

Chris Paik, Pace Capital, on Turpentine VC

Podcast: Chris Paik, Pace Capital, on Turpentine VC, w Erik Torenburg

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<https://www.podpage.com/turpentinevc/e64-chris-paik-on-the-end-of-software-and-the-future-of-ai-infrastructure/>

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Thoughts

Sajith Pai: Surprisingly good podcast episode. I encountered Chris Paik first on a [Invest Like the Best](#) podcast episode which was interesting as well, and then again recently when his post 'The End of Software' went viral. He is an interesting thinker as you will see from the highlights of this episode. A few points which stood out

- On Thrive Capital, his previous employer, he mentions how they were always 'playing offence', given they were based in NYC, and no one from the Valley had to visit NYC. You were default on a plane.
- Pace Capital's unfair advantage lies in being early. That is the only way they can compete with the multistage funds. If there is a deck, it is too late, is their internal motto per Chris.
- Bullish on local inference, and applications take advantage of that. Apple has a huge advantage per his thesis. Buy Apple! as he says sometimes the obvious trade is the clever trade (like FAANG and Bitcoin)
- Minimum viable infrastructure is an interesting mental model. There is a minimum technology format or bandwidth needed for a media or software product, like text for twitter, 3G for uber / snapchat, 4G/5G/video for tiktok etc. It explains why Instagram succeeded Twitter, and Snapchat succeeded Instagram, and TikTok succeeded Snapchat. The flow is usually in one direction. The reason we haven't had a new consumer co in the past decade is because bandwidth has topped out. Interesting theory and he proposes Livestreaming as a potential new format (suggests Whatnot as a likely winner). Some of this thinking also appears in the Invest Like The Best podcast I mentioned.

Notes

* He is ex Thrive Capital. About Thrive, he says, being in NYC, "Nothing comes to you. Calls never end with, let me know when you're in town, because it's never a certainty that people are coming to you." and hence you were always playing offence at Thrive (always had to be prepared to jump on a flight). In the early days felt very underdog-ish, and always felt "we had to do more in order to win."

* Sometimes the obvious trade is the clever trade (Faang trade, Matt Hwang of Paradigm on the Bitcoin trade). As investors we want to be right and clever, and the obvious trade doesn't seem clever.

* Chris: Are you a 2 fund or a 20 fund? (references Jamin Ball who wrote the article '[Misaligned Incentives](#)')

* Chris: "We have views of the world and use those views to sort and filter how we prosecute deals. It's not uncommon for us to be the first people to reach out to companies. We have this sort of informal motto internally, which is if there's a deck, it's too late. There are firms out there that can pay much higher prices than us. And so it's like, OK, well, where can we win? I think it's being thoughtful. It's getting there first. It's building conviction before other investors that might be less prepared would need more information to get to the same degree of conviction."

* Describes YC and the megafund model as "two interesting changes in the fabric of the venture market"

* Refers to a slogan from The Browser Company, 'as better as possible' which resonates with his pursuit of excellence

* Discussion abt his post: [The End of Software](#) - Chris: "Vogue wasn't replaced by another fashion media company, it was replaced by 10,000 influencers. Salesforce will not be replaced by another monolithic CRM. It will be replaced by a constellation of things that dynamically serve the same intent and pain points. Software companies will be replaced the same way media companies were, giving rise to a new set of platforms that control distribution."

* Chris: "...at the end of the day, software is just tool. They're just tools, right? They're means to an end. They're not necessarily ends in and of themselves. And so, if there's just like a lower friction, cheaper aqueduct for water to flow down, it's going to be that's like this real, it's like truly existential reckoning moment for the industry that has been largely cantilevered around SaaS as an incredibly, admittedly an incredible business model and value creator for many years, decades. You know, I think the standard approach is, you know, SaaS keeps the lights on with like steady returns and consumers the big swings that like, you know, SaaS can be fund driving, SaaS can make the fund and consumer makes the firm. And so all of a sudden we're like, oh shit, this thing, this like this one leg of the stool doesn't exist anymore. What is it going to be? It's just a sort of like race to the bottom on pricing. Now I see everybody talking about you sell the service, not the software, you sell the outcome, but that's just, you know, that's just one stop along on the way to the lot of conclusion of like, oh, actually it's just a race to zero. And distribution is the only thing that matters. And so in a world where distribution is the only thing that matters, okay, who ends up controlling distribution? What are those endpoints that we entrust with intent?"

