

Patrick Moorhead: Prakash, thank you so much for coming to the Six Five Summit 2021. We really appreciate it.

Prakash Darji: Pat, thanks for having me.

Patrick Moorhead: And probably the best place to start, Prakash, is let's talk about what you do at Pure. You have a great and cool title. So let's talk about it.

Prakash Darji: Well, so I've been with Pure about three years now, but over the last year I've been driving the digital experience for the company. And that largely means how do we offer service offerings to customers, primarily storage as a service, but then extending beyond that, potentially action services and other storage services on top.

Patrick Moorhead: Yeah. So you pretty much are at the epicenter of what is the hottest thing in tech right now. We had this, I call it the drunken sailor mode, where everything was public cloud or it's not good. And then now you see the cloud native folks bringing out on-prem and hybrid and you have the traditional on-prem folks bringing out hybrid. But the great news is we're on the same page, particularly as it comes to self-service options that are out there. And I'm curious, how are these new financing and self-service as a service options actually enabling digital transformation? Or are they even doing that?

Prakash Darji: Well, so, I think there's two pieces we need to unpack. The first is, the finance and the asset service thing sometimes get conflated. They're not necessarily the same thing. There's companies going from CAPEX to OPEX. That's one thing that is an industry trend where people want more of a consumption-based or operational expenditure. And some industries don't. Some industries are happy spending capital.

But that's very different than what I would consider storage as a service. Because when you talk about a service delivery, what are the major problems you need in storage? You either have more data and you need more space, or you have more performance requirements. It's kind of one of the simplest industries. Obviously you want to make sure that it's up and it's always on and all of that, but it's performance and capacity are the two primary vectors you want out of a storage system.

And price. Obviously price performance is another consideration. Well, when you think about storage as a service, what do you have to do to manage that? Could you just say "Here's the performance tier I want, give it to me." And if you want to upgrade or degrade performance tiers, pay a different price performance, you should make it a vendor problem, not a customer problem. So it all comes down to having service levels and service level obligations. And I would liken to say many years ago, industry apps went through the same thing. When Salesforce came around and set up CRM in the cloud, it was like "Okay, don't worry about setting up your CRM system. We've got a way of doing it. You

can set it up, you can subscribe it and onboard sales reps." Why shouldn't storage be similar?

Patrick Moorhead: Right. Well, I'm not always in complete agreement with everybody that I'm interviewing, but I have to say that's exactly where my starting point is. My company covers SAS, I cover IAS, I cover PAS and everything in between, on-prem as well. And that is exactly where I think the industry should be thinking is different tiers, different prices, you want to accelerate, you want to degrade, you want different options, make it easy, make it easy for everybody. So I'm really glad to hear that. So the industry, I would say my overuse the word digital transformation over the last few years, but in the context of enterprise storage, what are the trends that you're seeing that are reflective of the transformation?

Prakash Darji: Well, so let's talk about a digital transformation use case, right? When people say digital transformation, it's not really well-defined. It largely means "I probably want to get out of the data center business, I want to use cloud, I want to develop my apps faster." It means a lot of different things, but if you just kind of boil it down to first principles, how do you evolve your business such that you can serve a size, your business? And it doesn't... I'll give you an example. There's a tractor company in the Midwest that builds million dollar tractors. And what do they do? They ship tractors to people. But what if they had access to the telemetry off the tractors, and they could now say, "Instead of you just buying tractors, you could go ahead and buy utilizing tractors." They're million dollar assets.

Patrick Moorhead: Right. Right.

Prakash Darji: Probably the one I like lay that out. So you need to start with observability. Anything you do in digital transformation starts with data. You need to collect the information off the device. And I don't care if that's an IOT device. I don't care if it's a player helmet in football for wearables or whether it's a storage system. It starts with collecting the data. And the good news here at Pure, we've had Pure1 for a while collecting storage data, storage telemetry around how people are using storage systems. And now, largely right now we're tracking at about 20 petabytes a year that we ingest in telemetry off spot systems. So now we can optimize how to deliver the service tiers. So that's what I think about with digital transformation, it with observability and ends with SLA.

