



July 8, 2019

Hon. Makan Delrahim
Assistant Attorney General
U.S. Department of Justice
950 Pennsylvania Ave., NW
Washington, DC 20530

Re: Antitrust Review of Google’s Acquisition of Data Analytics and Business Intelligence Startup Looker

Dear Assistant Attorney General Delrahim:

The American Antitrust Institute (AAI) writes to the U.S. Department of Justice (DOJ) to encourage the Antitrust Division to carefully scrutinize Google’s recently announced \$2.6 billion acquisition of Looker.¹ Looker is a leading independent startup in important markets such as data analytics and business intelligence (BI) that are key components of cloud infrastructure.² Cloud infrastructure is a rapidly consolidating market in which Amazon Web Services, Microsoft Azure, and Google Cloud hold almost 60% of the market.

Consolidation in the market for cloud infrastructure features the rapid acquisition of smaller, potential, or nascent rivals. Acquisitions in key cloud infrastructure markets, including data analytics, BI, machine learning, and artificial intelligence (AI), have proceeded rapidly since 2010 and account for almost 20% of all acquisitions by Big Tech from 1998-2018.³ Google’s acquisition of Looker removes a leading, independent rival in the markets for data analytics and BI. It raises potential competitive questions surrounding the effects of both horizontal and vertical integration, and incentives to leverage any enhanced market power across the Google’s cloud infrastructure. Any adverse effects resulting from the elimination of competition would be felt primarily by business-to-business customers that purchase cloud-based services, through potentially higher prices, lower quality, less innovation, and less choice.

The AAI has provided independent, in-depth legal, economic, and policy analysis of antitrust and competition issues for over 20 years.⁴ The organization has been outspoken on the issue

¹ Paul Sawers, *Google to acquire big data analytics company Looker for \$2.6 billion*, June 6, 2019, <https://venturebeat.com/2019/06/06/google-to-acquire-big-data-analytics-company-looker-for-2-6-billion/>.

² Crunchbase Pro, *Overview of Looker, Competitors and Revenue by Owl*, <https://www.crunchbase.com/organization/looker#section-overview>.

³ For an in-depth discussion of Big Tech acquisitions, see American Antitrust Institute, *The Weak Record of Merger Enforcement in Big Tech*, July 8, 2019, www.antitrustinstitute.org.

⁴ The AAI is an independent non-profit education, research and advocacy organization. Its mission is to advance the role of competition in the economy, protect consumers, and sustain the vitality of the antitrust laws. For more information, see www.antitrustinstitute.org. AAI is a frequent commenter on proposed

of competition in the tech sector through its research, education, and advocacy agendas and initiatives.⁵ This letter discusses an important contextual consideration in evaluating the Google-Looker acquisition, namely the fast pace of consolidation in cloud infrastructure markets over the last decade. It goes on to suggest that the DOJ consider three ways in which the acquisition could affect competition. These include: (1) eliminating Looker as a smaller rival in data analytics and BI markets; (2) creating stronger incentives for Google to withhold Looker's services from rivals post-merger; and (3) increasing Google's incentives to leverage any enhanced market power across its broader cloud infrastructure.

I. The Fast Pace of Acquisitions in Cloud Infrastructure

Cloud infrastructure is a major engine of growth for "Big Tech," or the five major online service or computer hardware and software companies.⁶ These companies hold five of the top six slots, by market value, for the world's largest publicly traded firms.⁷ Cloud infrastructure is described as "virtual" infrastructure that is accessed by users via a network or the Internet and delivers on-demand services or products for cloud computing.⁸ Another definition of cloud infrastructure is the "core components needed to support businesses' digital transformation initiatives around building new customer experiences, deploying IoT to transform processes, using Big Data and analytics for better insights, and embedding

mergers, has testified numerous times before Congress, in federal court, and before state regulatory commissions on the likely effects of proposed mergers.

