

**EPISODE 1321**

[INTRODUCTION]

**[00:00:00] JM:** Pay as you go pricing has become a strong selling point for modern SaaS companies, as well as cloud-based companies. Public cloud providers, for example, typically only charge you for what you use. But implementing this option is challenging, because it requires advanced platform analytics. The company, Octane, is a drop-in metering billing system that gives you flexibility to build how you want. They offer expressive pricing plans that bill on usage, include base rates, add-ons, discounts and trials. Their services can be integrated easily with simple API's and SDKs, and generate detailed breakdowns of customer usage and spending with customizable reports and dashboards.

In this episode, we talked to Akash Khanolkar, cofounder at Octane.

[INTERVIEW]

**[00:00:54] JM:** Akash, welcome to the show.

**[00:00:55] AK:** Hey, how you doing?

**[00:00:56] JM:** Doing great. How are you? How are you doing?

**[00:00:59] AK:** Can't complain? Can't complain.

**[00:01:01] JM:** So I'm going to write a press release for your company while we're doing this podcast. And that's partly because I think you're going to be a really powerful company. But it's also because you're the first usage-based billing platform that I've talked to on the show, which I think is a pretty new category. It's a pretty important category. It sounds like the most boring thing in the world, but it's actually really, really interesting and flexible. Why is usage-based billing deceptively important?

**[00:01:31] AK:** Well, I mean, the boring problems are actually usually the most exciting ones, because they're typically very high-impact, right? Usage-based billing is particularly exciting. I mean, you look at some of the biggest companies in the past decade that have come to market, right? We think like Datadog, Twilio, the cloud providers like AWS, Azure, GCP, right? Enterprise software that we all use and love today, they're all doing consumption-based billing, usage-based billing, right? And what we're here to do is to help everyone build the way that the giants do. That's why it's so important.

**[00:02:10] JM:** So you're announcing your series A, series A seed? From who?

**[00:02:18] AK:** Yeah, I mean, some great investors. Basis Set Ventures led it.

**[00:02:23] JM:** What's her name? I forgot her name.

**[00:02:26] AK:** Chang and Lan.

**[00:02:28] JM:** From Basis Set. Led by Basis Set.

**[00:02:31] AK:** Yes, led by Basis Set. There're a few good angels too. GitHub's CTO, Jason Warner is there. Cofounder of Dropbox, Arash Ferdowsi. We're a lot of other cool venture funds.

**[00:02:48] JM:** Dropbox founding CTO, right? Founding CTO, Arash?

**[00:02:51] AK:** Cofounder. Yeah, yeah, exactly.

**[00:02:53] JM:** CTO, Arash Ferdowsi. That's F-E-R – Whatever. I'll look it up. How many millions? Is that public?

**[00:03:01] AK:** Two.

**[00:03:02] JM:** Two million. At what? 20?

**[00:03:06] AK:** 10.

**[00:03:06] JM:** Two 10?

**[00:03:07] AK:** Yeah.

**[00:03:09] JM:** Dude, I'll throw in some at 20 if you want me to. I'll throw in five grand at 20. So you guys are – Who are the main competitors? Who else is in this category?

**[00:03:19] AK:** When we when we talk to customers – Well, the way I think of competitors is when we talk to users, right? And it really is Homegrown, Homegrown plus Stripe. That's literally every conversation we have.

**[00:03:36] JM:** Homegrown versus –

**[00:03:35] AK:** Homegrown plus Stripe. So if you've got your own Homegrown, if they have their Homegrown system and they hook into Stripe. If we talk about competition, that's what we're competing with.

**[00:03:47] JM:** Got it, which is something you really don't want to do. So this is the same thing as RevenueCat, right? This is RevenueCat for the cloud basically?

**[00:03:54] AK:** RevenueCat for the cloud, yeah. If I understand what RevenueCat does, but I think they're enabling what? Real quick, what does RevenueCat do?

**[00:04:05] JM:** They have a red logo. They do mobile – It's like mobile monetization billing stuff. Highly modular billing related activities.

**[00:04:15] AK:** Yep. That's pretty much what we do.

**[00:04:18] JM:** YC Continuity did the B I think for RevenueCat. They went to B really quickly.

**[00:04:24] AK:** Hmm, interesting. Yeah. I mean, look, my cloud monetization, these are two areas – I mean, there're a lot of exciting work that needs to happen in the monetization space. Obviously, cloud businesses are growing rapidly. So it's just a beautiful combination.

**[00:04:38] JM:** I mean, your billing data is sort of your – It's a really valuable event stream. You got a lot of stuff going on and billing. I mean, usage-based billing. So why don't you just describe the app? What's a typical application for a usage-based billing? Or let's say I have Software Engineering Daily. Software Engineering Daily, let's call it a multifaceted cloud services conglomerate that started as a Software Engineering Podcast. We offer a variety of services to our users and we need a variety of billing related systems. Why do we need Octane?

**[00:05:12] AK:** So I imagine you need to create a hosted cloud to sell your offerings –

**[00:05:17] JM:** I actually do have an idea. So Knative as a service I think is underrated. So let's say we're building Knative as a service.

**[00:05:23] AK:** Okay, great. So with Knative as a service, what would be the key metrics that your end users would consume?

**[00:05:32] JM:** Well, the Knative as a service business is probably like a cloud provider infrastructure business. So you're actually selling to people who want to spin up their own Heroku. So people want to spin up their own Heroku using your Knative as a service. And they want usage-based billing for the customers on the K native platform who are essentially like, "I'm Sarah, and I want to spin up a Heroku competitor. I'm willing to pay \$50 a month based on people who use the platform, etc. But some variable pricing, that's going to be around \$50 a month to have my Heroku platform built on top of Software Daily."

**[00:06:13] AK:** Right. Okay, so if we're looking at – I'm just looking at Knative docs, right. So I guess there's a few key metrics that could be useful when you're making this service offering available to people. It can be compute, number of containers you're running. It could be memory, number of nodes, depending on – It could even be you might have a monthly subscription just flat, like you said, like 50 bucks a month, plus compute. It could be a number of

requests. There's pretty much a large laundry list of different events that you could bill your customers on, right?

So with Octane, what you can do is you can pick whatever your value meters are, okay? Let's say you want to charge based on number of containers, number of running containers in a given month, right? What you do is you can constantly ship to us real time. Say, "Okay, Sarah, who's using your software has, is currently running –" There are five running containers at this given moment, right? And we can constantly ship to Octane in real time what the infrastructure looks like. And what you do is, through our UI, you'd create a price plan associated with pretty much with your pricing with the set of meters that you'd like to actually bill on. So in this situation, if we're talking about number of running containers in a month or an hour, you can do that. And you just constantly stream to us what the usage is for all your customers. And we would ultimately, in real time, run all the calculations for the usage that all your end customers have on the platform and create what that bill looks like. And we're hooked into Stripe. So we do the end-to-end actually making the payments. Does that make sense?

**[00:07:59] JM:** It does. So you're built on Stripe, right? Stripe Connect?

**[00:08:04] AK:** Stripe Connect, yep.

**[00:08:06] JM:** Stripe Connect. Most underrated facet of Stripe?

**[00:08:11] AK:** Yeah, it's pretty awesome. Yeah, I mean, we pretty much have a click through experience where you can just connect to Stripe. Our API, you just send measurements. And in through the UI, you scrape price plans. So we just make it super easy. The engineering to product owner handoff is brilliant, right? So imagine you have a product manager for your hosted cloud offering. They can literally go in through the UI and create price plans, right?

Right now with typical homegrown systems, anytime you want to create a new price plan, adjust a price plan, deploy a v2 version of your price plan, that's an engineering hurdle. That's an engineering task. So we have a really nice separation of sending usage and creating price plans, right? The sending usage is on the engineering side. The creating price plans is on the business side.

