



**Testimony of
Charlotte Slaiman¹
Competition Policy Director
Public Knowledge**

**Before the
United States Senate
Committee on the Judiciary**

**Subcommittee on
Competition Policy, Antitrust, and Consumer Rights**

**Hearing On:
Big Data, Big Questions: Implications for Competition and Consumers**

**Washington, D.C.
September 21, 2021**

¹ I want to thank Alex Petros, Policy Counsel, for his support in preparing this statement.

Chairwoman Klobuchar and Ranking Member Lee:

Thank you for the opportunity to testify today on behalf of Public Knowledge, a nonprofit working in the public interest for over 20 years. I'm Charlotte Slaiman, a former antitrust enforcer at the Federal Trade Commission and now Competition Policy Director for Public Knowledge. We fight for an open internet, free expression, and access to affordable communications tools for everyone. Achieving these goals is only possible through robust online competition free from the control of today's digital gatekeepers. This hearing smartly zeroes in on one of the key components of this power: data. Although Big Data is most often discussed in policy circles for its privacy implications, I am very pleased that this Subcommittee is focusing on Big Data in the context of antitrust and competition policy.

Data is everything to a platform. It is the lifeblood, the currency, and the fuel that drives Big Tech and many of the products they offer. Perhaps most importantly, data is a key component that platforms use to maintain their gatekeeper power. This should be a dynamic industry where innovation can flourish, but because of the hands-off approach policymakers have taken in the past, new disruptive innovators have not had a fair shot. This hearing marks an important step toward addressing that power, and until we do so, Big Tech will continue picking winners and losers in digital markets.

Data & Gatekeeper Power

Gatekeeper power is at the root of the competition problems Big Tech presents. Expert economists and antitrust professors, policymakers here in the U.S. and abroad, and advocates the world over have identified gatekeeper power—sometimes “bottleneck power,” or “strategic market status”—as the power that dominant digital platforms have over other businesses’ ability to reach their customers.² As a result, these dominant digital gatekeepers also serve as the primary access point for key consumer data. These gatekeepers get to determine who can play the game in which they also compete. They have the incentive and ability to pick themselves as the winners of this game and pick potential competitive threats as the losers. These same gatekeepers can wield their superior access to data as a cudgel to ensure their gates remain closed—and they stay on top. We can’t expect gatekeepers to give up their power just because it’s the right thing to do. We need Congress to act to break open the gates and promote a competitive market.

² George J. Stigler Center for the Study of the Economy and the State, Committee for the Study of Digital Platforms Market Structure and Antitrust Subcommittee Report [“Stigler Report”] 32 (Jul. 1, 2019), <https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf>; Digital Competition Expert Panel, *Unlocking digital competition* 59 (Mar. 13, 2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf.

Digital gatekeepers benefit from a triumvirate of market characteristics—network effects, economies of scope and scale, and the ability to control the choice architecture that influences user behavior.³ We see network effects when users naturally flock to the most popular services as their utility from a service is directly related to how many other people use it. The fact that most of your friends are on Facebook’s social network is probably what convinced you to join Facebook in the first place and what keeps you there now. The inherent economies of scope and scale in Big Tech’s products also turbocharge gatekeeper growth. It can be difficult for new platforms to compete with dominant ones, yet once a new platform gets going, each additional user results in negligible costs for the platform and exponential benefits in terms of additional data. Finally, gatekeepers have complete control over the user interface—what users see when they access the platform—and can use that interface to push them towards certain choices.

Big Data Fuels Anticompetitive Discrimination

The user interface of a digital gatekeeper has a much bigger impact than the interface of an average website or the layout of a physical store. Dominant digital platforms can pick winners and losers in the digital economy by prominently ranking someone at the top of a page or hiding someone’s listing away after lots of scrolling. There are many other tools at their disposal, too. For example, some Google search results get to take up a lot of “real estate” on the search engine results page. These results can have images, bold type, or multiple clickable links to different parts of a website to really grab the user’s attention. A user is much more likely to click on one of those results than one that’s given fewer engaging features. Amazon chooses which retailer wins the coveted Buy Box (the “Buy Now” button that most users click on to actually buy a product), but Amazon also leverages clever site design to make it seem like the Buy Box is the *only* way for a customer to buy a particular product.⁴ Most users don’t even realize there are other sellers offering the same product due to this design feature.

