EPISODE 918

[INTRODUCTION]

[00:00:00] JM: Investors often use the term moat to describe the durable competitive advantage of a company. When an investor puts money into a company, they're making that investment based on a valuation. That a valuation is subjective. It's how much the investor thinks the company is worth. A valuation is determined by the present value of future cash flows of a company.

What are the future cash flows of a company? In order to figure that out, the investor needs to know how the business will look in the future, and this is why moats are so important. If an investor looks at how much money a business made this year, it does not tell the investor very much information about how much money the business will make in the future. If the business has a durable competitive advantage, then that means that the cash flows of the company are also durable. It also means that any compounding of those cash flows will be durable growth.

It's easy to understand durability for some businesses. Why do we keep using Google? Because there is no substitute search engine that's so integrated with our daily lives. Why do we keep using Facebook? Because there is no other social networking company that has all of our friends and family on it. But what about companies with substitutes?

There are lots of cloud providers. There're lots of log management systems and analytics providers. These are crowded markets, and yet in each of the crowded markets, there seems to be a dominant player who captures the most market share. Why is that? How do software companies in competitive markets develop a moat?

Astasia Myers is a venture investor with RedPoint, which is a software investment firm that makes large bets on technology companies. Astasia joins the show to discuss how software companies form competitive advantages as well as several specific markets, such as log management and cloud cost optimization.

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[00:02:10] JM: As a programmer, you think in objects. With MongoDB, so does your database. MongoDB is the most popular document-based database built for modern application developers and the cloud era. Millions of developers use MongoDB to power the world's most innovative products and services; from cryptocurrency, to online gaming, IoT and more.

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[INTERVIEW CONTINUED]

[00:03:07] JM: Astasia Myers, welcome to Software Engineering Daily.

[00:03:09] AM: Thank you, Jeff. It's really exciting to be here.

[00:03:12] JM: Yes! We're going to talk about the concept of competitive software businesses. We're going to talk about investing in software businesses, because you work at RedPoint, which is an investment company.

There is a term in investing called a moat, and a moat is a defensible competitive advantage that a company can have. Can you explain what a moat is and how a software company can build a moat?

[00:03:38] AM: So an economic moat is a business's ability to maintain its competitive advantage over its competitors. It's really based off of the idea of a mediaeval fortress, right? So you have a fortress that is in the business, and the moat that keeps the competitors out. So raising barriers that make it harder for them to overtake you, and it's mostly considered a defensive measure for the company.

So one thing that's interesting here is you only have the ability to create competitive moats when you're in a competitive environment, because, to some degree, these moats exists so you could generate profits. When you're in a perfectly competitive market, you can't generate profits. So you can't have a competitive moat.

One thing that I like to think about is kind of the fortress versus the moat. So that the fortress is the company and the moat is the fence, you really should be thinking about both of them when you're creating the company. The former, the company should generate the latter, the economic moat. So it's important to set out at the beginning thinking about both in conjunction, not one or the other.

[00:04:42] JM: How does this play out in software companies? Are we talking here about actual technology, or is a moat a sales process, or a marketing strategy, or a hiring procedure?

[00:04:55] AM: Yeah. So moats can actually come in a lot of different forms. We traditionally think about them more on the [inaudible 00:05:01] side early-stage investors. Moat can be an innovation of sort, like a differentiated technology that competitors can't really replicate.

Another way to think about it in terms of product is low cost of production. So, now, with cloud services, it's easier than ever to get a company off the ground as founders no longer have to buy and rack servers or buy storage arrays. It creates a competitive advantage compared to incumbents that may still have to be running data centers. You can also use offshore teams as lower cost per head as another example of lowering production costs, which is a moat.

It's become really well-known over the past few years that there is such things as data moats. One thing about a data moat is the ability to not only collect data from your user base, but also provide insights from it that other businesses that don't have that data can do.

An example of that in the software industry is some of these RPA companies, like UiPath, and Fortress IQ have amassed massive datasets around the use of their technologies, and this data moat better positions on going forward over new RPA companies.

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There are network effects that we sometimes see in enterprise software, where users get more value as there are more people using the software. It's not only because of word of mouth. It's a very influential power, but once everyone is using your product, people don't want to abandon it.

We also see high switching costs. So this is the idea that once a team uses a solution, people don't want to leave it. You can use the data here to create moats, like superior workflow or institutional knowledge know.

A really great example of this that we think about all the time is actually Jira for bug tracking. It's ubiquitous. Everyone knows it. People use the workflow every day. Maybe not everyone likes it, but they still use it anyway because there's a high-switching cost of retraining the people on a new system, exporting and then importing data from the old and to the new. The lag time is switching systems. You don't want developers to be unproductive. So this cost creates inertia that keeps users on existing solution and slows the growth of new ones.