**[00:08:59] JM:** Do you have flagship customers yet?

**[00:09:01] AK:** Yeah, we're primarily working with like the early startups. We're working with a bunch of different startups right now and hoping to, yeah, expand from there.

**[00:09:11] JM:** Can you give me like a database company? A SaaS provider?

**[00:09:17] AK:** Yeah. So we have a mix right now. So for example, we have an ML company, a no-code and I'll company using our product, data visualization company using our product.

**[00:09:31] JM:** Are any of these public? You can't say the name.

**[00:09:34] AK:** Yeah.

**[00:09:34] JM:** Okay, that's fine. That's fine. That's fine. Just curious.

**[00:09:36] AK:** Yeah. So It's really a lot of infrastructure related companies that are using our product right now.

**[00:09:43] JM:** And give me a scope of why this is a really hard engineering problem to solve.

**[00:09:48] AK:** Yeah, sure. So let's give you a context with – Let's say you're a database business, right? And a good example will be by looking at AWS, how they price, right? The way they price is different regions have different price points. They have multiple different instance types. They charge based on different meters. There's just such a large list of variables to price on. And being able to accurately track and rate all of those meters and Bill a large user base becomes a really hard problem. If you look, historically, it's been a subscription economy, right? Everything's been month-to-month one flat fee. But the reason it's become a much significantly harder problem is because of just how many variables that need to be tracked, and at what granularity they need to be tracked. So instead of once a month, we've now shifted to once an hour, or even once a second, right? You look at AWS billing, it's per second billing. So we went from something that was on a month-to-month basis to a per second, which is huge.

**[00:10:58] JM:** It seems really hard to track this kind of stuff with enough fidelity to actually build an accurate billing system. Like is there some margin of error that you have to include or –

**[00:11:11] AK:** Your question is when you say margin of error –

**[00:11:14] JM:** When I think about Octane, so I think of you as ingesting telemetry and then charging people based on the telemetry. And like any telemetry problem, there's some kind of granularity that you're actually exposing the truth, right? So what is that granularity? Whatever the granularity is, is your margin of error also.

**[00:11:31] AK:** Yeah, we do per second.

**[00:11:33] JM:** Per second. Okay. So if I'm a few milliseconds over on the database, you're not charging me, unless it's rounded up.

**[00:11:40] AK:** Yeah, I mean –

**[00:11:42] JM:** No. Even if it's rounded up, then I'm not going to be exposed, because I'm going to be charged each second epoch.

**[00:11:48] AK:** I mean, at the end of the day, you send us the measurements. You send us the time.

**[00:11:52] JM:** Oh. Oh, got it. Got it. Got it. Got it.

**[00:11:53] AK:** You don't actually do the metering. You send us the measurements, you send us the timestamps. So when we talk about margin of error, that it also comes from your site. At the end of the day –

**[00:12:03] JM:** So then you don't even have that heavy of an infrastructure footprint, right? You're more of a calculations company.

**[00:12:08] AK:** Well, no, I mean, but we're storing all the measurements. We do. We definitely do have – So if you look at us versus Homegrown, Homegrown, they create their own – They store all their usage in their own database, right? And they're doing the aggregations. And they're doing the calculations. And then they're shipping it off to Stripe for payments, right? Instead, we're storing all this data in our time series database, and we're doing the aggregations, and we're rating it, and we're shipping it off Stripe.

**[00:12:39] JM:** How much does Stripe take from you? How big of a cut do they get off your business?

**[00:12:44] AK:** Yeah, well, so Stripe – Yeah, I mean, we're on top of Stripe. Stripe is 2.9%

**[00:12:52] JM:** Stripe takes a 2.9% tax for your business.

**[00:12:55] AK:** Yeah, for the payments.

**[00:12:57] JM:** Seems like a large quantity of money.

**[00:12:59] AK:** Yeah. I mean, Stripe is expensive, but do they do critical stuff.

**[00:13:03] JM:** Is Stripe the new Oracle?

**[00:13:05] AK:** No. I mean, honestly, Stripe is a great – They're really good at what they do.

**[00:13:10] JM:** So is Oracle.

**[00:13:11] AK:** Yeah, I mean, Oracle is good at what they do too. But at the end of the day, they're here to serve the Internet, right?

**[00:13:16] JM:** So does Oracle. Oracle tells me that too. Last time I was over on Larry Ellison's yacht, he was telling me about how he serves the Internet. He serves the Internet to his CEOs for dinner on a silver platter. Larry Ellison presents the Internet to his CEOs to consume for dinner.



**[00:13:38] AK:** I mean, on the one, Stripe is more of a bottoms up, right? They are loved. And I think they still are loved by developers, right? There's not too much that we can say about Stripe.

**[00:13:50] JM:** Do you love Stripe?

**[00:13:51] AK:** I like Stripe.

**[00:13:52] JM:** Do you love Stripe as a developer, as a human being, or like as an economist?

**[00:13:57] AK:** Well, actually, first and foremost, as an entrepreneur, right? Like I think that's so cool that they're enabling the payments experience for such a large set of companies, right? I think that's really cool, right? I mean, I still remember back to my hackathon days, like roughly a decade ago, just being able to create an iPhone app, charge people on it in less than 24 hours because of Stripe. Like that was pretty incredible, right?

**[00:14:24] JM:** Yeah. No, I mean like – I don't know. Isn't it weird that there're no competitors to Stripe though?

**[00:14:31] AK:** It's not strange. I mean, that's pretty typical across –

**[00:14:35] JM:** What other \$100 billion a year or \$100 billion valuation business lines have no competitors?

**[00:14:43] AK:** Yeah, I mean –

**[00:14:45] JM:** Oil?

**[00:14:46] AK:** I mean, does Google have competition?

**[00:14:48] JM:** It doesn't. I mean, this is kind of why people consider Stripe the next Google.

**[00:14:53] AK:** Yeah. Oh, for sure. I mean, it is. It is. And that's, again, why we see ourselves really well positioned, because Google can't solve all problems, right? And Stripe can't solve all these nuanced problems.

**[00:15:07] JM:** Google can't even solve search. Like they have a great search engine, but it's like if I want to find the right quote in a podcast episode, Google doesn't really help me with that. If I want to find the best item on Amazon, Google doesn't help me with that. If I want to find the best Stripe Connect transaction in my transaction log, Google doesn't index that. Google doesn't solve search. Google solves search over like one broad domain of information, but it does not by any means solve all of search. Like Algolia is a great search company. Can't Algolia just divide up the Internet with Google and say, "Hey, look, Algolia is actually going to handle like search for these 20% of the Internet." I would love that. Let's just see what happens if Algolia builds a search engine. Like, "Hey, Google, can you cede some of the territory to Algolia? Can we see what happens?"

**[00:15:57] AK:** That's the thing, right? At the end of the day, for businesses to be competitive, they want to choose products that are like most competitive for what they're trying to do, right? That's why we're going to see a big movement towards more specialized products, right? The boil the ocean thing is just not going to work.

**[00:16:13] JM:** It doesn't work anymore. Nobody wants that. Nobody wants your boiled ocean, Amazon.

**[00:16:18] AK:** Yeah, like Amazon successfully did that with AWS, which is interesting.

**[00:16:23] JM:** Dude, they're trying to get into your home with the sidewalk project, and the ring stuff, and the echo. Echo is going to be everywhere. It's like, "No, we don't want that, Amazon. No, thanks. It's not going to work. You're not going to be in our wallpaper."

**[00:16:36] AK:** What they could do is they can just buy companies that have done that.

**[00:16:39] JM:** Nobody cares. Nobody cares. It's like Mark Zuckerberg with the metaverse thing. It's like nobody wants your metaverse, man. We're not going into the Zuckerverse.

**[00:16:49] AK:** People bought Ring because they liked Ring, but then Amazon bought it. And now they're using an Amazon product.

