



For Cloud Professionals, part of the On Cloud Podcast

David Linthicum, Managing Director, Chief Cloud Strategy Officer, Deloitte Consulting LLP

Title: Transforming SaaS cost structures with consumption-based billing

Description: Subscription-based billing methods for SaaS products aren't flexible, and they're often not fair. Drop-in metered billing solutions change that dynamic by enabling consumption-based billing—with customer-chosen metrics—for SaaS. The result? For customers, a more equitable billing structure with improved cost control. For software vendors (or any company looking to monetize home-grown software), the ability to build a more flexible, customer-driven product and get it to market faster.

Duration: 00:24:01

Operator:

Welcome to On Cloud, the podcast for cloud professionals, where we break down the state of cloud computing today and how you can unleash the power of cloud for your enterprise. Now here is your host David Linthicum.

David Linthicum:

Welcome back to the On Cloud Podcast, your one place to find out how to make cloud computing work for your enterprise. This is an objective discussion with industry thought leaders who provide their own unique perspective around the pragmatic use of cloud-based technology. Today on the show we are joined by Akash Khanolkar, and Akash is cofounder of Octane, a drop-in, metered billing system that gives businesses the flexibility to bill how they want. This interests me a lot, Akash, because, ultimately, I've built a lot of SaaS-based systems for clients in the last ten years, and, really, the ability to do

metering in billing and really kind of manage that process was a lot more complex and a lot more expensive than we thought it is. So, tell me about your technology and how you got in this game.

Akash Khanolkar:

Yeah, thanks for having me, David. It's interesting. I mean, so I come from a cloud background, right, and I know that that's one of the core tenets of this podcast, so I'm really excited to be here. What we've seen is, especially in the SaaS world, all these businesses, they've been aggressively and actively moving to the cloud. And what we've seen is that the most effective billing model, particularly with cloud-based businesses—think AWS, Azure, GCP, these companies—the way that they bill is on consumption. And what we're seeing now is effectively the entire SaaS industry is starting to trend after. They're seeing the massive successes, the massive successes of moving to a consumption-based billing model, and we're seeing a pretty significant trend now towards everyone adopting that model.

David Linthicum:

Yeah, and this is interesting to me, because I would take a company and they have some sort of a, say, some sort of a vertical application that they built up over the years. They found that their supply chain wanted to access to it, and they wanted to, in essence, externalize it as a SaaS-based system—we used to call it “SaaSification” as the ability to kind of take something that is not multi-tenant, doesn't have billing on top of it, was really designed for internal use, and expose it as a SaaS application, and deal with security, deal with multi-tenancy, add the billing aspect to it, things like that. So, how would you approach them and what would you suggest that they look at in terms of how they set up their billing processes and how the mechanisms work?

Akash Khanolkar:

Yeah, so there is no one-size-fits-all solution. Ultimately, for a SaaS company, what really matters is what works for the end customer. What we're seeing is there's a pretty significant shift towards bottoms-up methods of business, so SaaS companies selling to the developers and to smaller accounts and growing those accounts. And that's really where usage-based billing comes in. So, when we think about what's the most effective way to bill in a SaaS environment, it really is just having a very flexible style of billing. You should be able to offer your customers usage-based billing, flat fees if they need. You really want to just have a lot of flexibility.

David Linthicum:

So, when we do this sort of thing how do we tie it into do we tie it into the logon? Do we tie it into the security system, the identity system? If we're doing consumption-based billing, when is the billing turned on? How are we tracking it? And are we doing it by user, by company, all of the above?

Akash Khanolkar:

Right. So, again, that largely depends on the type of SaaS business. So, if we're talking about a purely—let's talk about a cloud-infrastructure business, let's say a managed database, machine-learning platform, et cetera. The method in which you bill is going to be purely based on the consumption of that infrastructure. So, if we're talking about CPU memory storage. It could be number of nodes, et cetera. But the way to actually—technically what we're really talking about here is a stitching together of metering systems, so metering your telemetry data, with some, effectively, ETL that happens from that telemetry data into what the revenue amounts would be. So, in a pure cloud-infrastructure world, it's going to really be just the telemetry of your infrastructure.

Now if we're talking about a seat-based—if we're talking about, for example, a company that's purely charging based on number of seats, that's still usage-based. But how we're actually tracking logins and logouts is obviously going to be completely different. So, it really depends on the type of SaaS business.

