sacolick. Isaac is the guy you go to when you want to know more about data driven practices.

He's the president and founder of Star CIO, a technology learning company that guide leaders on digital transformation. A lifelong technologist, he's been a CIO, a CTO, and a COO. Basically every C blank O that there is. He's also got a YouTube channel called Driving Digital Standup, which sadly isn't as funny as it sounds, but he's super fun. Welcome Isaac. Welcome Max.

Isaac Sacolick: Thank you.

Max Cheprasov: Thank you.

Baratunde Thurs...: Y'all ready to have fun?

Isaac Sacolick: Absolutely.

Max Cheprasov: Oh yeah.

Baratunde Thurs...: Okay. Look, automation isn't very new, but the way we deploy it is. We've seen low-code and no-code tools. Are we entering an era of automation for the masses? What do you think Max?

Max Cheprasov: I think so. Yeah. I think low-code no-code is here to be democratized. I think anybody today using these technologies can learn them pretty quickly. Can identify use cases within their scope of work and build solutions really quickly. I mean, it's when we built up the Citizen Automation Program at Dentsu,

Baratunde Thurs...: Citizen Automation Program...

Max Cheprasov: CAP, we call it CAP, Citizen Automation Program

Baratunde Thurs...: That sounds so ominous.

Max Cheprasov: Yeah. CAP without the maximum capacity because you can achieve so much with low-code no-code. And people without any background in software engineering, programming skills can learn how to use these technologies pretty quickly. We did workshops, two day workshops, and business users, again, without IT background, can go in, learn the technology in two days and walk out with a ready to go software robot that does something for them immediately. And the benefit is the payback period is also immediate. So it's so quick that essentially if you do nothing else for the rest of the year, if you just do that one robot in those two days, you pay for it pays for itself.

Baratunde Thurs...: So everybody gets their own robot.

Max Cheprasov: That's the mission. I think every company should focus on building a virtual assistant, building robots for every single employee, because that's possible today. So I think the citizen development is obviously one way to scale automation across the company. The other way obviously is still the top down. There still needs to be an engineering team that focuses on very complex use cases. Low-code no-code is good for basic things, very rules-based things. But you really need still the cross-functional processes that span multiple technologies and systems, and multiple people, and third parties. That requires a lot more sophisticated type of resources and skills to really engineer solution for that.

Baratunde Thurs...: You're smirking. What's going on over there?

Isaac Sacolick: Well, I mean I think it's more than just bots. I think we build applications, we move data around, we build dashboards so that teams can make decisions in real time. I've never met a CIO or an IT department that says, "Yeah, we have all the staff and skills for us to do all the automation, all the applications that we have to build, all the analytics that we have to build." And they don't always understand what their departments and customers need. So now you take low-code technologies, you put a governance model around it, tell people how to use it. And say the marketing department can build an app or build an integration. The finance department can take something out of a spreadsheet and automate it and create some analytics around it.

So now instead of just having a hundred or a thousand people in IT, and that's the only group that can actually do technology, and you're saying all these kids are coming out of school, they're hands on, they know how to use technology. We're going to bring technology to them, we're going to build practices to them and we're going to start doing a lot more technical capability across the organization. So that, that's the big story there.

Baratunde Thurs...: the idea that you move some of the technological capacity strictly out of the tech department and move it to the front lines, that makes sense to me. But can you give me real examples of what it means to deploy more automation closer to the edge of an organization?

Isaac Sacolick: Yeah. So if you just take a marketing department, the average enterprise marketing department has over a hundred SaaS tools that they're using.

Baratunde Thurs...: That's too many SaaS tools.

Isaac Sacolick: That's a lot. But you think about the CRM, the financial systems, email marketing, social media, marketing tools for SEO. These are all things that are bring data in. These are all things that they're actioning and doing experiments out. And most IT departments aren't staffed to be able to service that marketing department and bring all that data in, crunch it and be able to do it in real time, coming back to the marketer and saying, here's how we should change our messages. Here's how we should use AI to change the imagery around so that we can actually get a more personalized experience when we're actually trying to bring leads in and bring customers in.

And you can go to the finance department, there's the finance system and then there's a lot of spreadsheets. How do you calculate whether a particular program is profitable? And lots of financial analysts doing that on a regular basis. Usually, again, with spreadsheets, you give them tools and says, let's talk about being able to look at this not just once a quarter, but once a week, even once a day. And in this environment where things are changing so much, we need to bring that speed and capability to all the departments. So those are just two examples. Not only that I've seen, but I've actually helped companies implement.

