

International Center for Law & Economics

Comments of the International Center for Law & Economics

*On CMA's Proposal to Designate Apple and Google with
Strategic Market Status*

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I. Introduction

The International Center for Law & Economics (ICLE) appreciates the opportunity to provide comments on the Competition and Markets Authority's (CMA) proposed Strategic Market Status (SMS) decisions relating to Apple's and Google's mobile ecosystems.¹ These decisions represent the inaugural and most significant application of the new regulatory regime established by the Digital Markets, Competition and Consumers (DMCC) Act 2024. As such, the CMA's final decisions will set a crucial precedent for how this new legislative framework will be interpreted and applied for years to come.

The stated purpose of the DMCC is to create a "balanced and proportionate approach to driving greater competition in digital markets, unlocking opportunities for innovation and economic growth across the UK tech sector".² This objective aligns squarely with the UK government's broader economic vision, which prioritises boosting private-sector investment in research and development (R&D), creating the right conditions for all businesses to innovate, and establishing the UK as a global "science and technology superpower".³ The CMA itself has acknowledged this strategic steer, noting its responsibility to prioritise pro-growth and pro-investment interventions.⁴

It is within this context that the CMA's provisional decisions to designate both Apple and Google as having SMS must be scrutinised. A flawed application of this new regime—one based on a static and incomplete understanding of competition—risks creating regulatory uncertainty that could chill investment and stifle the very innovation that the DMCC and the UK's national industrial strategy are designed to foster. Given this, it is crucial the DMCC is applied in a manner consistent with these pro-growth goals, grounded in robust economic evidence and a clear-eyed appreciation for the dynamic nature of competition in digital platform markets.

A. Mistaking Dynamic Rivalry for Static Duopoly

The central premise of the CMA's proposed decisions is that Apple and Google operate as an "effective duopoly", characterised by "limited competitive constraint".⁵ This conclusion appears to be

¹ *Strategic Market Status Investigations into Apple's Mobile Platform – Proposed Decision*, COMPET. MARK. AUTH. (23 July 2025), available at <https://connect.cma.gov.uk/43419/widgets/129636/documents/88332>, hereinafter 'Apple proposed decision'; *Strategic Market Status Investigations into Google's Mobile Platform – Proposed Decision*, COMPET. MARK. AUTH. (23 July 2025), available at <https://connect.cma.gov.uk/43414/widgets/129618/documents/88217> hereinafter 'Google proposed decision').

² Apple & Google proposed decisions, at 1.1.

³ *Plan to Forge a Better Britain Through Science and Technology Unveiled*, GOV.CO.UK (6 March 2023), <https://www.gov.uk/government/news/plan-to-forge-a-better-britain-through-science-and-technology-unveiled>.

⁴ *Draft Strategic Steer to the Competition and Markets Authority*, GOV.CO.UK (6 March 2025), <https://www.gov.uk/government/consultations/draft-strategic-steer-to-the-competition-and-markets-authority/strategic-steer-to-the-competition-and-markets-authority>; see also Keir Starmer, Prime Minister, United Kingdom, *Speech at the International Investment Summit* (14 October 2024), <https://www.gov.uk/government/speeches/pm-international-investment-summit-speech-14-october-2024>; Joe Pike, *Starmer Asks UK Regulators for Ideas to Boost Growth*, BBC (28 December 2024), <https://www.bbc.com/news/articles/cy0n14ywwzqpo>.

⁵ Apple proposed decision, at 6.11; Google proposed decision at 6.23. See also Apple proposed decision, at 1.20.

derived from an inherently static analysis of the market—one that focuses heavily on the stability of market shares over time and the differentiation between the two primary competing ecosystems. But while iOS and Android have indeed maintained significant shares of the UK market, interpreting this stability as evidence of weak competition is a profound analytical error. It mistakes the temporary outcome of successful past innovation for a permanent state of insulated market power.