How these design choices influence user decisions is called the “choice architecture.”⁵ It can be extremely effective and misused to trick customers, a phenomenon researchers have termed “dark patterns.”⁶ To understand and use these tools of discrimination to their greatest effect, the platforms are constantly running tests on us, the users. Based on what I click or don’t click, dominant digital platforms can refine what they’re doing to more accurately get the next person to click. This applies to influencing me to stay on Facebook longer, or to purchase a particular product on Amazon. Dominant platforms meticulously optimize their user interfaces to push us

³ See *supra* Stigler Report, 7–8.

⁴ See Amazon Seller Central, *How the Buy Box Works*, https://sellercentral.amazon.sg/gp/help/external/help.html?itemID=37911&ref=efph_37911_cont_home

⁵ Richard H. Thaler et al., *Choice Architecture*, SSRN (Apr. 2, 2010), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1583509.

⁶ Sara Morrison, *Dark patterns, the tricks websites use to make you say yes, explained*, VOX (Apr. 1, 2021), <https://www.vox.com/recode/22351108/dark-patterns-ui-web-design-privacy>.

to behave in a platform's best interest. This could mean keeping us constantly engaged with a product or it might mean keeping us *away from* companies that could challenge gatekeeper dominance if they were given a fair shot on the platform.

The platforms also can choose winners and losers through the Big Data-driven algorithms they develop and use to determine which options they'll show to a user. Users may be harmed by the high degree of tracking and engagement needed to target these offerings.⁷ They may also be harmed by seeing fewer options and by the assumptions the algorithm makes about us. What a platform's algorithm thinks you'll click on isn't always what's best. We as users could lose out on products we might actually want if our full range of short-term and long-term interests aren't adequately captured by these blunt algorithms. Platforms also offer behavioral targeting for use in perpetuating racial and gender discrimination. Federal enforcers have accused Facebook of targeting housing ads based on race, in violation of the Fair Housing Act.⁸ Prospective employers can target their job ads at young men, leaving qualified older workers and women out in the cold.⁹

And this doesn't just harm users. Businesses trying to reach us through Google or Facebook will also suffer if they don't fit into the prescribed categories that the platforms expect based on the Big Data algorithms they deploy. If I haven't previously consumed much content from creators of color, Google and Facebook probably aren't going to show that to me.¹⁰ If I haven't previously purchased foods Amazon deems "ethnic" they're probably not going to highlight those for me. Businesses assessed by the platforms to not be appealing to large groups of customers or to wealthy customers may be denied a chance at fair competition. If a grocery store declines to put a product on their shelves, that producer can go elsewhere. If Google decides your product won't be popular with the people in your city who can afford it, your business would be in much bigger trouble.

Even seemingly minor changes to these algorithms can have disastrous effects for small businesses. Facebook's infamous "pivot to video" was one such case.¹¹ Facebook determined that videos were getting more attention on their site, and started promoting video content much

⁷ For an excellent review of the collateral damage to everyday life caused by this complex advertising ecosystem, see TIM WU, *THE ATTENTION MERCHANTS: THE EPIC SCRAMBLE TO GET INSIDE* (2016).

⁸ Katie Paul, *U.S. Charges Facebook with racial discrimination in targeted housing ads*, REUTERS (Mar. 28, 2019), <https://www.reuters.com/article/us-facebook-advertisers/u-s-charges-facebook-with-racial-discrimination-in-targeted-housing-ads-idUSKCN1R91E8>.

⁹ Ava Kofman & Ariana Tobin, *Facebook Ads Can Still Discriminate Against Women and Older Workers, Despite a Civil Rights Settlement*, PROPUBLICA (Dec. 13, 2019), <https://www.propublica.org/article/facebook-ads-can-still-discriminate-against-women-and-older-workers-despite-a-civil-rights-settlement>.