⁵ See, e.g., *AAI Digital Platforms Roundtable*, event materials available at <https://www.antitrustinstitute.org/event/aai-digital-platforms-roundtable/>; *Moss Tells Washington Post That the Antitrust Laws Can and Should Be Applied to the Tech Platforms*, July 25, 2018, <https://www.antitrustinstitute.org/moss-tells-washington-post-that-the-antitrust-laws-can-and-should-be-applied-to-the-tech-platforms/>; AAI President, Diana Moss, participated in the Federal Trade Commission's Hearings on Competition and Consumer Protection: Hearing #3: Multi-Sided Platforms, Labor Markets, and Potential Competition, Nascent Competition: Are Current Levels of Enforcement Appropriate?, Oct. 17, 2018, <https://www.ftc.gov/news-events/events-calendar/2018/10/ftc-hearing-3-competition-consumer-protection-21st-century>; American Antitrust Institute, *Google Acquisition of DoubleClick: Antitrust Implications* (urging the FTC to block the merger of Google and DoubleClick), Nov. 6, 2007, https://www.antitrustinstitute.org/wp-content/uploads/2018/08/Google_DoubleClick_memo_110620071437.pdf; American Antitrust Institute, *Analysis of the FTC's Decision Not to Block Google's Acquisition of AdMob* (raising the question of whether a mobile advertising market that is dominated by Google and Apple ad networks will provide insufficient competition to protect advertisers, mobile web publishers and developers), June 7, 2010, https://www.antitrustinstitute.org/wp-content/uploads/2010/06/google-admob-white-paper_060720101348.pdf; American Antitrust Institute, *An Examination of the Antitrust Issues Posed By Google's Acquisition of ITA* (concluding the merger warrants serious consideration of a challenge), Feb. 18, 2011, <https://www.antitrustinstitute.org/wp-content/uploads/2018/08/Google-ITA-AAI-White-Paper2.18.11.pdf>; American Antitrust Institute, *NPR's Morning Edition Talks Big Tech with Diana Moss* (stressing that public and private enforcers should bring more cases involving Big Tech), June 11, 2019, <https://www.antitrustinstitute.org/nprs-morning-edition-talks-big-tech-with-diana-moss/>.

⁶ Big Tech refers to Amazon, Apple, Facebook, Google, and Microsoft.

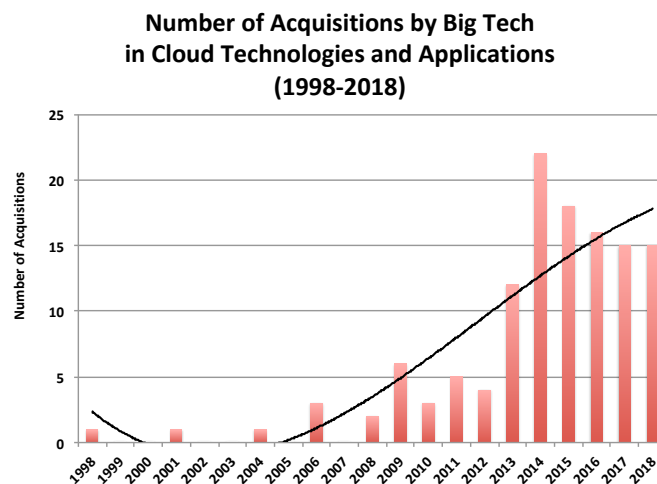
⁷ *The World's Largest Public Companies, 2019 Ranking*, Forbes.com, https://www.forbes.com/global2000/list/#header:marketValue_sortreverse:true.

⁸ See, e.g., <https://www.techopedia.com/definition/30455/cloud-infrastructure>.

machine learning and AI for automation.”⁹ The cloud infrastructure market is predicted to grow at over 10% annually over the next eight years.¹⁰

The expanding value and role of the cloud infrastructure market has created incentives for strategic positioning by rivals. For example, shortly after Google’s acquisition of Looker was announced, Salesforce revealed it was acquiring Tableau, another startup competing in analytics, AI, cloud computing, and other markets.¹¹ The acquisition of Looker follows Google’s purchase in February 2019 of data analytics firm Alooma, a data migration provider that “streamline[s] database migration in the cloud with an innovative data pipeline tool,” for an undisclosed sum.¹² In May of 2018, Google also purchased Cask Data, a data pipelining tool.¹³

Acquisitions involving the building blocks of cloud infrastructure have accelerated dramatically over the last several years. The figure below shows the over 130 acquisitions by Big Tech involving data analytics, AI, BI, machine learning, and cloud computing.¹⁴ 2013-2014 marked the beginning of a surge in cloud-related acquisitions, with a steady trajectory through 2018. Eleven new acquisitions have been announced in 2019, the majority of which involve startups.



⁹ Cloud market share Q4 2018 and full year 2019,” canalys.com, Feb. 4, 2019, <https://www.canalys.com/newsroom/cloud-market-share-q4-2018-and-full-year-2018>.

¹⁰ Daria R., *Future of the Big Data and the Top 7 Successful Companies Which Already Use It*, Jan. 30, 2018, <https://www.cleveroad.com/blog/top-7-big-data-startups-to-help-you-start-your-super-project->.

