

future @ tense

Greedy Bots Cornered the Sneaker Market. What Now?

BY SETH STEVENSON

NOV 01, 2021 • 5:17 PM



Adrian Hernandez/Unsplash

Bots are a special, clever kind of software. Much faster than any human sneakerhead could ever click on the correct shoe size and enter their credit card number, bots can swoop in and buy everything in the blink of an eye. Then, the people who control the bots will put those sold-out shoes on the resale market at much higher prices.

But bots don't just buy cool sneakers. They buy up those concert tickets you wanted, so they can then scalp them to you at an outrageous markup. At the beginning of the COVID pandemic, bots were buying hand sanitizer and face masks. Later, they were booking all the

vaccine reservation spots. Anything that's very high demand with a very limited supply. That's an opportunity for the bots to become greedy hoarders and corner the market.

On Friday's episode of *What Next: TBD*, I spoke with Eric Budish, a professor of economics at the University of Chicago's Booth School of Business, about the dangers of bots and how to fix the broken system.

Seth Stevenson: What are the incentives to develop and use bots for online transactions?

Eric Budish: The incentives are to use technology to buy the mispriced asset at scale. You see that in the sneaker market, you see that in the ticket market, I've documented that in the context of financial markets. Upwards of 20 percent of financial market volume is high frequency trading races. The typical race, the difference in time between the winner and the loser is between five and ten millionths of a second. It's just like unfathomably fast. The structure of the market rewards speed. Speed's not a constructive form of competition, but that's what the market induces.

This phenomenon, where people buy up all the tickets to some event and then scalp them at a higher price, or buy up all of a limited-edition product and then resell it at a profit, is that relatively new? Or is that something that also happened in the past?

I found examples of that phenomenon dating back to a Charles Dickens reading in the 1860s. Dickens was giving readings. Tickets were priced at \$2, and \$2 was a lot of money back then. But there were reports of a resale value of \$20 or \$30 a ticket. There were reports of a young boy being paid in gold for a good spot in line. It's the same economics, without the scale of the internet. So no, this is not a new thing. *Sneakers* is a newer thing just because people weren't collecting sneakers a hundred years ago.

Has the internet fundamentally changed the dynamics of this?

The internet changed the technology of ticket speculation: the scale with which you could amass tickets in the primary market to then easily resell them in the secondary market. What used to be "stand in line and buy tickets" became "build a bot and buy tickets across the whole fucking country."

Then the secondary market—where you resell the mispriced goods—became a lot easier to use, too. In the old days, if something was priced at 50 bucks, but worth 200 bucks, there'd be a lot of shady brokers who would get the \$50 tickets to then resell at 200 bucks, but a lot of fans would also get \$50 tickets and be quite happy about it. But if all the tickets get scooped up by ticket bots at 50 bucks and then resold at 200 bucks, that doesn't do the

team or the artist any good. The internet kind of broke the ability to mostly get your tickets to your fans at a low price.

Bots are a symptom of a mistake. There are a couple different versions of the mistake you might have made. One is you set the price too low, or you set the quantity too low. You left money on the table. Or, if your *intention* was to leave money on the table—out of the generosity of your heart, or because you're a long-term prudent business person and want to give value to your fans—if you're choosing to set a price that's too low, then the mistake you've made is letting the below-market-priced goods go to bots, not your fans.

When sellers don't raise the price of their goods, it seems effectively what they're doing is just giving free money to the bots, right?

Yes. I think the other cool option is what the wonderful late economist, Alan Krueger called Garth Mode. Garth Brooks had a view as to what a fair price for a Garth Brooks concert was. 75 bucks, I think. And he just announced, "I'll play as many concerts as there is demand to see me at 75 bucks a ticket." What that does is it puts a ceiling on the resale value, because you know there'll just be another concert you can buy tickets for. That's a beautiful way of shutting down speculation: Just produce as much as the market will bear at the price that you think is a good, fair price. Sneaker companies could do that. They could just produce more copies of the in-demand sneakers. But the choice of making it limited edition and *also* setting a below-market price, that's the one that as an economist is just hard to get your head around. It doesn't make perfect sense.

It's like if Ferrari set the price of a Ferrari at \$5,000 and you were like, sweet, I can get a Ferrari. But then of course you can't, everyone buys them up and there's only a secondary market where they cost \$180,000.

Yeah, and you'd look at Ferrari and be like, what are you doing? Just set the price of a Ferrari to be an appropriate, market clearing price. It doesn't do anybody any good to pretend the price is 5 grand if it's 180 grand. It's just going to create a lot of crushed hopes and dreams.

So how would we create rules that prioritize the emotions of the person who just wants to see the concert or buy the shoe and enjoy it?

I think Garth Mode is a clean answer. If you want to set a low price, and you want your fans to all have a chance to buy at that price, raise the quantity. Just perform more shows, produce more cool sneakers, so everybody can have access. The other kind of answer is harder to execute, but is to really put a lot of care into the allocation of the fairly, low priced

good, directly to your fans. Airline tickets have names on the ticket; I can't resell my ticket to you at a markup. Airline tickets are totally nontransferable. If you did that, then you could just sell tickets to your fans at whatever price you think is fair and shut down the resale market.

These platforms where the secondary sales happen, like StubHub or eBay or wherever people are reselling their limited-edition sneakers, do they bear responsibility? Is there anything they could be doing to make it better?

I hold them responsible for lobbying to preserve flawed rules. I think the thing to note about StubHub and the secondary market venues is how much of the pie they manage to grab for themselves. StubHub and SeatGeek and all those sites, their fees are so high that they're actually making more profit on the resale than the bot themselves or the broker themselves. They want there to be lots of brokers developing great bots to scoop up mispriced assets to resell. And then they're taking this gigantic toll.

They're at least providing some kind of service. They're providing a platform where, if you're willing to pay the higher price, you can go there and pay the higher price. But what value are the scalpers providing?

You're absolutely right. In a perfect world, there would be a resale market, or something like it, where if you really badly wanted to go to an event and you were willing to pay through the roof to get there, there'd be a price. Someone would make you a market.

It's this situation we're in where most of the tickets flow through bots and then the secondary market, both of whom are collecting a big fee, that doesn't make a whole lot of sense.

This all seems like it's just parasitic behavior. Are these bots providing any value to society?

No. It's socially wasteful behavior that does not provide value to society. When you see technology being used for these tiny relative advantages, that's a symptom of competition on a bizarre level. Economists call that socially wasteful behavior, or rent-seeking behavior. I try to emphasize to my students the difference between value creation strategies and value capture. The companies we admire most grow the pie. They invent new things. They improve products. They create value. And a lot of this stuff is about capturing from a fixed pie, or even shrinking the pie. Parasitic is not too strong a word.

If I put you in charge of the universe, but I told you the only thing I want you to solve is this problem with bots buying up all the cool sneakers, what would you do?

If Nike really wants to sell just 50 copies of some sneaker, they should sell those sneakers to fans who have done works of charity, or who have won essay contests. Something noble and value-creating for society. Competition on some different dimension, other than price and other than botting, that's more socially valuable.

Right now, the competition for the regular person is clicking faster than a bot, which you're never going to win. But you might beat a bot in an essay contest.

Yeah, you could beat a bot in an essay contest. Just finding some constructive dimension to compete on. That would be a way of redesigning the market to produce value-creating competition, not value-destroying competition. ▀

Future Tense is a partnership of Slate, New America, and Arizona State University that examines emerging technologies, public policy, and society.

SLATEGROUP

Slate is published by The Slate Group, a Graham Holdings Company.

All contents © 2022 The Slate Group LLC. All rights reserved.