July 21, 2020 | Episode 183

Eric Vishria – The Past, Present, and Future of SaaS and Software

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EPISODE SNIPPETS

PUBLIC MARKET SOFTWARE COMPANY VALUATIONS

- The typical rule for a "good" software business is the **Rule of 40** - which is you **add operating margin plus growth rate**, and you aspire to be above 40
- Public SaaS valuations are high from a multiple standpoint, but they have great business models and SaaS/software is still not that penetrated in the market (lots of TAM to expand into)

JUMP TO SECTION

COMPETITIVE FRONTIERS FOR BUSINESS

- **Businesses need to be adaptable when the competitive frontier shifts.** HBO/Disney went from selling through middlemen to building digital direct-to-consumer businesses. Businesses that don't shift when frontier changes will be left behind
- In SaaS, the competitive landscape is shifting from **competing on the best GUIs to competing on the best APIs**

JUMP TO SECTION

THREE GENERATIONS OF SAAS

- **Wave 1:** Moved software from client hosted to vendor hosted, and from one-time revenue to recurring revenue
- **Wave 2:** Changed the adoption model from macro (long expensive sales cycles) to micro (cheap, individual bottom-up adoption)
- **Wave 3:** SaaS companies will attack new markets growing faster than anticipated by addressing new verticals, new areas within other companies, and new, smaller customers

JUMP TO SECTION

MARKETPLACE AND SAAS CROSSOVER

- SaaS businesses should learn from marketplace businesses and vice-versa. **Opportunity for both to cross over into other category and build large businesses**
- In SaaS, Customer #1000 still does not get a real benefit from the data of the other 999 customers. Example of this changing: **Stripe aggregating fraud data across clients**. Untapped potential here

JUMP TO SECTION

LESSONS IN SCALING BUSINESSES

- Very often, the executives in a start-up who get you from A to B, and do a great job, aren't necessarily the ones who get you from B to C. These are different skill sets
- Two core traits of the best investors: **super curious and super competitive.** Some investors are quantitative, some are qualitative, some are people-oriented, some are market-oriented. But the best are curious and competitive

JUMP TO SECTION

FULL TRANSCRIPT

INTRO

Patrick (00:01:42): My guest this week is Eric Vishria, a general partner at Benchmark Capital. Eric joined Benchmark after spending the first part of his career as an operator and CEO. The topic of our conversation is the past, present and future of software businesses.

We begin by explaining why public software companies trade at such incredibly high multiples today. We then explore the several different generations of these businesses and why the future remains so bright for companies building software as their primary product.

I'd go one step further and suggest that the information in this episode is even more valuable for non-software businesses and investors, because it's crucial to understand the impact that these products will have on the overall business landscape. COVID has accelerated the long-running transition to digital across the corporate world and Eric serves as the perfect guide. Let's dive in.

PUBLIC MARKET SOFTWARE COMPANIES

Patrick (00:02:26): So, Eric, I thought an interesting place to begin would actually be away from what you do in your day job in the private markets and talk a bit more about public market software companies. I know you follow them. I'm sort of obsessed with them in part because they are so expensive by any measure that I can drum up. They look sort of absurdly priced and they've performed incredibly well in 2020 when so many stocks have had such huge trouble. Maybe we could just begin there. I'd love to get your take on what's going on in public markets around SaaS businesses.

Eric Vishria (00:03:00): It's so fascinating. It's incredible. I was actually looking at it yesterday, just in terms of performance year-to-date. So, get this. The Dow and S&P are down 5% to 10%. The NASDAQ, as we all know, is up about 10%. And if you look at the Bessemer Emerging Cloud Index, which is a good proxy because it's the basket of whatever 100 or so public SaaS companies ranging from Salesforce and Adobe and Shopify, all the way down. It's up 50% on the year. In the *middle* of a global pandemic.

And it's this really fascinating thing because there have been, all of these companies where you could literally over the last six or seven years, you could get venture returns in the public market.

So, you'd have all liquidity that you'd want. You'd have the ability to trade in and out. And you'd have literally venture returns. So, it is really astounding and it's very interesting.

Patrick (00:04:05): I always try to look for the reasons behind these sorts of moves. One of the things I've learned in my career is "when something seems ridiculous it usually isn't." Markets are quite smart in aggregate and highly efficient. It's easy to dismiss these things as an aberration and as silly valuations and everyone usually says dotcom valuations. But usually markets are pretty good. So, I'm curious what you think is going on under the hood here.

Obviously, these are the business model is incredibly impressive, very highly profitable. But what do you think is going on? Why do these continue to trade at 10 times revenue multiples which is like a startup valuation?

Eric Vishria (00:04:39): Interestingly, I feel a lot of them aren't profitable in the P&L sense of the word. But it is a really good question. So, at Benchmark, we do this thing where we were just kind of looking at these public companies in an effort to help our kind of growth stage private companies and even mid-stage private companies, we're trying to understand what happened in the public markets to forecasts. Because one

explanation possibly would be: “in the middle of the pandemic, digital became more important and everybody's forecast jumped.”

So we looked at the guidance in January versus the latest guidance that these companies had and you have Zoom and a couple of outliers where forecasts jumped. But for the most part the forecasts are the same or withdrawn actually, in a lot of cases. A lot of public companies have pulled forecasts.

So, what's really happening is multiples have expanded. I think I looked at it recently and to your point, they're trading at about to 10 to 11 times forward revenue. If you kind of look at the underlying characteristics, they on average, again, looking at the Bessemer Emerging Cloud Index, they're at 35% growth rate and a 7% or 8% free cash flow margin, which is the kind of typical rule in software was the rule of 40 which is you add operating margin plus growth rate, and you aspire to be above 40.

What's really interesting here is you have this index of 100 plus SaaS companies, and the entire index is above the rule of 40 using free cash flow margins and operating margin. That is really, really impressive, and oddly the multiples are the highest for the SaaS companies.

> “The rule in software was the **Rule of 40**, which is you add operating margin plus growth rate, and you aspire to be above 40.”

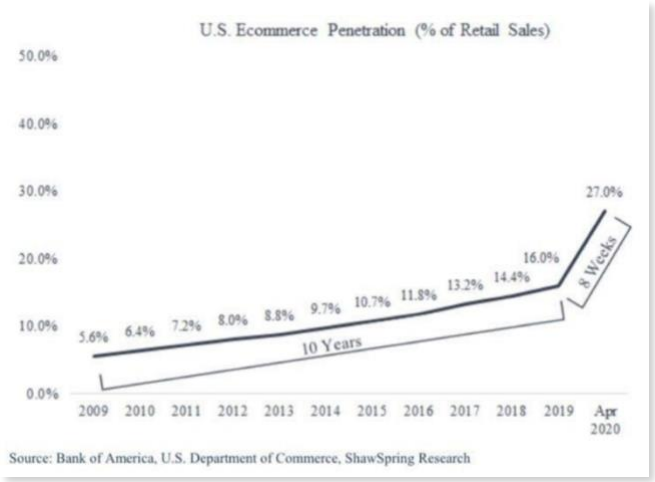
So, I think it is really interesting and to your business model point, I actually think it is what I call a unicorn business model. What do I mean by that? It's actually, it's win-win. It's win for the vendor and it's win for the customer. A lot of people talk about how, "Hey, it's recurring revenue and it's great cash flow and all this stuff." People talk about the vendor perspective which I would summarize as almost software margins plus compounding, which is really powerful. But I actually say one of the things with SaaS is it's actually better for the customer.