Max Cheprasov: you said something important about the fact that IT teams are sometimes understaffed and have got so much in their pipelines...

Isaac Sacolick: They're always understaffed.

Max Cheprasov: ... and things they need to do. So when we talk about the basic examples of where low-code no-code comes in, where you really want to, because when we looked at all the use cases out there about what could be automated, there are some big ones, 10 or 20 processes in every company that really require a lot of transformation, a lot of application built, a lot of IT support. But there's a long tail of micro tasks, micro activities, a very long tail, and an aggregate that if you automate those micro tasks, it can sometimes exceed what you can, in terms of your value that you provide to the business, it can exceed the top use cases. So some of the micro examples where low-code no-code becomes useful is, for example, something that any business function does. Meeting agenda prep. You know, have to reach out to a bunch of people, ask them, "What do you want to talk about in the next meeting?" That stuff can be easily automated. You can create a bot, somebody on your team can create a bot that does that email automatically gets the input, standardize it, creates an agenda, distribute it, and schedules the meeting. So that's an easy example.

Isaac Sacolick: Or maybe you don't even need a meeting, right?

Baratunde Thurs...: That's the kind of automation I can get behind. Anything that kills meetings I'm a fan of.

Isaac Sacolick: There you go.

Baratunde Thurs...: Anything else jump to mind in terms of other examples of what this automation at the edge means? The frontline automation?

Max Cheprasov: Yeah. I mean, my first bot was...

Baratunde Thurs...: Oh, first of all, can we just...

Max Cheprasov: My first Bot.

Baratunde Thurs...: I want beautiful sentimental music. My first bot, by Max Cheprasov.

Max Cheprasov: Alfie. Alfie.

No, it's something I had to purchase, long time ago. Nothing that I built. But, it's bot that we purchased. But again, it was more about, at that time it was more about experimenting with what these technologies can really do for the business users. And the first bot for me was the one that scheduled, helped me coordinate scheduled meetings. Not, we talked about the agenda, but this is a bot that basically, somebody emails me or reaches out to me and says, I want a meeting with you. This bot will check my availability and essentially will start to coordinate directly with those people who want to meet with me to put a meeting together whether it's a virtual meeting or somewhere we go offsite. And most people will not realize that they're actually talking over email to a bot because it feels so human to them. And that was five years ago, and that was the first bot I had. It's also the first bot I had to fire.

Baratunde Thurs...: You fired first, whoa. So how do you give a pink slip to a bot? Does the bot see it coming?

Max Cheprasov: No, it.

Baratunde Thurs...: Does the bot fight back? I wish it was kind of like that, but it's more like you just turn off the subscription to a bot.

Wow. That's like bot murder.

Baratunde Thurs...: Do you end up creating a situation where you've got your scheduling bot, I've got my scheduling bot, and then they just work it out together the way I, or the human assistants might have done?

Max Cheprasov: I think initially that was a conflict. However, one of the things I want to see in the future is a way for bots to actually understand, for the software bots to understand each other skills and capabilities and what they're supposed to be doing. So if they have that context, if they understand how to interact with each other, then you can talk about a digital workforce, collaborative workforce of digital robots helping each other, understanding what they do and passing tasks to each other.

Baratunde Thurs...: It sounds like an HR department for bots.

Max Cheprasov: HR department really needs to be involved in all the automation.

Baratunde Thurs...: Bot resources, the BR department.

Isaac Sacolick: if you're firing bots, it means you got to listen to them too, right? So is this bot actually performing well? Is it actually solving problems for end users and customers? And you know, can go onto a SaaS site, a software site, and saying, get on their bot and start talking to them saying, I'm having trouble logging into the system. And it starts telling you, well, reboot your computer, clear all your cash, get all the cookies out of your system. But that may not be the problem. It doesn't have enough context to actually solve it without really realizing what is this person actually trying to do. So I like starting bots with simple things. The things that people are doing over and over again telling me I need help resetting my password. 30% of tickets coming into an IT department are about resetting passwords, or I need access to something that I don't have.

Baratunde Thurs...: All right. So here's what we're going to do now. There's a lot of gobbledygook in tech speak, and we want your help in translating it. So we've designed a game that tests your ability to understand and communicate what those terms are. We'll give you a pile of cards. On those cards will be tech words. And as you hold that up, your partner will have to communicate what that word is without saying the word. So you thought a bunch of clues, you mime some things. And as many as you can get through in a round as possible, that's the goal. You can pass if it's taking too much time, and then we'll switch off and the other person will have a go.