One way that businesses try to create switching cost in like deeper tech infrastructure companies is usually because it's really hard to install, configure, integrate, manage and run these solutions. Even take mainframes, right? I know they're not software, like you suggested, but there's still around today, because the switching costs are so high.

Some businesses try to crystallize their product moat through certification programs. I worked at Cisco. Cisco CCIEA was notorious for this, right? Giving people credit for learning the tech. Once they do, they don't really want to move off those products.

We as early-stage investors think about economic moats at the beginning of the business more in terms of the technology and product, but that doesn't mean there aren't other ways people can build moats on the go-to-market side of the house, right? So there are brand moats. So communicating at company's unique advantage, why they really stand out?

One of the best ways to build a brand moat is actually creating a brand-owned term. We recently invested in a company called Opsani that created their own brand-owned term for continuous cloud optimization, CO for short. Hubspot, they created inbound marketing. Drift coin

conversational marketing. So kind of affiliating with the term that you create can be really powerful.

Also on the go-to-market side of the house, you have distribution moats. So locking up sales channels, like digital channels, they're like owning the hacker news community or owning Redit. Exclusive go-to-market partnerships can be really helpful or selling into SIs that will only work with you. Some businesses have regulatory moats. You have like IP trademark and licensees. I don't focus my time on regulated industries to the same degree, but you can have advantages there.

But what's really important about all these is that moats can be both wide or deep. So a wide moat relies on several factored ones. Say like product differentiation and innovation, and maybe great branding. While a deep moat is more difficult to overcome, but is isolated to a single characteristic.

For example, like building the best distributed graph database company. That would be much harder to replicate So, yeah, economic moats come in many different flavors and some are emphasized more importantly at earlier stages in the business than later.

[00:09:39] JM: You mentioned switching costs, and switching costs are something that almost every software company actually has. Whether you're talking about a database, or a cloud service provider, or Jira. All of these things seem to have switching costs built-in. It makes me wonder, if you have switching costs built-in to almost every software product by default, it almost seems like the moat is inherent in the software business. So every software business seems to have at least some form of moat built-in. Would you agree with that?

[00:10:17] AM: To some extent, I would agree with that sentiment. I mean, I think it's just the magnitude of the moat. Again, as I said at the end of the comment, you can have deep or wide moats. If you look at enterprise software, if they have paying customers, they obviously have some degree of moat. They are an incumbent in the account. The team likes the solution to some degree. It's going to be harder for a new SaaS business to come in replacement. That doesn't mean it can't be done, but it will just be harder.

To me, the larger businesses that really achieve incredible customer traction and number of users have a deeper and stronger moat regarding switching costs than others, right? Going back to the Jira example, people have this as a core software solution in their software development lifecycle. Everyone knows how to use it. It has become the standard for the industry. They first innovated. Then they built high-switching costs, and then it becomes the standard. So people expect to have it in accounts. To me, that level of switching cost is really rare, but something that we look for when we're investing in companies.

[00:11:32] JM: You're an infrastructure investor, and in infrastructure, there are the spaces – This was part of the Genesis for the show that we're doing now, these spaces where it's not winner-take-all. You have a very big space, like CICD, or log management, or as in the case of Opsani, which was the thing that triggered our recent conversation, cloud cost management. I've seen 4 or 10 cloud cost management companies. I've seen 5 or 10 logging companies that have been successful. There're plenty of CICD companies.

Now, as a venture capital firm, you need to have large returns. I guess the positive take on these super competitive markets is maybe if you're talking about a highly competitive market and you make an investment in a log management company, you've got a better chance at coming out with like a breakeven kind of scenario or getting your returns back in the case so that you don't end up getting the category winner, so to speak. But because the market is big enough, you can sustain kind of a breakeven sort of return. But as a venture capital firm, that's actually almost a loss for you. You're looking for the really big returns.

Tell me how a venture capital firm thinks about these highly competitive markets.

[00:12:53] AM: Yeah. So I would argue that most of the investments we do are in companies that play in competitive markets to some degree, right? There's kind of two flavors of competitive markets we think about, kind of oligopolies, where a small number of firms. None of which have that much product differentiation, but how the influence in each other dominate.

So when I'm thinking about those industries, usually I have the top five vendors in this space representing over 50% market share. Some oligopolies that I used to work with were kind of in

the storage industry. The old world of EMC and NetApp and pure storage, there are only a few competitors, but they had high influence on each other.

Then the second category we think about in terms of competition is monopolistic competition. So I think the segment you're referring to, which is a whole bunch of firms all selling very similar products, but they're not perfect substitutes. So observability and CICD are great examples of that, and each of those we've categorized 20 plus vendors in them.

[00:14:07] JM: In each?