The customer gets good software, thoughtfully delivered, a relatively good experience. They have none of the operational overhead. They don't have the maintenance and upgrade headaches. Literally, by using a lot of these SaaS software packages, they have the ability to focus on their customer and their core competency, and so that's been true. So, has the market just woken up to that fact and realized, “wow, with compounding these things can get really, really big” or “what we once thought were narrow is actually much, much larger?”I don't know. I think that's interesting. Then, I guess the other side of it is, just what's happening macro, which is a bunch of external things. Alex Wilhelm at TechCrunch had a couple of good pieces on this. But there's obviously the zero interest rate policies so you have investors seeking return. I think Peter Zeihan, who you've had on your podcast, is a very interesting thinker in every book or every podcast I listen to his, makes me really reflect on what I believe and know. He'd probably make the “investors are seeking haven in the US dollar” argument. There are all of these interesting external macro things that are happening behind the scenes, and which I know very little about. I'll put them out there then leave them be. But I do think that there is a paradigm shift which shelter-in-place and COVID have really shined a very bright light on, which is digital has gone from kind of “nice to have” or sidecar to, "Holy shit. If we don't get this right, we're done."

It's become existential, which then drives companies to look hard at their digital strategies and their IT stacks and that ends up being really important. That will drive a lot of revenue for these cloud and SaaS companies for many years to come. One way to think about this is what's the competitive frontier? I think if

you think about any company, you think about retail, think about a bank, think about entertainment, in every case the competitive frontier has shifted to digital.

Patrick (00:09:18): It's amazing to look at the chart. There's this famous chart circling around now about e-commerce penetration in the US and pre-COVID I think it was 15% or something like that. It's jumped a decade's worth in three months. But even after this crazy inflection point, it's still not a third penetrated. Maybe the answer is as simple as, "Oh my god, not only are these good businesses and they're good products so they're the win-win that you mentioned." But actually they're, let's call it market share, a sort of market share. It's still really, really low and it's a superior solution. Interest rates are down so markets are just valuing growth more than they did, all things equal, three months ago. But even with all those things in mind, it's been a wild ride.



Eric Vishria (00:09:57): Oh, it's been a totally wild ride. I mean I think that it's really hard to understand it, in some case, justify some of the stuff. But to your point, I don't know if you've heard the Nike's latest earnings call from last week, but it was just astounding.

So, Nike said in the last quarter, 30% of their revenue was direct, direct-to-consumer digital. That was their 2023 goal. So, literally, the future got accelerated by three years and now they've actually increased their goal to 50% to be digital or direct-to-consumer, which are kind of the same thing, because stores are shut. So, you really do have this notion of “where is the competition” is so interesting to me because if I think about a bank 10 years ago, I might have chosen a bank where I open an account based on which branch is close to me, who has the most ATMs.

> “So, Nike said in the last quarter, 30% of their revenue was direct, direct-to-consumer digital. **That was their 2023 goal.**”

Now, if I'm choosing a bank, I'm choosing of who has the best digital experience? Leaving all the economic side of it, controlling for the economic side of things. So, the digital, and I think companies are realizing, "Wait a minute, we have to get this right and we've kind of treated it as a sidecar and this is existential for us." It really, really matters if these businesses want to be around long-term.

THE COMPETITIVE FRONTIER FOR A BUSINESS

Patrick (00:11:19): I think I understand now what you mean by competitive frontier as sort of the appropriate battleground where similar companies are vying for consumer or enterprise attention. Has that shifted over time do you think? How long do you think that's been digital? Is that really just coming into people's minds in the last COVID period? Say a bit more about that idea of competitive frontier. That's an interesting concept.

Eric Vishria (00:11:42): I think the competitive frontier as for a business, where are they going to fight or what is the battlefield or where they're going to fight for the next customer and to keep the existing customer? So, it's just kind of like, "What are the criteria and where is that battle happening?

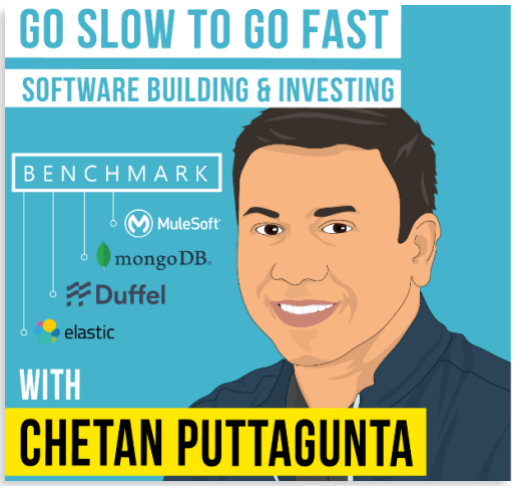
What I realized is digital has been part of it for a really long time. Take digital entertainment. Entertainment is really interesting. So, if you think about HBO, if I'm HBO, it used to be that I'm producing great content, and then I'm using that content through satellite and through cable, through bundling, and I'm using my differentiation on that and the subscriptions that I sell through those "middlemen" to drive up the share of revenue that I get from those cable and satellite companies.

Now, you live in a world where HBO is actually competing on the digital front with HBO Max and HBO Plus. They're going direct-to-consumer on that digital experience They're capturing that and that really matters. Now, there's kind of an elimination of a middleman in a way or maybe people would prefer to say that there is a new middleman in terms of who that is, who they're selling through. But now they actually have to have a great digital experience.

Disney is another and very prominent current example of this where they had all the content assets forever and they were distributing through traditional channels. But the competitive frontier shifted, and they needed to actually go direct and they couldn't go direct through some shitty experience. They actually had to build Disney+ as a really great experience on its own merit, in order to compete and drive subscriptions there. I think that's obviously been a runaway success.

I think those are examples of companies, kind of traditional legendary companies, who have had to realize, "Wait a minute, the new battle is over here and we have to put all of our energy against it." They have both done it very creatively and well in the sense that they have leveraged their strength, which is the content and to some extent the back catalog. But competed on the new battlefield.

Patrick (00:14:01): How has that same concept morphed or evolved in SaaS companies specifically? So, obviously, those are very digital companies, purely digital companies in many ways. They're building software. How is that battlefield shifted over time? I'll give you a little tiny example. I'm really interested in open source businesses. Involved in one. I did a conversation with Chetan recently on this topic and one of the things we talked about is the power of community, that all things equal if two companies are trying to solve the same problem, one place there's sort of a battleground is the quality of the community amongst developers and how they nurture that. Would that qualify in your mind as a competitive frontier within software and what other ones would come to mind?



Eric Vishria (00:14:41): Yeah. I think that is definitely a competitive frontier within software which is “what's the community, what's the community contribution? Is there a network effect that's kind of created across the customer base?” Which has really been lacking actually in software and SaaS, even in modern SaaS to a large extent.

I'll give you another one where the competitive frontier is shifting for SaaS companies and that's to this API economy or the APIs as you want to call it, API economy sounds highfalutin. I think there's this really interesting idea but if you think about Twilio, you think about Stripe, you think about Contentful. We're investors in CommerceLayer, Modern Treasury and Duffel and a bunch of these API companies, “API first” companies.

What you're seeing is with a lot of the SaaS companies that were maybe founded 10 years ago, the primary interface and the primary experience that the customer had was through a UI. It was through a GUI of some kind and it was a person who was interacting with that software. Think about how people use Salesforce, for example, it's a human being looking at software, entering data into software, and running reports and

everything else. And a lot of the middle generation of SaaS, we can go through these, but the middle generation of SaaS, the Zendesk, the New Relics, Asanas, the Wixes of the world, they competed on a really great user interface and experience that way, the user experience.