¹⁰ See Chris Lewis, *Fighting the Free Speech Divide Requires Interoperability and Privacy Protection*, TECHDIRT (May 29, 2020), <https://www.techdirt.com/articles/20200527/11104344587/fighting-free-speech-digital-divide-requires-interoperability-privacy-protection.shtml>

¹¹ Will Oremus, *The big lie behind the "pivot to video,"* SLATE (Oct. 18, 2018), <https://slate.com/technology/2018/10/facebook-online-video-pivot-metrics-false.html>.

higher than other types. Whole industries had to change their business models to keep up. In the news industry in particular, many writers were laid off to make room for hiring new video content teams.¹² Later, we found out that Facebook had misled advertisers and publishers. Video posts on Facebook actually were not receiving nearly the attention Facebook had claimed. Google’s search algorithm has its own esoteric preferences it thinks users prefer, like recipe blogs that have a cute (or annoying) little story you have to scroll through before you get to the actual recipe. This influences what small businesses do to “work the algorithm” to access users through the dominant platforms’ gates.

Wielding Data Access as an Anticompetitive Weapon

Dominant platforms have strategically positioned themselves at internet bottlenecks. Many times, companies are forced to pay gatekeeper tolls to access customers and data. These tolls can take the form of monetary payments and/or unfair data sharing and access conditions that reinforce the platform data advantage. The penalties for not towing the gatekeeper line can end once-promising products or services.

For example, access to the Facebook network is a lifeline for upstart social networks. The strategic cutting off of that access for potential rivals is a pillar of the ongoing Federal Trade Commission’s case against Facebook.¹³ According to the FTC, Facebook retooled its network access as an “anticompetitive weapon”—only granting access to companies that agreed not to compete with Facebook or support its rivals. Potential competitive threats were cut off as they began to exhibit growth that could threaten Facebook. Soon after losing access to the Facebook network, these would-be rivals promptly folded, depriving consumers of services they otherwise might have enjoyed.

Finding out who is collecting your data is not as simple as the brand you see at the top of the page. You might be surprised to learn that it's actually Google and Facebook collecting your data instead. If you use Google to find a news article, you may end up not on the newspaper’s website, but one of Google’s Accelerated Mobile Pages (AMP). In that case, it's actually Google that gets to track my data, and if the newspaper wants to know which of their articles is getting the most readers, they need Google to “share” that data with them.¹⁴

¹²Alexis C. Madrigal & Robinson Meyer, *How Facebook’s Chaotic Push Into Video Cost Hundreds of Journalists Their Jobs*, THE ATLANTIC (Oct. 18, 2018), <https://www.theatlantic.com/technology/archive/2018/10/facebook-driven-video-push-may-have-cost-483-journalists-their-jobs/573403/>.

¹³ Amended Complaint, Fed. Trade Comm’n v. Facebook, Inc., No: 1:20-cv-03590-JEB (D.D.C. Aug. 19, 2021).

¹⁴ Competition & Mkts Auth., *Online Platforms and Digital Advertising: Market Study Interim Report (2019)* ¶ 5:252 (“Publishers... have concerns around restrictions on their ability to monetise these pages and their ability to access data generated from consumers’ interaction with them.”).

In order to advertise to you, a lot of companies use third party cookies to track your web browsing activity. But most browsers have begun blocking third party cookies or have announced they will block third party cookies—including Google’s Chrome browser. Some browsers, like Brave and Firefox, have taken the position that they will never enable passive tracking of their users. Google has not; they have implemented their “privacy sandbox” as an alternative to cookies. Now instead of third-party cookies doing the tracking, it’s your web browser that is tracking you. Under their new system, Google has even more control over your personal data, because it is increasingly one of the only options for tracking people across the web. Third party cookies were bad for privacy. However, this new system from Google doesn’t prevent tracking from occurring; but for many users it means Google is the only one able to do the tracking.¹⁵

As a user, I don’t want to rely on Google’s or Facebook’s interpretations of privacy. We need comprehensive federal privacy legislation that protects users from Google’s and Facebook’s data collection and use just as much as it protects us from other companies.

Big Data is a Major Incumbency Advantage

Digital gatekeeper platforms also exhibit increasing returns to scope and scale, largely because of how the value of data increases so significantly when it’s merged with other data. Twice as much data isn’t just twice as good for a company, but many times more so. This is true both on an individual and a group level. A company that is able to aggregate multiple sources of data on you will be much more powerful than one that is relegated to a single or few sources.¹⁶ Think of a user fully integrated into the Google ecosystem. Google knows where you are by looking at your Android phone or your Google Maps app. They know what videos and shows you like from YouTube and YouTube TV activity. They know your interests from your Chrome web browsing and Google search history. All of this data can be merged together to build an in-depth profile about you and what you might be interested in right now. A company with just one of those sources of data can’t predict your behavior as accurately.