[00:14:08] AM: Yes, in each, 20 plus offerings. So these hypercompetitive markets, you're right, they can be much more challenging. But we as investors don't shy away from them. There are a few reasons. One is because if you're actually operating in a market that doesn't have that many competitors, you have to ask yourself why. Is it that this isn't really a pain point? Is it that the technology hasn't evolved to a degree it needs to to support your business? Do people just not have budget? So we do like to see competition.

In the super competitive markets, we try to focus on the economic moats that we just discussed, particular on the technology. Is there a re-platforming on backend systems that's occurring that your observability solution can take advantage of better than anyone else? Moving from on-premise to the public cloud, or moving on to Kubernetes. Is there an aspect of your technology that makes it faster to build and more comprehensive than other solutions?

Some data points that I like is that GitLab did a new software feature released once a month on every 22nd day to show momentum. My understanding is that other businesses like the Drift did the same thing. So are you rapidly evolving your solution, which makes customers excited and so they gravitate to you in spite of it being in a competitive marketplace.

For us, competitive markets and nothing to shy away from. We like them, but as a founder, you really have to think through your economic moat. If you don't have a unique insight that informs how you build product or your go-to-market, it's probably not a good fit for you to found a business in that space.

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[INTERVIEW CONTINUED]

[00:16:10] JM: Every software engineer writes integrations. Whether we're integrating Stripe, or Slack, or Google, or Facebook, we write code to leverage the APIs and tools of the software world. As an application gets bigger, more and more of these services exist in your app. You have Twilio, and HubSpot, and Zendesk, and Salesforce. You begin to want integrations between these different services, and the amount of integration code you have to write grows and grows.

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[INTERVIEW CONTINUED]

[00:18:38] JM: On the investor side, when you're waiting through these competitive markets with 20 different players, it's very important to have a diligence process or a research process. Can you tell me about a space that you've gone sufficiently deep in to feel confident about your kind of evaluation of the different – One of these markers where there's 20 players. How do you pick the winner and what's your diligence process like?

[00:19:10] AM: Yeah, you're right. In these competitive markets, it not only shapes how we evaluate companies, but also how founder should position themselves during financing conversations. So one thing that's really important to us in these hypercompetitive markets is understanding the product and technology.

We typically have multiple different buckets in which we will evaluate a business. We want to look at team, tech, market, traction and vision. But in these hypercompetitive markets, we anchor even more on the tech. That's different than if you're doing category creation as a separate segment where you're trying to build something from nothing.

So when you are in a hypercompetitive market, we want to make sure that you have a very clear, well-defined and achieve difference in your tech. So we often take diligence in terms of many different things. One, we talk to your current users of the technology. What is the value they're extracting? How this compare to alternatives? How much are you willing to pay? What priority is this? Is the difference in the tech enough for you to change vendors?

The second thing we do is we also talk to thought leaders in this space about where they think the market is moving. So going back to the example of observability companies that often emerge every 3 to 4 years when there's a re-platforming. On the compute infrastructure, is the underlying shifts from on-premise the public cloud game changing and significant enough to

build a standalone and enduring observability space that services the public cloud? Is the platforming, re-platforming to Kubernetes so substantial and so different that you now need a new technology to observe microservices or any services running in a Kubernetes instance?

So it's a multifaceted approach to doing due diligence, and it's very different, as I said, then if you are actually kind of creating a category as a company. In that space, we anchor much more on understanding the market and the vision of the founder. So in terms of market, we really want to look for analogues of is there a comparable solution in another category that we can take spend from, or the repurposing of budget from an old analog category to your category.

A great example of this is in the container security space, right? Are we seeing evidence where IPS and IDS spend is moving from a Palo Alto networks or source fire to container security companies, because it's a new compute form factor. Then what's also even more important for founders that are category creators is that you really just have to emphasize that vision.

For established spaces, like logging, or databases, or network security, we have a pretty good sense of how the company's product portfolio market can evolve over time. There are precedents we can rely on and we can paint our own vision. But if you're category creator, you have to be a masterful storyteller. You have to kind of hold our hands and paint a vision that is both logical, pragmatic, but also magical in the way to help sell us on what you're trying to create.

[00:22:45] JM: So something that's in between the highly competitive market or the re-platforming kind of market, or the kind of market where you're watching out for a re-platforming. Between that and creating an astounding vision for what you're doing, there is something like what you described with Opsani, which is the idea of creating a kind of a narrative around a new way of looking at an established vertical.

So the case of Opsani, it's cloud cost management. There're a lot of these kinds of businesses, but in their messaging, they have found a kind of messaging that fits with the customer in a compelling way. Let's go through that as a case. So Opsani, the example of cloud cost management. Maybe tell me when you started looking cloud cost management, just your

perspective on the space and how that perspective evolved and when you started looking at Opsani, how you eventually started being taken by that business.