**[00:16:55] JM:** Yeah. And now it has a shelf life.

**[00:16:57] AK:** Similar with like Instagram. It's like Facebook, people started to hate Facebook. But then Instagram, people were like, "Okay, I'm moving to Instagram." And it was like, "Oh, I don't use Facebook. I use Instagram." No, you're using Facebook through Instagram.

**[00:17:10] JM:** Well, this is the Facebook lifecycle. Like this is the Facebook – I just read a book about Facebook. It took me two and a half years. And this is what I found, is like the Facebook product lifecycle strategy is acquire a brand, instantly given an expiration date and start working towards that expiration date looking for the next product to build or acquire.

**[00:17:29] AK:** There's definitely an expiration date on Instagram.

**[00:17:32] JM:** Yeah. And there didn't used to be.

**[00:17:34] AK:** But then you know what I'm surprised about how Snapchat has no expiration right now.

**[00:17:38] JM:** Oh, Snapchat has no expiration date. Like Snapchat is amazing. This is why Snapchat is an amazing company is it's actually a more trusted company. I mean, so nobody wants the Zuckerverse. Also, nobody wants to Evan Spiegel augmented reality experience, but people at least are willing to take it seriously. Like people would rather watch Evan Spiegel open a vending machine, take out a pair of snap spectacles, put them on and enter his own metaverse that nobody else is a part of. Like people would rather pay attention to that than pay attention to Mark Zuckerberg talking about the Zuckerverse.

**[00:18:12] AK:** Yeah, unfortunately – I mean, not fortunately. I mean, not unfortunately. But like perception matters, right?

**[00:18:18] JM:** Right. You've seen a picture of Mark Zuckerberg triumphantly marching down the aisles between all the people wearing the VR headsets, right? You've seen that one? You haven't seen that one. Let me see if I can share the screen. I'm going to find this image. Mark Zuckerberg VR. Yeah, there we go, first one. The first one day. Dude, it's the creepiest photo of Mark Zuckerberg that exists on the Internet. Do you see what I'm talking about? I'm going to share the screen right now.

**[00:18:47] AK:** He's running a very like social platform, right? His platform is social, but he's a pretty awkward individual. It's just very strange.

**[00:18:57] JM:** No he's not. He's an extrovert. Mark Zuckerberg is a great guy. Like I can't wait to hang out with the guy. But he's a little bit too brash. Like he's self-aware, and he just thinks that he's cool enough to evade the reality of the fact that he looks like a tyrant. Like the guy looks like a tyrant. It's like "Dude, just admit that you look like a tyrant."

**[00:19:18] AK:** I think he just seems like someone I'd have trouble empathizing with or –

**[00:19:22] JM:** Can you see this picture?

**[00:19:24] AK:** Oh, yeah. Yeah, that's weird.

**[00:19:27] JM:** It's not a good look.

**[00:19:30] AK:** I mean, I don't know. Do you see a future in VR? I don't know if I do.

**[00:19:34] JM:** Not really. The thing that's cool about Facebook is the portal, the Facebook portal project.

**[00:19:40] AK:** I don't understand portal at all.

**[00:19:41] JM:** Portal is great. Portal is great. It's not great today. It's going to be great.

**[00:19:46] AK:** How does that differ than like FaceTime?

**[00:19:48] JM:** FaceTime doesn't follow you around the room with a hardware device.

**[00:19:53] AK:** Okay.

**[00:19:54] JM:** So this is the thing that people don't know about Portal. Portal like zooms in on. Like you walk around the room, Portal zooms in on you tracks your location throughout the room. So like imagine Portal on a drone.

**[00:20:06] AK:** Okay.

**[00:20:08] JM:** So then you have a head tracking drone. Like the drone follows you around the room doing like edge computer vision on you, tracking your location, figuring out occluded images, delivering you a cup of coffee, right? Portal is a flying object. Portal is transformative. Portal is going to fly around your house like the ring – Did you see the ring drone?

**[00:20:33] AK:** No, I have not.

**[00:20:34] JM:** Did you know Ring makes a drone?

**[00:20:36] AK:** This is an Amazon product?

**[00:20:38] JM:** This is a frickin' Amazon product, man. Like, I don't like Amazon anymore basically because of this product. And this product and the Ring –

**[00:20:48] AK:** Liked Amazon before?

**[00:20:51] JM:** I worked for Amazon for eight months.

**[00:20:52] AK:** Okay. Well, eight months? Yeah.

**[00:20:55] JM:** Dude, I send a lot of big ideas to Jeff Bezos. That guy has at least three PDF files from my Amazon account telling him how to change the direction of the company away

from a fucking surveillance enterprise. Like what is this? Floating home drone from Amazon?  
No, thanks.

**[00:21:16] AK:** I don't think the world is ready for that, yeah.

**[00:21:18] JM:** Here's the thing. The world's ready for it if it's open source. Do it in open source.

**[00:21:24] AK:** By a corporation that can –

**[00:21:25] JM:** No, it's fine. Dude, you worked in the Kubernetes ecosystem?

**[00:21:28] AK:** Yeah.

**[00:21:29] JM:** Everybody trusts Kubernetes. Amazon is trusting Kubernetes at this point. Amazon let the wolf into the henhouse with Kubernetes. Like they're willing to let the wolf into the henhouse because the wolf will work for them.

**[00:21:43] AK:** Honestly, I mean, people trust AWS too.

**[00:21:46] JM:** Do they?

**[00:21:48] AK:** Yeah, they do.

**[00:21:49] JM:** Who do you trust less, AWS or Stripe?

**[00:21:53] AK:** Who do I trust less? AWS or Stripe?

**[00:21:56] JM:** Stripe does the PayPal thing where they shut down your business sometimes?

**[00:22:01] AK:** Yeah, they shut down your business if – Yeah, AWS did that too. Didn't Amazon do that too?

**[00:22:07] JM:** Amazon did with Parler. So AWS does do it too for different reasons. Almost arguably, for worst reasons. Stripe does it for like we can't handle the counterparty risk, or we can't detect the right fraud things because we're like this crappy centralized fraud detection system that we charge you up sells for on what's the Stripe radar thing? Like that seems like a conflict of interest problem. But AWS is much worse, because they just shut down things that they don't like. What? Like why did they shut down Parler? What happened there?

**[00:22:41] AK:** Yeah, you can't really be – I think you can't be too politically opinionated.

**[00:22:46] JM:** Clearly, you can. Clearly, you can.

**[00:22:49] AK:** You can. Yeah, I mean, which –

**[00:22:51] JM:** No, no. Okay, actually, I won't even make you answer that question, because like you can just hate them equally, or love them equally, whatever. The really creepy thing was when Alex Jones got taken off the air from the podcasting world. Like I'm not a fan of Alex Jones at all, clearly the guy spreads misinformation. It's just it's creepy that people think of podcast is the most decentralized thing on the internet and still somebody can get taken down from it.

**[00:23:15] AK:** Does that scare you at all?

**[00:23:16] JM:** It does. It does scare me.

**[00:23:18] AK:** You can say what you can't say?

**[00:23:20] JM:** Yeah, it's not right. It's not right that there's not really like a real true way to have open information on the Internet. It just is not right.

**[00:23:29] AK:** So which do you hate or like more? AWS or Stripe? Or do you not have a –

**[00:23:35] JM:** They're just like – They're Oracle. I love them as much as I love Oracle, right? Like I love Oracle, right? I don't really want to be in business. It's just dangerous – They're foundational. They're foundational.