¹¹ Crunchbase Pro overviews of Salesforce and Tableau, <https://www.crunchbase.com/organization/salesforce#section-overview> and <https://www.crunchbase.com/organization/tableau>. See also Adam Selipsky, *Salesforce Signs Definitive Agreement to Acquire Tableau*, tableau.com, June 10, 2019, <https://www.tableau.com/about/blog/2019/6/blog-1-110508>. See also

¹² Amit Ganesh and Dominic Preuss, *Google announces intent to acquire Alooma to simplify cloud migration*, Feb. 19, 2019, <https://cloud.google.com/blog/topics/inside-google-cloud/google-announces-intent-to-acquire-alooma-to-simplify-cloud-migration>.

¹³ Tom Baer, *Google buys Looker for \$2.6 billion, aims to extend its analytics reach, support multiple clouds*, June 6, 2019, <https://www.zdnet.com/article/google-buys-looker-for-2-6-billion-aims-to-extend-its-analytics-reach-support-multiple-clouds/>.

¹⁴ Data sourced from Crunchbase Pro. See <https://about.crunchbase.com/products/crunchbase-pro/>.

Sources estimate that Amazon Web Services is the leader in cloud infrastructure, with 32% of the market, followed by Microsoft Azure, with about 17%, and Google Cloud, with about 9%.¹⁵ Other cloud “mega-vendors” include IBM and Salesforce.¹⁶ Together, Amazon, Microsoft, and Google control almost 60% of the cloud infrastructure market.

II. Background on Looker

Founded in 2011, Looker describes itself as “a complete data platform that offers data analytics and business insights to every department, and easily integrates into applications to deliver data directly into the decision-making process.”¹⁷ Sources categorize Looker’s products and services into four areas: analytics, BI, data visualization, and enterprise software.¹⁸ Looker is ranked by industry sources as the top or key player in the market in which it competes, which is estimated to contain 20 close rivals, including Domo, Tableau, and Jasperoft.¹⁹ Looker’s funding base has grown by over 40% per year between 2013 and mid-year 2019.²⁰

Looker’s data analytics and BI capacity will be added to the Google Cloud Platform. The acquisition of Looker and other similar assets appears to be designed to strengthen Google Cloud’s position in the cloud computing market, by adding capability to compete more effectively in the market for analytics and BI tools.²¹ Those tools encompass the technologies, applications, and processes for data collection, data analysis, report creation, dashboards, and data visualizations that make analytical results and predictive modeling available to decision-makers.²² In light of this background, we suggest the DOJ consider the following issues in their investigation into the Google-Looker deal.

¹⁵ Ben Lorica, *Core technologies and tools for AI, big data, and cloud computing*, Feb. 11, 2019, <https://www.oreilly.com/ideas/core-technologies-and-tools-for-ai-big-data-and-cloud-computing>; <https://builtin.com/cloud-computing/google-set-acquire-looker-26-billion-deal>.

¹⁶ *Supra* note 9. See also Larry Dignan, *Top cloud providers 2019: AWS, Microsoft Azure, Google Cloud; IBM makes hybrid move; Salesforce dominates SaaS*, May 12, 2019, <https://www.zdnet.com/article/top-cloud-providers-2019-aws-microsoft-azure-google-cloud-ibm-makes-hybrid-move-salesforce-dominates-saas/>.

¹⁷ *Looker Maintains Rank as an Overall Leader in Annual Wisdom of Crowds Business Intelligence Market Study*, June 5, 2018, [looker.com](https://looker.com/news/press/looker-maintains-rank-as-an-overall-leader-in-annual-wisdom-of-crowds-business-intelligence-market-study), <https://looker.com/news/press/looker-maintains-rank-as-an-overall-leader-in-annual-wisdom-of-crowds-business-intelligence-market-study>. See also Thomas Kurian, *Google to Acquire Looker*, June 6, 2019, <https://cloud.google.com/blog/topics/inside-google-cloud/expanding-our-platform-for-business-intelligence-and-embedded-analytics>.

¹⁸ Crunchbase Pro, Overview of Looker, queried June 25, 2019, <https://www.crunchbase.com/organization/looker#section-overview>.

¹⁹ *Id.*

²⁰ See Crunchbase Pro, company profile for Looker, <https://www.crunchbase.com/organization/looker#section-funding-rounds>.

²¹ Rita Sallam, *The Week The Modern Analytics and BI Market Changed Forever*, June 11, 2019, <https://blogs.gartner.com/rita-sallam/2019/06/11/week-modern-analytics-bi-market-changed-forever/>.

²² See definition of Business Intelligence, <https://searchbusinessanalytics.techtarget.com/definition/business-intelligence-BI>.

III. Competitive Issues Raised by Google’s Acquisition of Looker

A. Elimination of Looker as an Independent Competitor in Analytics and Business Intelligence Tools

The acquisition will eliminate Looker as a leading independent rival in the data analytics and BI market. Reporting indicates that post-acquisition, Google will control 1% of the \$12.7 billion-dollar market for business intelligence tools.²³ It is, of course, up to the DOJ to more precisely define relevant markets around the providers of data analytics and BI that could discipline a post-acquisition price increase, and evaluate any adverse competitive effects of eliminating Looker as a rival. We encourage the DOJ to investigate any potential effects of the acquisition on prices, quality, choice, and innovation.