[00:23:49] AM: Yeah, sure thing. So I described cloud cost management helps companies control their cloud service spend. They do a lot of monitoring, of resource usage, and computing demands, and they alert company if their spend is kind of getting out of control and they're trying to manage that, because it really can affect a lot of enterprise SaaS businesses, gross margins. If you have bad performing services, the user experience can be really bad for like a consumer company. Businesses don't really want that.

So we started looking at that space about a year ago. I actually called it out as one of the key dev ops trends in 2019 on our memory lake blog. We got excited about the category for a few reasons. One is, once again, it's kind of the re-platforming of services from on-premise to the public cloud, which is we can argue the biggest shift in technology over the past 10 years.

The second aspect that we got really excited about while we are going through this re-platforming now, [inaudible 00:24:57] spend is about 50 billion. The ability to optimize the computing portion of it is quite significant because, traditionally, you would have performance engineers, or cost management engineers that would go in and actually manually evaluate your infrastructure, the parameters in which you're running the software, the configuration, to improve it over time.

Now, with Opsani, there’re some alternatives. You can use actually software to do that. So you can digitalize a traditionally manual process. We actually thought in Opsani’s case, it was an amazing application of machine learning, right?

So just to briefly touch on what Opsani does. They’re a continuous cloud optimization solution that helps you fine tune runtime environments. What they do is they use machine learning models to continuously assess the efficient frontier between a services performance and the cost of running that service in the cloud. What they do is they tie in to your observability solution, like a Datadog and your CD pipeline, like a Spinnaker, or Harness.

Then before you're about to do a deployment, they run a canary of the new service in production. They run their machine learning over it, and they provide you recommendations about how you should be running the application for middleware configuration, to garbage collection, to worker threads, etc., so that you can get the most out of the service at a cost that's effective for your business.

What's really special to them about us is that they are actually doing the continuous part, right? So instead of just providing the recommendation, since they tie in to the CD system, they can push the recommendation automatically to production. So this ability to have CI, CD and CO, as we're talking about and kind of that economic moat branding that we discussed earlier we thought was really powerful.

As businesses continue to push code more frequently to the public cloud, it goes from 10 years ago, a few times a year, to now multiple times a day. You want to run this over all your code, because if you're not, you could be lost opportunities to save money on your services.

So while you mentioned, there's a lot of businesses in this space. We kind of broke up the broader category into three parts. One, the kind of cost visibility and forecasting. So this historically was kind of like the cloud health and cloud abilities of the world. The second category we looked at was kind of the spot instance management and optimization, and spot instance doing really well there.

The third was kind of continuous cloud intelligence. Tying into other aspects of the infrastructure layer and not just looking at the pricing and compute size, but also moving up into the software level layer to get added insights. We really thought this third category stood out as the best opportunity for us, and we're pretty excited about our partnership with Opsani there.

[00:28:02] JM: So this space, it kind of snuck up on me in how prominent it became and also just how interesting and deep it is. Because for people who don't know much about this space, the cloud cost optimization space is basically like – Let's say you're startup. You get started. You're just trying to get customer traction. Let's say you're Airbnb. You're just trying to figure out how to get people to stay in strangers homes.

But overtime, you get traction, and your business starts to take off. In day one, you only had like a couple servers. You had to database. It costs you almost nothing, because it's AWS. But then your business starts to take off and your compute infrastructure starts to add up. You start to spend more and more. Then all of a sudden you're spending – I don't know what the biggest cloud bill you've seen is, but you're spending millions. Then you get into a situation where basically if you can bring in a cloud cost optimization company, then they're just going to save you money. They're going to literally save you money and then they can take a cut from those savings. I don't know if that's what Opsani does, but that's what a lot of these people do.

So the cloud cost optimization market has matured a bit, and now we're in a situation where a company like Opsani, and now that you've described it in such detail, you mentioned so many different modern aspects of software and operations. You mentioned canarying, you mentioned cloud cost optimization, you mentioned continuous delivery, you mentioned log management and the fact that you can expect a customer to have a log management system to be plugged into. There're a lot of different modern pieces there to that story.

One particular thing I wonder about is what's the integration process like there? Because of you're wiring into a customer's continuous delivery process, you're having the wire into their log management system. You're having to say, "Okay. We're going to give you cost optimization." It seems like that's kind of a long process. I wonder if that's almost a consultative process, or is it self-serve?

[00:30:20] AM: Great question, Jeff. Yeah. So one thing that we really thought about was how teams like Opsani could effectively onboard customers to their solution. You're right, there are many newer components of the stack, mostly in the SDLC and observability suite. But we're starting to see that there are breakout leaders in those respective categories.