The mobile-ecosystem industry features significant competition *for* the market, not merely *in* it. The primary competitive pressure is, therefore, not so much the fear of losing a small percentage of market share to a price cut, but the existential threat of being displaced entirely by a superior technology or business model. This constant threat compels firms to engage in relentless large-scale investment in R&D and innovation simply to remain viable.

The evidence of this dynamic rivalry is overwhelming and can be found precisely where the CMA sees a lack of competition: in the nonprice vectors that matter most to consumers. The fierce competition between Apple and Google is waged through continuous improvements in camera technology, the race for superior processing power (with Apple's A-series chips and Google's Tensor chips forming the basis of their respective performance claims), and divergent—yet intensely competitive—approaches to user security and privacy, which have become central pillars of each company's marketing and value proposition.⁶

Most recently, this rivalry has shifted to the next frontier of innovation: the deep integration of artificial intelligence into the core user experience, with the corollary that both firms have invested massively in AI technology (and continue to do so). To observe this landscape of ceaseless innovation and declare it a market with "limited competition" is to misunderstand its fundamental nature.

B. User Satisfaction Is Not 'Lock-In'

The CMA's narrative of entrenched market power in the mobile-ecosystem industry hinges on the assertion that consumers are "locked into" their respective ecosystems by high switching costs and other barriers, leading to limited churn between platforms.⁷ This perspective, however, misinterprets the nature of consumer choice. The CMA's own data, which showing a large majority of users do not consider switching when purchasing a new device, is not necessarily evidence of insurmountable barriers. Rather, in a market with highly differentiated products, it is powerful evidence of high consumer satisfaction. When a consumer chooses to buy a new iPhone or a new Pixel, it is typically an affirmative choice to remain within the ecosystem they value and with which they are satisfied, not a market failure.

⁶ See, e.g., Sarah Lord, *Apple iPhone 16 vs. Google Pixel 9: The Ultimate iOS vs. Android Showdown*, PCMag (10 September 2024), <https://www.pcmag.com/comparisons/apple-iphone-16-vs-google-pixel-9-the-ultimate-ios-vs-android-showdown>.

⁷ Apple proposed decision, at 6.30; Google proposed decision, at 6.35.

Moreover, the claim of prohibitive switching costs is inconsistent with both the available evidence and the firms' observed behaviour. Various studies, including the CMA's own data, demonstrate that significant user churn (potentially exceeding 20%) does occur.⁸ Contrary to the CMA's assertion, these numbers suggest there is a permanently contestable segment of the market that disciplines both platforms' behaviour. To wit, this level of switching is *significantly* higher than in industries like telecoms, insurance services, utilities, and banking services.⁹

Tellingly, both Apple and Google invest significant resources to develop and promote sophisticated data-portability tools (Apple's "Move to iOS" app and Google's "Data Transfer Tool") that are designed for the express purpose of lowering switching costs for their rival's customers. The existence of these tools is a clear signal of competition. A monopolist has limited incentive to build a bridge to makes it easier for customers to leave a rival's territory and enter its own; a competitor does. While the user experience of these tools may be imperfect, their strategic purpose is undeniable. They are instruments of competition, designed to persuade potential customers and facilitate switching.

The CMA's framework treats brand loyalty earned through years of investment and product improvement as synonymous with anticompetitive lock-in, overlooking the fact that the decision to remain with a platform is, for most consumers, an active and rational one.

C. The Economic Value of Differentiation and the Dangers of Mandated Homogeneity

The CMA's proposed decisions appear to treat the distinct business models of Apple and Google not as a dimension of competition, but as a source of competitive harm. This approach fails to appreciate that these structural differences are the very source of the differentiated value propositions that give consumers meaningful choice.

Consumers choose between two fundamentally different philosophies. Apple offers a highly curated, secure, and integrated experience, where the tradeoff for less customisation is a higher degree of privacy and safety—a proposition many consumers clearly value. Google, through Android, offers openness, customisation, and a wide variety of hardware at multiple price points, supported by an advertising-based model. These are not subtle variations; they are distinct and competing visions for the mobile experience.