**[00:23:49] AK:** And I think if you want to really innovate, you have to start building on top of that in your own intricate way, right? We're not going to build a payments alternative. And we're not going to roll our own –

**[00:24:02] JM:** Why wouldn't you though? Why wouldn't you though? So imagine if you had open source payments infrastructure, which is – One of these companies that I'm working on called Rectangle, it's open source payments infrastructure. I feel like every company that is in a business such as your business should have their own payments infrastructure stack. If you're running the rest of your infrastructure, why should you be paying 2.9% of your business for Stripe to be doing that? You should have some open source alternative that you just spin up as a module and you pay at a fixed cost. Like are you joking me? You have to pay variable costs to a payments provider? That makes no sense. Did you get to settle at a fixed cost on crypto today? You can settle over a fixed cost on crypto today. And people are still paying variable costs. That's how bad payments infrastructure is today. People are still playing variable costs.

**[00:24:54] AK:** But, ultimately, it's important we do one thing and do it really well, right? So if we're rolling our own payments infrastructure, that takes away from our –

**[00:25:05] JM:** How big of your business does it need to get to where 2.9% is the cost of a full time engineer?

**[00:25:11] AK:** Right. I mean, we can get there eventually, right? Like, eventually, when we're serving tens of thousands of customers, it's going to make sense. Dropbox is a good parallel to this, right? Like Dropbox was running on S3 for the longest time. And then, eventually, they ran it on their own infrastructure, right? Because it's just so expensive to be paying S3. But like in the earlier days, that didn't matter. They needed to build an amazing experience for Dropbox. So that's the way we see it with Stripe. I mean, they're \$100 billion company and they do payments well, and we're a usage-based billing platform. And for us to be also doing payments is just not going to make us – Is not going to give us that laser focus –



**[00:26:01] JM:** Right. Here's my point. Here's my point. If you make it open source in the same way that Kubernetes is open – So like you don't roll your own Kubernetes, right? What's your infrastructure of choice? Like is it Cloud Run?

**[00:26:12] AK:** We're running on Kubernetes, yeah.

**[00:26:14] JM:** Kubernetes. But are you using like Fargate or something?

**[00:26:19] AK:** We're using EKS.

**[00:26:20] JM:** EKS. So why do you want your own Kubernetes installation? Why not use Fargate?

**[00:26:24] AK:** We have a little bit more control.

**[00:26:27] JM:** A little bit more control.

**[00:26:29] AK:** But why do you want that control? Why don't you just want to –

**[00:26:32] AK:** Right. Okay. So one bit of that too was for larger enterprise customers that we can pretty much run – We could run our system on-prem, on their premises. That was the reasoning behind it.

**[00:26:46] JM:** Oh, okay. That's great. That's great. That's a great reason. Great reason. Great reason.

**[00:26:49] AK:** We wanted a dense line between how much managed – To what effect –

**[00:26:55] JM:** Got it. Got it. So all I'm saying – I understand what you're saying. All I'm saying is imagine a world where Stripe was like Amazon in that situation where actually when you're deploying to your payments provider, you can also have a route off of that payments provider, right?

**[00:27:15] AK:** The open source version of Stripe is a great idea. And it's a business that –

**[00:27:20] JM:** Hey, I'll trade you some equity in Rectangle for equity in Octane. Is that legal? Can we do that?

**[00:27:26] AK:** Yeah. I mean, I'd like to talk to the Rectangle people. I think that's really cool.

**[00:27:30] JM:** Dude, you're talking to the Rectangle people right now.

**[00:27:33] AK:** Yeah. I mean, yeah, I think that's super cool, right? If we don't need to – Okay. So then there's one more hurdle here, which is Stripe is pretty much global right now. So dealing with the trust situation, right. So the question is do we trust open source or do we trust something that serves the Internet for payments? That's what we need to –

**[00:27:58] JM:** I mean, what do you mean? I don't understand.

**[00:28:01] AK:** So like Stripe has reliably pretty much been running payments, right? So when we think about like – Okay, so for our experience, giving that easy Stripe connect experience for customers is like a big sell, right? That's like one of the decision making between using payment gateways. But also, we did get a lot of interesting requests for like beyond Stripe. For example, companies in India were asking about Razorpay, companies that in Europe were asking about Paddle. So there's actually a lot of interest for using a bunch of different types of payment gateways. So that's been pretty interesting.

**[00:28:39] JM:** What was the number one product of the day when you guys were number two product of the day on Product Hunt?

**[00:28:44] AK:** Yeah. I don't know. I was really focused on us. This is on July 26th, right.

**[00:28:51] JM:** I don't know. I just saw it on your website. Product Hunt, number two product of the day.

**[00:28:58] AK:** Yeah, those other ones.

**[00:29:02] JM:** Do you go to producthunt.com on a regular basis?

**[00:29:05] AK:** On occasion. We just wanted a few good launch pads, and Product Hunt was just one of them.

**[00:29:11] JM:** It is kind of the leading launch ad of business.

**[00:29:15] AK:** I think launch pads are really cool.

**[00:29:17] JM:** What are your other favorite launch pads? Indie Hackers? Do you like Indie Hackers?

**[00:29:21] AK:** We're still yet to go through the list. I mean, we're going to do a show HN probably tomorrow.

**[00:29:25] JM:** Right. Hey, why did Hacker News lose its cloud?

**[00:29:32] AK:** Has it?

**[00:29:33] JM:** Hasn't it? I think so.

**[00:29:34] AK:** I don't know. Yeah, I mean, we have a list, Indie Hackers I guess is one of them. But Product Hunt has been the predominant one. But even Product Hunt, I think it's gone a bit downhill too.

**[00:29:46] JM:** It's gotten gamed. It's gamed at this point.

**[00:29:49] AK:** It's unfortunate because there's – I think launch pads are important, right? Like I think we need that.

**[00:29:57] JM:** Yeah, we need it. But I think, basically, Twitter is the only launch pad that matters.

**[00:30:04] AK:** Twitter? Why Twitter?

**[00:30:06] JM:** Well, okay, if you can knock over the Twitter domino successfully, then you don't have to be on any of the other launch pads. Other people will post it for you. It doesn't really matter. Like if Stripe launched today, the way that they launched back in 2005 was it? Or whenever they launched. 2009? Stripe launched in 2009, 2011, something like that. If they launched today on Hacker News or on Twitter, they would basically have the same effect. It doesn't matter where they would originate. The idea was so powerful that just was made to go viral. So probably Twitter's your shortest path to virality there.

**[00:30:42] AK:** Right, because it's like the honest true version just comes out in Twitter. Is that what it is?

**[00:30:47] JM:** Or just like the fastest, like the fastest virality.

**[00:30:49] AK:** Right, just for sharing.

**[00:30:51] JM:** I think so.

**[00:30:52] AK:** Yeah.

**[00:30:53] JM:** Hacker News is a little insular. Not everybody goes there.

**[00:30:58] AK:** The interesting thing about our product is it's a handshake between engineers and product people, right? Since we're doing the monetization, I think it's really interesting to engineers, because we're now giving engineers more power to just demand is more of the stack. But also it's like product people can now create price plans, right? So when we think about how we share the product with the world, it's something to think about, right? Like I think it's attractive to both product people and engineering. And I think, for example, Hacker News is very clearly engineering audience. Product Hunt is very B2C audience actually, I'd say. Like a lot of B2C products come out on Product Hunt. But, yeah, I think we need more launch places, more ways to share things with the world.

**[00:31:50] JM:** What's the hardest part of your company? Hardest part of building? I think we talked about engineering a little bit, but like what's the – How early are you? How old is this company? A year?