David Linthicum:

So, say—well, let's get to a bigger question. How much of a business opportunity is it for companies that aren't in the traditional technology business, like the ones that employed me over the years, to SaaSify their systems, to expose some of these things, whether it's data, whether it's applications, whether it's core processes, and then sell them in the open internet, in essence, with whatever consumption model, whether it's per-seat, consumption-based, things like that, how—where is the opportunity for that? And are you working with companies—and I guess you are—that are doing that right now, where they're, in essence, moving from more of a traditional-based system—it could be a healthcare provider, insurance company, things like that—into someone who's actually selling and becoming a technology company? Walk me through that. Have you seen that a lot? Is that a rarity in the marketplace? because I see it a few times, and I think it's starting to grow.

Akash Khanolkar:

So, are you saying shifting from an annual commit-based deal, or a month-to-month deal, to a usage-based? Is that what you're asking?

David Linthicum:

No, I'm actually talking about a complete transformation. In other words, they have an internal system, or they have internal data that they're looking to expose outside of the organization and sell and, in other words, get into selling this application per use in some usage-based billing model, getting into some data per use, a usage-based billing model.

Akash Khanolkar:

Ah, I see, I see. So, some—some internal system that people are using for their own internal set of business purposes and then reselling it to the outside world also.

David Linthicum:

Yeah.

Akash Khanolkar:

Okay, yeah. Right. So, this is a—yeah, so, this is another big shift that is happening, and I experienced this, too, when I was over at a big—working at a big bank in a previous world. But, pretty much, you look at especially larger enterprises, and I'm sure you've seen this. Everyone's building an as-a-service offering, and you think about how AWS was born. It was born out of Amazon creating—pretty much selling what their internal as-a-service product was to

the world. So, we're definitely seeing a pretty big trend to even internal businesses building their internal SaaS, and we see that with lots of users, actually taking that internal as-a-service product and selling it out to the world.

David Linthicum:

Yeah, and I didn't even see that aspect of the market, but I guess that would be a smart thing to do. In other words, if you have an existing application, your ability to put metered billing on it and certainly do show back and charge back with these various systems, whether you're externalizing outside the company, internalizing within the company, keeping track of who's using it and the ability to kind of distribute the way people are going to be impacting the budget based on usage, and also potentially your ability to sell it out to known customers. In other words, you may sell it within your supply chain, so anybody who's dealing with you. You're a big retailer—not naming anybody specifically, but they have to link into your internal systems and they have to leverage your software. So, it's okay for you to charge them for that. Your ability to have billing systems to allow how it's allocated and how it's pushed out would seem to be a logical conclusion.

So, this is kind of moving in—this is exciting, because we're moving into a world where data, applications, things that we typically didn't monetize, were leveraged for direct business value within the company, we can leverage in different ways. As you just mentioned, we can leverage it internally, kind of as an internal SaaS, which just makes—it's just smart because we're able to kind of compartmentalize the application versus make it versus one of a large platform, but also getting to the technological business.

And I just see—I see this as kind of a quiet revolution within the market. And we are getting the tech startups that are building things and getting into the usage-based billing. I'm sure that's a large part of your market and we'll talk about that next. But also the ability—and this is kind of the cooler part—to get into the traditional companies that may have sold biscuits the last 80 years, and then suddenly they have an application that everyone wants access to and they're able to monetize that application in a different way. Am I overly excited about this? Should I be excited about this? Am I reading this wrong?

Akash Khanolkar:

Yeah—no, I think there's—I mean, there's a lot of—so what's happened is, because we talk about how we talk about just how cloud infrastructure, cloud automation—it's now way, way easier to even SaaSify things. So, being able to create, effectively, a full stack that includes automated security, automated login, monitoring, and now, for example, with Octane's perspective automated billing, you're really able to build a full SaaS product really, really fast. And that wasn't something that was available several years ago. It would've been a much more challenging problem, and you'd probably have to make your core business that and that alone. So, when you're talking about how companies that have these internal-facing, as-a-service teams that are selling only internally and now externalizing that, that is a very real thing that's happening.

David Linthicum:

So, what's a typical client for you, a customer for you? What kinds of problems are they looking to solve? Why do they call you? What's the pain point that they're trying to eliminate?

Akash Khanolkar:

So, the SaaS market in general has become extremely competitive, and you'll end up having several software vendors more or less selling a very similar, or the same thing. So, typically the winners of these different market segments end up being the ones that have a few things—obviously the best product, but also the most flexible ways of billing. And when companies come to us, they're really here to—expressly to now extend their existing billing system. What we've seen is, today enterprise software is extremely inefficient in the way that they build. It's pretty universal that you're seeing annual subscription deals. So, you'll go to an enterprise software vendor and you'll say, "I want to buy your software," and they'll say, "Okay, it's going to cost 50 grand a year, or 10 grand a year." And that's a fairly common practice that you see in enterprise software.