⁸ See, e.g., Google proposed decision, at 6.33 ("Google's internal data indicates that in 2024 around: (i) [%] [10 – 20%] of Android smartphone users switch to iOS at each purchase decision; and (ii) [%] [10 – 20%] of iOS users switch to Android at each purchase decision. 212 It further noted that switching rates from Android to iOS are greater for higher-priced mobile devices with Android losing around [%] [20 – 30%] of users to iOS for devices priced at \$700.213 Further, Google submitted that it is harder for users to switch from iOS to Android, [%].214 6.34 We note that it is difficult to draw direct comparisons between the switching rates from our consumer survey and the switching rates from Google's internal data (as set out above), as these are based on different methodologies.215 Nevertheless, we note that Google's submitted switching rates from Android smartphones to iOS are of a similar order of magnitude to those we find in our consumer survey".)

⁹ See, e.g., *Consumer Markets Scoreboard: Making Markets Work for Consumers*, EUR. COMM'N (2018), at 67, available at https://mpo.gov.cz/assets/cz/ochrana-spotrebitele/eu-a-spotrebite/aktuality-z-eu/2018/10/2018-Consumer_Markets_Scoreboard.pdf.

The interventions that the CMA's findings imply—such as mandating sideloading on iOS or restricting Google's licensing agreements—would force a convergence toward a single, homogenised model. Forcing Apple to open its ecosystem to unvetted third-party app stores would fundamentally undermine the security and privacy proposition that is a primary reason consumers choose its products, exposing them to significant new risks of malware, fraud, and data theft. Such a remedy would not “increase” competition; it would eliminate a distinct competitive offering from the market, thereby reducing consumer choice and welfare. A regulatory framework that cannot distinguish between a competitive business model and an anticompetitive barrier is one that is likely to do more harm than good.

D. Differentiation and Unintended Consequences

These comments proceed in two parts. In Section II, we explain why the CMA's premise of “limited effective competition” understates the rivalry between iOS and Android. Modest but meaningful churn—on the order of 15–20%—together with the steady inflow of new users, widespread switching tools, and continual feature-by-feature leapfrogging, are all consistent with large contestable market shares and vigorous competition. In short, differentiation and some brand loyalties do not imply a lack of competitive pressure; they reflect distinct business models that compete along dimensions of quality, security, price point, and experience.

In Section III, we assess the unintended consequences of heavy-handed interventions that would likely ensue under the DMCC. Mandates around interoperability, choice screens, and app-store access all risk degrading privacy, security, reliability, and the monetization models that fund innovation—while, as the overseas experience suggests, yielding little demonstrable benefit. Overly broad remedies could also slow the integration of AI and erode valuable platform differentiation that lets consumers choose between distinct approaches (Apple's integrated model and Android's open model). Accordingly, given the competitive dynamics we document, any SMS designation should be paired with narrow, evidence-based measures, if any, and a presumption in favor of lighter-touch oversight.

II. Strong Competition in Mobile Ecosystems

The CMA's July 2025 proposed decisions for Apple and Google reiterate the authority's view that competition between iOS and Android is limited. On that basis, they provisionally find “substantial and entrenched market power” for each firm in a bundled “mobile platform” (OS, native app distribution, and browser/engine) market.¹⁰

For Apple, the CMA says the platform “faces limited competitive constraint from rival Mobile Ecosystems”, noting a “stable duopoly with Google”, and that “user switching ... poses a limited

¹⁰ Apple and Google proposed decisions, at 1.2.

competitive constraint ... [with] large sticky customer bases” where “with the vast majority of end-users not even considering the alternatives available to them when they last replaced their smartphone”.¹¹

For Google, the CMA likewise “provisionally conclude[s] that Google’s Mobile Platform faces limited constraint from other Mobile Platforms”, again describing a “stable duopoly with Apple” and further asserting there are “no expected or foreseeable developments” likely to eliminate Google’s market power over the next five years.¹²

These inferences, however, still overlook critical competitive dynamics. “Low” switching rates are not synonymous with weak competitive pressure: modest but material churn—often in the mid-teens—together with a steady inflow of first-time and replacement buyers can support large contestable shares and intense rivalry. Switching tools and cross-platform services further reduce frictions, while developers’ widespread multi-homing, and ongoing feature competition between iOS and Android, constrain both ecosystems.

