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 Tien Tzuo sit at a large wooden bench in the middle of the garage. His other guest Matt Kimball 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., where we eat alphabet soup for breakfast. I'm your host Baratunde Thurston, and the subject of our episode is the subscription economy. I'm joined by the man who coined the term subscription economy, Tien Tzuo. Tien was an early hire at Salesforce, where he built the company's original billing system. He's since gone on to found Zuora, one of the fastest growing SaaS companies in the country. He's the author of Subscribed: Why the Subscription Model Will Be Your Company's Future and What to do About It.

Also with us is Matt Kimbell. Matt has 25 plus years' experience working in areas ranging from hardware to software engineering, enterprise IT, and product management. He spent 11 years in AMD's server business unit and was also an IT director for two different states, Florida, and Oregon. Couldn't be more different, but he unites them. He's currently a senior data center analyst at the global consulting firm, Moor Insights & Strategy. He's also the proud owner of a dog named Williford Theodore Franklin. Adorable, the dog's initials spell WTF. Tien, Matt, thank you so much for being here. Good to have you.

Tien Tzou (<u>01:23</u>): Thanks for having us.

Baratunde Thurston (01:23):

Tien, I want to start with you. Do you think we're moving toward a subscription economy?

Tien Tzou (<u>01:27</u>):

Oh, we are absolutely moving towards a subscription economy, and you probably know this when you look at your credit card bill.

Baratunde Thurston (<u>01:33</u>): I do.

Tien Tzou (<u>01:33</u>):

When we need something, instead of reaching for a product, we're reaching to our favorite service.

Baratunde Thurston (01:38):

So moving towards services, Matt, I want to get your take on this, and you have a perspective of someone who's worked in these massive organizations, AMD, the State of Florida, do you also sense that we're moving toward a subscription economy?

Matt Kimbell (01:51):

Yeah, I would agree with Tien. I look at the world through the lens of the data center and there is a consumption model that is being driven across both hardware and software that is largely subscription based.

Baratunde Thurston (<u>02:03</u>):

I suspect Tien, that is... I know you're a strong proponent of this. You wrote a whole book about it and helping people do it, but what are the risks you see associated with becoming a more subscription-based economy?

Tien Tzou (<u>02:14</u>):

The subscription model is not about, "Am I better off if I own something." It's really about trust. The vendors ultimately are going to want to earn your trust. So I would say that this is probably the more natural business model. People and people, there's a trust and there's a relationship with services, and the product model really introduced itself at the start of the 20th century with mass production, and we're really returning back to what makes us human, which is to know each other and to provide services to each other. So product model [crosstalk 00:02:47].

Baratunde Thurston (02:47):

Oh, you're good, you're good. Okay. So when we enter the subscription model, prices change, features change, the dynamic of that relationship can change. So, Matt, how do you manage that change, because it is such a different way of approaching operating a business when you actually no longer fully own the capability that you need to be able to run your business?

Matt Kimbell (03:12):

Yeah. I think there are a couple of ways of looking at this and I would agree with Tien wholeheartedly in the notion of subscription based. I think IT organizations understand the value that the cloud brings from an agility perspective, but they're turned off by some of the large costs they see. So what is that perfect marriage of cloud economics and still having some control, and I think this is where subscription-based computing within the data center makes perfect sense. I don't have enough data scientists on staff and enough IT folks on staff to stand up a large analytics environment or AI environment. So what if I went to an OEM, a server vendor, and bought their subscription-based service?

There are a couple things that are great there. I service the needs of my customers, my internal customers, immediately or near immediately. The server vendor or solution vendor manages that environment for me, so I'm not bogged down from an operational perspective. And I'm paying for it as I use it. So my costs should go down dramatically over time. So the question is, do I give up control at that point? And that's really your question. I don't look at this as an IT organization giving up control over their environment or giving up control over their data. I look at them leveraging a great team of experts that are standing behind them, helping them have more control over their environments, quite frankly, and do the things that they're being tasked to do.