But what you're seeing here now is a shift to where this up-and-coming generation of SaaS companies is actually competing in large part on APIs. A big part of Stripe's success has been the design of the APIs and the thoughtfulness of the APIs and the ease of consumability of the APIs. That is one of these competitive frontier shifts that's happening. I mean it's worth spending some time on if you want because I think it's a really interesting "why now, why is this happening now?" APIs have been around forever and what's actually happening and why is it all coming together now?

Patrick (00:16:48): Yeah. Let's get into that because I think just to clear up the terminology, I've started using that term API a lot. I have to remind myself to kind of explain what it means every time because it's sometimes not intuitive until it becomes intuitive, and then it's very clear. So, maybe you could in your own words describe exactly how you think of what an API does, the job that it does. Then. I'd like to get into this why now question because it does seem to be the big idea in software right now.

Eric Vishria (00:17:12): I'll answer it backwards because I think it'll be a little easier to understand. And I have to admit, it's quite tricky and maybe unobvious but I'll give you the best articulation I have of it.

So, the last couple generations of SaaS have really been or software broadly, have really been about business users using software to get their job done. So, you have a person in an organization, say a sales person, who is using Salesforce to get their job done. That has been the last generation of SaaS and software and that has been very, very effective and it's helped people, individuals become more productive.

> "So, the last couple generations of SaaS have really been or software broadly, have really been about **business users using software to get their job done.**"

In that case, the user of the software is a human being, and therefore, the interaction with the software is through an interface called a graphical user interface, or GUI for short. Which is often in the SaaS world or mostly in the SaaS world, web based, through the browser. So that's what the interaction was.

What's happened is Jay Kreps the founder of Confluent and one of the authors of Kafka, he had this blog post last year, reading it made this come to life for me. What he described as like, "Hey, businesses have historically used software. But what's happening now is businesses are actually becoming encoded in software." That's a mega shift. When businesses become encoded in software, now what you need is not a person necessarily using software but you have software using other software. And when software is using other software, it's obviously not interacting through a user interface, it's interacting with the other software through an API.

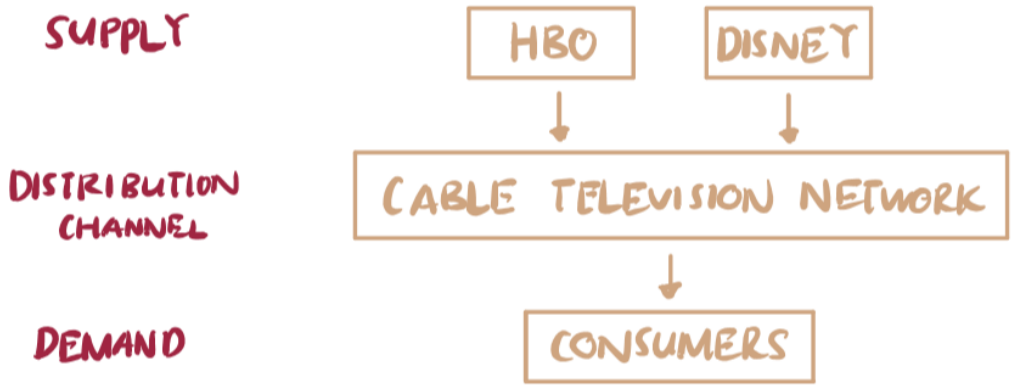
API stands for application programming interface. So, the software is talking to other software through this interface. I think a really nice way to think about APIs, without getting into the technical mumbo jumbo, is if a human is interacting with software they're doing it through a GUI and if software is interacting with software, it's going to happen through an API. That's kind of the analogy. It's a really interesting way to think about things and you can go through kind of example after example inside of businesses where this is really happening, where the business used to use software and now are increasingly actually encoded in software.

COMPETITIVE FRONTIER

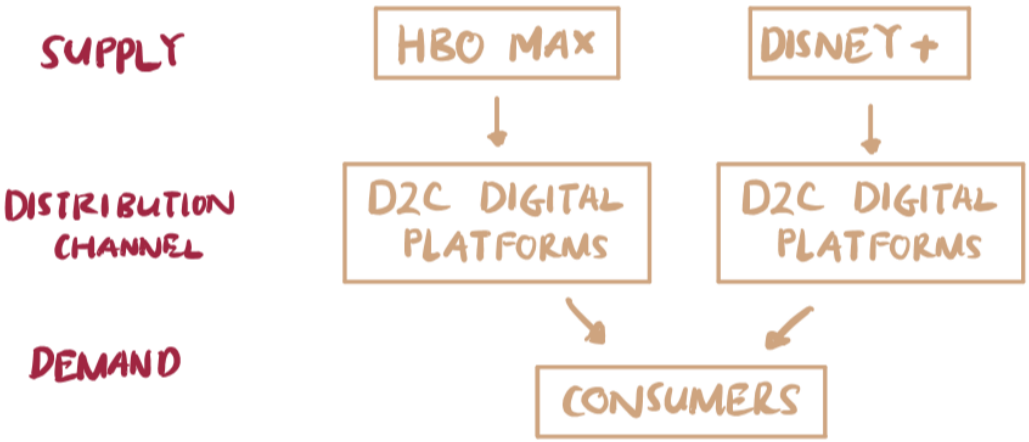
↳ THE 'BATTLEGROUND' WHERE COMPANIES IN AN INDUSTRY COMPETE FOR CUSTOMER REVENUE

EXAMPLE:

COMPETITIVE FRONTIER = CABLE TV



COMPETITIVE FRONTIER = DIGITAL PLATFORM



Patrick (00:19:49): I suppose also that alongside encoded in software is many businesses are building software themselves. More and more even small companies have a say a developer on staff, and that the, call it like a library of APIs, is basically just a bunch of Lego bricks to build an application. I had John Collison on recently and Stripe's API is this unbelievably complicated and beautiful thing. But all it's really doing is say, "Dump this code in and you'll be able to accept payments from anyone in the world." The job is very simple but the complexity is large.

Eric Vishria (00:20:22): Yeah. Totally. I mean I think that's exactly right. The Lego analogy is a really good analogy where you have these building blocks and you can put things together. This is a little bit of what we mean by encoding, the business gets encoded in software. So, think of maybe a loan application process. Old days, whatever, forty years ago a person goes and talks to a loan officer, the loan officer asks for a bunch of documents. Those documents come in. The loan officer assembles those and make sure the packets goes back and forth to the customer blah-blah-blah, takes it to kind of the credit committee or whatever to approve it, and presents the case manually and there's a discussion, and the decision comes down, et cetera.

Okay. Then, people started using software for that. Now, we have PDFs things. We use DocuSign for things. We start to assemble documents electronically, maybe there's some workflow that helps facilitate everything, okay, and finally we have a complete packet. Now, hit submit. That packet gets submitted digitally and everything else.

Where we're working towards, and where we'll get to, is actually this entire thing being encoded in software. So, literally, you're clicking a button, the customer's supplying some basic information, and then software is going out and talking to your bank and talking to your existing mortgage company and pulling all of this information together automatically. And assembling that, maybe doing some analysis, and then another piece of software, or another service, is actually looking through that quantified data, and actually surfacing automatically a decision based on historicals and everything else and surfacing a score or a decision based on that. And then surfacing that back to the customer immediately and you can imagine a world where all of that, you see this with kind of credit cards and things today.