Now our company, Octane, what we are helping companies do is actually facilitate a much more flexible way of billing. So, we said usage-based billing. It's something very similar that you experience when you consume AWS, Azure, or GCP. The problem in the market is a company like an AWS, they have hundreds of billing engineers working, or thousands of billing engineers, working on building a robust metered-billing system. And companies at various stages don't really have that luxury, so we're really simplifying the experience of implementing usage-based billing.

David Linthicum:

So, in other words, you're taking a fixed-fee billing kind of system, subscription-based billing kind of system and you're converting it into usage-based billing? Am I getting that right?

Akash Khanolkar:

Exactly. We're making that—the ability to sell on a usage-based system extremely easy, yes.

David Linthicum:

Got it, and that kind of leads to one of the things I had in the show notes was why SaaS billing is rarely ever fair. And that kind of makes sense, because if we're consuming a subscription product, and we're allocating that subscription among the different divisions within the company, or the different users, if I'm a rare user of those systems, suddenly I'm paying a lot for value that I'm not getting. And this, in essence, allows us to pay for just the value that we're getting from leveraging that technology. Close?

Akash Khanolkar:

Yeah—no, absolutely. Usage-based billing is really an incredible method of billing for both the end user and the seller, because what happens is, like I said, going back to the annual subscription—let's think of an annual gym membership. If you buy that gym membership and you never actually go to the gym, which we've all been—at one point have maybe faced that issue, you'll feel a bit of resentment. You want to really pay for things that you're actually using. And in enterprise software, that also often happens. You do a large contract with another company, and you don't actually end up using the software to the extent that you'd like. So, the closer you can get to the actual usage—the usage and value of the product in terms of the price, that's when you have really happy customers.

David Linthicum:

Yeah, I would think so, and I would think your ability to, in essence, allocate things to people who are leveraging them also gives you better insights into who's leveraging the technology, for what purposes, and how much value they're generating from usage of the technology. So, I mean, it's one thing—and this, by the way, is a common complaint that I hear from users of cloud-based systems, is that they, in essence, get allocated—and it could be an infrastructure-as-a-service provider or a SaaS provider. They get allocated through a percentage as to, if there's five divisions of the company, they're paying for one-fifth. And they may actually not ever use that cloud provider, but they're still paying for it.

And it seems to me that that's an accounting issue because they're removing money from their budget that's probably unfairly removed, to the point you made earlier. But core to this is, I don't know who's consuming this and what they're leveraging it for. And, so, this provides me accountability internal to the company to what's going on. And I think certainly with cloud computing now that's 23 to 30 percent of existing system infrastructure, that's going to be pretty important. What are your feelings on that?

Akash Khanolkar:

Yeah. I mean, that's a whole—even just being able to, from the end buyer perspective, being able to understand what spend looks like when you're actually consuming software as—I mean, it's really important. If you have a pretty significant gap where it's, like we said, you're spending 100 grand a year, but you're spending \$20,000.00, I mean, there's a pretty significant problem there. And what you're ultimately going to want to do as a buyer is switch vendors as soon as possible to one that would actually map the value to the spend. So, we're going to see that a lot more. We're going to see a pretty big shift towards—annual subscriptions are going to slowly dwindle.

David Linthicum:

So, I always like the things with my customers when I was—back in my CTO days and building products. They would come to me with stories of what I call an unintended value. In other words, they're leveraging my technology in such a way that they discovered that—to find this value vector that I never identified. Are you finding that people are finding value within your product that you guys probably didn't even consider?

Akash Khanolkar:

Oh, so value in our own product?

David Linthicum:

Yeah, value in your own products. In other words, leveraging something that makes something much more easier that you probably didn't anticipate that they would leverage it for.

Akash Khanolkar:

Yeah. Well, so actually, on that note, what we've found is that there's a constant experimentation that happens across vendors of all sizes, small to—it really doesn't matter what size you are. There's a continuous discovery that happens of what are the metrics that we charge on that are the most valuable to the customer. And that can often change. So, you'll start to see, "Oh, it looks like this new type of user is consuming this specific metric a lot more; we should dial in on that."

And what's been interesting that's happened on our platform is the amount of experimentation that happens. So, there's a lot of testing that we're seeing, and people are generally—we're seeing that the succeeding companies are very data-driven, and what they're doing is, they go in with the preconceived notion of these are the set of metrics I want to bill my customers on, but then they're leaving it, learning that there's actually an additional set of metrics that might be more valuable to bill on. And that we've found fairly fascinating.

David Linthicum:

Yeah, that's interesting also, too, because you basically just loop that back into your products, in other words, this value vector that people are finding. We're able to accommodate it differently, and as you rev your product, continuously improve it, you're going and building that stuff in there. So, let's get in a time machine, right, and go forward three years, go forward five years, and look at enterprise billing, the market that you're in. What do you think is going to change, and why did it change?