Antitrust scholarship likewise cautions that observed switching rates, standing alone, are a poor proxy for market power. In short, the CMA’s updated record does not establish that competition between mobile ecosystems is ineffective, nor that the statutory tests for DMCC designation are satisfied merely because many users do not switch.

A. High Levels of User Churn

One of the most compelling indicators of competition between iOS and Android is the high rate of user churn between the platforms. Contrary to widely held belief, consumers frequently switch between iOS and Android, undermining the notion of ecosystem lock-in.

The CMA’s assertion that there is limited effective competition between iOS and Android rests on an assumption that brand loyalty prevents meaningful switching. The numbers, however, tell a different story. According to the latest data, only 24% of iOS users cite brand as the most important factor in their smartphone choice, compared to 12% for Android users.¹³ While this suggests a higher brand attachment for iOS users, it does not imply the absence of competition. Instead, it highlights how consumer preferences are shaped by perceived quality and features. These are factors that both Apple and Android manufacturers actively refine in their efforts to attract users.

Another critical aspect of competition is the ability to transfer data and apps across platforms. The CMA acknowledges that modern switching tools exist but notes that 35% of switchers experienced

¹¹ Apple proposed decision, at 1.20, 6.37, 6.46, and 6.66.

¹² Google proposed decision, at 1.20, 6.23, and 1.26.

¹³ Apple proposed decision, at 7.21 (c); Google proposed decision, at 6.16 (c).

some difficulty with at least one aspect of the switching journey.¹⁴ While some barriers to switching may persist, these are not the only factors that consumers consider.

The CMA's data indicates that 33% of iOS users and 38% of Android users see no significant benefits in switching operating systems.¹⁵ This may not, however, reflect direct unwillingness to switch, but rather user satisfaction with their current device. In fact, 11% of iOS users and 10% of Android users considered switching when purchasing a new smartphone but ultimately did not, demonstrating that competition remains a significant factor in consumer decisionmaking.¹⁶

The CMA's figures also show that iOS primarily targets the premium segment, accounting for 71% of smartphones sold for more than £300 in 2024, while Android holds 100% of the lower-end market (devices sold for £300 or less).¹⁷ Further, 51% of new Android smartphones were sold for £300 or less in 2024.¹⁸ While the CMA suggests that iOS and Android largely operate in separate market segments, evidence suggests that competition extends beyond direct price comparisons.

Looking beyond the CMA's market study, some of the best available data stems from the European Commission's *Google Android* decision.¹⁹ This data is now several years old and must therefore be taken with a pinch of salt, but it nonetheless paints a compelling picture of smartphone competition, which happens to run counter to the Commission's ultimate conclusions.

According to the Commission's own numbers, roughly 39% of all smartphone sales are contestable. This comprises both new users without prior brand loyalty (roughly 25% of purchases at the time, although this number is likely lower today), and the roughly 20% of existing users who switch brands when they purchase new devices.²⁰ For context, these churn rates are in the same ballpark as other industries that cannot remotely be called anticompetitive, such as general retail, travel, and financial/credit services.²¹

This churn is facilitated by the constant evolution of features and pricing strategies. For instance, Apple's introduction of more affordable iPhone models—such as the iPhone SE—has attracted price-sensitive Android users. Conversely, the proliferation of high-end Android devices with cutting-edge technology—like Samsung's Galaxy series and Google's Pixel phones—has drawn iOS users who seek enhanced features. This fluidity underscores a vibrant competitive environment in which neither

¹⁴ Apple proposed decision, at 6.36 (d) (iii); Google proposed decision, at 6.47 (d) (iv).