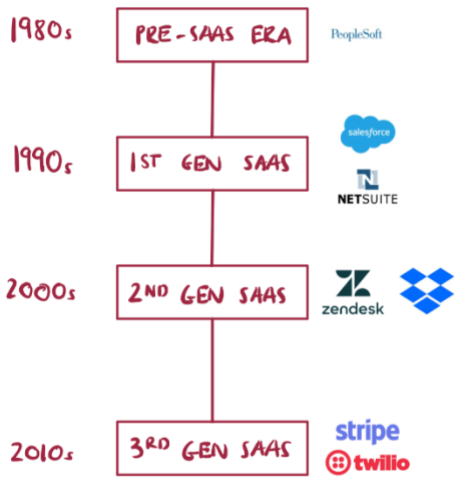
All of that happens very, very quickly. So, what used to be a multiple weeks manual process that was labor-intensive for the customer, labor-intensive for the loan officer and the credit committee. All of a sudden starts to become very fast, very real time and very automated. And APIs are a big part of that. I think that's one of the big drivers here of the kind of next generation of SaaS companies, and further facilitated why now the world just has a lot more Legos to start assembling, whereas 10 years ago there were just a handful of them.

Patrick (00:22:54): I've got a lot more questions on this but I don't want to lose track of a question around business models. Traditionally, I'd love you to describe how SaaS, per seat SaaS has charged its customers. If the people are being sort of abstracted away and now software is talking to software, how does one charge in an API business when so much more is automated and now we're relying less on humans sitting in front of a screen entering data or pressing buttons? What important shifts are you seeing in the business model itself of software as APIs become more popular?

Eric Vishria (00:23:27): It's a really interesting point that actually I hadn't thought of until you just asked the question. Which is if you think about Salesforce or ServiceNow, what I'll call kind of “gen-one SaaS.” They were seat based pricing. If you think about a Twilio or a Stripe or most of the API companies, they are actually charging based on transactions, some volume of transactions. That's kind of the primary driver of the price you pay is, it used to be the number of people, and now it's the volume of transactions. Which is exactly consistent with who the user of the software is. That is a big pricing change.

THREE GENERATIONS OF SAAS

Patrick (00:24:08): What do you think about the business strategy, obviously, you've invested in tons of companies that were traditional SaaS, I think what you would call "gen two." We keep using these generations, maybe we should pause and describe what gen one, two, and three are. Actually, you know what? Let's do that. So, maybe just briefly describe gen one, two, and three, and then I'll ask my follow-up question.



Eric Vishria (00:24:26): Let's go back kind of the past, present, and future so to speak of SaaS and go through it. In the late '90s, my first exposure to this idea of SaaS was at LoudCloud and they were actually at the time called Application Service Providers or ASPs. ASPs was the big analogy. Really what the original generation of SaaS companies did was capitalized on a better delivery model and a better economic model.

Let's kind of break that down. The delivery model, what I mean by that is you used to ship CDs to a customer site and the customer would install it. So, it was customer hosted software and the new delivery model is it's vendor hosted. The vendor themselves is actually hosting the software, running the software, operating it, maintaining it, upgrading it, et cetera on behalf of the customer. That's the better delivery model.

The better economic model was, in the old world of software, you would sell software and you would get one-time revenue, and then you would charge typically 18% of ongoing maintenance on an annual basis for upgrades and things like that. The new economic model, in gen one SaaS, was actually recurring. You may pay an implementation fee, and then you pay an annual fee on an ongoing basis. That's the same or grows year-to-year. Those were the kind of the two big developments of the original generation of SaaS.

What's interesting is actually what stayed the same in the original generation of SaaS. It was still big ticket enterprise sales. It's still a relatively large implementation. For the most part, those were all still single instance so they weren't multi-tenant SaaS. So, what would happen behind the scenes is the vendor would then stack servers, install software, configure an instance for that customer on their behalf. And because they were doing it across thousands of customers, they were able to do that more efficiently or invest in automation.

If you were Coca-Cola and you had traditional software, it wouldn't make sense for you to invest in automation for your ERP, but if you're doing it across a thousand customers, it does make sense. There were benefits there. But it was still single instance not multi-tenant SaaS. That first generation of SaaS companies, the other kind of interesting notion if you think about what was Siebel became Salesforce, was PeopleSoft became Workday, was Peregrine became ServiceNow.

It was actually the same founders, literally. It was the same people. They just realized, "Wait a minute. There's a better delivery model. We know what to build. We know the features. There's a better delivery model. There's a better economic model. Let's go build it."

David Duffield, you have the Peregrine founders founded ServiceNow. Tom Siebel and Benioff worked together at Oracle I believe, before Benioff went off to do Salesforce. You have a lot of the same ideas and honestly, not that great software experience, but it was a better delivery and economic model. That was

what I would call gen one SaaS. All those companies were founded, 1999 to 2005. So, really that generation.

Patrick (00:27:39): By the way, those three examples, Salesforce, Workday, ServiceNow relative to Siebel, PeopleSoft and Peregrine are 10 times the size or something. Just the delivery and economic model is a much more valuable company.

Eric Vishria (00:27:51): I mean I think even more than 10. I think Siebel was a little around 3 billion ultimately, acquisition and I think Salesforce, whatever is like 170 billion.

Patrick (00:27:59): Two orders of magnitude.

Eric Vishria (00:28:00): Yeah. Two orders of magnitude. I mean I think PeopleSoft was a big outcome and Workday. So, PeopleSoft and Workday are probably 5x or so. But I think Peregrine and ServiceNow would be like 150x. I mean these things are just… some of that's market expansion, but definitely better delivery and economic model too.

Patrick (00:28:17): Okay. Great. So, that brings us to generation two.

Eric Vishria (00:28:20): Gen two took the ideas of a better delivery and economic model, and then added a better adoption model. I think the realization was, "Hey, now we have the software the customer doesn't have to do anything, why don't we make it really nice user experience, make it very easy to consume, make it go from this kind of big implementation, high cost of failure to very cheap, low cost of failure for the customer, so you can kind of get to a what I'd call a try and toss mentality.

An organization can try a new piece of SaaS and if they like it, great, and if they don't, whatever, no big deal. Which definitely isn't true with the Salesforce or a ServiceNow or a Workday. Those are huge implementations, big decisions, executive decisions, et cetera. The adoption model shifted from what I would call a “macro adoption” where the whole enterprise is buying into this adoption to a “micro adoption” model where an individual or a small group inside of an organization can make a decision to try a SaaS application and adopt it.

That is just a massive elimination of friction in terms of the adoption, and so think about a Zendesk or a New Relic or Wix or Asana or a Twilio or DocuSign. All those types of companies they really added this adoption model that was much more streamlined. It's really interesting what happened with that. Because that generation of companies has turned out to be giant. They turned out to be really big companies but they took a little time. You're adopting, they have much larger customer bases. The initial land price is much lower. They took time to compound.

“The adoption model shifted from what I would call a “macro adoption” where the whole enterprise is buying into this adoption to a **“micro adoption” model where an individual or a small group inside of an organization can make a decision to try a SaaS application and adopt it.**”

You actually got in the earlier days of these companies' evolution, you got slower revenue growth. And then it kind of exponentially compounded in recent years, they've grown like wildfire. It's very interesting. It's actually in some ways it's consumer-like adoption. Where if you think about the evolution of Facebook or Snapchat those types of companies, remember for a long time, everyone in the media would be like, "Well, when are they ever going to generate revenue and how are you going to make money on these things?"

They were just amassing these massive, massive user bases and relative to the revenue they were producing was much lower. Even Google frankly didn't figure out the revenue model but was getting a bigger and bigger user base in the early 2000, 2001 and then all of a sudden, it's like, "Okay. We laid our revenue model on this monster user base and it just goes through the moon."

Patrick (00:31:06): The best business ever.

Eric Vishria (00:31:07): Yeah. The best business ever. In a way this kind of second generation of SaaS companies, the economics actually look much more like that. They're actually in some ways also more capital efficient. But, again, you have to have patience. Before we got on, we were talking about Workday and how these companies were built and you actually, you built a big expensive enterprise Salesforce. That takes a lot of capital and it's capital consumptive.