Data from large groups of individuals is similarly more and more valuable with each new user added. Data about other users can fill in the few things a company doesn’t know about you by looking at people who are similar to you on the data points they do have. If other white women my age who live in my neighborhood, work in Dupont Circle, and follow Epic Gardening on

¹⁵ See Cory Doctorow, *Fighting FLoC and Fighting Monopoly Are Fully Compatible*, ELECTRONIC FRONTIER FOUNDATION (Apr. 21, 2021), <https://www.eff.org/deeplinks/2021/04/fighting-floc-and-fighting-monopoly-are-fully-compatible>; Charlotte Slaiman, *Data Protection is About Power, Not Just Privacy*, PUBLIC KNOWLEDGE (Mar. 3, 2020), <https://www.publicknowledge.org/blog/data-protection-is-about-power-not-just-privacy/>.

¹⁶ Tom Wheeler, *Big tech and antitrust: pay attention to the math behind the curtain*, BROOKINGS INSTITUTE (July 31, 2020), <https://www.brookings.edu/blog/techtank/2020/07/31/big-tech-and-antitrust-pay-attention-to-the-math-behind-the-curtain/>.

Instagram like something, Big Data analyzers can assume I will like it, too. Combining a variety of data points helps to more effectively influence users and discriminate between them.

The dominant platforms sometimes argue that data ages rapidly, so a new competitor could quickly amass the data needed to compete. This is theoretically true, but it is not just old data that today's dominant digital platforms control. Users are still today locked in to these platforms through their gatekeeper power, so the platforms continue to have access to ongoing data streams. These data streams can be used to continuously update algorithms to stay on top. They can also keep platforms updated about the users so as not to rely on just static or past data about them. This allows platforms to not just “know” their users, but see how their users change over time—often in response to the algorithms that platforms created using older user data. This cycle of collection, use, and iteration gives platforms significant power over their users.¹⁷

By taking advantage of the significant increase in the value of a data stream when it's merged with other data streams, vertically integrated and conglomerate firms like the dominant digital platforms can exacerbate barriers to competition. The wide variety of products Google offers gives an illustrative example. Google can see from my calendar and my email that I have a meeting coming up across town. Using Google Maps, it can tell me exactly when I should leave for said meeting. There are competitors that offer different navigation apps, calendars or email clients, but it's very difficult for a smaller company to offer all three. Simultaneously entering multiple markets to compete with multiple arms of the Google leviathan at once is called dual-market entry, a notoriously difficult feat according to antitrust economists.¹⁸ Consumers could lose out on a better single product if innovative entrepreneurs are blocked from the market unless they can debut multiple great apps at the same time. This huge entry barrier is one way that vertical integration and conglomeration results in less competition against Big Tech and fewer options for consumers.

Finally, gatekeepers can prevent rivals from getting the data they need to effectively compete. This is perhaps best seen in the infamous episode of Google starving Bing of data it needed to effectively challenge its market power in online search.¹⁹

Solutions

¹⁷ See, e.g., Will Oremus, *Facebook keeps researching its own harms — and burying the findings*, THE WASHINGTON POST (Sept. 16, 2021), <https://www.washingtonpost.com/technology/2021/09/16/facebook-files-internal-research-harms/>.

¹⁸ See, e.g., U.S. Dept. of Justice & Fed Trade Comm'n, *Vertical Merger Guidelines 7–8* (2020), https://www.ftc.gov/system/files/documents/reports/us-department-justice-federal-trade-commission-vertical-merger-guidelines/vertical_merger_guidelines_6-30-20.pdf.

¹⁹ See CMA Report, *supra* note 13, at ¶ 24; Fiona Scott Morton & David Dinielli, *Roadmap for a Monopolization Case Against Google Regarding the Search Market 37*, OMIDYAR PROJECT (June 2020), <https://omidyar.com/wp-content/uploads/2020/09/Roadmap-for-a-Monopolization-Case-Against-Google-Regarding-the-Search-Market.pdf>.