¹⁵ Apple proposed decision, at 6.36 (a); Google proposed decision, at 6.47 (a).

¹⁶ Apple proposed decision, at 6.27; Google proposed decision, at 6.31.

¹⁷ Apple and Google proposed decisions, at 1.20.

¹⁸ Google proposed decision, at 6.25 (a).

¹⁹ See Commission Decision AT.40099 (*Google Android*), slip op. (18 July 2018).

²⁰ Dirk Auer, *Making Sense of the Google Android Decision*, INT'L CTR. L. ECON. (25 February 2020), at 20, available at <https://laweconcenter.org/wp-content/uploads/2020/02/Auer-Making-Sense-of-the-Google-Android-Decision-White-Paper.pdf>.

²¹ See, e.g., Raphael Böhne, *Customer Churn Rate in the United States, by Industry*, STATISTA (9 November 2024), <https://www.statista.com/statistics/816735/customer-churn-rate-by-industry-us>.

platform can afford complacency.²² It also contradicts any assumption that operating system is irrelevant to consumer choices. Instead, it reflects an environment in which firms compete aggressively to enhance user experience and retain customers.

In short, it is important to remember that there is some degree of brand loyalty in nearly all markets, and that this rarely constitutes an obstacle to interbrand competition. The CMA's study provides no benchmark against which to assess its claims. In other words, its market study merely shows that smartphone users exhibit *some* brand loyalty, not that they exhibit *too much* of it for competition to thrive.

B. Ease of Data Portability

The CMA's study of mobile ecosystems cites several factors that might prevent users from switching to new platforms. As the CMA puts it:

(i) We have found substantial evidence from our consumer survey, internal documents (from both Google and Apple) and third-party responses of material perceived barriers to switching related to: (i) learning costs associated with switching;³⁰⁰ (ii) transferring data and apps across mobile devices;³⁰¹ and (iii) losing access to other devices (including connected devices) and having a worse experience of interacting with friends' and family's devices.²³

What the proposed decisions do *not* reveal, however, is whether these minor inconveniences have a significant effect on user switching, or whether they merely represent a minor and competitively irrelevant departure from perfect competition. In other words, all markets present some minor frictions that may marginally reduce the intensity of competition—switching from one supermarket to another, for instance, implies learning costs to absorb the layout of the new store—but this does not mean such markets aren't intensely competitive.

In that respect, there are important reasons to believe that competition between the two platforms is stronger than is typically recognized in competition-policy circles. Ever since the first iPhone was introduced in 2007, each iteration of both companies' operating systems has included features that could be found in previous versions of the other:

Features like picture-in-picture, live voicemail, lock screen customization and live translation were all found on the Android operating system before eventually making their way to iOS. And though the use of widgets to customize your home screen was long held as a differentiator for Android, that feature too eventually found its way to iOS.

On the other hand, Android's Nearby Share feature is remarkably similar to Apple's AirDrop, and Android phones didn't get features like "do not disturb" or the ability to take screenshots until some time after the iPhone had them.

²² *Id.*

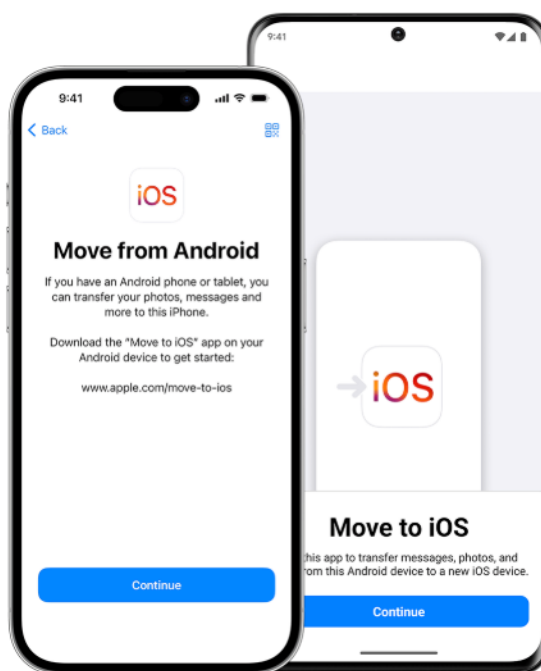
²³ Apple proposed decision, at 6.36 (d); Google proposed decision, at 6.47 (d).

