

SONOS

Written Testimony of Eddie Lazarus

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Senate Committee on the Judiciary

Subcommittee on Competition Policy, Antitrust, and Consumer Rights

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I'd like to thank Chair Klobuchar, Ranking Member Lee, and distinguished members of the subcommittee for the opportunity to appear before you.

It is an honor to testify as the Chief Legal Officer of Sonos, a hugely innovative company whose history — from small startup to multibillion-dollar global enterprise — embodies American tech innovation at its best.

Sonos was founded in Santa Barbara, California in 2002 by a handful of entrepreneurs who set out to reinvent home audio for the digital age. What Sonos's founders imagined was a world where the old home audio systems — featuring passive speakers connected by wires to a centralized receiver/amplifier — would be replaced by a well-designed and seamless experience where users could play music on wireless speakers that communicate with each other to produce what is known today a multiroom home audio.

Many companies now tout how they let you stream the same music to different speakers in different rooms of your house, or stream different music to different rooms, or play music at different volumes in different places, or pair speakers in stereo. Years before the Amazons and Googles thought about home audio, Sonos invented and patented each of those delightful features of a modern home audio system — and many other cool features too. In this way, Sonos was putting “smarts” into the home years before the idea of a “smart home” became a part of the lexicon. Our innovation is reflected in our portfolio of over 1,000 patents issued in the U.S. alone, a number that continues to grow every year as we invest heavily in new audio experiences.

Sonos's innovative culture has served it well. Today we employ roughly 1,500 people (mostly in the U.S.), and our products have been welcomed into more than 11 million homes. Over the past year, we introduced our category-leading soundbar in Sonos Arc, our ultraportable, weatherproof Bluetooth speaker in Sonos Roam, and a new collaboration with the carmaker Audi. We've grown our customer base, product portfolio, and revenue every year since our founding, and nearly three years ago the company went public.

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Our success is based in significant part on elevating the idea of an open platform facilitating consumer choice rather than a walled-garden experience. Sonos customers can choose audio content to play on our systems from more than 100 streaming services, such as Spotify, Deezer, Tidal, Apple Music, Amazon Music, and Google's YouTube Music. They can also choose between one of the two leading voice assistants, Amazon's Alexa, and Google Assistant. Moreover, we provide these services with a strong emphasis on quality and privacy, focusing on using customer data to enhance their experience rather than aggressive monetization.

Sonos had the good fortune of disrupting home audio, building its brand, and developing financial resilience before the huge tech players sought to dominate the smart speaker space. That puts us in a stronger position than most companies to speak out about the existential threats to continued innovation and fair competition. And speak out we must. The battle for the future of the smart home is upon us, and we very much welcome this Committee's attention, as Congress can play an extremely salutary role in determining what that future will look like.

We see two possible futures for the smart home. In the first scenario — resulting from the current trajectory we're on — every smart home will be controlled by one of a few dominant companies, Google, Amazon, or perhaps Apple or Facebook will squeeze in too. These behemoths will exert overwhelming control over the direction of innovation and what new ideas make it to market, ultimately replicating a market structure that history tells us inhibits innovation and competition. Consumer choice will also wither. Consumers will find themselves channeled into the siloed ecosystems of a Google or an Amazon in a self-reinforcing dynamic of network fueled dominance.

In an alternative scenario, revamped antitrust law and enforcement level and broaden the playing field. The second future is one in which companies like Sonos and countless others innovate and bring novel experiences to customers. A multitude of companies will compete based on the merits of their products and services, with the best ideas rising to the top. Consumers will enjoy greater choice not merely to choose alternatives to the systems provided by the dominant companies, but also to mix and match seamlessly among their and other offerings. We believe that Congress has a vital role to play in determining which future we create. Due to strong network effects, technology markets can tip quickly. So time is short.