Baratunde Thurston (04:48):

But you have to have trust, like you said earlier. You have to have almost a level of faith, I think. One, that that provider, that vendor, that SaaS partner is going to exist three years from now, now that you've become dependent on it, that they're going to maintain a sort of product development path,

that's still in line with your business growth or your household growth, and they're not going to pivot someday, "Oh, we don't do that anymore."

Tien Tzou (<u>05:12</u>):

That's right.

Baratunde Thurston (05:12):

How do you see the culture shifting within organizations, whether it's the CEOs, the marketing people, the various technology leadership around the subscription model? What does it do to the organizational culture?

Tien Tzou (<u>05:24</u>):

Well, to Matt's point, it obviously gives you incredible agility, but I think there's a bigger picture for organizations, which is, if you think about, as an organization, you're starting to subscribe to all these services. Well, your organization also has a mission, your organization has customers. So your organization's customers are actually going through the same thing, because this is all happening in our personal lives. So what's going on in your organization right now is they're probably transforming to a subscription business. They're probably saying, "We have to turn our customers into subscribers. We have to transform as well." So there's a broader thing. When we talk about shifting to subscription economy, this isn't just something that instead of buying software, I'll simply subscribe to some SaaS app or applications or I'll use the cloud. This is a whole economic shift in the world around us, and it's affecting the companies, and it's actually creating new demands on IT in today's world.

Matt Kimbell (06:18):

I wholeheartedly agree. A couple of points on there. There's a term that's used out in the industry called digital transformation, and that is the digitizing of businesses in response to the market, which is huge, and every company is going through it. But we talk about that in such an abstract way sometimes, we forget about the downstream effects within the organization. And to what Tien said, as businesses transform, those IT groups that support them have to transform as well. And I kind of take issue with that a little bit in that it's not that IT organizations have to transform. They have to do more.

Their day-to-day jobs have not gone away. That break-fix capability or support that they provide to the organization, that has not gone away. Maintaining the operating environment has not gone away. But now they're being asked to do more in addition to that. And as I was talking about earlier, that's where subscription based or consumption-based computing from the server all the way up to the software really can be used as a tool by IT to offload a lot of those mundane tasks and allow them to reorient themselves to what this new brave world looks like. So I think that's a pretty big part of it.

Baratunde Thurston (07:37):

A lot of this makes sense to me and most people for digital goods, digital services. It's all ephemeral anyway. But what about physical goods? Am I going to be subscribing to mugs and index cards and pins and not own tables?

Tien Tzou (<u>07:55</u>):

You absolutely will. I know it's weird. I know it's a strange concept, but there's definitely a misperception out there that subscription services are really for digital. But the fact is that every single physical product

is connected to the internet. We're talking to companies that are building smart tables. Tables that actually sense...

Baratunde Thurston (<u>08:12</u>):

Why does a table need to be smart? It's a table.

Tien Tzou (<u>08:17</u>):

You haven't seen what engineers can design with these tables. So imagine you're running a facility, maybe you're running IT and facilities, and you want to know. You want to know how often your employees are coming to the office, using their desks, moving around, and what if your table and what if your desks, what if your chairs can actually tell you all that information?

Baratunde Thurston (<u>08:34</u>):

Dude, you got to stop right now, because you're describing the greatest snitch network I've ever heard of. My desk is going to rat on me?

Tien Tzou (<u>08:42</u>):

Well, we'll work through the privacy [crosstalk 00:08:44]-

Baratunde Thurston (<u>08:43</u>):

I was at the office. The table says no.

Tien Tzou (<u>08:45</u>):

But imagine that you can actually walk down to a table that says, I want to check into this table right now. I could put my fingerprint down, a computer monitor comes up, has all my applications on it, and it gives you the flexibility to move around in offices. So what's happening now is because physical products have the ability to be connected to the internet, you buy a washing machine today, it's connected to the internet.