So there isn't necessarily the same degree of long-tail integrations that you would initially expect. We're also seeing that most businesses are starting to have these tools in production. So we wanted to be forward leaning in which tools we would integrate with. So Prometheus, Datadog, New Relic on the observability side. On the CD side, there's Argo, Spinnaker and Harness. So we are really placing our bets with some of the other partners that are being successful in their respective categories.

For us, we want to invest in software first businesses. So what we liked about Opsani a lot was their architecture, which is they're data collectors that integrate into these third-party services are actually open source. So anyone can write their own integrations and drivers. We thought this was a huge for the business, because if you have custom solutions in-house, we want to be able to work with you, and we can help you do that through the open source.

Then for the intelligence layer, that's actually in the cloud. So the data collectors push back the information they need to the public cloud to actually run the machine learning and provide the recommendations and insights. So we try to o look at it both ways. Betting on some of the newer leaders in these categories, because people are starting to have these tools as best practices for their dev ops teams, but also empowering potential customers to build the integrations they need themselves.

[00:32:26] JM: So after you have explained Opsani to me. To me, it seems like quite a different company than a lot of the other cloud cost optimization products that I've seen. This kind of business that looks different, if you look at it under a closer lens, this happens pretty often if you are studying these software companies.

So like I asked you about it earlier, but I think if you just start looking at these companies, and like you said, talking to other people, the breakaway companies, sometimes it becomes obvious if you just spend enough time looking at the space.

So you've looked at these super crowded spaces, and one company that I've been intrigued by is Datadog. Full disclosure, they're a sponsor of the show, but they're also a breakaway log management and observability company. I always wondered why that was. Like if I asked different people, they give me different answers. Some people will say, "Oh, yeah. They just keep up with the integrations." Other people say, "Yeah. I don't know. They're operationally really good, or they paint a nice picture."

As another case study, can you tell me your perspective? Why did Datadog take the market?

[00:33:43] AM: Well, I first want to say that congrats to the entire Datadog team for recently IPOing [inaudible 00:33:48] with a huge splash in the market. So it really speaks to what incredible team has built over the 10 years since it was founded in 2010. So kudos to that team.

They do play in a very competitive market called observability. That market is considered to be about enough 37 billion in spend or so, which is pretty significant. It has a few subcategories. So you touched on them. You have application performance monitoring, AppD and New Relic are best known for this as like their core main offering. You have log management, like Elastic and Splunk. You have infrastructure monitoring, which is really where Datadog started. So it's not just one piece of technology, but that entire category has multiple different subcategories as well, but I want to make sure we acknowledge.

So one thing that we thought about in terms of the Datadog case study is that they really arose in an interesting point in time. About 10 years ago, moving to the public cloud wasn't an obvious outcome, right? It was still pretty early days with AWS. So what the founders of Datadog realized through their experience as developers was that there was this huge shift with businesses running and moving their services on the public cloud compared on-premise data centers.

The founders really took advantage of this moment and built a cloud first monitoring solution and they did a fantastic job of writing a monumental industry shift. Something that was a secondary outcome of businesses shifting to the cloud was kind of a change engineering culture began to set in. So as we know, traditionally, there were two groups with two very different cultures. The software engineers who built out the applications, and then on the other side where like the system admins who would work on all the hardware and get everything set up and running to run the software.

As we moved from on-premise to the public cloud, those two teams really started to work together much more. The skillsets required for those two roles started to converge a little bit, but they also needed to collaborate more to be effective at their respective roles.

So my understanding speaking to some people that worked at Datadog early days and some of their incredible investors was that there is this cultural movement that was catalyzed by the re-

platforming that Datadog did a great job facilitating. So with the ops team starting to help engineers interact with the infrastructure more, you had this proliferation of users that needed to understand observability.

You also had a proliferation of the number of services you're renting at any given time. Probably 10 years ago, a business that was operating hundreds of servers now today has ten thousands of units of compute that they are dealing with. You have what we talked about before, which code was being pushed more to production more frequently several times a day. So businesses were moving from waterfall to agile development processes and they needed an observability solution that could deal with the scale of the services, the frequency in which they are updating.

The third thing was that teams were no longer at the same level that has to a centralized decision-making authority about what tools they could use. So if a development team said, “I got to move fast. I have to beat the competition. I need a great observability tool to make sure we have high-performance services.” They had more of a right to go out and procure Datadog themselves. They could land with a one team and expand across the organization.

So what Datadog really did was they stepped in when they saw a hole in the market. They built a solution that really helped teams with the successful re-platforming, you know, under these digital first initiatives these companies have, and they facilitated this cultural shift of bringing different teams, devs and ops together so that they could embody best practices of dev ops and be more successful in their role.

So while they had started infrastructure monitoring, they were very thoughtful about how observability would evolve overtime and how they could continue to be competitive. So they added on AMP, and logs, and now, synthetics. So they created a platform instead of just a single point product, and now they are truly world-class observability solution.