Why Smart Home Matters: It is the gateway to the internet and a gold mine for data

Generally speaking, in a smart home, a set of front-end, consumer-facing control devices, such as control consoles, phones, or smart speakers, serves both to connect the home to the internet and also to provide a control interface for back-end "workhorse" devices, like lightbulbs, HVAC systems, and alarms. Consumers have already integrated many smart systems into their homes, and that trend will continue to accelerate rapidly in the coming years.

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For Google and Amazon specifically, the smart home — this new and growing interface between their online enterprises and consumers — presents both a threat and an opportunity. The threat is that if other companies were to be successful in the smart home space -- and in particular if they were successful with controller devices that connect directly to the internet -- they might stand between the dominant companies and customers. The opportunity for these companies is to dominate yet another important consumer market and, even more critically, to use their smart home systems to collect vast amounts of consumer data which can be monetized on their already dominant and enormously profitable platforms.

As it happens, the stickiest product in the smart home space is the voice-enabled smart speaker. One reason for this is that people love music and often use smart speakers for that purpose. Spread around the house, such speakers also give consumers easy access to the internet (for example, to check the weather or ask a question) without being tethered to a device such as a phone.

This is where Sonos comes in. Sonos introduced voice-enabled smart speakers in 2017 through our integration with Amazon Alexa on the Sonos One, and we followed up two years later by featuring Google Assistant on our products. The ability to serve as a host for voice assistants makes Sonos's devices an important access point for search and e-commerce services, especially in the future. As a result, we have firsthand experience regarding the strategies that the dominant digital platforms use to prevent that from happening. We would divide those into three categories: 1) cross-subsidization; 2) denial of interoperability and product tying; and 3) leveraging dominance and data. I'll address them in turn.

Cross-subsidization to achieve market dominance

A common strategy of Google and Amazon is to take on a competitor by producing and then flooding the market with similar (I might say copycat) products sold at highly subsidized prices or even given away for free. Anyone who has followed the smart speaker space for the last few years has borne witness to this practice. Indeed, at least of one those companies has stated on the congressional record that the products themselves are money losers. But Amazon and Google, in contrast to Sonos or other smart speaker makers, can afford to lose money on the speaker products because they aren't counting on profits from the product sales themselves. Instead, they make their money by protecting the dominance of their monopoly products and from the rich trove of personal data that these microphone-enabled products vacuum up from consumers. The speakers are mostly just a conduit to their dominant advertising and e-commerce platforms — and so they can take the profits from those platforms and subsidize the speakers themselves.

Amazon and Google have now come to control roughly 85% of the U.S. smart speaker market. This is terrible for innovative dynamics because it hamstring those companies that have better products that cannot be sold at a loss and consumers lose. In addition to protecting the future profits of their dominant products and services, cross-subsidization ultimately will result in the

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same anticompetitive effects as “traditional” below-cost predatory pricing; prices are sure to go up once these dominant companies have driven the other companies out of the market and reduced competition.

The problem is a familiar one from other settings. Take the example of Gmail and Google Photos. Google attracted hundreds of millions of customers to Gmail by offering it for free, wresting away email from email providers who competed on a variety of features. It did the same with Google photos. In 2019, once a number of competitors had tanked, Google began charging Gmail customers who “exceeded” their storage limit.¹ In the same vein, just this month, Google announced it would charge for Google Photos. Now these customers are effectively locked into these services, and Google has not surprisingly generated a lucrative recurring revenue stream, estimated at billions of dollars a year.

True interoperability is essential to competition

The problem of cross-subsidization is compounded by restrictions on interoperability. The strategy of each of the dominant players is to aggregate demand on its own platform — to make a smart home a Google (Nest) home, or an Amazon (Echo) home, or an Apple (HomeKit) home — or at a minimum to draw customers into their ecosystems as much as possible. They lure you into the walled garden with the subsidized prices, and then they want to lock you in. Sonos, like many other innovators, wants to offer a different model: one that interoperates with each of the dominant players, but also unlocks consumers by enabling them to discover and choose from various other products and innovations.