Baratunde Thurston (09:06):

How does the business decide? It's not just about the customer ratings on the performance of the product, but it's about the reliability, the security, the communication style of this provider, because we are putting all of our businesses into these distributed financial relationships, all of our personal lives into those. That feels so different from the idea of I own the bed... I don't own the bed anymore. I'm renting everything. So I've got to trust the landlord a lot. How do you find a way to that level of trusting?

Tien Tzou (<u>09:39</u>):

I'll give you... You talk about appliances. It's not really about the appliance. It's about the outcome that you're looking for.

Baratunde Thurston (09:46):

Clean clothes.

Tien Tzou (<u>09:46</u>):

Clean clothes, clean clothes. So now imagine you are an engineer building a washing machine and it's a smart washing machine, and that washing machine is now collecting all the information. You're saying these customers are actually putting too much detergent, these customers aren't putting enough detergent. These customers are using a product completely wrong. And what your natural inclination is going to do is going to want to take over more and more of that and actually deliver the outcome that the customer's looking for, which ultimately is clean clothes. So you're going to see the products that start to evolve towards these types of capabilities. And the business model allows this to happen will be something like that. It will be some monthly service where you get clean clothes, and it's not just going to be the washing machine, but it's going to be all the stuff that goes on around the washing machine.

Matt Kimbell (10:30):

You know, the fact is some folks may not want their outcome to be completely clean clothes. They might want something slightly different, and I do believe that it's not always the case where the customer is using the product wrong. They're just not using it as you envisioned it to be used. And the smart companies figure that out into what you said. It becomes more of a dialogue and there's a learning process. And this is an age-old issue that product managers and software developers face all the time. I build a product for these specific functions, and Io and behold there are these edge cases that really aren't edge cases. They're quite popular and you learn, and you incorporate that back into your service. But there is a balance you have to strike between driving two outcomes and understanding what those outcomes are, and giving too much flexibility, because before you know it, you're right back to square one where you're just making software and throwing it out there and its benefit is never fully realized.

Tien Tzou (<u>11:31</u>):

You used the word conversation, it's a dialogue. And that's really what this digital transformation is about. You can have an ongoing dialogue with each and every one of your customers. Now imagine that now coming back to IT, because what makes all this possible is technology. So what you're seeing is a shift in IT, there's a merging of say the CIO and the CTO function, where IT is not just about running a bunch of applications or running the infrastructure. IT has to be about how do I enable that ongoing dialogue between my company all the way down to the engineers and my customers.

Baratunde Thurston (12:05):

So we're going to take a little break. I want you all to get to know each other a bit better and also explain what you do. People in the tech industry sometimes forget that the average person has no idea what the hell they do, but I think even an IT expert should be able to describe their work in simple, layperson's terms. That's why we created this next segment. You're going to explain your jobs to each other as if you were on a first date. You'll each have 20 seconds to make a good impression and hopefully let lockdown date number two. Get ready to spit some A-game because it's time for date night IT. So you both heard the basic outlines of the game. Matt, I'm going to have you go first. You are at date number one, put your best foot forward, give Tien what you got.

Matt Kimbell (12:54):

You got it. So as an industry analyst, a tech analyst, I look at... I try and marry the knowledge gap that exists between solutions providers and IT consumers.

Baratunde Thurston (13:07):

Okay, Matt, I'm going to give you some pointers here. You opened with 'industry analyst,' which if I'm on a first date, that's not really going to loosen me up a bit, so you might want to have a softer opening. You want to give it another shot?

Matt Kimbell (<u>13:23</u>):

I don't know that I want to go on a date with you [crosstalk 00:13:25].

Baratunde Thurston (<u>13:25</u>): Tien, what were you about to say?

Tien Tzou (<u>13:27</u>): I was looking at the dessert menu. Sorry man.

Matt Kimbell (<u>13:32</u>): All right, let me try it again.

Baratunde Thurston (<u>13:33</u>): Do it again.

Matt Kimbell (13:34):

What I try and do is I try and bridge the gap between technology companies and IT organizations to help IT organizations make more informed decisions around what they're going to deploy and use inside their data centers. Better?