Apple removed the 3.5mm headphone jack from the iPhone in September 2016, and I distinctly remember that at Google's launch event for the Pixel the following month, chuckles went round the room when the exec on stage proclaimed, "Yes, it has a headphone jack." Google itself went on to also ditch the headphone jack, with the Pixel 2.

...Rumors that Apple would remove the physical home button on the iPhone X were circling long before the phone was officially unveiled in September 2017. Are they the same rumors Samsung responded to when it "beat Apple to the punch" and removed the home button from its Galaxy S8 earlier that same year? Or did both sides simply arrive at such a big design decision independently?²⁴

Another critical factor enhancing competition in mobile ecosystems is the ease of data portability. Both Apple and Google have made substantial efforts to simplify the process to transfer data between their platforms, thereby lowering switching costs for consumers.

FIGURE 1: Apple's 'Move from Android to iPhone' Tutorial



SOURCE: Apple

Apple's "Move to iOS" app allows Android users to seamlessly transfer contacts, message history, photos, and even app data to their new iPhone.²⁵ Similarly, Google's "Data Transfer Tool" facilitates

²⁴ Andrew Lanxon, *Android vs. iPhone: 15 Years of Innovation Through Rivalry*, CNET (24 April 2024), <https://www.cnet.com/tech/mobile/smartphone-showdown-15-years-of-android-vs-iphone>.

²⁵ Move from Android to iPhone or iPad, APPLE, <https://support.apple.com/en-au/118670> (last visited 7 February 2025).

the migration of data from iOS devices to Android smartphones with minimal friction.²⁶ Moreover, both Apple and Google have webpages that help users to switch from one platform to the other (see Figure 1).

This isn't the only evidence that Apple and Google are engaged in fierce competition for potential users. Online comparisons of Android and iPhone abound.²⁷ Likewise, the business press often describes the fierce rivalry between Apple and Google.²⁸ And numerous academic studies have reached similar conclusions about the nature of their competition. Nicolas Petit refers to Apple and Google as "moligopolists",²⁹ while David Evans has described their rivalry as "dynamic competition".³⁰ Marshall Van Alstyne and his coauthors have analyzed the strategies that both Google and Apple have deployed to outcompete one another.³¹

Finally, both Apple and Google regularly file reports with securities regulators that cite the other firm as an important competitor (if not by name). For example, Apple has noted in its 10-K filing that:

The Company believes the availability of third-party software applications and services for its products depends in part on the developers' perception and analysis of the relative benefits of developing, maintaining and upgrading such software and services for the Company's products compared to competitors' platforms, such as Android for smartphones and tablets and Windows for personal computers.³²

While Google has noted in its 10-K:

We face competition from: Companies that design, manufacture, and market consumer electronics products, including businesses that have developed proprietary platforms.³³

²⁶ *Switch Is Easier than Ever*, ANDROID, <https://www.android.com/switch-to-android> (last visited 7 February 2025).

²⁷ See, e.g., Michael Muchmore & Gabriel Zamora, *Android vs. iOS: Which Phone OS Really Is the Best?*, PCMAG (13 November 2024), <https://www.pcmag.com/comparisons/android-vs-ios-which-mobile-os-is-best>; Prakhar Khanna, *iPhone Vs. Android – Which One Should You Get?*, FORBES (16 February 2024), <https://www.forbes.com/sites/technology/article/iphone-vs-android>; Bartosz Szczygieł, *iPhone vs Android Users: Key Differences in 2024*, NETGURU (8 January 2025), <https://www.netguru.com/blog/iphone-vs-android-users-differences>.