**[00:31:58] AK:** Yeah, a little less than a year.

**[00:31:59] JM:** Why did it take you a year to build this? I think there's a good reason. But just I'm curious.

**[00:32:04] AK:** Yeah. Well, first of all, I mean, billing infrastructures, it's hard, right? We need to do it reliably. We need to do it right. And building this the right way, we went through – It was a lot of also just talking to users and making adjustments based on that. What aspect of the metered billing problem was the most painful was what we were working through. So at one point, we were actually early, like pretty much in October, November, we were thinking about, “Well, maybe is it the metering that was actually the most challenging part of this problem?” And we talked to more users, and we realized, “Well, actually it was just the integration into payments, into Stripe, that was the challenge,” right? Actually, storing that usage historically, doing the aggregations and sending the bill. So that's why our most recent iteration and what we've probably launched is an SDK where you can easily just ship out measurements to us, and we store aggregate rate, and ship it off to Stripe. So in terms of what took long one is just billing infrastructure is hard. And you have to do it right. And two is just really listening to customers to understand what the biggest pain was.

**[00:33:21] JM:** And I guess it's not hard to find your first customer for this kind of business. But who was your first customer?

**[00:33:27] AK:** This company called Explo. So yeah, they're a YC-backed startup.

**[00:33:31] JM:** What was that MVP development process? Customer – it's like a code development process.

**[00:33:37] AK:** Yeah. I mean, it's pretty interactive. They were describing what their price plans looked like. I mean, they're fast growing business, right? And they continue to have new types of meters that they're billing on, right? They're a data visualization business. So they're here to cater to a growing audience, right? From number of users to number of events. I think every growing startup has an innovation process when it comes to their price plans. And it was discovering that together. So, currently, their process is fairly manual in terms of how they build their customers. And we've just worked with them to automate that.

**[00:34:17] JM:** So you spent some time in the Kubernetes ecosystem, right? Why is Kubernetes such a healthy community? It's such a healthy community. Isn't it healthy? Or is it healthy? Actually, better question, why did Kubernetes win?

**[00:34:31] AK:** I think it was like 2017, I was at a big bank. And I was on their managed Kubernetes. Team, right? And I just pretty much – It was like 2017 when I heard about Kubernetes. And people were talking about like DCOS and other – I think there was a war going on amongst what the winning container orchestration tool would be. And I heard about Kubernetes, and pretty much everyone in the room was just like, “Look, Kubernetes is it. It's going to be what wins.”

And I think a big part of it really comes down to just word of mouth, and there was just a bit of virality around it. There was a bit of like this is what everyone's doing. And that's just how it just completely consumed the market, right? It was the new cool thing that was happening. And I think the other container orchestration tools that were out there, they came before, right?

**[00:35:33] JM:** They came before.

**[00:35:34] AK:** I think they came before Kubernetes, right?

**[00:35:36] JM:** They did. I mean, they kind of did. But like why were they worse? Why is HashiCorp Nomad worse than Kubernetes?

**[00:35:46] AK:** It's really tough to say what made Kubernetes when, but I think –

**[00:35:51] JM:** I want to ask Brendan Burns that question. I want to ask him why is Nomad inferior to Kubernetes? Because here's the thing, HashiCorp kept the Nomad business. HashiCorp kept the Nomad business, right? They didn't give it up. They kept it. Nomad by HashiCorp.

**[00:36:13] AK:** I don't even think that tool was what was compared up against Kubernetes. I think it was Mesosphere.

**[00:36:20] JM:** No. No. No. No. No. I mean, that's the thing, is the narrative – The whole narrative was messed up. I was reporting on the wrong stuff at the time. I was always like Kubernetes versus Mesos. Kubernetes versus Mesos. It's not even an accurate comparison. These are like two different systems. Mesos is like heterogeneous VMs, or containers. And then Kubernetes basically said – Kubernetes said VMs don't matter, which is not true. But Kubernetes is an abstraction that implies that VMs don't matter, which is not true. You can build VM infrastructure as a Kubernetes plugin, or superset, or something. You can totally integrate VMs. But those are not really comparable technologies. Basically, what happened was everybody else brought a knife to a gunfight at a marketing competition.

**[00:37:09] AK:** That's what I'm saying. I think it was marketing.

**[00:37:11] JM:** It's marketing. It's a marketing competition.

**[00:37:13] AK:** I mean it was also that Kubernetes came out of Google. Like people respect software that comes out of Google. And that's what really – So just looking at like, “Oh, wow! This is the software that's running at like Borg? This is the software that's running at Google?” The fact that I can use this thing, like I know for a fact that when I'm telling people about Kubernetes, I was thinking like, “Okay, I'm helping people implement what Google used on their infrastructure,” right? And that story was just – That that really conveyed the message of like, “Okay, this is a really cool thing.” What's funny is I don't think they actually made that much money on Kubernetes.

**[00:37:54] JM:** Who? Google?

**[00:37:55] AK:** Google? Yeah, I mean –

**[00:37:56] JM:** What do you mean they didn't? I mean –

**[00:37:59] AK:** I don't know. AKS, EKS still –

**[00:38:00] JM:** Dude, the value of an asset is the present value of its future cash flows.

Emphasis on future.

**[00:38:08] AK:** You think it's still yet to be realized?

**[00:38:10] JM:** Are you kidding me? I mean, in what year will Linux produce the most value? Or in what year did Linux produce the most value? Probably, it's in the future, right?

**[00:38:25] AK:** Yeah. But like at this point, it's kind of forgotten that Google – Plus, it's less relevant than Google created, right? I think over time, it becomes less and less relevant that Google created it, which means the ability –

**[00:38:39] JM:** Less relevant, or more relevant?

**[00:38:40] AK:** I think it becomes less relevant. I think it becomes a little bit more forgotten.

**[00:38:45] JM:** Okay, those are different things. So more forgotten, arguably more relevant though, because what happens if Google loses the container orchestration wars? Actually, more accurately, what happens if the world realizes that container orchestration is not a winner take all battle? Like what happens when the world realizes that actually we need domain-specific container orchestrators? Then Google no longer has a boil the ocean strategy, right? And what we really need is to take away all the boil the ocean strategies from all these companies.

**[00:39:15] AK:** Yeah, I think that's a big thing that's going to happen in general.

**[00:39:19] JM:** Dude, is happening, is happening. These companies are falling apart. Dude, what are they doing with this like return to the HQ strategy? Nobody's going back. It's like a big



joke. They're trying to get people to go back to the Amazon HQ, or the Google HQ, or the Facebook campus like enticing you with the same old buffet food. Nobody wants that stuff anymore. They want you back. They're trying to bring you back. They can't –

**[00:39:48] AK:** I think there's some good to being in a workplace.

**[00:39:51] JM:** Are you doing an office? You're not doing an office, are you? Are you? We're going to do an office. We're going to do an office, but it has to be different. What's your office strategy?

**[00:39:59] AK:** What's our office strategy? Our office strategy is – Well, it just so happened that a lot of the people we hired are in New York City. So that kind of worked out, and we're all in the office. Our strategy is we're going to hire the best talents But we also have people in – We have a lot of people in New York. So if you're going to be here, that's great. But I think flexible is fine. But we found that where we're at now, I mean, being in an office is fairly useful. Do you think being remote is going to stay?

**[00:40:31] JM:** I mean, I think it's got to be an option, right? So we want to build an HQ. You can go to the HQ whenever you want to, and probably all be in HQ four out of five days of the week at some point during the day. Maybe I only come in like 2 to 3pm, or two to 5pm, or 3 to 6pm, whatever. But it's like if you want to have an in-person conversation, you want to give people the option to do that, or in-person premises. I don't know. There're all kinds of reasons. People want to get out of the house. People want to go to an HQ. People need to escape from their kids at home. Maybe you set up a nice facility. Like all the economies of scale stuff. You set up a gym. You have a gym for the company. Maybe food, right? Maybe a coffee machine. Maybe an espresso bar if you can afford it. You want a nice little meeting place for people to hang out in just like a proprietary meeting place. You want a club, right? You want a nice little club. Everybody wants a club.