* Chris: "...say you're like the CFO at a company and you need a budget, annual budget, odds are you actually don't ever touch Excel, right? Odds are you ask someone to make the budget

and they maybe ask someone else and that someone touches Excel. But we've already kind of abstracted away from person using the tool and it's like, and so what's going to end up happening is instead of like humans as those intermediaries, it's just going to be agents, right? And so we're all going to exist in this mode of orchestration and conducting rather than actually using the tools themselves. And that's going to lead to wild productivity improvements. It's going to lead to insane like re-skilling and unemployment probably. It's going to demand for the welfare state even more because every time you have like a productivity boost, you have like dramatic wealth inequality and disparity. But if the internet took us from this amount of content, to this amount of content, I would argue that AI and LLMs are going to take us from this amount of software to this amount of software."

* Chris: "So we're going to have a crazy amount of free software. I don't even know what we're going to call it, but we're going to have a crazy amount of software flooding the market, and it's all going to be free, and it's all going to compete with each other for distribution. Right. It's also worth noting that these influencers are on centralized platform, like Instagram or Facebook or Twitter or whatever it is. And so I wonder if there's some enterprise or SaaS equivalent."

* Software (post AI) going free, moving from cloud to local inference like graphics. Framework: Data in the cloud, and compute moves to the edge (local inference).

* Chris: "My assumption is that compute gets pushed to the edge and data always gets sucked up into the cloud for a lot of reasons and convenience and portability. But compute, generally speaking, gets pushed to the edge on device. Your graphics render on your phone, not in the cloud and get pushed to your phone."

* Gives Apple a huge advantage due to the power of the iPhone and Mac in enabling local inference. Gives the framework of being the first mental hop away like Amazon won over Google in product search, by being even more closer to the intent.

* The parable of the [three brothers](#) - one is open ai / anthropic cutting edge models, the middle one is open source models (llama, mistral) and the last is local inference. The elder brother is first to the new tech (like a 8K TV) but the younger brother ends up inheriting everything eventually (and how much really is the difference between an 8k and a 4k TV)

* Minimum viable infrastructure - Chris: "the Minimum Viable Infrastructure for Twitter was SMS, and the Minimum Viable Infrastructure for Instagram and Snapchat was 3G. And the Minimum Viable Infrastructure for TikTok was 4 and 5G, or LTE. And it has to do with the size of the media file, right? So Twitter texts have a really small payload. That can actually happen over SMS. And it also can happen over data, but it was backwards compatible to SMS. Instagram compressed images larger than text, significantly larger than text and file size. But it basically, so it basically requires a network saturation of speed to allow the average user a good experience consuming on mobile. Same with Snapchat, maybe incrementally more. Snapchat is images plus whole form video. And then TikTok or Musically is video, video plus audio. As you can imagine, those increasing packet sizes or size of standard media on those content networks, as they increase

in size, they also demand more infrastructure saturation to allow for the average user to have a positive consumptive experience. Largely 3G, Uber was impossible pre 3G. Even on edge networking, the data throughput wasn't enough to deliver turn-by-turn navigation. But with 3G, all of a sudden, you could deliver turn-by-turn navigation. Awesome. Amazing. And so it's actually like this infrastructure that is this rate limiter that prevents these consumer platforms from existing. And so there's like a very discrete order, like Twitter, 2006, SMS, Instagram, 2010, 3G, 2011, Musically, which is functionally Tiktok is 2014. And we really haven't had a consumer company in the last decade because we kind of topped out. Like we topped out on bandwidth. And so the infrastructure, we basically blew past infrastructure. Like what else is, what else, what else can, what is the next strictly more bandwidth consumptive consumer product? Like maybe, maybe it's whatnot. Maybe it's live streaming something. I could see that argument."