Competition is not a panacea for the challenges of Big Data. We also urgently need new privacy laws to protect users, as well as a digital regulator to comprehensively address the policy questions surrounding digital platforms. We can't afford a race to the bottom on privacy with companies scrambling to maximally exploit consumer data. It's not the realm of antitrust or competition policy to decide what markets are just too harmful to people and, thus, not worth having at all. A comprehensive federal privacy law can be pro-competitive by creating a level playing field for dominant incumbents and new entrants alike.

At the same time, we need new laws and rules focused on promoting fair competition on and against dominant gatekeeper platforms to give back some real control to consumers and business users. Until we have a real choice to leave these platforms if we're not happy with them, they won't care about doing what is in their users'—our—best interest. Thankfully, there's already a template for legislative change that could have a major impact on the power of Big Tech and Big Data. The package of antitrust bills focusing on Big Tech that recently passed through markup in the House Judiciary Committee represents a key piece of the solution, as does broad antitrust reform as Chairwoman Klobuchar has proposed here in the Senate. The recently introduced *Open App Markets Act* from Senators Blumenthal and Blackburn is also an important part of the reform solution. These solutions aren't mutually exclusive. Both sector-specific and economy-wide antitrust reforms are needed. I hope that we will see Senate companions to the House legislation, and a House companion to the Senate legislation.

Interoperability, Data Portability, and Delegatability

Interoperability, data portability, and delegatability are the privacy-protective ways to neutralize the power that Big Data confers upon dominant digital platforms. Right now, if I'm frustrated with how Facebook treats my data, I don't really have the option to leave because my friends and family, the businesses, groups, and even schools I need to communicate with are on Facebook. Facebook is able to rest on its laurels and faces little incentive to innovate or actually protect my privacy. When the Stop Hate for Profit campaign last year convinced many advertisers and users to boycott Facebook because of their refusal to moderate hateful content on the platform, Mark Zuckerberg said he wasn't concerned, that they'll be back "soon enough."²⁰ He knows that other platforms can't compete because his network is so much larger. Interoperability would address these network effects and allow competition to flourish by letting users connect back to Facebook from a new competitor if they choose.

Data portability allows users to bring their data with them from a dominant platform to a competitor. For users, this helps address one of the high switching costs in leaving a platform. Think about how much time you've spent building out your social media presence—all the

²⁰ James Clayton, *Zuckerberg: Advertisers will be back to Facebook 'soon enough,'* BBC (July 2, 2020), <https://www.bbc.com/news/technology-53262860>.

uploaded photos, comments, statuses, etc. If the only way to end your relationship with Facebook is to lose all this data, you may be wary about leaving. Portability also helps upstart competitors because when a customer chooses them over the incumbent, the new platform gets not just a new user and the data they choose to share going forward, but also the past data they choose to port over from the incumbent. That should make dominant platforms fight harder to win your business and give new entrants more of a leg up. To be clear, data portability on its own will not be sufficient to jumpstart competition.

Delegatability allows users to designate a third party to manage their online interactions and account settings (including privacy settings) across multiple platforms. If interoperability and portability work as intended, we expect to see new entrants actually competing against some of these dominant platforms. Delegated services can simplify the process of interoperability across multiple platforms and help consumers receive the maximum benefit from it.

Thankfully, we have an excellent congressional blueprint in the form of the *ACCESS Act*, a bipartisan and bicameral bill with origins on this Subcommittee. What I love about the *ACCESS Act* is that it puts users in control and puts privacy first. If a user wants to move their data elsewhere or try out a new competitor they can. And the Act explicitly lays out detailed privacy protections such as giving the FTC explicit rulemaking authority over the privacy of relevant data, specifying that any data gleaned cannot be commercialized, and creating data minimization requirements. The *ACCESS Act* is an excellent example of a bill that couples massive benefits for both privacy and competition and should be passed as soon as possible.

Non-Discrimination

These platforms can abuse their gatekeeper power to freeze out would-be competitors from the market and one of the tools for that discrimination is Big Data. Gatekeeper platforms can put their own products first on the page, give them the best attention-grabbing design, and point users away from companies that might threaten their gatekeeper power. They can give their own services unfettered access to consumer data that they zealously guard from others. They can even misuse competitor data (data that the competitor must give as a condition of competing on the platform) to launch rival products or hamstring competitors.²¹ While this offends our basic notions of fairness, without greater legislation and regulation this behavior would be very difficult to stop using our existing antitrust laws.