[00:38:38] JM: It seems like, from that answer, what they really were able to capitalize on was the fact that there was a massive shift coming that they were early to noticing and were early to strategically positioning themselves to capitalize on that shift. Once they were strategically positioned well enough to take advantage of cloud and dev ops and the increased and pushes and all those other things that you mentioned, once they were strategically positioned well, it's

almost like the market took care of itself. Once you are positioned correctly, there's so much advantage to being strategically positioned in the right way.

Now as an investor, you want to be on the lookout for what is the next thing that is going to be the draft that's going to push up on the company that senses that trend and positions itself correctly. So as an, you're constantly looking for what are these trends that some people are talking about but still seem to be kind of under the radar, or still seem to be kind of debated. Are there any particular trends that – I kind of hate asking the question, like, “Are there in the trends?” Because it sounds like a question that like an analyst or some – I don’t know, a journalist or something. I guess I am a journalist, but it sounds like one of these canned questions. But as an investor, you know it's actually like pretty important. What are the trends and who is capitalizing on them?

[00:40:25] AM: Well, happy to talk about trends in a moment. But I just want to go back real fast to your point about Datadog had an insight and then it seemed like the market pulled them into adding new products and becoming a big business. I really want to emphasize that point around having a unique insight. That goes back to like what are the different types of economic moats. Do you have any insight about the product? Do you have an insight about your channel? Do you have an insight about the buyer that no one else does that gives you this enduring advantage of your time. It's not to be understated. It’s really hard to have that insight. That's why founders that do or incredible business leaders, it's really hard. So the fact that they recognize this through their experience as engineers, it speaks to their level of insight. It wasn't just an infrastructure monitoring. Your right. They eventually added other products, and some of that is earning the right to build other products, right? Building relationships with customers where they become advocates and make sure that they push you and refer you into their friends and peers at other firms, that they want me to do more, because the customer experience is so incredible.

But not just having that vision, but executing. They have, I think, over five product lines now and they’ve executed each one of them very thoughtfully, because they built this real-time data integration platform where you could spin up new services. So it's more than just, “Yeah, it’s a big market, and there’s re-platforming.” They had to see that there was a re-platforming. They had to execute. They had earn the right and the trust from the customers, and they've just done a phenomenal job.

Going back to your point about trends in the market. Yes. So actually at RedPoint we are fairly thematic investors. It's something we take pride in. We like to do deep dives across categories to understand trends, technologies, open source projects, kind of pain points, so we cannot only help our existing portfolio companies best position themselves and accelerate their growth, but also use that data and crystallize it so that we can use it as a lens in which we view new partnership opportunities.

So what we often do to get a sense of where the market is going is, of course, we speak with the senior leadership at our current firms. We also build out a network of buyers and operators, kind of friends of the RedPoint family to help us give insight. We have an active cadence of meet ups and dinners that we host with those individuals and also summits.

We work with the CNCF to do summits around Google Next historically, where we bring these people together and we talk about interesting subjects. We really try to distill everything from our conversations, to what we're seeing at conferences, to third-party research and what we see in the news, and to core categories that we think are leading-edge and exciting that could generate standalone enduring businesses.

So I do a lot of this research, and some of the areas that I've been focusing on I would say this year. One, obviously, that cloud cost management, which we've already dug into. What really catalyzed that was the re-platforming, but also it was hard to not find a CTO or a VP of engineering that said, "This is not a top three problem," which is incredibly rare. When you do 40 calls and someone's like, "Yes, that's pain point. Help me." You're like, "Okay. There's something that we should dig into that category." We like to hear –

[00:44:23] JM: Wait. So, literally, when you were talking to these companies, they would say that we are spending too much on cloud, and it's one of their top three reasons that they're worried about.

[00:44:34] AM: Yeah. When we spoke, we did a whole bunch of diligence, and everything from midsize startups, to unicorns, and publicly traded companies, it was usually a top three concern for the technical teams. I'm going to say it's universally true, but it was a top three concerns. I

think that's why to your point, there's so many vendor, right? When people hear that, they're like, "Oh! Okay, let's go after that spend. Let's go build something unique. Let's go help these people." So that's probably why we have this large span of companies trying to solve that pain point.

[00:45:11] JM: Sorry to interrupt you. That caught me by surprise. I didn't realize that it was that acute.

[00:45:17] AM: Yeah, definitely more pronounced in later stage businesses that are established and certain verticals. As you can imagine, if you are an enterprise SaaS business that's publicly trading, you really care about gross margin. So wouldn't you love to be that awesome CTO or head of engineering that says, "Oh! I saved us a few points or a few beeps on our gross margin." Oh my gosh! You're the champion, right? You could move the stock price. That's a very big deal.