Baratunde Thurs...: Max, I'm going to have you hold up the cards first. I'll count you in. Three, two, one. Go.

Max: So it's figuring out things on its own in every possible situation. And using contextual information to really figure everything out. Now pass-

Baratunde Thurs…: All right. Next.

Max: Okay. It's a group of people who become experts at-

Isaac: Citizen developers-

Max: ... Experts at solving things and-

Isaac: ... Solution architects.

Max: And it's a-

Max: . They're great at what they're doing. People. They're in the middle-

Max: A group of people in the middle and they form a-

Isaac: Automation COE-

Max: No pass.

Isaac: Okay. Oh my God.

Max: Okay. It's what I do with my eye, except a machine is doing it.

Isaac: AI.

Max: It's actually seeing-

Isaac: Computer vision.

Max: Yes.

Baratunde Thurs…: Nice. All right.

Max: Okay. So we're looking at a document. It's in image format, and we're trying to pull out-

Isaac: OCR

Max: Yes.

Baratunde Thurs…: Nice. One more.

Max: We are scanning text and trying to understand the meaning of it.

Isaac: National language understanding. National language processing.

Max: Yes.

Baratunde Thurs…: All right. Time. Can we go back and see what some of those earlier ones were?

Max: You could be upset at one of them.

Baratunde Thurs…: Generally.

Baratunde Thurs…: So now we get the game. We're going to play it again and again, Are you ready?

Max: I am ready.

Baratunde Thurs…: Three, two, one, go.

Isaac: Okay. It's doing something for you instead of you.

Max: It's a robot.

Baratunde Thurs…: Yeah, that's good. It's bot.

Isaac: This is a way to a way to validate that it's ...

Max: Testing.

Isaac: It's a bot, but it's a human.

Baratunde Thurs…: Oh, that's a good one-

Max: Oh my god [inaudible 01:12:38]-

Baratunde Thurs…: We're going to come back to that one.

Isaac: Sci-fi movie, SkyNet.

Max: Oh, geez. I'm just-

Baratunde Thurs…: Isaac.

Isaac: It's from the future-

Max: Movie. Space Odyssey, 2001-

Isaac: [inaudible 01:13:21] back. I'll be back.

Max: Terminator.

Baratunde Thurs…: I was really worried about you.

Isaac: It's what happens on a desktop. Softwares front and-

Max: Windows.

Isaac: The front end design. The front end.

Max: UX, user experience.

Isaac: But it's about design of a [inaudible 01:13:44]-

Max: Design thinking.

Baratunde Thurs…: You can also pass. I'm going to call it, you should pass. That's hard.

Isaac: It is information that is not labeled.

Max: Unstructured data.

Baratunde Thurs…: Good. That was impressive.

Isaac: something that is a code that explains a human behavior.

Max: Oh. Behavior analytics?

Isaac: No, it's a piece of code in machine learning that basically defines how to automate something. Decision making.

Max: RPA.

Isaac: It's closer to machine learning.

Max: Oh, geez.

Baratunde Thurs…: Time

Baratunde Thurs…: Thank you so much for playing our weird little game. I hope you learned a lot about each other.

Max: Oh boy. Yeah.

Isaac Never play this game again.

Baratunde Thurs...: With your work in digital transformation, you're also necessarily talking about human transformation. Because now we have virtual coworkers, we've got a new semantic relationship with how you put in a request to a bot versus what a human would just naturally understand. I'm going to call you up, you're going to ask me some follow up questions. Maybe the bot isn't trained to do that. So how hard is the human part of this adaptation for you? As you push automation further out? It doesn't just change software, it changes people.

Isaac Sacolick: Digital transformation is all about human transformation. We've been implementing technology for two decades, if not longer. We've been building apps, we've been doing automations, we've been doing analytics. The technology capabilities are a lot greater than that. But the speed by which competitors are able to adopt technologies and get a real competitive advantage is significant. So if you go to any department, we've been talking about HR, marketing, operations, finance, every three, four years, they're going to be transforming how they're working.

Baratunde Thurs...: That's really fast.