But then, you get kind of quick revenue but you're kind of continuing to add Salesforce so there's a decent amount of burn, whereas some of these other companies that we're talking about, they're relatively capital efficient but you don't get the time to 100 million in revenue might be a little bit longer from the time that the first line of code is written.

Patrick (00:31:52): I'm assuming that this has also changed in gen two the sort of failure rate or maybe it hasn't, but since it's cheaper than ever to start a business, the gen two adoption model means that you can address sort of any kind of problem with software and have it start to get picked up by small groups or small firms or big firms, it doesn't really matter. It would stand to reason that that would lead to, I don't know, thousands of software experiments being tried versus a fewer number of the big enterprise plays. Have you seen that lead to a higher failure rate then? So kind of looking at this through an investor lens. Is it harder to be an investor in that environment even though that it leads to great companies?

Eric Vishria (00:32:29): I don't have enough history. I've been an investor for six years. I don't have enough history. I kind of landed in the middle of a gold mine, without quite appreciating that I got dropped into a gold mine. But to your point, I do think it's led to Cambrian explosion of SaaS, where there's basically any little function in an organization, anything that is repeated can be "SaaSified." Lots of small stuff got saasified in that process and I think that's been interesting.

I think if you look at a typical company now, there are hundreds of SaaS applications inside that company. Which I think is quite different than it looked 15 years ago. There's actually one other important point, which just relates to this unicorn business model that I want to just go back and say, which is just true of SaaS broadly gen one and gen two. Which I think is actually really underappreciated and may have been unintended frankly.

That in a traditional software company, if I think back to Opsware in my days there, a good 30% maybe more, of the engineering and product development resources were backward looking. What I mean by that is they were supporting old versions, they were fixing bugs on old versions or back porting bug fixes. They were supporting customers who were on old versions. It was just, you kind of always had to think about backward compatibility and you had these windows in our contracts we would say, "Okay. We'll support version six for two years after version seven comes out."

> "That in a traditional software company, if I think back to Opsware in my days there, a good **30% maybe more, of the engineering and product development resources were backward looking.**"

So, you lost. There was this huge tax that you paid in traditional software world of product development resources being backward looking. What happened in the SaaS world is actually now, because customers are getting, whether they know it or not, they get upgrades continuously. They're getting upgrades because the vendor is just upgrading behind the scenes and they're pushing fixes.

The product development resources actually all go towards forward looking and helping the customer solve the next problem getting better. And that, if you think about that you get 30% or so of your engineering back to actually look forward and accelerate. That's huge deal. I think, like I said, may be unintended, but I think it's a really big deal that's allowed those SaaS companies to continue to stay at the front.

I'm definitely not saying that first-generation of SaaS company, that those products are fantastic, because they're definitely not fantastic. But they are definitely better and have stayed at pace better than their kind of legacy software counterparts.

Patrick (00:35:18): It makes me think of John Collison's point again, that modern income statements for a lot of those public companies you mentioned, the engineering core at some of these companies is so critical and the operating expense that pays their salaries, really expense to build something and if you're focused on just your core value proposition and sort of outsourcing all the ancillary functions that are also compounding, because they're run by these great SaaS businesses, you start to maybe understand a little bit of the public market valuations for these things. Because the efficiency, sort of sharing the load across all these companies all compounding at the same time, sure is a compelling business proposition.

Eric Vishria (00:35:55): No question. I think that's totally right. I think there's actually a lot… You mentioned the e-commerce penetration, another way to look at it kind of a similar metric would be, what's the "cloud and SaaS" penetration of total IT spend? So, I think cloud and SaaS penetration is probably 15-ish percent of total IT spend, which means 85% is spent on companies doing the stuff themselves and legacy software and racking and stacking boxes and everything else and, of course, the labor behind that.

I mean, okay, it's not going to get to 100% but is the cloud and SaaS spend going to go from 15% to 20% to 60%? Yeah. I think it is. It could go further. By the way, I should say I think Tomasz Tunguz over Redpoint was the one who articulated that part to me that way and I was like, "Oh, wow. That's really good." That's a very macro view of things that really resonated and landed with me.

Patrick (00:36:54): Now that we've laid the first two generations and I'm able to come full circle back to the question that I was going to ask around APIs, so I'm thinking about APIs as part of whatever the next generation three of software is, and we're going to go into some other subcategories of what you anticipate there as well. But first on the API side, do you think that it stands to reason that all of those software companies that had traditionally lived in graphic user interfaces and GUIs need to have an API strategy to stay relevant and compete? The companies that you invested in, are you advising them to start thinking about that now?

Eric Vishria (00:37:28): Yeah. I think it really matters. That isn't to say that the GUIs go away. If you think of Stripe, there's plenty of GUIs in Stripe. It's just that the primary consumption vehicle of Stripe isn't a GUI. It's the API. I think that's probably broadly true which is all of these companies, there's still going to be

software for users and for individuals to do stuff, but I think they all probably end up needing APIs because they live in a part of an ecosystem. They live in the ecosystem of other software that they need to talk to, exchange data with, call functions of, and so I think that definitely ends up being really important, part of the competitive frontier.

FROM MACRO-ADOPTION TO MICRO-ADOPTION

Patrick (00:38:05): I love this idea in gen two that the adoption model is so different. It creates this sort of different revenue growth curve and opportunity set. What do you think is still left untapped? What other challenges can software go solve for people trying to accomplish some outcome that you're excited about?

Eric Vishria (00:38:24): I think it's massive. Now we have, we've gone to a micro adoption model. We have a better delivery model. We have a better economic model and I think the TAMs are exploding in just unanticipated ways.

Let's look at them like… So, gen one SaaS really served the Fortune 2000 and traditional venture capital advice was there's no money to be made in the mid-market. If you're a service provider providing to the mid-market, there's no money to be made in that.

Obviously, Shopify and Wix and the list goes on and on just totally proved that wrong. We've made some of those mistakes. Benchmark historically has made some of those mistakes too and got some things right like Zendesk and New Relic and others and Asana. So, gen two the kind of micro adoption model opened up the mid-market and SMBs as a really viable customer base for this kind of software because all of a sudden, you didn't need expensive sales people to go to the SMB, it was easy for the SMB to try themselves.

	Wave 1	Wave 2	Wave 3
Example	salesforce	zendesk	twilio
Target Market	Fortune 2000	Fortune 2000, Mid-market	Fortune 2000, Mid-market, SMB
Buyer in the Org	C-Suite	VP/Heads	VP/Heads, Developers
Time to Integrate	Months	Weeks	Days
Revenue Model	Upfront fee & annual license	Per seat	Per API Call
Marginal Cost of Service	Medium	Low	Near zero
Start-up costs	High	Medium	Low

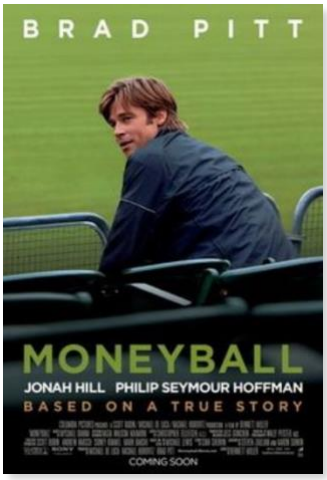
So, you switch from kind of expensive sales led to low-cost marketing led. I think that was really revolutionary. But that now opens up all sorts of kind of new "customers." So, that's one area that opens up. I think you have new specialists. I think one of the interesting things is you look at all of these different functions inside of an organization and now all of a sudden you can build a software package to serve FP&A. Anaplan, which serves planning inside of an organization, is like a $7 billion company.