Anyways, going back to other categories that we have dug into spend a lot of time and the data privacy and security space. Once again, that was an area that when we went to conference and spoke to operators in our community, they flagged continuously for us. Catalyzed by not just GDPR, CCPA that will be coming to fruition quite soon in California, and all the breaches that have happened where private data has been exfiltrated. It's high-profile. There's regulatory risk here, and three people want to have a good brand with their customers, right? They don't want to have these problems be headline news for them. They want to create trust. So dug into data privacy and security.

The other category I spent some time earlier this summer was synthetic data. So the ability to generate audiovisual or linear data from either [inaudible 00:46:47] or with other forms of software. So we historically have been pretty excited about this, because it enables end technologies, like AV, autonomous systems with synthetic voice. It's pretty powerful for video editing, and even podcasts, like yours, for fixing moments where I may have stumbled over a word. You can use synthetic data to kind of paint over that. So those are kind of the two other categories we're excited about. If anyone is listening and is working on a company on those spaces or know someone that is, definitely email me. I'd love to talk to them.

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[INTERVIEW CONTINUED]

[00:49:37] JM: The synthetic data stuff, are there any mature companies you've seen? What's the state-of-the-art there? Is it too immature still? I can certainly agree with you that this is something that is valuable. Yeah, like cleaning up podcast episodes by creating some synthetic fill-in verbiage would be very useful. I can imagine that being applicable. I don't know if the algorithms are there yet or if it's usable yet. What's the state there?

[00:50:09] AM: Yeah, it's actually been pretty incredible the evolution of the synthetic data market even in the past two years. Actually, right around the time I joined RedPoint ventures in 2017, we invested in a synthetic voice company called Lyrebird, which was a team of PhDs out of Canada that were working on mimicking the voices of Obama, and Trump and other figures of significance for kind of that video editing experience.

Even back then, it was like absolutely incredible. You really couldn't hear the difference. Over the past two years, there's been huge leaps and bounce. I mean, if you go into GitHub right now, actual visual synthetic data. I think it's like deep fakes. There's two different repose there right now that are the top trending repos on all of GitHub, and I believe they've been there for about two – Maybe a month at this point, which is pretty impressive.

So the technology has advanced to the point that people are trying to use and adapt it. As we know, it can be a little scary. We need to create services that can do verification of whether content is genuine or fake. I mean, we're starting to see companies that are building identification for that and alerting. But overall, I would say that the synthetic data market, while still early, is pretty impressive. The work that's coming out of open AI using generative adversarial networks, that's GANs, that I said before, to auto generate synthetic content has really advanced and people are using it in production. People are starting to think about it for training data, for autonomous vehicles, or robots. So it's really coming to fruition, which is exciting.

[00:52:07] JM: In these markets that we've discussed, especially the super competitive ones, the cloud providers, such as AWS, Google Cloud, and Azure, frequently have solutions that are competitors to the point solutions on the market. For example, AWS has logging products that you can buy instead of Datadog.

Describe the competitive dynamics between the large cloud providers and the point solution companies.

[00:52:42] AM: Well, I first want to make sure people know that each public cloud is kind of known for a different aspect of their business. So when they go head-to-head against a

standalone startup, or a third party vendor, their approach is slightly different depending on the public cloud themselves. So as we know, AWS is known for their computing infrastructure and their broad product portfolio as compared to Google that really tries to emphasize their AI, ML technology, and then Azure that tries to build best-of-breed enterprise solutions that are highly secure with high auditability because of their historical customer base being big enterprise.

So the dynamic that we see between the public clouds and standalone vendors is a little complicated, right? Because you have two different types of standalone vendors. We have the close sourced alternatives, they can be best-of-breed, or you can have open source projects that are champion and supported by a standalone vendor.

I think what you're getting at is really this dynamic we're seeing now between open source projects and the cloud vendors, because there's been a lot of activity over the past year or so where some of the cloud vendors have decided to take open source projects and host them, or fork a version of the original open source project and then began offering it as a service on their platform. This creates a little bit of a challenge for these startups that have this kick butt, take names attitude, where they've done so much work on their projects. Now that they're starting to be used by the public cloud, marketing and sales can be a little more challenging.

What's interesting is we've seen Amazon fork Elasticsearch. We see Amazon EMR for Spark. Now there's Amazon MSK for Kafka. So there's like a precedent for these startups to be a little on their toes when their open source first.

One thing that is very interesting is businesses now are trying to be more active. They want to support their community. They want to have that self-serve tested out, try it, put it throughout your environment. So they want to continue these open source initiatives. I don't want to automatically close source what they're working on, but they want to protect what they've worked so hard to build.

So an example of this is CockroachDB changed their license styles so that if you want to use CockroachDB to any number of nodes, you can. If you want to embed it in your applications, you can. You can run your service internally. The only thing that you cannot do is offer a commercial version of CockroachDB as a service without buying a license, right? So they want

some of that credit for all their effort. So it is interesting to see this kind of competitive dynamic emerge.