The dominant players often make that difficult if not impossible. To take one egregious and anti-consumer example, Sonos has developed the technical ability to host multiple voice assistants on its smart speakers simultaneously, which we call voice concurrency. Voice concurrency allows for multihoming, whereby consumers would have the ability to call upon whichever voice assistant they want (including more than just the two dominant assistants), and the system will channel them into their chosen service automatically. This is a feature that customers told us they wanted and which requires complex engineering, and we worked hard to invent it. But Google demanded as a condition of having Google Assistant in our products that we never allow concurrency with another general voice assistant. As a result, today Sonos customers must open an application and manually choose which single voice assistant will be configured on their device. This forced choice degrades the consumer experience, but it is arguably good for Google, which is betting that most users will choose Google Assistant as the default voice assistant and then stick to the Google ecosystem.

Nor is Google alone in limiting interoperability. Take Apple’s announcement that it will now license Siri to third parties in the smart home. As reported in *The Verge*, Apple will only license

¹ "Gmail hooked us on free storage. Now Google is making us pay", Gerrit de Vynck, Los Angeles Times, October 24, 2019. Available at: <https://www.latimes.com/business/story/2019-10-24/gmail-hooked-us-on-free-storage-now-google-is-making-us-pay>

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Siri to companies that utilize the HomePod as a central hub to connect with Siri.² Thus, Apple is conditioning interoperability with Siri on companies placing a competitive Apple product alongside their own.

No doubt the dominant companies will suggest that new legislation is unnecessary in light of the initiatives they have underway — like the “Matter” alliance³ — that are working towards a degree of smart home standardization to facilitate interoperability. It may well be that these efforts will yield some positive results for the makers of back-end devices, such as light bulbs, garage door openers, and the like by enabling them to interoperate with any of the three major ecosystems (Alexa, Assistant, Siri) using a uniform code base. But count me a skeptic that these types of initiatives will foster consumer choice at the front-end — where consumers control their smart home devices — or do much, if anything, to foster genuine interoperability across the siloed ecosystems of gatekeepers. From the user’s perspective, the choices among a very few walled gardens will likely remain the same. One could imagine, furthermore, a Trojan Horse aspect to all this. Those who control the standard and its evolution effectively control the nature and pace of innovation, including the innovations dreamed up by their competitors. The standard Matter is working on, as I understand it, is basically a creature of Google and Apple code. That is hardly a formula for fair competition or more creative invention. It’s a formula for further entrenching the dominance of the very few.

Leveraging dominance and data to inhibit rivals

It is also important to appreciate the competitive imbalance that already exists between the dominant players and other participants in the smart home space. Google operates an irreplaceable platform for advertising, controls one of the two dominant voice assistants (Google Assistant), controls one of the two dominant mobile operating systems our products operate on (Google Android), offers office productivity tools, and provides a popular music service (YouTube Music), among other products. Amazon is far and away the most important e-commerce channel, it runs one of the fewer and fewer viable, large-scale cloud services platforms (AWS), it owns the other dominant general voice assistant (Amazon Alexa), and it too has a popular music service that it ties to other services (Amazon Prime Music), among other products. Given these companies’ sprawling empires, one has to do business with them. They are like platforms or basic infrastructure. In many respects, the relationships are productive and mutually beneficial, as these firms also value access to Sonos’s large and growing customer base.

To gain access to their platforms and integrate with their services, these companies issue all manner of take-it-or-leave-it demands, from early and technically detailed access to our product

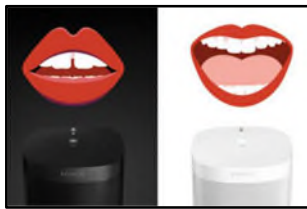
² "Apple introduces Siri for third-party devices", Chris Welch, The Verge, June 7, 2021. Available at: <https://www.theverge.com/2021/6/7/22523045/apple-wwdc-siri-third-party-devices-ecobee-watch-tvos-tv>

³ buildwithmatter.com (last accessed June 2021).