I think 12 years ago if you said, "Hey, there's going to be a SaaS company that serves FP&A and it's going to be a $7 billion company." We'd have been like, "Get the hell out of here. No way. Zuora is subscription billing company. And it's a multi-billion dollar company. They're just all of these kind of “seemingly narrow” functions that actually end up being very, very, very deep. I think that's where new specialists emerge.

I think there's another area where what I'll call Mad Men to Moneyball. What do I mean by that? Let's take marketing as an example. Marketing, everybody's seen Mad Men, right? So marketing used to be very Mad Men style. What I mean by that? It's smart people, creative people sitting around thinking, apparently drinking a lot.

Patrick (00:40:49): A lot of scotch.

Eric Vishria (00:40:51): Yeah. Scotch and midday scotch and doing other inappropriate things. But it wasn't quantitative. It was very qualitative. And that was the crux of marketing and in the early 2000s, when I was in marketing, if you looked at your traditional CMOs they kind of were brand-oriented or comms-oriented. What happened was as all of this money shifted from kind of print and TV to digital marketing, people started to realize, "Wait a minute. One of the benefits of digital is we can actually quantify it and we can look at performance and we can look at click-through rates and we can actually measure the ROI of these various initiatives."



Marketing went from very Mad Men's style to very Moneyball style. And people hopefully are familiar with Michael Lewis book Moneyball, where Billy Bean of the Oakland A's kind of took scouting and team building of baseball from this kind of scouts which was very qualitative to looking at very deep and esoteric statistics and constructing a team that way. So, he kind of quantified this area, and so it became Moneyball. So, Moneyball is this notion of kind of quantifying and making very quantitative or analytical decisions as opposed to subjective decisions.

So, you went from Mad Men style marketing to Moneyball style marketing. If I look at the CMOs that are enterprise companies today, they in large part aren't from brand and they aren't from comms. They are actually from the demand gen performance. They're very analytical and they just don't feel like traditional marketers.

That area, that kind of notion of Mad Men to Moneyball is happening in all sorts of areas.

So, it happened in marketing. It's actually happening in product management right now and product development. Where product managers also used to be: it's a smart person doing some surveys, talking to a few people, coming up with something, build software, ship it, and you get no feedback outside of focus groups or whatever. To now it's like, "Okay, it's all SaaSified, we can actually have metrics. We can understand what users are actually doing in our software, what causes someone to retain, what causes someone to churn."

It can all be quantified, and so we're an investor in Amplitude, which is a company that does that. You have another company that we're fortunate to work with. It's called Chainalysis. Chainalysis is also interesting to me in this way because… so, Chainalysis serves financial services and government that are basically trying to understand what's happening in cryptocurrencies. If you kind of take as a given, that criminals or people with ill intent are going to use crypto currencies for transactions, old way to do forensic analysis and everything else is very qualitative and investigative.

Chainalysis has basically said, "Hey, with blockchains there's all of this data, there's all this data exhaust, we're going to collect all that data exhaust and we're going to analyze it and we will be able to surface to government and law enforcement, we'll be able to surface what's actually happening and help them understand where there might be money laundering or "tumbling" going on. That's what they do. It's another area that's gotten kind of quantified. I think there'll be a lot more of those.

Patrick (00:44:19): With all this green field, there's so many interesting new areas that software could go into. You talked about the relatively low penetration of cloud and e-commerce and everything else, it feels ubiquitous but the market share is still low. It just seems to me like there should be more dollars going into early stage companies in this area than there are.

You add up all of the commitments let's say to venture capital funds, even though you hear about them a lot, the dollar amount is kind of shockingly low. There are mutual funds that manage more money than the entire venture capital industry. It seems hard for me to square the size of the opportunity, the ability to build businesses now with the supply of entrepreneurs. It seems like we don't have enough. Do you agree with that? If so, why is that the case?

Eric Vishria (00:45:04): I think one of the things that's happening, which I'm really bullish on and optimistic on, is the cost to get started is actually lower than it has been because of cloud, because of all of the other services and apps that are available, APIs. You can actually get started at a very low cost. It doesn't take that much. It takes a person with an insight or a couple of people with an insight, an idea, and a notion to get started and build a lot of these SaaS applications.

There's still things that require multi-year engineering efforts, but a lot of these applications we're talking about are really, it's kind of low cost to get started. Once you start scaling and they start to work, it actually is pretty expensive to fuel them. So, I think that has been a lot of the drivers of the growth, venture growth, or the public market investors coming down or whatever where there's quite a bit of money at that growth stage pouring in. But one of the other interesting things that's happened is because of the cloud and these services, it's actually become really possible for entrepreneurs all over the world to get started and serve a global market.

So, we've seen kind of more companies that we've backed as Benchmark in Europe, for example, started in Europe. It's a European entrepreneur who has an idea and serves an initial market, and then kind of wants to expand and get to a global market or scale up. So, we've seen more of that. There have obviously been a few New York successes in recent years. So, more and more stuff is actually possible outside of Silicon Valley.

There's actually plenty of stuff happening inside of Silicon Valley too. To your point, I think they'll continue to be lots more on both sides.

MARKETPLACE AND SAAS CROSSOVER

Patrick (00:46:48): I'd love to think about how you as a deep expert in SaaS and software specifically both as an operator and now as an investor for the last six years of Benchmark, how you take lessons from other technology investors, most notably your partners. I know you guys spend every Monday in deep dive conversation. What are some of the interesting crossover lessons that you've learned from other parts of the investment universe at the early stage that you are starting to think about how it might apply to SaaS?

Eric Vishria (00:47:16): There are a couple things that we've been talking a lot about. A few weeks ago, my partner Sarah Tavel released kind of her Hierarchy of Marketplaces, As I was reading it and kind of digesting it and understanding these marketplaces, I was like, "Holy shit." So much of this applies to SaaS companies, and there's so many opportunities for SaaS companies to take characteristics of marketplaces and marketplace companies to take characteristics of SaaS companies.

The Hierarchy of Marketplaces — Introduction and Level 1

Sarah Tavel Follow
Jun 15 · 5 min read

Let's unpack that a little bit. If you think about the old moats of the gen one SaaS companies or whatever, they were kind of two big ones. One was they were a system of records. So, it was like your data goes in its Hotel California, data goes in, it doesn't come out. It was a system of record. It was constantly referred to and going from one to another was a huge lift. So, that was one thing.

The other big moat was frankly the enterprise sales team. It was like they had account control. We talked about gen two and you go to this better adoption model and you go to a try and toss mentality and it's like, "Well, wait a minute." All of a sudden some of the defensibility is lower with that kind of gen two SaaS companies. It is frankly easier to switch. It's not easy necessarily but it is easier to switch, and so you have kind of those notions there.

What is Shopify doing now or what has Salesforce done? They're actually trying to think about some marketplace elements where they actually get cross-customer network effects. I buy from one Shopify vendor and now they're trying to make it really easy for me to then buy from another Shopify vendor. Shopify is able to understand what vendors I might be interested in based on who I've purchased from in the past. That's really different than where Shopify started which is just, "Hey, we're enabling the vendor to do something really easily."