One thing that I think is really important. If I'm going to put my investor hat on looking at these earlier stage startups who are open source first, which is something we strongly believe in investing quite a few of those businesses is that having influence on the community and being viewed as the thought leader, right?

Amazon, or Azure, or Google, if they try to take your project, people are going to notice that. That's why there's been so much commentary online about some of the examples I mentioned earlier, is because people are like, "Hey! There are great open source contributors that have done a lot of work. They're the thought leaders. They have created the vision of what this technology can do. They've identified these use cases. They help my business and others.

So for these startups, you really want to make sure at the get go that you are part of the governance boards, either create them or actively part of them, that you contribute back, that you build community through marketing and events, and that you maintain your thought leadership so that people view you as the visionary. I think with that, people continue to purchase their solutions directly from the standalone business.

[00:57:12] JM: The amount of money in the venture capital market has increased in recent years. Have you seen the amount of money in the market impact how deals get done and the prices of those deals?

[00:57:29] AM: Yeah. One thing that I love about being a venture capitalist is you're always learning in this role, and it's not just the technology. It's not just interpersonal skills, but what we've really seen in the VC world over the past five years is a change in how we finance businesses.

To your point, there's been an influx of venture capital more now than ever before not just in terms of like very large mezzanine or growth funds, like a SoftBank or Coto or a Sequoia Growth, but also this emergence of very early stage funds, pre-seed, seed funds. Now what we've seen in the past six months to eight months is multistage, early-stage fund. Some people

joke about seed funds being multistage at this point to increase [inaudible 00:58:24] seed, and mango seeds.

[00:58:25] JM: Avocado seeds.

[00:58:27] AM: Yeah. It's a good time. So one thing that we have noticed is that because of the influx of capital, it has changed the way that businesses fundraise. So what we really value because of our firm's cultural values of like being founder first and open source the org, which is like create transparency and trust and think differently is having a diverse perspective on the market and the team, is that we really like to partner with founders as soon as possible in their journey.

We want to try to help them with hiring, strategy, BD, sales acceleration, because in that way we can get to know them and they can get to know us without making it be around a transaction, right? We are here to build a long-term relationship with these founders. If we can get to know them Overtime, we can move very quickly during the fund raise.

So I've been part of processes where I sourced and let our investment where we had gotten to know the founders over 5 to 6 months. Then when they told us that they were raising, we could act really fast, and those processes were quite short compared to an average process of about 2 to 3 weeks. So we've tried to change our approach. Be more founder first and partner earlier rather than later with businesses.

[00:59:58] JM: Last question. Tell me something about venture investing that you learned in the last six months.

[01:00:03] AM: So I've actually been an investor for almost a decade now. I've had a really interesting career trajectory where I started out kind of in the public markets on sell side equity research covering storage networking, security infrastructure companies, like Cisco, and Juniper, and Palo Alto networks, all the big, exciting guys out there.

Then I transitioned to Cisco's M&A and corporate venture arm more. I supported the core business units of servers and switching and really looked at growth investing or incubating

company's internally, what they call alpha projects. When I joined, RedPoint, a little over two years ago, I continued to cover the same exciting categories of anything the sells into a technical audience, big data, ML, cyber security, cloud infra, dev ops.

But because it is an earlier stage, how do you evaluate and assess company's changes, right? When at wrap that public company, it's a lot of financial analysis, a lot of business metrics that you indict on. Even then, we would you channel checks to try to see if customer spend for, say, a Cisco switch or a Palo Alto Networks firewall went up or down [inaudible 01:01:23]. But you're changing like half a penny in your model. It's really detailed, fine-grained financial analysis.

When I did the growth investing, you want to do that financial analysis, but you're still kind of thinking about sales execution and the market size. Can this support an enduring business? This team becomes a little more important when you go earlier, right? Like are these visionaries, can they hire well? But nowhere near the same degree as when you go early.

When you're an early-stage investor, you really want to know the team, understand their vision and evaluate if you are the best partner to help them on that journey. That's kind of going back to the last question, was we want to partner early with high conviction and help these founders. Over the past six months, I have learned more than ever the value of working with founders and knowing the team and making sure that there is mutual excitement and enthusiasm to partner together.

I know that's probably pretty self-obvious. Coming from late public markets, to mid-stage, to early, people say it. But what I've been really fortunate is to learn this myself over the past six months about it, team first, founder first investing.

[01:02:43] JM: Astasia, thanks for coming on the show. It's been really fun talking to you.

[01:02:46] AM: Thanks so much, Jeff. I really enjoyed it as well. As a long-term listener, it's been awesome. I hope your audience enjoyed our discussion too.

[END OF INTERVIEW]

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