Baratunde Thurston (<u>13:51</u>): Tien, was that better?

Tien Tzou (13:55):

Maybe I'm going to skip the appetizer, but I'll stick around for dessert.

Baratunde Thurston (13:58):

Sticking around for dessert. All right, well that's good. Now you go from the judger or to the judged. Tien, shoot your shot.

Tien Tzou (<u>14:08</u>):

So Matt, you know those services that you love, you use all these subscription services? I run a company that really creates some incredible software to make those things possible.

Matt Kimbell (<u>14:24</u>): All right, so you're too nerdy for me.

Tien Tzou (<u>14:26</u>): I'm so nerdy.

Baratunde Thurston (14:29):

Wow, I was like... The way you said software, that got to me Tien.

Matt Kimbell (<u>14:34</u>):

Tien, you did a great job. I'm looking for a little bit more on my second date.

Tien Tzou (<u>14:39</u>): All right. Swipe left.

Baratunde Thurston (14:41):

I appreciate the honesty and the openness to play the game. I'll take you both out separately. Tien, you are on the record as being extraordinarily pro subscription. What do you want to own?

Tien Tzou (<u>15:00</u>):

I think we're actually witnessing the end of ownership. I tell you, a couple years ago I saw this trend, this Marie Kondo trend, where hey, just go into your closet and just throw everything away, throw everything away. And at first, I was like, 'Well, that's just got to be a strange fad.' And then you look at your own house, your own apartment, your own closet, and you realize why do I have all this stuff? It just weighs you down. So I just started throwing things away. Just like everybody else.

Baratunde Thurston (<u>15:28</u>): Do you own that jacket, Tien?

Tien Tzou (<u>15:29</u>): If I could rent it, I would.

Baratunde Thurston (15:31):

I'll take that as a yes. You own that jacket. My wife loves books. I'm a digital books person myself, but she wants the physical book. Where do you stand on books, Tien. You're an author.

Tien Tzou (<u>15:42</u>):

I do like physical books. [crosstalk 00:15:45], but I'll tell you, number one question I get is, "Well, can I subscribe to your book, ha ha." So we now have a weekly newsletter. We just continue to dialogue the book and we're actually collecting a bunch of things that might actually become a second book.

Baratunde Thurston (15:59):

Okay, so you're getting high on your own supply. You're committed to the movement, and I respect the commitment. Matt, when you think about the death of ownership, are there parts of the business world where you think ownership is still is something worth preserving?

Matt Kimbell (16:15):

I do believe that the days of owning your assets are long behind, and that's what made the cloud so interesting in concept to start and so broadly adopted, and it's what's going to drive consumption-based computing from solutions providers across the spectrum moving forward.

Baratunde Thurston (16:36):

Matt mentioned enterprise organizations, which makes me think of the big ones, the Fortune 500 companies. What happens to the Fortune 500 companies in this transition to a subscription economy?

Tien Tzou (<u>16:47</u>):

The majority of the Fortune 500 companies, their business model is based on ownership. So you think about a car company and you think about... So the last five or six years, the number of cars sold around the world is actually declining every single year, including in emerging markets, like China and India, because we don't need it. There's all these services out there. So if your business model is based on number of cars sold, then 10 years from now, you're going to be a smaller company, unless you just keep on increasing prices. But if your business model is based on miles driven, well it turns out that miles driven is going up. So the same time that we are seeing the end of ownership, we're actually using things more and more. We call this usership. Usership is going up and ownership is going down.

Got a friend Ray Wind that wrote a book, Everybody Wants to Rule the World, and he estimates that 95% of today's Fortune 500 companies will not exist in 2050 because of this change. So that is the big question that Fortune 500 companies have. How do I make this shift? And if you're running IT in one of these organizations, you should be asking yourself, "How can I help my organizations make that shift? How can I make sure that my organization is still one of the survivors in the year 2050?"

Baratunde Thurston (17:58):

Matt, in terms of making the shift, what are the hardest parts that you've seen? What's working well in the organizations that have been successful in making the transition?

