

June 21, 2023

The Honorable Lina Khan  
Chair  
Federal Trade Commission  
600 Pennsylvania Avenue Northwest  
Washington, District of Columbia 20580

**RE: Comments of ACT | The App Association to the Federal Trade Commission  
on the Business Practices of Cloud Computing Providers (FTC-2023-0028)**

Dear Chair Khan,

ACT | The App Association (App Association) respectfully submits its views to the Federal Trade Commission (FTC) on its request for information on the business practices of cloud computing providers.<sup>1</sup>

The App Association is a global trade association representing small business technology companies from across the United States. Our members are entrepreneurs, innovators, and independent developers within the global app ecosystem that engage with verticals across every industry. We work with and for our members to promote a policy environment that rewards and inspires innovation while providing resources that help them raise capital, create jobs, and continue to build incredible technology. Today, the value of the ecosystem the App Association represents—which we call the app economy—is approximately \$1.7 trillion and is responsible for 5.9 million American jobs, while serving as a key driver of the \$8 trillion internet of things (IoT) revolution.<sup>2</sup> The App Association appreciates the FTC’s call for input and recognizes the crucial role of transparency for consumers and businesses utilizing cloud computing services to access new efficiencies enabled by IoT. Vastly improved access to broadband and the rapid uptake of mobile device usage in recent years has made cloud computing a key enabler of small business owners who require on-demand access to their data, cross-team communication, and an efficient environment for remote work.

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<sup>1</sup> <https://www.regulations.gov/docket/FTC-2023-0028>.

<sup>2</sup> ACT | The App Association, State of the U.S. App Economy: 2020 (7th Edition) (Apr. 2020), available at <https://actonline.org/wp-content/uploads/2020-App-economy-Report.pdf>

Cloud computing services have become an ideal way to deliver solutions and enterprise networks for many different businesses across the globe. Before the widespread availability of cloud computing, businesses and individual users relied on traditional on-premises computing models, which limited computing resources and services to being managed, hosted, and owned locally by the user. This environment was expensive and cost-prohibitive for small businesses and startups. Evaluating the technology refresh rate, scaling needs, and estimated cost of system administration staffing, the average monthly cost of a dedicated on-premises computing server is roughly \$1,500 compared to the nominal cost of \$300 per month for a cloud computing server.<sup>3</sup> Now more than ever, the small business and startup innovators we represent rely on a competitive, trustworthy, and secure digital economy infrastructure to create and maintain relationships with users across consumer and enterprise opportunities, fueling business growth and job creation.

Cloud computing services have given small businesses and startups greater flexibility, scalability, accessibility, and cost savings, while also enabling innovation and accelerating time to market for new services and applications. Cloud computing services provide small businesses with access to a wide range of cost-effective solutions and on-demand scalable infrastructure support that allow them to focus on their core operations on their customers' needs. The nature of cloud infrastructure, which consists of many independent data centers located in different places, lets small businesses minimize outages and data losses by eliminating single points of failure that still exist for on-premises solutions. Notably, cloud computing services have been central in enabling accelerated digitization during and since the COVID-19 pandemic. For example, in response to a shift towards remote work environments, roughly 60% of companies moved their business to the cloud in 2022.<sup>4</sup> The tools and kits provided by CSPs have allowed smaller businesses to scale their business resources to specific workloads as needed, providing the ability save costs and compete across markets.

The App Association seeks to preserve the ability of small businesses to leverage the right cloud service for their needs, and the flexibility to change cloud computing services should those needs shift. **We strongly encourage the FTC to recognize the positive correlation between cloud computing services and U.S. small business digital economy growth and innovation, and to commit to pursuing policies that will foster a healthy and competitive cloud ecosystem.**

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<sup>3</sup> Tom Collins, "Dedicated vs. Cloud: How Much Does a Server Cost?" (April 7, 2019), available at <https://www.atlantech.net/blog/cloud-vs.-dedicated-server-cost-which-is-the-better-deal>

<sup>4</sup> Aditya Rayaprolu, "How Many Companies Use Cloud Computing in 2023? All You Need To Know," (Updated February 27, 2023), available at <https://techjury.net/blog/how-many-companies-use-cloud-computing/#gref>

The App Association also urges the FTC (and other policymakers) to ensure that any steps taken in policy that would impact the U.S. cloud computing do not disadvantage U.S. leadership globally. Cloud services are an important means of competition between the U.S. and other important markets, including the European Union, China, and others. Building on the above, we provide specific responses and views based on questions and commentary in the FTC's request for input:

- **Scope of the FTC's Inquiry:** Cloud computing competes with on-premises IT services.<sup>5</sup> Many small businesses find the solutions they need across different offerings, some cloud-based and others on-premises. Today, 85% of data infrastructure spending is allocated to on-premises solutions.<sup>6</sup> Therefore it would be appropriate for the FTC to broaden the scope of its inquiry to include both cloud and on-premises data management services.
- **Objectively Evaluating Offerings from Cloud Services Providers:** The App Association cautions the FTC against presuming that the combined offering of services has anticompetitive impacts. From the small business perspective, combined offerings of services can result in economies of scale, leading to more cost-efficient solutions. For example, a cloud provider could offer combined migration, storage, analytics, and cybersecurity monitoring/mitigation services together for a discount, savings small businesses costs. Cloud services providers can differentiate themselves from each other to attract new customers and retain their existing ones, and such offerings may include bundling and linking services to best serve the user experience and needs. Small business cloud users widely benefit from this dynamic, which the FTC should consider pro-competitive.
- **Data Access, Security, and Integrity:** Succeeding (and simply maintaining operations) in the digital economy requires a focus on data security. App Association members recognize the need for proactive security risk mitigation throughout a product or service's lifecycle. For small businesses, particularly those that face resource constraints, leveraging cloud service providers' enhanced security tools, monitoring, and mitigation services is critical to their operations. Cloud services are more resilient and benefit from ubiquitous security updates and monitoring. It is vital that the FTC recognizes the key role cloud services have in protecting the digital economy, and that they are more secure than on-premises infrastructure. The App Association also offers its detailed views on privacy and the digital economy for FTC's consideration.<sup>7</sup>

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<sup>5</sup> BoYee Au-Yeung, Dave Chu, Mark Enfante, Graham Logan, Kevin Saelee "Industry Analysis: Cloud Computing," California State University Sacramento, available at <https://www.csus.edu/indiv/h/hattonl/documents/cloudcomputingindustry.pdf>.

<sup>6</sup> Gartner, Why Organizations Choose a Multicloud Strategy, (May 7, 2019).

<sup>7</sup> ACT | The App Association comments to FTC in response to its Advanced Notice of Proposed Rulemaking on commercial surveillance are available at <https://www.regulations.gov/comment/FTC-2022-0053-1089>.

- **Data Portability and Interoperability:** Many App Association members, and the majority of cloud users, leverage two or more public cloud providers. Our community often will, depending on the unique circumstances they face, switch between cloud providers, and between cloud and on-premises solutions. Cloud computing has made it easier than ever for small businesses to move between providers, with the costs for making such a switch continuing to decrease (indeed, many providers now offer portability toolkits).
- **Open Source Software's Role in Cloud Computing:** Some App Association members leverage cloud offers that include open source licensed software and software development kits and application programming interfaces (APIs) made available under open source licenses. Such open source tools, depending on the context of use may be ideal for a small business' needs (e.g., a small business may prefer to freely use and modify a software solution to enable processing in the cloud with one or more providers and/or on premises). Further, some open source APIs enable seamless switching between cloud providers.
- **Cloud Pricing:** App Association small business innovators currently enjoy a range of pricing options with the ability to scale depending on their needs. Over the last 20 years, our members have seen many price decreases in the cloud services they use. As our members grow and their needs evolve, they routinely leverage pay-as-you-go approaches and specially tailored services. Generally, App Association members see transparent pricing for cloud computing services across providers, which has enabled informed business planning decisions and enhanced competition. As they scale, some members have also benefitted from advantageous price offerings through volume discounts.
- **Artificial Intelligence:** We appreciate the FTC raising artificial intelligence (AI). From the perspective of the App Association, consideration of AI in this FTC inquiry is important for two distinct reasons. First, cloud services are, and will continue to be, vital for development and innovation of AI solutions, which require secure access to large amounts of data to train and improve. As App Association members seek to compete across consumer and enterprise markets using AI, their continued access to cost-effective and reliable cloud services will be essential to leveraging new capabilities (e.g., quantum computing capabilities). Second, we urge FTC to recognize that AI is a means for cloud service providers to compete by developing new and improved services and features. Whether in the context of this inquiry, or more generally, the App Association urges the FTC to align itself with the App Association's AI policy principles, available at <https://actonline.org/2023/06/14/6-15-2023-act-the-app-association-issues-policy-recommendations-for-ai/>.

The App Association appreciates the opportunity to comment on this extremely important request for information. We applaud the Commission for taking an active role to protect consumers and commit to assisting the FTC in its efforts to protect consumers and enhance competition.

Sincerely,

A handwritten signature in black ink, appearing to read 'Brian Scarpelli', with a stylized flourish at the end.

Brian Scarpelli  
Senior Global Policy Counsel

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Regulatory Policy Associate

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