Response from

ACT | The App Association

to

the Competition & Markets Authority (CMA)

regarding

its Issues Statement on Public cloud infrastructure
services market investigation

**Response from ACT | The App Association to the Competition & Markets Authority (CMA) regarding its Issues Statement on Public cloud infrastructure services market investigation**

The App Association welcomes the opportunity to provide comments to the Competition & Market Authority's consultation on its Issues Statement on *Public cloud infrastructure services market investigation*.

The App Association is a policy trade association for the **small business technology developer community**. 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 ecosystem the App Association represents—which we call the app economy—is valued at approximately £720 billion globally and is responsible for more than 400,000 jobs in the United Kingdom (UK).[1]

The App Association appreciates this opportunity to highlight the transformative role that the cloud economy has played in supporting the growth and operational efficiency of small businesses. The growth and development of the cloud ecosystem has brought around a new era of innovation and accessibility, levelling the playing field for companies of all sizes and, consequently, providing a competitive edge for small and medium-sized enterprises (SMEs). We recognise that the cloud's continued evolution presents both opportunities and challenges, and we are eager to contribute our expertise and our members' perspective to this important matter, to ensure that cloud services continue to meet the evolving needs of small businesses.

Cloud computing services have become an ideal way to deliver solutions and enterprise networks for companies throughout Europe and 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.[2] 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, fuelling business growth and job creation.

Cloud computing services have given small businesses and startups greater flexibility, scalability, security, and cost savings, while also enabling innovation and accelerating time

---

[1] *See* https://actonline.org/wp-content/uploads/Deloitte-The-App-Economy-in-the-EU-2020.pdf.

[2] 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

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 and their customers' needs. The nature of cloud infrastructure, which consists of many independent data centers located in different places, lets small businesses minimise 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 digitisation during and since the COVID-19 pandemic. For example, in response to a shift towards remote work environments, roughly 60 per cent of companies moved their business to the cloud in 2022.[3] The tools and kits provided by cloud service providers have allowed smaller businesses to scale their business resources to specific workloads as needed, providing the ability save costs and compete across markets.

Another benefit of cloud computing services is the data security they provide to SMEs. Cloud services invest huge amounts in security and SMEs benefit from this because they cannot afford to deploy the same security measures in-house. For small businesses, 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. This is important because small businesses are especially reliant on consumer trust because they do not enjoy the inherent trust that comes with the brand recognition enjoyed by larger companies. Consumers are much less likely to give an SME a second chance with their data, so the inherent security provided by cloud services is especially important to our members.

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 CMA to recognise the positive correlation between cloud computing services and UK small business digital economy growth and innovation, and to commit to pursuing policies that will foster a healthy and competitive cloud ecosystem.**

In the following sections, we explore the CMA's four theories of harms related to cloud service providers behaviour, providing our members' insight and experiences relating to the hypotheses.

## Barriers to multi-clouding and switching

We appreciate the CMA's concern of potential difficulties in customers' ability to multi-cloud, or switch cloud providers, because of possible technical barriers and egress fees, expressed in its first two theories of harm.

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

---

[3] 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

providers, with the costs for making such a switch continuing to decrease, especially, since many providers now offer portability toolkits.

Moreover, in the CMA's investigations on multi-homing and switching, we recommend considering a wider market scope, including on-premises solutions. Cloud computing competes with on-premises IT services.[4] Many small businesses find the solutions they need across different offerings, some cloud-based and others on-premises. Today, 85 per cent of data infrastructure spending is allocated to on-premises solutions.[5] Therefore, it would be appropriate for the CMA to broaden the scope of its investigations to include both cloud and on-premises data management services. Moreover, by considering the appropriate scope for its market investigations, the CMA can acknowledge the bigger picture of market trends, which show that clouds have made it easier for customers to multi-home and switch, therefore promoting healthy competition and consumer choice.

Regarding the CMA's proposed potential remedy for reducing technical barriers through increased interoperability between different cloud infrastructures, we are concerned about the decreased quality, and cybersecurity risks. Cloud service providers compete on different quality points, including functionalities, user experience, cybersecurity, and data protection. Forcing interoperability will likely lead to a reduction in these quality points, as higher quality providers are required to accommodate the systems of lower quality providers. Moreover, the remedy proposal of requiring increased standardisation may result in halted innovation, as cloud service providers would no longer have the opportunity to compete on different quality factors which differentiate them. We call on the CMA to consider the anti-competitive effects of its proposed remedies, and the negative consequences for SME customers who rely on the high-quality functionalities and security offered by clouds.

## Committed spend discounts

We recognise the CMA's concern related to committed spend discounts as another potential barrier for multi-clouding and switching.

However, the App Association cautions the CMA 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, saving 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 CMA should consider pro-competitive.

[4] 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
[5] Gartner, Why Organizations Choose a Multicloud Strategy, (May 7, 2019).

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.

Therefore, we urge the CMA not to prohibit the existing cloud discount structures, as this will inadvertently negatively affect small businesses with limited resources, who greatly benefit from the reduced-price offerings.

## Software licensing practices

We acknowledge the CMA's concern related to the possibility of cloud service providers' tendency to be more likely to deploy licensed software products on their own cloud infrastructure, rather than on rival providers' clouds.

The requirement for software developers to adapt their products to different cloud models raises concerns regarding interoperability. While the concept of seamless software portability between cloud providers may present benefits, there are significant technical hurdles and practical considerations that must be taken into account. Software is often tailored to leverage the specific features, capabilities, and infrastructure of a particular cloud environment. These optimisations help achieve high-level performance, cost-efficiency, and increased user experience. Making universally interoperable software across multiple cloud providers is a great challenge, considering the differences in cloud infrastructures' underlying architectures, services, and application programing interfaces (APIs). Such attempts may encourage designing software with the lowest common denominator in mind, which could lead to missed opportunities for leveraging the unique strengths of individual cloud platforms. In some cases, giving customers assurances that they can easily switch from one cloud provider to another may be a way for cloud providers to compete with each other.

We urge the CMA not to adopt any remedies which will require cloud service providers to compromise on the cost efficiency, quality, and user experience of their offerings, as this would negatively affect SMEs that rely on clouds for their business operations.

Cloud providers can play an important role in lowering entry barriers for SME software developers. Some App Association members leverage cloud offerings 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's 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.

We appreciate the opportunity to comment to this consultation and thank the CMA for taking our members' views into consideration.

We applaud the CMA for taking an active role to protect consumers. We commit to assisting the CMA in its efforts to protect consumers and enhance competition.


Sincerely,




Mike Sax
Founder and Chairperson

Brian Scarpelli
Senior Global Policy Counsel

Stephen Tulip
UK Country Manager