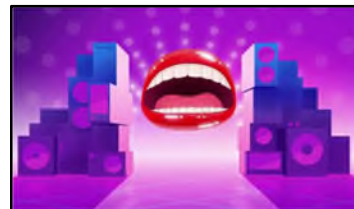
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roadmaps, to proprietary business data, including sales forecasts, to waivers of essential contractual rights. This results in less entrepreneurship and reduces innovation.

The issue is dramatically compounded when these companies then decide to use what they've learned about your business to produce remarkably similar products and to use those products to compete with you. Dominant platforms are able to develop copycat products by analyzing sales metrics on their platforms and combining them with the rich data profiles of their customers. These copycat products are then sold at cost or lower, with no intent to reap a profit. They also can use remarkably similar trade dress and marketing campaigns.



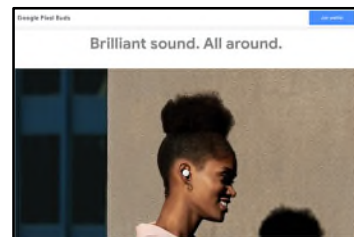
Sonos ad (2017)



Amazon ad (2018)



Sonos ad (2019)



Google ad (2019)

And while the dominant platforms make unnecessary demands on our data, they hoard their own much richer data sets in ways that can harm consumers and degrade competitive offerings. A good example arose in the important area of privacy, where we are tied to the mast as dominant platforms evolve their voice assistants. In 2019, Bloomberg News revealed that Amazon and Google were reviewing live voice utterances without customers knowing. Some of this review was conducted by outside consultants with even less accountability. The companies course-corrected and now inform their customers about these practices, but we've seen that such violations of trust impact the willingness of our own customers to add voice assistants in their home. Their behavior, whether responsible or not, swings purchasing decisions. Our business model is not founded on monetizing data, meaning that we take privacy seriously. We give our customers control over their privacy, and we don't sell their data to third parties. Meanwhile, when we tried to get access to anonymous error rate data that would allow us to improve the way our speakers respond to customer commands, we were told such data could

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not be shared for privacy reasons. Using privacy as a pretext for anticompetitive behavior ensures that voice assistants always work best and are “snappier” on devices built and marketed by the dominant platforms.

Why Congress must modernize antitrust law

We have been heartened as state and federal antitrust agencies have begun to investigate and, in some cases, bring enforcement actions against the more egregious anticompetitive practices, including, in our case, Google’s ban on concurrency. But the limited nature of the ongoing enforcement actions is not enough to protect consumers and promote the competitive process.

For that reason, we very much appreciate that Senator Klobuchar has introduced legislation to bolster antitrust enforcement. It is vitally important to recognize that a wide range of conduct that will suppress innovation and competition in the smart home space falls outside existing law. The world has changed a lot since the introduction of the Sherman Act of 1890, and we need reforms to address the new and unique challenges we face today in the digital age. The conduct addressed by the investigations and lawsuits brought by the Department of Justice, Federal Trade Commission, and State Attorneys General address just the tip of the iceberg when it comes to conduct that distorts competition in the smart home. We need legislation that promotes nondiscrimination by addressing restrictions on interoperability, predatory pricing and cross-subsidization, and misuse of data. We believe that Congress should be deeply skeptical of voluntary pledges by companies to forego such conduct, including insufficient commitments to interoperability, as we detailed earlier.

We urge Congress to act soon. Entrepreneurship is at risk, and venture capitalists are loath to invest in startups that drift too close to the “kill zone” by dominant platforms, while at the same time pumping money into firms that have a chance of being acquired by these platforms. The gatekeepers already control important sectors of the economy, and we are in grave danger of them extending their existing monopolies.

There are many other companies that have suffered from anticompetitive conduct by these platforms. But many are too afraid of retaliation for speaking up. We hope that in raising our voice, we will call attention to the need to support innovation in America.

Thank you for your consideration.