Patrick Moorhead: Yeah, it's funny. My response is always a little bit snarkier, which is the first thing I think of as analog transformation to be difficult and try not to use the word. But I think of technology is speeding up so fast because we have the newest technology creating the newest technology that you have to think of vertical integration, horizontal integration, suppliers become competitors. I have to go from widgets to widgets as a service. And how am I going to do that? And you are right. It does all start with what's coming off storage, that then becomes data before anything else happens. So, taking this from kind of strategic, maybe a little bit more abstract to definitively, what are some of the big questions that

organizations should ask when evaluating solutions and whether it's... And let's focus on storage as a service here.

Prakash Darji:

Well, I think the first one is this. When you're operating a business, you need uptime, right? Your storage system should always be on. So the first question I would tell people is, how do you ensure you don't have disruption events? A service means it's on. For example, today if Salesforce systems or their SAS finance systems go down, they can't close the books and they can't book revenue. Their whole business comes to a stop. Right? And my doctor's office told me this recently, there used to be a day prior to digital, when they could continue to do business, it was slower, but they could continue to do business if the power went out because everything was pen and paper. Now, if the power goes out, you probably got to refuse medical treatment to people. It's a very different world when you're thinking about digital. Uptime is everything.

So the first question is, how do you have a hundred percent uptime with no disruptions? And here at Pure, the way we approach that is we introduced an architecture called Evergreen. It was part of the foundation of our products, such that if you buy 100 terabytes and you deploy 100 terabytes, you'll never have to change that system or do a data migration. There's no planned downtime. There's none of that. And the company's been around 10 years and I still haven't seen another company in storage deliver that. So, largely how can you build a storage as a service, without that capability? You could build financing, you've been doing subscription. And I hear a lot of people in storage talk about subscription and CAPEX versus OPEX. But I think you should ask the fundamental question of uptime and SLA because that's where it all starts.

Patrick Moorhead:

I love that. Very provocative. We should be asking those questions. So let's talk the future. What you're talking about here, Prakash, sounds very much like the public cloud. I mean, is this how this plays out? That there are big moves to the public cloud, but will these, I'll call them on-prem as a service or let's say at a service provider, slow that down?

Prakash Darji:

I don't know whether it's slow it down or not. I think everything starts with the point of origination of data. If you have a bunch of SAS apps, it probably makes sense that you're going to store those SAS app data in the cloud that it's sitting on or near it. And if your point of data generations on-prem probably makes sense that you're going to do that. I think the problem is this; you need to think about your cloud experiences as ubiquitous. It needs to work across on-prem and the public cloud. You need common management, monitoring, billing, APIs, right? Those four kind of vectors need to unify storage where the location doesn't matter. When people talk about cloud, everything's about well, is it in the public cloud? Is it in the hybrid cloud? Is the hosted cloud? It's just getting silly.

If you really need to go ahead and talk about the ubiquity of data management. And then the question is, can you offer that same experience everywhere? And if you think about management, I think you can, monitoring you probably can,

billing you can, and APIs you can. And by using someone that's a best of breed provider, similar to what we offer at Pure, you can do that. Where you can have a common storage API across Microsoft, AWS, non-prem, and your environment Azure. But one of the interesting things to say, where's the workloads going and what companies are doing, is...

Just a few weeks ago, Andreessen Horowitz just published trillion dollar cloud repatriation problem, right? The cloud paradox. And I encourage anyone to check it out. But if you're building a SAS company today and your cost increases linearly with customer acquisition, which is kind of how the cloud utilization model works, you eliminate any path to profitability in real valuation. So these are real problems that are happening for SAS companies that are crossing the chasm into large public real estates. And now it's like, well, the cloud's a great place to start, but is it a great place to scale their profitability or not? And maybe it's a private cloud, maybe it's a public cloud, right? So these are the considerations of the modern day business.

Patrick Moorhead: Yeah. I read that Andreessen Horowitz article and it said what we all knew, which is, listen, nobody goes to the public cloud to save money, right? People go to the public cloud to speed up agile, add 10,000 servers, and the next day take them offline. And also having APIs and services that are available. And I actually do think we're in a better place now in the instance that AWS outposts was announced, the conversation was done. Hybrid cloud is a real thing. And now we have, I like to look at it as candle on both ends, you have the cloud native vendors trying to get on-prem and you have the on-prem vendors going hybrid cloud. So at least we all seem to be headed in the right direction where five years ago we weren't. And what I am wondering about though, in relation to, as a service, how does Pure fit into that story? Because you're doing things with the hyperscalers and the public clouds.