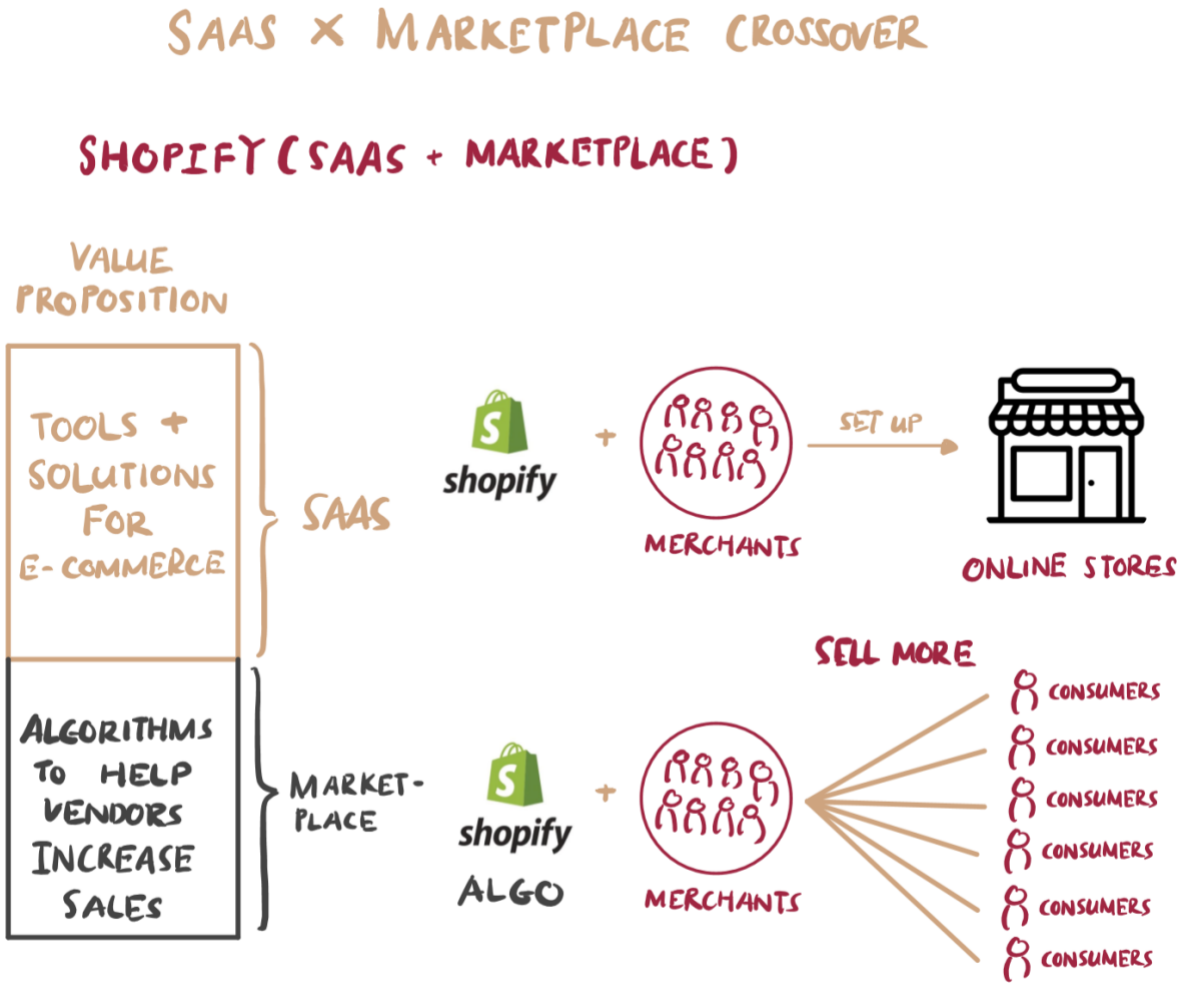
Now, they're really thinking about how do they help the end customers of those vendors have a better experience. That's kind of Shopify's way of approaching it.

Salesforce built something, took a different approach which is, "Hey, we have the system of record, we have all this great data and there's a whole ecosystem of other applications that we're not going to do or maybe, we will do and compete with, and we want to enable those vendors to actually work on our 'platform.'" Salesforce has done that. That's a big part of Salesforce's moat, is not that, "Hey, such and such company uses Salesforce but such and such company uses Salesforce and 27 other companies that are in the Salesforce ecosystem." That has reinforced their moat in marketplaces. I think there's a lot of really interesting marketplace in SaaS crossover where you can start to take elements of both business models, and use them to reinforce each other to build new moats, to kind of get to a “winner take all” or “winner take most” economic theory.

I think there's a lot of cool stuff there. One company that we're involved with and many of our companies are doing this, but HackerOne is a bug bounty company. It's a company where basically you have hackers, that's the supply in the marketplace mentality, and companies. The companies have software exposure or software bugs, security holes that they want to uncover. White hat hackers, or good hackers, want to basically get paid for helping surface some of these vulnerabilities and HackerOne acts as a matchmaker.

It's a marketplace for these types of things. They're very marketplace dynamics but the way they've done to market is actually largely kind of SaaS. They charge and bill in a SaaS way, and then they facilitate money going from their customers to the hackers. There's a lot of cool crossovers like these. I actually think that every SaaS entrepreneur should spend time on Sarah's Hierarchy of Marketplaces and really understand how these marketplaces work.

I think every marketplace entrepreneur should really understand SaaS businesses and think about how they work because there will be tons of little things that you'll pick up and will make you better.



LESSONS IN SCALING BUSINESSES

Patrick (00:51:36): I love that idea. I mean I love the cross-pollination of different business models, especially around defensibility. Marketplaces are so defensible and to sprinkle some of that thinking into a SaaS business sounds like a very smart idea. I'm curious when you've been involved in companies for a while now, I'll use Confluent as an example, which I believe is one of your earliest investments at Benchmark. So, well done on that one.

Watching a company like that evolve in size, what lessons have the entrepreneurs taught you about scaling that you think are valuable for other companies out there to think about?

Eric Vishria (00:52:11): There's so many lessons at each of these stages. If I were to summarize it, as you're going, and I'm going to use revenue numbers as it's a proxy for this stuff. But as a company goes from zero to a million in ARR (annual recurring revenue), that's really, when you ask do we have something here? At those points, you want to do a bunch of stuff that's unscalable or you're just trying to figure it out. You're trying to figure out, do we have product market fit? Is there something here? Is it interesting? Do our theories pan out?

As a company goes from $1 to $25m ARR, a lot of maintaining that momentum and that growth is really, does the CEO build a leadership team? Do they build an executive team? Do they start to get functional expertise? If they do those things, then they start to introduce an ability to scale: scale the organization, scale the business. And now you're starting to do things they need to be quite repeatable. You need to kind of constantly be thinking, "Okay, we're at 1, what does it look like at 10? We're at 10, what does it look like at 25? We're at 25, what does it look like at 100?"

You start to find all of these points of friction. There's a candidate I was talking to recently and he was describing company that he worked out that was one of these rocket ships and he was like, "One of the things that was really good as a management team, we were always looking forward and saying, 'Okay, we're doing this now, how will this work and does this scale when we're an order of magnitude bigger?'"

They were finding systematically any point of friction and eliminating it. I think that's a really good mental model for scaling, which is just finding points of friction and eliminating them. As you go from $1 to $25 million, I think building that management team helps you get management bandwidth and leverage to actually be able to scale, eliminate more friction, and kind of rinse and repeat.

> "I think that's a really good mental model for scaling, which is just **finding points of friction and eliminating them**."

As you go from $25, to say, I don't know, $150 million in revenue, then it's really, do those managers and those executives build their management teams and do the same thing? You kind of get this, what are the Russian nested doll effect? *[Editors note: Matryoshka dolls]*

It's either that or a fractal or whatever analogy you want to use. But it's basically a recursion. You get this notion of, "Okay, now, do those executives build their management teams?" One of the things that we find oftentimes in these companies is you hear this a lot. The executives who get you from A to B, and do a great job aren't necessarily the ones who get you from B to C. That's where it is, where a lot of the people will do an amazing job kind of getting you going, introducing that initial level process, et cetera, but then they don't do a great job building their management teams and empowering those people and kind of parceling out the work and responsibilities and missions to the next level in the organization.