Isaac Sacolick: It's really, really fast. So you take your average person saying, here's your tools, here's your workflow, here's your priorities, here's our objectives. And in two or three years, a pandemic hits and we're doing things differently. Two years after that, we're out of the pandemic. But financial situations are different and supply chains are different. We need a different set of rules to operate, and the technical capabilities are evolving. So a lot of this is not just deploying a technology, but educating people around what's the impact for them? I'm not just automating something that they're doing and taking 10 hours of their day away. I'm freeing them up to go and do more intelligent work, more thinking, work around that. So I like bringing AI and automation together. So help people make better and faster

decisions and then automate the things that they don't need to do anymore. The swivel chairing between two different systems, because I've connected them.

Baratunde Thurs...: Where does automation go awry?

Isaac Sacolick: Well, you asked a great question. How are we tracking the decisions that the bots are making, the decisions that people are making around this? Ultimately the outcomes that are coming from this software that we're putting out there. It could be a bot, it could be an app, it could be a data visualization. Are we getting better at what we're doing? Are customers having a better experience? Are employees having a better experience? Are we doing something more efficiently or faster or smarter? Are we doing something more innovative? So we're trying to take all this technology, what decisions we're automating, what decisions people are making, and looking at that end to end process and saying, how do we capture the data about the data? How do we know...

Baratunde Thurs...: That's meta.

Isaac Sacolick: That's the meta. How do we capture the data about the data and saying, when we're doing this, we're doing something better than we're doing before. And if we're not, maybe you are firing it. If you're not, how do we improve it? Which is usually what ends up happening. You know, talk about catalogs, as a IT person, I want to make sure that I don't have a hundred bots all doing the same thing. So I make this available and say, you can, as a consumer, buy, reuse, repurpose, and improve. And it's not just, again, bots, it's apps, it's data visualizations. We have a long history of building a lot of technology and then having what we call in the IT technical debt. Just the ability to maintain everything that was built and continue to improve it, make sure it's secure and things like that. We need to make sure it's all bringing outcomes that we expect. And so we're looking at this and saying, how do we measure the outcomes? How do we measure the decision making that's going on inside it?

Baratunde Thurs...: Yeah. Well, I love what we've learned so far. I want to find out what the average person on the street knows about automation. So we're going to toss to our producer, Alex Stone, who took a bit of a tech walk to see what others thought about automation. Let's take a look.

Alex Stone: If a computer could do anything for you, what would it be? File your taxes? Find your next romantic partner? Be your next romantic partner? How much of your life should you be willing to automate? We asked people on the street what they thought.

One of the things we're talking about today is about automation and computers doing more and more jobs that were once human jobs.

Speaker 2: Yeah.

Alex Stone: What do you think about that?

Speaker 2: Technology can be convenient and make jobs easier. That's important. But I also want the workers who might be losing out on the jobs because of technology to be involved more.

Speaker 4: I mean, if computers are taking jobs away from people who could actually do them, I'm not really for that. But if a computer can help someone doing a job do that job better, then I'm for that.

Alex Stone: Do you think computers are going to take over everything some day?

Speaker 5: I don't think that is going to be practical, no. Because it need human thoughts. It need human ideas.

Alex Stone: I read an article online, which means it has to be true, that 40% of Americans would consider having a romantic relationship with a robot. What about you, be honest, would you ever date a robot?

Speaker 4: No.

Speaker 6: I've been married for 50 years. Where am I going to go date a robot?

Alex Stone: Would you let a computer decide who you date?

Speaker 4: In this climate, in this dating climate, anyone who could help you do any of that, let them try.

Speaker 7: If somebody is constantly pulling up questionable things on the internet that may not fit into my lifestyle or align with my values, I wouldn't know that until I got deep into a relationship with them. But technology would know from their search history.

Alex Stone: If you could automate one task in your life, what would it be?

Speaker 8: Cleaning. House cleaning.

Speaker 9: Fold clothes.

Speaker 7: Make dinner for my family, clean up my house, do my laundry. I would love the lady from The Jetsons to ...

Speaker 10: Anything-

Baratunde Thurs..: Anything jump out from that kind of street talk to either of you? Max?

Max: Yeah, the example about the vacuum cleaners. Of course it was something that I was highlighting initially when I was promoting the idea of automation at Dancer. The conversation began with the fact that there is a little bit of research out there actually. About five years ago it was done, that humans are inherently lazy. Our brains are actually wired to conserve energy and not focus on the menial routine, mundane work. We don't like to do that. So we are really lazy and we want to focus more on a creative and strategic and innovative, interesting kind of work. So of course we look for ways to remove that waste or low value menial work out of our routines, our daily routines, whether it's through the vacuum machine or through re-engineering our processes, or building software robots that can help us do that and elevate us. It's really about elevating the human potential and unleashing that human greatness-

Baratunde Thurs..: Unleashing human greatness. Sounds like you're running for office, for the world.