**[00:41:24] AK:** Yeah, I mean, at the end of the day, it's like just getting things done.

**[00:41:28] JM:** It's a getting things done club.

**[00:41:30] AK:** It's like, we're here to get things done. We're here to do good work. I think, for sure, this whole like you have to be in the office nine to five, five days a week is just ridiculous. So moving towards you have a place you can come to when you want to come. There're people here that are working on the same problem that you are. And you have flexibility. I think the world is moving towards flexibility, right? Be it billing, the workplace, what cloud provider you run on. Everything is just about flexibility.

**[00:42:03] JM:** Unless you're on Stripe.

**[00:42:05] AK:** Unless you're on Stripe, then you don't have flexibility. I think that's going to change.

**[00:42:08] JM:** Let me share something with you. Just because I want to in the spirit of what the show actually is, who are the other competitors? Who are the other people doing usage-based billing?

**[00:42:18] AK:** Yeah. There's like Chargebee, Chargify. Yeah, Chargebee, Chargify.

**[00:42:27] JM:** This is a giant category. It's such a giant category.

**[00:42:31] AK:** I mean, Stripe tries to do this. So, again, these are all like subscription. They all have in quotes like metered billing. But again, they all come with big asterix because they came from subscription-based offerings.

**[00:42:47] JM:** I like your branding the most. Of these three, who else is there? Is there anybody else?

**[00:42:54] AK:** No. I mean, those are the main ones.

**[00:42:55] JM:** Okay. So you guys are the market leader?

**[00:42:58] AK:** Yeah.

**[00:43:00] JM:** Who else could move into this? Probably nobody, right? Not really. This is too hard. This is hard to build. This is a hard thing to build. What about the so called cost optimization category? I mean, I guess that's too big. That's too much of an overloaded category to do what you do.

**[00:43:19] AK:** Yeah. I mean, like I see us being in a position where we can eventually be helpful there, right? Because if you think about what we do is we convert usage to some dollar amount. So right now, we're converting that to a revenue amount. But we could also – We can also apply cost as just an attribute to that measurement. But, again, like I said, focus. I think spend management, there's a lot there's a lot of work there. What made you bring up cost, by the way?

**[00:43:48] JM:** Cost?

**[00:43:49] AK:** Yeah.

**[00:43:50] JM:** What do you mean? Like the category of cost management?

**[00:43:53] AK:** Yeah.

**[00:43:54] JM:** It's just think about like who could potentially compete with you?

**[00:43:58] AK:** Oh, I see. So cost management companies.

**[00:44:00] JM:** Yeah, the cost management companies. Who are the best cost management companies? What's the one that Andreessen invested in?

**[00:44:06] AK:** Kubecost is one –

**[00:44:08] JM:** oh, Kubecost si good. Ku becost is good. But, no, the console one. It's like a console thing. Nevermind, that's not even a cost management company, I guess. Who were the best – The thing about cost management is there're so many vendors, and there's a lot of them

that don't seem that impressive. There's not really like a clear vision for how to become really big. I don't really see much of a vision from any of these.

**[00:44:31] AK:** I'm surprised how many cost companies there are. I mean, frankly, we've thought about cost like roughly – We thought about it roughly a year ago. I mean, we're interested in the space. But like there're a lot of companies there. And we want to be in the business of helping companies expand and grow their revenue, not cut their spend. So it's more interesting problem, but this is personal.

**[00:45:01] JM:** What are your margins?

**[00:45:03] AK:** We just rolled out a new iteration of our pricing that's consumption-based. I mean, again, it's all on shared infrastructure. So like margin is not something we think too much about. Yeah, margin is just not something we think too much about.

**[00:45:18] JM:** How do you choose your seed investor?

**[00:45:22] AK:** Really, it was Chang actually that connected with really well. She just seemed to really care. She really cared about what we were building. She was a strong believer in what we were doing. She spent a lot of time exploring the space. And that was very well appreciated. So when we chose them – Honestly, it extended beyond the check. They've been just extremely helpful and collaborative with us. So yeah, I mean, Basis Set Ventures was really awesome from a lead perspective.

**[00:45:55] JM:** If you had your dream series A investor, who would it be?

**[00:46:02] AK:** I don't have an answer.

**[00:46:04] JM:** Good answer. Top five.

**[00:46:07] AK:** No, we're talking to a bunch of different investors. I think it goes a little bit more personal than that. For example, for a seed, it really did come down to us spending a lot of time with our specifically investor, Chang. And I think that's going to continue on, right? I think,

obviously, a good brand is great. But like also the people behind it. I do think that like this is a traditional thought, but it's true. I think it's relationships. I think the founder to an investor relationship is really important. There's a lot of trust there. And I think it expands for a long time. So I think it goes down to relationships.

**[00:46:51] JM:** So what relationship? Like what characteristics do you look for in a –

**[00:46:56] AK:** Yeah. So one characteristic I look for is been there before, right? Like you founded the company that's compelling. Well-connected is also very useful, because it is also a relationships business. And some of them you, it's hard to even like – Also, one feature which I really appreciate about a lot of our current investors, like they really care about – They put a lot of time and effort, right? Like they're just hard working, they're grinders. Like when I get an email, I reply fast, same thing. It's like the little things.

**[00:47:37] JM:** Yeah, I agree with that. I agree with that. It's like not only do you need an investor who is there when times are tough and an investor who's there when times are happy. You need an investor who's there when times are boring. You need an investor who's actually responsive to boring things.

**[00:47:53] AK:** Yes, responsive, just always on top of their stuff. I think that's super important in business in general, just being like on top of your stuff always just ready to tackle the day. Because if you don't, you lose leads, you lose potential hires. Like being on top of your stuff is super important. So like that's definitely something that I look for in the people that I hire and also our investors.

**[00:48:16] JM:** Have you used Sack Huddles? Have you seen the Huddle thing? Dude, it's so good. Slack Huddles is going to replace podcasts.

**[00:48:25] AK:** Why? Because there're big Slack communities, everyone getting in a huddle?

**[00:48:29] JM:** Yeah. So Huddles are exactly what you want out of Clubhouse. Basically, the Clubhouse product is probably effectively worthless. And it's going to be because of Slack Huddles, whatever Discord does, the same thing. I mean, Twitter Spaces I was unimpressed by.

Twitter's a little too open. Twitter's not organized into groups. People don't organize into groups on Twitter. There are platforms where people organize into groups. Facebook groups is pretty good.

**[00:48:58] AK:** Are they are they good?

**[00:48:59] JM:** Remember a few years ago, there was a lot of pressure on Facebook, and Facebook sort of just tried to change the narrative by focusing on groups? This is like post-Trump. Post-Trump Facebook says everybody get into groups. So people got into groups, and then they became radicalized. But look, actually, nothing d radicalizes people faster than being in a shared audio experience. Like if you want to deradicalize people, take away their YouTube and give them shared audio.

**[00:49:32] AK:** So you think audio is more compelling than video?

**[00:49:34] JM:** Well, shared video is great too. Share video is great too, because then you will see how ghastly the cult leaders are. Like all the cult leaders look really weird and unhealthy.

**[00:49:43] AK:** They sound great.

**[00:49:46] JM:** A lot of them sound pretty great. They're great orators, but they look like they're depraved.

**[00:49:50] AK:** Right. But that goes against what you're saying then, because if you're saying audio is going to promote deradicalizing, then if they were on video, but then that hides their scariness. So you'd actually think that audio would promote deradicalizing, right? Oh, no, no. How do you promote more radical behavior? Because they're hiding their scariness. Does that make sense?

**[00:50:16] JM:** It does make sense. What's weird is I just posted this tweet on Software Daily, but it doesn't look like the tagging worked. I used Tweet Deck. Do use Tweet Deck?

**[00:50:31] AK:** No.

**[00:50:32] JM:** Yeah. Speaking of which, what would you have done with Twitter? If you were in charge of Twitter all those years that was kind of like static, like nothing changed. Why did that happen? Why was Twitter a static product for so many years? Now they're doing all this interesting stuff. But they were a static product for many years.