A non-discrimination law like House Antitrust Subcommittee Chairman David Cicilline's *American Choice and Innovation Online Act* could help solve these tough problems. Dominant

²¹ See Makena Kelly, *Jeff Bezos can't promise Amazon employees don't access independent seller data*, THE VERGE (July 29, 2020), <https://www.theverge.com/2020/7/29/21347083/jeff-bezos-amazon-tech-antitrust-hearing-jayapal-questioning>.

platforms would be prohibited from advantaging their own products and services or disadvantaging the products and services of their rivals or potential competitors. There are also specific prohibitions on using non-public data from a platform's business user to compete against them and impeding or restricting the portability or interoperability of business user data. The proposed law was written with data issues in mind and would target some of the most pernicious platform behaviors.

Merger Limitations

Today's Big Tech titans did not always grow organically, but through strategic acquisitions to fend off rivals and maintain their hold on their respective markets. Many times, a platform will acquire a company to integrate their data or data streams with the treasure trove of data the platform has already accumulated or data streams they already have access to. This feeds into the increasing returns to scope and scale that help entrench Big Tech market dominance. Efforts by advocates and enforcers to block or unwind these deals have been an uphill battle. We need our laws to better recognize the power that can come from conglomerating sources of data that may at first seem unrelated. Bills like Rep. Jeffries' *Platform Competition and Opportunity Act* would represent an important step forward. It would chill predatory acquisitions by dominant tech platforms and allow innovation and competition to flourish. Chairwoman Klobuchar's *Competition and Antitrust Law Enforcement Reform Act of 2021* would also be a great help in this area. Amending the Clayton Act merger standard to ban mergers that "create an appreciable risk of materially lessening competition" and shifting the burden to the merging parties in certain instances would both help our overworked enforcers and stop the worst anticompetitive mergers from moving forward.

Structural Separation

Merging multiple data sources helps huge conglomerates know even more about us, so they can even more effectively manipulate and discriminate against us. It's important that antitrust enforcers have the ability to sue dominant digital platforms collecting data across multiple lines of business to separate off a line of business that's posing a conflict of interest. Rep. Jayapal's *Ending Platform Monopolies Act* would provide this needed tool to antitrust enforcers and sets forth the situations in which it can be used.

App Market Reforms

The *Open App Markets Act* is targeted at the worst abuses of dominant app stores, a notorious and narrow internet bottleneck. The bill would allow apps to use alternative payment systems and require the app store operator to give third parties fair access to device and software features. There is also a specific ban on using non-public data gleaned from an app to compete against the

app. The bill requires operating systems to offer interoperability, including letting users choose third-party apps as defaults and use alternative app stores.

Broad Antitrust Reform

Purposeful narrowing of our antitrust laws by the courts have left big business with license to engage in a host of anticompetitive conduct. A myopic focus on price and other easily quantifiable effects leaves out important innovation and consumer choice harms that antitrust is supposed to address. It's well past time for our antitrust laws to receive a refresh. The Chairwoman's *Competition and Antitrust Law Enforcement Reform Act of 2021* would help rein in the power of Big Data by updating the legal standards for blocking mergers and stopping exclusionary conduct. The bill also restores an appropriate definition of market power that goes beyond prices. Antitrust enforcers can bring in anticompetitive data practices as direct evidence of market power. The newly proposed Division of Market Analysis could also study data markets to improve enforcement.

Conclusion

For decades now, Washington has taken the perspective that we need to let digital businesses run wild to see what great innovations they might come up with. But today, unscrupulous data practices and consolidated power have led us to a place that isn't anyone's dream of what the internet was supposed to be. These largely unregulated platforms have been allowed to amass powerful gatekeeper roles in multiple markets, where they need not fear competition or government intervention. For users to really have control, we need to have a *real* choice to leave these platforms. We need real competitors and we need switching to be easy. To get those things, we need new laws and rules to promote fair competition on and against gatekeeper platforms like Google and Facebook. Congress has already done laudable work of introducing a series of bills to combat these harms. The best time to pass them was 10 years ago. The second-best time is now.