Max: Robot office. Yeah.

Baratunde Thurs..: So let's talk about the non great outcomes. There's many places where this can go wrong. Where have you seen certain processes automated that shouldn't have been, or were automated poorly? Any examples come to mind of, maybe we just shouldn't have automated that, or it was too early, or there was some kind of error that made it not a positive outcome?

Isaac: Trying to automate a hundred percent of something. Use the word automation, and some people think, I don't have to have any human in the loop doing anything around this. If you think about just bots and technology being used to look for spammy

content, we still get a ton of spam. Why can't we actually have a bot look for spam across all of our channels? And the answer is, it's really hard. So even when you take something simple, scheduling a meeting or moving data from point A to the point B, there are places where there's going to be exceptions. There's going to be places that it's going to be hard to understand the full context of the decision that's being made. And you're going to want to look for those signals, and in some cases make the decision, I'm 95% confident that I can go create a meeting on Isaac's calendar at this time. Or maybe I'm only 60%. There's some indicators here. I can't make a clear decision, and I'm going to put that in front of an assistant to make a final decision around this.

Baratunde Thurs..: One thing I've observed just as a human who interacts with machines increasingly because of the way the world works, is I adapt my behavior to suit the machine. I post a certain type of content on social media, because it's a reward.

Isaac: Used a voice assistant then before, right?

Baratunde Thurs..: Yeah. So we speak differently when we're talking to machines. We write differently when we're composing for machine interface. So we get automated too. how do labor forces respond to having to change how they interact, not just with each other, but with the machines?

Isaac: I want to make it easy for people. And sometimes that's not that easy. If you'll remember the, go to the ticket counter at the airline and they're keying in your ticket and they're sitting there banging away at the keyboard for, just to say, Hey, it's Isaac going onto an airplane. Should be pretty easy to key that in, and they're putting a lot of information in. So a lot of it is looking at the overall experience and marrying in, how do we make it easy for users, but how do we make it interpretable for the machine to understand context? If we start asking people to put in full sentences, we know that's hard to parse and understand the full meaning of what people are putting in there. So we start compacting things. We look at two or three keyword combinations that look for things. So I think it's that balance of, how do we make it easy for people to put information in, but then also going to the engineers and saying, what's the input here that we're looking for that we can get high reliability of an outcome or decision from that?

Max: If you build something that's purpose built with the user in mind and it's easy to use, people will understand and will adopt that

easier. So we engineered solutions with that concept in mind, with that analogy in mind, is that we need to involve the end users. We need to build something to them. When it's deployed, it feels natural.

Speaker 12: So how does an IT leader keep up with the constantly evolving landscape of automation tools?

Max: Five years ago, McKinsey Institute came out with a statistic that about 45% of business processes can be automated using technology that was available five years ago. On the way here, I found out a new report that said 85% now. So technologies continue to evolve, and a number of use cases and processes they can automate continues to increase. I mean I've seen that increase jump every year by about five to 10%. So it's important for automation COEs, and the IT managers to really know the landscape of available technologies. And more important, not just knowing about the leaders, what they can do, but really learning about the new emerging startups. What are they planning to solve for? What is their emerging technology? How can you fit that into your business process?

Because that's where you can gain the competitive advantage, because you can spot early a technology that nobody else is using and knows about. And then you can influence its' product features and roadmap to fit your unique business model, and then you gain competitive advantage. So automation COEs and the IT teams really need to have a lab of individuals who focus on researching continuously and finding those new startups and experimenting and seeing how they fit in.

Speaker 12: You know what that sounds like? A chief automation officer.

Speaker 14: All right.

Baratunde Thurs...: Isaac, it's been a pleasure. Max, thank you so much. You've been hiding something from us that I want you to share. Can we see your socks?

Max: Yeah. I'm a human part machine. I've got robots that are part of me.

Baratunde Thurs...: I knew you were a Cylon. I knew it. I knew it. It's really been a pleasure talking to both of you. Thanks.

Baratunde Thurs...: Thanks to our guests, Max [inaudible 02:07:19] and Isaac Sacolick. I'm Baratunde Thurston, and the bot that's going to replace me will see you next time, if he hasn't already done it.