**[00:50:49] AK:** I think people like to be a part of some new thing always, right. Like they want to be a part of a new cool thing. And that's the problem when you have a product that doesn't really change much. I feel like you have to change it in just subtle ways. And that's how you can get a research. I mean, like that's why Facebook had to turn to Instagram, right? Like Facebook and Instagram are kind of very similar. They have similar things, similar concepts, but like you pretty much have to provide a completely new product with a different UX, maybe some different features. That's my take. Twitter hasn't changed, has it?

**[00:51:27] JM:** No. Twitter's changed. So Twitter's gotten more streamlined, lots of small UX changes, clear ideological bent towards cryptocurrencies, which is useful. It's important. So which social networking company do you feel more comfortable putting in charge of your finances? Twitter or Facebook? I mean, if you're going to choose Twitter or Facebook to offer you financial products, which one do you trust?

**[00:51:58] AK:** I would say Facebook.

**[00:52:00] JM:** But wouldn't you want – You would actually want products from both companies, right?

**[00:52:04] AK:** I would say Facebook because it's bigger. I think if they messed up, there's more at stake.

**[00:52:14] JM:** The problem with Facebook is you have to treat Facebook like you treat Goldman Sachs.

**[00:52:19] AK:** I mean, I'd give Goldman Sachs my money.

**[00:52:21] JM:** Sure. But from a regulatory perspective, you have to treat it like it's Goldman Sachs. You have to treat Twitter more like it's – What financial institution is Twitter like? Like Square, probably. It's probably like Square. So you can treat Twitter like it's Square. Square has proven to be a pretty positive-sum entity. Not many people have a beef with Square. For being a payments company, not many people have beef with Square. Everybody's got beef with Stripe, or PayPal, or name your financial institution. People seem to generally like Square. It's the first payments provider that people like, other than Stripe.

**[00:53:04] AK:** Yeah. I guess, yeah, when it comes to story – So are we equating money with trust?

**[00:53:11] JM:** Maybe. Not entirely. You have to give money to some people that you don't trust.

**[00:53:17] AK:** Yeah. Like do I totally agree with everyone at Goldman Sachs? No, but do I trust them with my money? Yes.

**[00:53:29] JM:** For what though? Like what do you trust them with? Like what kind of – You don't want to buy collateralized debt obligation related products from them.

**[00:53:40] AK:** I'm just saying like if I had to take a million dollars and say, “Who am I giving it to? Am I giving it to Goldman? Or am I giving it to –”

**[00:53:49] JM:** But the problem with Goldman is sometimes Goldman puts your million dollars in the super risky tranche. And then they just say, “Sorry, we lost your million dollars because it was in the super risky tranche.” Much like Facebook occasionally says, “Hey, we caused an interaction sorry.”

**[00:54:04] AK:** But would they do that though? That would be a reputational hazard for them. Similarly, wouldn't that be –

**[00:54:10] JM:** When has Facebook shown concern for reputational hazard? That's the thing about Jack Dorsey. Jack Dorsey is way more self-aware and an act as if he's self-aware when it comes to image, whereas Zuckerberg plays the tyrant role. He's just like, “I'm a tyrant. I don't



care. I ride my jetski. I carry an American flag while I'm riding my jetski. It's a robotic jetski. And I'm a tyrant." He just doesn't care. Jack Dorsey is more empathetic.

**[00:54:41] AK:** Even if he doesn't –

**[00:54:42] JM:** Or Jack Dorsey at least claims to be empathetic. He at least exudes empathy. Zuckerberg is like smiling ear to ear with a lack thereof.

**[00:54:54] AK:** Do I think that my money will get exploited for them to make a lot more money off of the money I give them? Yes. But I think the reputational hit, if we're talking about a company A that is worth a billion dollars and a company B that's worth \$100 million, I'd trust the bigger company because you have an angry customer that loses money. They're going to pay more for it than the company with less, right? I feel like my money is more secure in a larger organization.

**[00:55:24] JM:** No. In fact, the penalties get less the bigger you get. Like the bigger you get, the easier it is for you to pay a seemingly large fine. So the fine looks large in the headlines, but it's actually small relative to how much money you actually have. That's why all the regulation is so toothless. Financial regulation is the easiest regulation to deal with, because it's really easy to quantify. What's really toxic is regulation, like you have to put a cookie banner on all of your WordPress websites. That's the really bad regulation.

The really bad regulation is the regulation where Facebook has to open source all of its software. Well, what I mean is it's bad for Facebook. It's good for us. It's good for us. That's where things are going to go, is Facebook is going to have to be open source. Facebook will have to be open source. Google will have to be open source. Not only will these businesses have to be open source. They'll have to be open data. They have to be open data, like vaguely anonymized data, granularly shared data. granularly shared model access. Like they can iterate as quickly as they want as if they're military technology, but they're going to have oversight like their military technology.

**[00:56:42] AK:** Yeah. I mean, they're not going to – Because regulation is not in place. They're making a lot of money because of that. Like they're getting away with –

**[00:56:50] JM:** Oh, have you looked at ad tech? Do you know anything about ad tech?

**[00:56:54] AK:** Yeah. Are you talking about the Apple? Like the Apple –

**[00:56:58] JM:** No, no, no. No, not that. Advertising fraud. Do you know about advertising fraud?

**[00:57:02] AK:** No.

**[00:57:03] JM:** About how like most of the ads on the internet are shown to bots?

**[00:57:07] AK:** Are shown to bots?

**[00:57:08] JM:** Yeah, most advertisements on the internet are shown to bots.

**[00:57:11] AK:** That can't be with where but corps sending that to bots?

**[00:57:16] JM:** Huh? Basically.

**[00:57:17] AK:** I mean, that sounds – At like how are ads such a big business?

**[00:57:23] JM:** Because it's fraud. Because it's a fraudulent business. It's the auto scaling fraud business. You didn't know that? You can just go search Software Engineering Daily archives for everything we've done in fraud.

**[00:57:38] AK:** Yeah, that would be a pretty big one. I mean, isn't Google like 90% ads business?

**[00:57:44] JM:** So they do they do search ads. So the thing about search advertising is it's kind of hard to run a fraud-based search advertising business. But Google manages it.

**[00:57:53] AK:** As in they aren't fraudulent.

**[00:57:55] JM:** No. As in they managed to run a fraudulent search-based advertising business.

**[00:58:01] AK:** Oh, so they do have – It is fraud.

**[00:58:03] JM:** Massive fraud. So one example is if you – There is some way. I can't remember how to do this, but you can search WebMD. You can search WebMD using Google. When you search WebMD using Google, you get a subset of potential ads that can be served to somebody who is searching Google. So it allows you to basically use Google search to vend you domain-specific, platform-specific advertisements. Because there is a way for platform specific advertisements to be served to you via Google AdWords – Or AdWords? What's the search one? AdWords. AdWords is their big, big, big, big, big business that they make their money printing machine out of. So the fact that you can get fraudulently-vended Google AdWords means that we don't actually know the numerator of the proportion of Google AdWords search business that is fraud. So we simply don't know how much of Google's business is fraudulent. We don't know how much of Google's business is actually taken from small businesses that think they're advertising to humans, when they're actually advertising to bots. The same is true, or an equivalent statement can be made about Facebook's business.

**[00:59:33] AK:** Well. Okay. Actually, yeah. I mean, when you think when you think about running an ad campaign, you think about certain metrics. You look at impressions and clicks, right? And then impressions, clicks, and signups – I guess the only metrics that shows impressions and clicks, but I guess both of those, you can just have bots. Is there any way to even verify what an impression is?

**[00:59:57] JM:** How would you do it? How would you do that? How would you solve that problem? You're a usage-based billing company. Shouldn't you know how to solve that problem? Isn't that exactly what you do? Like aren't you basically an impressions-based company? Your basic impressions calculation company. Shouldn't you know how to solve this problem?