Tien Tzou (<u>18:08</u>):

The biggest challenge that IT organizations find in transforming operations, transforming the way they consume technology is all cultural. It's behavioral. It's, 'we have done things a certain way for a certain amount of time, and there's a lot of discomfort and a lot of unknown on the other side of that transformation,' which is what causes IT organizations to be, I don't want to say they're loath to go through that transformation process, but not embrace it as quickly as they would like. Tien had mentioned 2050, the Fortune 500 looking vastly different. I think it could be much earlier than that, depending on the adoption of technology.

Baratunde Thurston (18:49):

How do you start thinking about ownership of the underlying behavioral and usage data that's part of the intelligence which drives the subscription product in the first place. Tien.

Tien Tzou (<u>19:01</u>):

I think it should be black and white. I think anything that's about you as a business or a consumer should be your data. We need to create regulations.

Matt Kimbell (19:11):

So that's at a consumer level. Think about it as a business level. I have a whole lot of proprietary data that I'm generating on these servers. I have trade secrets that I don't want my competition to gain access to. So if I'm getting consumption-based services from a large server vendor or from a cloud provider that is on prem[ises] and they're using advanced telemetry to find performance data and all

kinds of monitoring of my operations, there's also a fear that is as that data goes back and feeds a large ML farm or inferencing farm start to provide better services out to all of their customers, is some proprietary data being shared just around operations that I don't want to be shared. I mean, there are so many different issues, I think, that really have to be pulled back, and I hate to use the term unpacked, but unpacked and really explored as we start to move forward toward what really is an inevitable end, which is everything has a subscription.

Baratunde Thurston (20:18):

Tien, it feels like it keeps coming back to trust.

Tien Tzou (<u>20:20</u>):

I think buyers are getting smarter. I think buyers are being smarter. They're certainly asking the right questions. They're doing their homework. And ultimately the marketplace will decide the winners and the losers, and the winners are going to be the ones that can establish that trust over time and understand that their reputation is always at risk and live up to that reputation. So if you're a modern-day CIO and you're sort of clinging on to these systems that you put in place for the last 20, 30 years and saying, 'Look, I need to standardize because it's about scale,' and you're not really able to meet the needs of the business, then you are going to hurt the business. There's no reason why the CIOs of today can't be the CTOs and absorb some of that... All those cloud digital services. Not to run a sales forecast, but to actually, the service that the company's providing, the automobile service or the transportation service, the entertainment service, whatever it happens to be, there's no reason IT can't take that role.

Matt Kimbell (21:13):

And this is where IT as a service and consumption-based computing can be so important. There's also a skills gap that exists in these IT organizations. It's not just about, you need to transform. You need to be able to transform. If you can't do that, you're falling behind. And there are different levels to as a service, but if you can take these readymade solutions that come down from IT solutions providers and stand them up as a service within your environment, that all goes to somebody else. And that's where the trust comes in, and that's how you allow your business to leapfrog the competition.

Tien Tzou (21:47):

That's what I love to have the listeners realize. You can look at IT, you can look at the subscription economy and say, "Okay, the implication is as an IT leader, how do I take advantage of these subscription services?" But I think the next level is to say, "How do I, as an IT organization help my entire company transform into the subscription economy?" And I think that's where the real gold is.

Baratunde Thurston (22:07):

I've been hearing from both of you, mostly the positive benefits of shifting to a subscription-based model. But one thing we haven't talked much about is the energy consumption of it. How do you think about the ongoing cost of replacing physical goods on a regular basis or keeping digital services alive so persistently given the climate crisis? Tien?

Tien Tzou (<u>22:29</u>):

We do believe that it is a more sustainable world.

Baratunde Thurston (22:32):

What are you talking about, Tien?

Tien Tzou (<u>22:34</u>):

I'll share a quick story with you. It turns out there's a firehouse somewhere in California, and there's a light bulb that's been on for a hundred plus years.

Baratunde Thurston (<u>22:43</u>): Wait, one light bulb.