So, if you kind of keep doing those things and you're kind of continuing to build management and leadership bandwidth, and simultaneously, you're continuing to look at points of friction of how your business operates in eliminating, systematically finding and eliminating those points of friction, then I think what you end up doing is actually getting to much, much higher levels of scale, and frankly, much less painfully. You can brute force a lot of things and get pretty far, especially in a white hot market as many of these markets are. But it's painful. Painful for the organization. It's painful for the entrepreneur and the CEO and the leadership. If you do some of these things, I think it actually allows you to grow faster but more painlessly.

Patrick (00:55:54): It's so interesting how the arc is sort of more arc early on, more structure and science later on, and I have to imagine, never done it, I hope to, but how hard it is for founders to do all of those things well. I mean to morph from someone doing stuff that doesn't scale to get to a million bucks of revenue to building a team of teams of teams. Very different skill sets and makes it pretty remarkable that there are founders that can do that whole thing.

Eric Vishria (00:56:21): It's astounding. Actually, what's crazy is the best founders in this kind of notion of your greatest strength becomes your greatest weakness, what will happen to a lot of these companies is they get really good at execution and they get very systematic. And getting very systematic and eliminating

these points of friction, they also eliminate all of these inefficiencies. But some of those inefficiencies are the next product.

They're the next idea. They're the kind of handful of engineers who are sitting around at lunch bullshitting and coming up with the next innovation, and some of that stuff gets eliminated or doesn't get fueled or funded, and so what's amazing to me is the best entrepreneurs are able to, in the morning have these incredibly operational systematic vigilant meetings and drive and look at things quantitatively and systematically, and then in the afternoon, turn around and dream and think about the second horizon or the third horizon, fuel innovative efforts and pick those things out. I think it's remarkable to be able to do that because it's such different thinking.

Patrick (00:57:29): What do you not understand well right now that you wish you did?

Eric Vishria (00:57:34): I mean, dude, we could be here for the next six months with me rattling off stuff that I don't understand. Any notion of understanding is a mere illusion, ephemeral illusion at that. Actually, there's one thing I meant to say earlier, we talked about the marketplace SaaS crossover, but I think there's something else that is a huge opportunity for SaaS companies that I see very few doing.

That is a cross-customer perspective. So, if you think about version one SaaS, version one SaaS they did this better delivery and economic model, but it was kind of very isolated per customer or whatever. Then, version two SaaS did multi-tenant and they put everything together and they kind of introduced this better adoption model and made it very low cost for them to stand up a new customer for the vendor and also very low cost for the customer to try something.

I think that generation of SaaS hasn't fully taken advantage of the multi-tenancy and what's possible there. All of the data across customers is now in one place, one virtual place, but it's still isolated customer by customer. It's still like a very customer by customer experience. And what's interesting is that for customer 1000, besides the features they get and the kind of robustness of the product, they don't get benefit from the vendor having 999 other customer data.

What's interesting is why can't this be abstracted and anonymized, so every company can kind of see how they compare, see how they're doing relative to their peers, see what the benchmarks are? Why can't there be some network effect value in a cross-customer perspective?

You see little bits of this, Stripe Radar, for example, for fraud. They can understand, "Hey, there's fraud coming from this IP address on our API, and therefore, it's probably fraud when we see that same IP address from another customer." So, you see the beginnings of that, but it's very little. I think that there's a lot of potential benefit of these SaaS companies to actually anonymize, look across customer data, and make each customer's experience better as a result.

Patrick (00:59:59): I love this and it makes me think of, this is kind of an obscure reference but bear with me. I love the writing of Vaclav Smil, the guy who writes about the history of energy, and how obviously, the things that matter are the source of the energy and the efficiency with which you can extract usable energy from it. So, we find cheap coal or something or deposits of oil and that's great, but even cooler is how efficient we've gotten at spinning a turbine or something.

We used to get 10% efficiency. Now, we're approaching 100% of the energy in the underlying substrate, and just making me realize like everything you're talking about, it's almost like we are through software, going that 10% to 100% efficiency. So much of this is making what people actually do trend more towards creative, positive, green field work, and away from maintenance, turning the crank, Dunder Mifflin type-work.

I mean I just find it incredibly exciting. We've talked about, it's kind of a wonky discussion which is my favorite kind, but when you step back, what all of this means is I think a more interesting world than existence for most people.

Eric Vishria (01:01:03): I totally agree. I'm very bullish and optimistic. I think that there's lots of cool stuff happening and when you think about the Lego blocks that are possible and what can be offloaded so that more energy can go towards the creative or "advancing the ball" stuff and less energy can be expended on the rote stuff. It's really positive for humanity. I think there's just a lot of possibilities here.

Patrick (01:01:29): I love obviously talking to investors, sort of started to collect them as my primary hobby and avocation. You, I think get to speak with a lot of investors of all different stripes. I'd just be curious you go through companies with a lot of reps but also through investors, what in your mind makes for a very interesting investor as you think about the next generation of investors that you would want to personally work with? What qualities stand out to you as most important?

Eric Vishria (01:01:54): Really interesting question because there's so many different ways to be successful in investing. We think about the different successful venture capitalists and the legendary ones. Take John Doerr and Michael Moritz, and I've spent very little time with both of them, but you can tell in the first 10 minutes that their personalities and their approaches are so different.

John is very salesy and very relationship oriented and Moritz is introverted and an incredible thinker. If you go back through the Benchmark founders, and the kind of current generation, you'll see a lot of those contrasting approaches in our shop today. The way Peter Fenton thinks about things and approaches business is very different than the way Bill Gurley thinks about things and approaches things and that surfaces.

I think there's a lot of different approaches that are successful. Having said that, one consistent theme is that they are hyper curious, all of these people are hyper curious. There's something that they don't understand or they hear about and they don't understand why it works or they made a mistake on, like they are going to delve into it and think about it and talk to people about it and ask questions and pull information and try to form a point of view about what they missed or what they didn't understand or what's happening.

They're super, super curious. And they're hyper competitive. These people are very competitive. They want to win. They want to be the best. I think both of those end up being really defining characteristics of the great ones. Some are quantitative, some are qualitative, some are people oriented, some are market oriented. There's lots and lots of differences but I find those two characteristics to be quite consistent.

Patrick (01:03:30): I've found this conversation to be so edifying for me as I think about the space of business and investing in the markets. I've learned a ton as I always do whenever I talk to you and your team. I think you know my closing question for everybody which is to ask for the kindest thing that anyone's ever done for you.

Eric Vishria (01:03:57): There have been so many people who have given me a shot when I probably didn't deserve it. I mean going back to I think about my 11th grade AP physics teacher, Mr. Mullins or my calculus teacher, Mrs. Gates, to Ben Horowitz and Mark who hired me as their assistant, as Ben's assistant in the very early days of LoudCloud and gave me shots many times over the eight years I worked there. To the Benchmark crew for giving me a shot. Someone who's never invested to be able to join Benchmarks.

I think those are all incredibly kind things and I wake up every day trying to repay that favor to all of them and pass it on frankly to the next gen.

Patrick (01:04:45): Yeah. I love it. It's emerging as the major category of the answers to this which is taking a chance on somebody, being the recipient of someone else's risk which is really, really cool. This conversation will I think stand the test of time and I look forward to doing it again with you a year or two from now when this landscape continues to grow and evolve. Such an interesting part of the market and I really appreciate you taking the time to explain it to us today.

Eric Vishria (01:05:06): Thank you so much. It was awesome.