**[01:00:12] AK:** We're an impressions calculations company? We would empower AdWords to charge their – We'd be empowering AdWords, unfortunately –

**[01:00:20] JM:** Dude, does AdWords need to be more empowered at this point? Don't they also – They're another one of these internet tax people. They're another one of these internet tax people. It's like Stripe, Sstripe and Google and Facebook, the internet tax people. Like their goal is to grow the GDP of the internet because they're a tax on the Internet. Like that's not a positive goal. That's like an arbitrary goal. GDP is a number. It doesn't actually confer anything. I'm just giving Stripe a hard time now, and Google a hard time.

**[01:00:58] AK:** I disagree on –

**[01:00:59] JM:** Because here's the thing. Okay, here's the thing. Listen –

**[01:01:01] AK:** Okay, Google makes money on ads, which is like no one wants ads. I don't know if that's a plus for the world.

**[01:01:09] JM:** People do want ads. I want ads.

**[01:01:11] AK:** Do you want ads?

**[01:01:12] JM:** Listen, here's the thing. I want Octane to pay to be the top spot on AdWords, because you guys are the market leader, right? So you should be paying top of market. You should pay the internet tax because you get a lot of value out of the Internet. Google built the Internet. They deserve an internet tax. But let's just call it what it is, right? Can we just all pay a tax to Google and be done with it, instead of playing this game around this advertising thing? Let's pay them a tax.

**[01:01:40] AK:** Google Ads equals Internet tax.

**[01:01:42] JM:** Let's just pay them a tax. In this BS where we have to pay for a second tier of search results, like there are two tiers of search results that we pay money for. One of them is the tier, like the paid tier, and the other one is like the real tier. And we have to scroll past the paid tier to get to the real tier. Like what is this product?

**[01:02:06] AK:** And also, like I know very, very few entrepreneurs that are succeeding or that have grown their business purely off Google ads.

**[01:02:13] JM:** No, you grow your business, and then you pay the Google tax to grow your business faster.

**[01:02:19] AK:** Organic searches, that's what really is going to drive your business, right? Not the Google ads. I don't understand. Like I think there's something to uncover here how it's 90% of their business, because that's not an entrepreneurial strategy, right? Maybe at growth-growth, like you're paying –

**[01:02:42] JM:** Listen. I want you to know something. I want you to know something. I started reporting on advertising fraud. I guess it was like four and a half years ago. I thought that somebody was going to have me killed, because I was reporting on this. So this is like one of the biggest conspiracies in the Internet. Nobody talks about it. It's the actual way that Facebook and Google make the majority of their money and nobody looks into it. Because if you think about like, remember the congressional hearing where people were like – There were some congressmen that asked Zuckerberg like, “How much do people pay to subscribe to Facebook?” It's like, “What? That's not what Facebook is.” Facebook is an ads-based business. If you want to inspect Facebook, look at the ads business. You want to inspect Google, look at the ads business. If you can't understand the businesses, you don't understand the company. So all of these like fake critics of these companies, they just don't go for the jugular. They go for the talking points. They go for the polemic. Like how do you actually criticize the company? Go after their revenue lines?

**[01:03:44] AK:** Yeah. How do you even do that? Like how do you uncover this? I feel like –

**[01:03:47] JM:** You read a book about Facebook, which is what I did.

**[01:03:50] AK:** Okay. Yeah. Yeah, I mean. Yeah, I mean, that's the thing too, right? Facebook ads empowers Facebook, right? Isn't that most of Facebook's business. Also, the Facebook ads are insanely good.

**[01:04:00] JM:** They're insanely good. They're not too good. They're not too good, man. This is television. We're in the television era of the Internet, right? We're in the passive, recline and let drool drip out of your mouth generation of the Internet. And that's coming to an end, right? The whole like creator economy thing, that's just going to wipe Facebook off the face of the earth if Facebook doesn't do something drastic. Nobody wants to consume.

**[01:04:26] AK:** How is how is Facebook – Do you think Facebook's going to last a long time?

**[01:04:30] JM:** Yes, absolutely.

**[01:04:31] AK:** What about this open – So I agree with you on just like the future is like open – Like you can control what data is on Facebook. It's more of this open source concept. If we do that though, their margins are in the shit, because they can't sell better ads.

**[01:04:46] JM:** So Facebook was able to pivot to mobile, right? Facebook had an existential threat pivoting to mobile. So Facebook has already shown a proficiency in adjusting to new market conditions. If I say to Facebook today, "You are going to have to be open source in five years," they can do it in three.

**[01:05:06] AK:** And you think they'll still be equally profitable though?

**[01:05:10] JM:** They'll be much more profitable. Imagine a world in which people trusted Facebook.

**[01:05:15] AK:** It sounds like a never like – That sounds like – Maybe. I guess, maybe. Maybe there's a world that –

**[01:05:23] JM:** If Mark Zuckerberg open sources Facebook, changes the narrative over the next five to 10 years about what Facebook is, the guy can run for president at age 45.

**[01:05:33] AK:** But what is he selling then?

**[01:05:36] JM:** He's selling Facebook? Like that's the thing. This is why it's so stupid. Dude, you own like the most addictive software platform in the world. Just charge people for it. Like charge people for it. Limit their usage. What are you doing? You're giving cocaine to people. You're giving unlimited cocaine, unlimited morphine, unlimited dopamine to people. Can you please charge the money so that they're restricted? Like what are you doing? It's not healthy.

**[01:06:07] AK:** Charge it on usage. That's sounds –

**[01:06:08] JM:** Charge it on usage. Charge on usage or do a credit system. If you contribute to the knowledge base, you get free credits. If you – I don't know, participate in the sporting event, get free credits. Do the social credit score, right? Do the social credit score but in a responsible way, or something? Do something better than what you're doing? Can we stop taking advantage of each other? Please?

**[01:06:34] AK:** So WhatsApp, before Facebook, I think they charge about one buck a year. And that was like very profitable for them too.

**[01:06:40] JM:** Yeah, great business.

**[01:06:43] AK:** I mean, they got what? A couple billion users now? Like three, if I had to guess? I don't know. How much money they made –

**[01:06:48] JM:** I mean, look, if you're Zuck and like Jan Koum just walked out of your company and you're you're still sitting there. You're like, "Why are all these guys leaving? What am I doing? Come on, Kevin. Kevin, where did you go? Kevin, I bought your company. I bought your company. Are you going to hang out with me? Kevin, where are you going? Jan, where are you going?"

**[01:07:10] AK:** I think they all sold to Facebook because of the existential threat.

**[01:07:15] JM:** What existential threat?

**[01:07:17] AK:** That they'd get killed. I'm pretty sure, I think I saw like there's like a chat with Kevin and –

**[01:07:22] JM:** Dude, I got to go in four minutes. We need to solve Facebook in four minutes.

**[01:07:26] AK:** Charge it on usage. Use Octane.

**[01:07:28] JM:** Charge it on usage. Use Octane. We're done. Pay attention to the press release. I'll edit the press release right now. Facebook will be using Octane.

**[01:07:37] AK:** That's it.

**[01:07:38] JM:** Flagship customer. Flagship customer. Oh, wait, I think I got the octane.io link is still in here. Let me add this. Now we're doing press releases. We're a press releases company now.

**[01:07:50] AK:** That's pretty cool. I'm excited that we get to be one of the first press releases you have.

**[01:07:54] JM:** The first. Other than press releases for my own products.

**[01:07:58] AK:** It says octane.io.

**[01:07:59] JM:** I'm changing that right now. I'm changing that right now. It was a good show. I enjoyed this.

**[01:08:05] AK:** Yeah, this was this was awesome.

**[01:08:06] JM:** Sweet. Talk to you soon, man.

**[01:08:07] AK:** Thanks for having me.

[END]