Akash Khanolkar:

What we're going to see in the next several years is that enterprise software billing is going to become way more advanced. Users are going to have a lot more flexibility to click and choose in the way that they consume software, very similar to what we see with, for example, the cloud providers. Customers are going to be able to go in and say, "I want to go ahead and start using your software," and they start using it and they start paying for it. "I want to go and pay for the year, but get a reserved amount of this enterprise software. I'm going to want to go and..." We think about, like, spot instances, too, and, like, for example in cloud infrastructure. "I want to be able to go in non-peak hours and pay a cheaper amount." We're going to start seeing a much wider range of just flexible billing options.

The other thing we're going to see is, because of just the continued amount of competitiveness in the enterprise-software space, we're going to see it become a lot fairer for the consumer. So, in 2015 actually, Slack released what is called the Slack Fair Billing Policy, which says if you're a non-active user for a certain threshold of time, you don't get charged. I think we're going to see a lot more of that across enterprise software, in which if you are a user that doesn't use the software, you're not going to have to pay for it, or you're going to get a refund. So, we're going to get a lot more advanced in—the long story short is we're going to have a lot happier customers because billing is going to be way more advanced and flexible.

David Linthicum:

Yeah, in essence, we're moving to consumer-based billing so we're paying for when we use the gym, right?

Akash Khanolkar:

Exactly.

David Linthicum:

Yeah, I think that that is going to be a lot more fair, and it's a large complaint. What I think is people are consuming this technology internally, the ability to kind of divide it up in a fair way have automated systems, things like that. I think the flexibility aspect is going to be kind of a game changer. People are going to demand that we do things in different ways, different models based on how we're consuming the technology and the value that it's bringing into the business. So, I'm assuming you had this vision, you dialed this into the product roadmap, you're looking to move forward with it things like that. So, what should the enterprises who are looking at this technology consider today, specifically about your technology?

Akash Khanolkar:

So, can you explain that question a bit more?

David Linthicum:

Yeah. I mean, ultimately, if I'm going to be moving forward with a billing system, and we're going to start morphing our existing technology to run this billing system, I'm trying to, in essence, prepare my infrastructure, prepare my people, prepare my technology, prepare the use we use cloud, sort of like that, to move into kind of a billing arrangement. And what I'm getting at is, before they give you a call, what would they—what should they be doing internally to kind of improve their chances of success?

Akash Khanolkar:

Yes. It's important to have the ability to easily get that telemetry. So, what I mean by that is, if you want to actually understand what the optimal way to price and charge your customer is, well, you're going to need very granular data. So, you're going to need to know, across the different dimensions you want to price on, say, active seats, API requests, compute—you're going to actually need that telemetry data. So, it's important that you build a system that will support you getting, one, very granular data, and two, a large range of that, because as I'd mentioned before, you'll think that you should be pricing on one metric, maybe it's number of seats—and we've seen this with many of our customers. You'll eventually learn that actually, wait, maybe I should be charging on the second or—this completely different metric that's actually closer tied to value, say API requests. And for you to do that, you need to really have the—you really need to be able to extract the telemetry, obviously segmented on a per-customer basis. So, that's what's really important. You want to be able to do really granular metering on a per-customer basis across the different dimensions of your product.

David Linthicum:

Yeah, I think that's great advice. I think this is something that enterprises aren't into right now—they should be—are going to have to get into it moving forward, because the FinOps aspect of it, the ability to deal with financial operations and the ability to control and allocate this stuff to the value that it's providing is really going to be a core challenge going forward. And the reality is you have to think about this—how you're going to do it yourself, and different enabling technologies, such as Octane, to make this work. So, where can we find out more about you and where can we find out more about your product and company on the web?

Akash Khanolkar:

Yeah, absolutely. Come please check us out at [GetOctane.io](https://getoctane.io). Feel free to shoot me an e-mail, too, if you have any questions at [Akash@GetOctane.io](mailto:akash@getoctane.io). And we have a self-service experience. You're welcome to get started.

David Linthicum:

This is great. I think this is fantastic. This is a different dimension that we typically don't talk about on this podcast, or other podcasts, and just there's so much noise out there in the business. And the reality is that this is foundational technology I think all enterprises are going to need to do cloud correctly. And I think as we get into migrating to these various systems, we have to be able to allocate the value to who's consuming the value. And the reality is, I don't think a lot of the puppet cloud providers and SaaS providers are really focused on doing that; they're just focused on providing their product and billing some sort of a fair thing for the company in general. And your ability to kind of separate that out into some sort of thing that makes sense that everybody agrees on is going to be a key value point moving forward.

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Operator:

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