Tien Tzou (<u>22:44</u>): One light bulb.

Baratunde Thurston (22:44): We can do that?

Tien Tzou (22:45):

So it turns out we can do that. And it turns out that it used to it be the electric companies would sell you light. The light bulb went out, they would have to come, take it off, and replace it. And eventually they said, "Oh, we want to sell you electricity instead and you buy your own light bulbs." And all of a sudden, the lifetime of a light bulb started to shrink because these companies had an incentive for you to go back and buy more light bulbs. So when you leave all the use of resources to the vendor, the service provider, you actually wind up having a much, much better model.

Baratunde Thurston (23:19):

Tien Tzou, Matt Kimbell, thank you both for helping me transform a bit in my understanding of this topic. I still want a dumb table, but I'll smarten up [crosstalk 00:23:28]-

Tien Tzou (<u>23:28</u>): We're going to get you a smart table.

Baratunde Thurston (23:29):

If you pay for it, then yeah. Put it on your credit card, I'll try it out.

Tien Tzou (<u>23:32</u>): I'll cover the first year.

Matt Kimbell (23:33):

And you guys can use that smart table on your second date.

Baratunde Thurston (23:37):

See, he remembers? There are a lot of subscription services out there. Some are so random, they sound made up to me. To prove my point, we're going to play a game called dumb subscribe. I'll describe three subscription services, two are real, one is fake. Your mission, should you choose to subscribe to it, and the only answer is click yes, is to sniff out the fake one. Do you understand the game?

Tien Tzou (<u>24:07</u>): I think so.

Baratunde Thurston (<u>24:07</u>): All right, so here are our three services. Number one Bacon of the Month Club from Bacon Freak.

Tien Tzou (<u>24:15</u>): Oh, it's definitely true.

Baratunde Thurston (24:16):

Bacon Freak's Bacon of the Month Club sends its customers boxes full of bacon and bacon related products like bacon jerky, chocolate covered bacon, and bacon flavored seasoning. It's bacon. All right. Subscription two. Ship Snow, Yo. Starting at 49.99 a month, Ship Snow, Yo will deliver a patch of fresh snow to you wherever you are in the US. The snow is sealed in a Styrofoam container to prevent melting and leakage. And number three, Bless Me, Father. Bless Me, Father is a monthly subscription service for Catholics who want to celebrate the ritual of confession, but remotely. Once a month, penitents confess their sins to an ordained priest who assigns penance over a secure video feed. To review, Bacon of the Month Club from Bacon Freak, Ship Snow, Yo, or Bless Me, Father. Matt?

Matt Kimbell (25:11):

The Ship Snow, Yo makes no sense on its surface. I don't care if you put it in Styrofoam. It doesn't make sense to me. So I'm going to have to go with Ship Snow, Yo, as the fake service.

Baratunde Thurston (25:22): Tien.

Tien Tzou (<u>25:22</u>):

The snow thing sounds so ridiculous that it has to be true, so I'm going to go with the Catholic priest over video conferencing.

Baratunde Thurston (25:31): Okay. Well this is interesting.

Tien Tzou (<u>25:35</u>): It's not bacon. Don't tell me the bacon.

Baratunde Thurston (25:38):

I like the suspense. You're like, "Please don't take my bacon away from me. I'm already signing up in the background over here." Bless Me, Father is not real. And I'm sorry, but the snow thing is actually happening.

Matt Kimbell (<u>25:50</u>): That's so stupid. Can I say that? Baratunde Thurston (25:54):

You just did. It's been a pleasure playing, hanging, and learning from all of you. Tien, Matt, thank you so much for playing with me, for helping me transform, if not digitally, at least mildly in an analog way. It's been a pleasure.

Tien Tzou (<u>26:10</u>): It was fun. Thanks.

Baratunde Thurston (26:11):

We've got to lock up this garage now, but thank you for joining us, and thanks to our great guests Tzou and Matt Kimbell. I'm Baratunde Thurston, and I'll see you on the next Late Night I.T.