Post-acquisition, business customers will have one less significant option for purchasing data analytics and BI tools. Indeed, company merger documents identify customers that are shared by both Google Cloud and Looker.²⁴ The acquisition also removes an important source of choice for those customers not wishing to contract with Google Cloud, Microsoft Azure, or Amazon Web Services – the three major services owned by Big Tech firms. And the acquisition eliminates the possibility that Looker will grow to become the next generation of a mature rival in vital markets for cloud infrastructure.

B. Potential Adverse Effects on the Differentiated Market for Cloud Infrastructure.

The DOJ might consider the competitive effects of the Google-Looker transaction in the broader market for cloud infrastructure. Reportedly, the major motivation behind Google’s acquisition of Looker is to enhance its position in cloud while differentiating its services from rivals with a focus on its competencies in machine learning and AI. Looker’s data analytics and BI capabilities “fill a hole” in Google’s portfolio, which is reportedly weaker on business analytics and end-user focus.²⁵ Analysts emphasize that analytics, machine learning, and AI are increasingly “differentiators” for large business or enterprise customers.²⁶ This implies that large cloud providers – Amazon Web Services, Microsoft Azure, Google Cloud, IBM, and Salesforce – compete on the basis of differentiated cloud services offerings.

The foregoing highlights the importance of investigating the effects of the acquisition in the broader cloud infrastructure market. The Horizontal Merger Guidelines’ lens is focused on narrow markets and evaluating transactions in isolation (i.e., one transaction at a time). The rapid series of Big Tech acquisitions in cloud infrastructure highlights the notion that enforcers should attempt to expand the lens through which they evaluate serial transactions, with emphasis on the longer-term effects of such consolidation. The DOJ’s analysis would also include any enhancement of Google’s ability to leverage market power in key areas such

²³ Angus Loten, “Google’s Looker Deal Fills Hole in Analytics Portfolio: Acquisition is aimed at luring big corporate customers to better compete with Amazon and Microsoft,” June 6, 2019, <https://www.wsj.com/articles/googles-looker-deal-fills-hole-in-analytics-portfolio-11559855259>.

²⁴ *Google Announces Intent to Acquire Looker*, Google Cloud, <https://cloud.google.com/press/pdf/Google-Announces-Intent-to-Acquire-Looker.pdf>.

²⁵ Loten, *supra* note 23.

²⁶ Baer, *supra* note 13.

as AI and machine learning (and post-merger, data analytics and BI) across a broader market for cloud infrastructure.

C. Enhanced Incentives to Withhold Looker's Data Analytics and BI Services from Rivals.

The DOJ may consider investigating the competitive implications of Google's post-acquisition control of a leading input provider of data analytics and BI. Such an inquiry would frame issues that are similar to those raised by the DOJ in its complaint in the 2011 acquisition by Google of ITA Software, Inc., a leading independent provider of airfare pricing and shopping systems. There, the DOJ was concerned that Google's acquisition of ITA would increase its incentive to foreclose rivals in the market for comparative flight search services.²⁷ Looker serves a broad base of diverse customers, some of which currently or potentially compete in markets in which Google *also* currently, or potentially competes.²⁸ To the extent the acquisition could enhance Google's incentive to withhold Looker's services to rivals, the DOJ should examine whether doing so would impair their ability to compete by raising their costs or degrading their service.

This assessment will depend on the structure of the data analytics and BI market, namely the ability of rivals to discipline competition when Looker is eliminated as a rival. And while industry sources report that Google asserts it will maintain interoperability with products such as Amazon Web Services and Microsoft's Azure, its changed incentives post-acquisition may cause it to deviate from non-binding commitments.²⁹

We appreciate the opportunity to suggest major areas of inquiry that the DOJ might pursue in its investigation into the Google-Looker acquisition. We would be happy to discuss any of the issues outlined in the foregoing letter with you or your staff.

Sincerely,



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²⁷ *U.S. v. Google, Inc. and ITA Software, Inc.*, Complaint, Case 1:11-cv-00688, April 8, 2011, at 10, <https://www.justice.gov/atr/case-document/file/497686/download>.

²⁸ *Data Driven Companies Run on Looker*, <https://looker.com/customers>.

²⁹ Folake Dusu, *Google Set To Acquire Looker In \$2.6 Billion Deal*, June 17, 2019, <https://builtin.com/cloud-computing/google-set-acquire-looker-26-billion-deal>.