Prakash Darji: Well, so we've introduced our storage operating system, Purity, in both AWS and Azure today. And we call it our cloud block store. It's our cloud service. So customers can get common management, monitoring, and APIs across that environment. And if you think about workload mobility, very few people are really running things on bare metal today, they're running things on virtual machines or containers. And those environments are what [crosstalk].

Patrick Moorhead: Don't tell anybody.

Prakash Darji: Yeah, exactly. Right? So those environments, it's not the storage that needs to be portable. If your VMs, you're moving your VMs, that you've deployed and they're portable, your storage needs to move with it. And the only way to do that as an open storage format, which VMware has called vVols. And Pure, was published as the number one provider of vVols by VMware, in an open storage format for portable cloud workloads.

And then for containers, we acquired Portworx, which was the leading storage container platform, which deploys across AWS, Azure, Google, and on-premise

where people actually can deploy their apps in a portable way. Now, you combine that with our cloud operating model, where you pay for your consumption and you get SLAs with a common management monitoring and API paradigm. For both VM and container workloads you now got a way of solving the modern storage as a service problem. And like I said, it started with observability. We're still the only storage vendor that has unified VM and container monitoring in our Pure1 monitoring real estate.

Patrick Moorhead: I love it. So, Prakash, what if I'm an enterprise and is like, "Hey, I love this storage as a service thing and even kind of knocking up against the data as a service." What is the first thing that somebody needs to do, who has a large on-prem estate to get into as a service?

Prakash Darji: Well, there's three elements. One is your business side. One is your technology side. And three, are you dealing with legacy or net new? So first, you need to have a business imperative saying, "I'm okay working on a utilization or consumption basis." And some people are okay with it. Some people are not, that's a business maturity.

Patrick Moorhead: Let me make an assumption here. Let's say I'm somebody who it's very seasonal. My needs go up and down. When I need it, I need it, I needed big, and I need to get back to a [inaudible] point. Let's use that as a starting point.

Prakash Darji: That one's easy. As a service helps you in that world, because you can make a smaller reserve commit and pay on demand for your bursty workloads. So the model of utilization basis makes that a no-brainer.

Patrick Moorhead: Okay. Where do I start? You said it starts with a strategy, a strategic imperative. And let's say that strategic imperative is be able to better serve my customers on the upswing.

Prakash Darji: Well, look on the upswing then you need your storage as a service to have SLAs that manage headroom. And it's the vendor needs to provide enough monitoring such that the vendor can manage your headroom, not you. So, the vendor needs to know what your utilization patterns are. So, let's say in a particular location, you're going to have an upswing. They need to make sure you have the right equipment and the headroom to be able to manage it, not you.

Patrick Moorhead: Okay. And be clear, because when you say storage, is this something that you do?

Prakash Darji: Okay. Well, so in the Pure as-a-service case, we do, right? So our Pure as-a-service offered, does that. We provide the performance and capacity SLA. We have that, we manage the headroom. So you can go on demand, you can do bursty. We provide the uptime SLA with Evergreen architecture, such that it's non-disruptive. So you no longer have to worry about an outage or those types

of things, your planned downtime. And it's funny when you read some of the terms and conditions of 100% availability ignoring planned downtime, right? What does that even mean? I've seen some of those things out in the market. But anyway... So yeah, we provide all of that as part of our Pure as-a-service today.

Patrick Moorhead: I love it. I got kind of, I wouldn't call it the inside move, but as most analysts get, we get pre-briefed on things. And I really believe that one of the criteria that customer should make, as they're getting in here, that says, does this vendor care about the experience? And do they know how to talk about the experience? And a lot of that has to do with, I've a lot of correlation between knowing how to do software and knowing how to treat customers. And I will say that, and this is me giving Pure credit, this is something that I think Pure does really well. You brought the notion of experience to storage, and I'm super excited to see how your, as-a-service plays out and also how it inter-operates with multi-cloud. And I appreciate the innovation and Prakash, we're coming at time here a bit. I really appreciate you coming on to The Six Five Summit 2021.

Prakash Darji: Yeah. I appreciate you having me!

Patrick Moorhead: Yeah. Thanks. And this is Pat Moorhead with Moor Insights & Strategy, hoping you enjoy the rest of The Six Five Summit. Have a great day.