²⁸ See, e.g., Rhiannon Williams, *Why Competition Between Apple and Google Is More Brutal than Ever*, THE TELEGRAPH (29 September 2014), <https://www.telegraph.co.uk/technology/google/11127694/Why-competition-betweenApple-and-Google-is-more-brutal-than-ever.html>; Bianca DiSanto, *Google vs. Apple: Why Their Competition Is Good for You*, THE HOYA (21 October 2016), <https://thehoya.com/google-vs-apple-why-their-competition-is-good-for-you>; *Can Google or Huawei Stymie Apple's March Towards \$4trn?*, THE ECONOMIST (24 October 2024), <https://www.economist.com/business/2024/10/24/can-google-or-huawei-stymie-apples-march-towards-4trn>.

²⁹ NICOLAS PETIT, *BIG TECH & THE DIGITAL ECONOMY: THE MOLIGOPOLY SCENARIO* (2020).

³⁰ David S. Evans, *Why the Dynamics of Competition for Online Platforms Leads to Sleepless Nights But Not Sleepy Monopolies*, SSRN (25 July 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3009438.

³¹ Marshall W. Van Alstyne et al., *Pipelines, Platforms, and the New Rules of Strategy*, HARV. BUS. REV. (April 2016), at 1-9.

³² Apple Inc., Annual Report (Form 10-K), at 1 (29 September 2018).

³³ Alphabet Inc., Annual Report (Form 10-K), at 5 (31 December 2017).

The upshot is that the competitive battle in which iOS and Android are engaged is marked by continuous advancements across multiple dimensions, including user-interface design, hardware integration, app-ecosystem quality, and security features. Apple's iOS is known for its seamless integration with hardware, delivering a tightly controlled and optimized user experience. Conversely, Google's Android offers a more open ecosystem, allowing for greater customization and a wider variety of device choices from multiple manufacturers.

These differing approaches and business models do not mean that Apple and Google fail to compete. To the contrary, those differences are *a function of competition*. As Randal Picker has explained in the context of the case initiated by the European Commission against Google Android:

Google undoubtedly wanted to support Android through its advertising business as that was its great competitive advantage. Embedding Google Search in Android is the natural way to do that. It meant that Android would come with a third-party payment mechanism built in and it meant that the price of Android handsets would presumably be lower given that the Android software itself would be free.

This is really the point of business model competition. Apple was being Apple: vertically integrated hardware and software. Did that with the Macintosh, did that with the iPhone. Microsoft was being Microsoft: it had dominated the OS market for the open IBM PC architecture and it hoped to do exactly that for mobile phones. There would be lots of handset makers, just as there were PC makers and Microsoft would make money off of phone OSs. **Google was offering a different business model: lots of handset makers and advertising-supported software.** The competition between Microsoft and Google was precisely over which way of paying for phone OS software would win.³⁴ [Emphasis added.]

These tools reflect the companies' acknowledgment of consumer demand for flexibility and choice. By reducing barriers to switching, Apple and Google have created an environment in which users can make platform decisions based on current preferences and needs, rather than be locked into a single ecosystem. This ease of mobility is a testament to the competitive pressures both platforms face, driving them to enhance their user experience and value propositions continuously.

This combination of vigorous platform rivalry, significant user churn, and robust data-portability mechanisms paints a clear picture of a highly competitive mobile ecosystem. This competition not only fuels innovation but also ensures that consumers retain the ultimate power to choose the platform that best meets their evolving needs. Not only does this cut against arguments for designating iOS and Android as SMS players, but perhaps more importantly, it significantly tilts the cost-benefit analysis of regulatory intervention (which we discuss in the following section) toward a lighter-touch approach, as competition can be expected to discipline market players' behaviour.

³⁴ Randal Picker, *The European Commission Picks a Fight with Google Android over Business Models*, PROMARKET (23 July 2018), <https://www.promarket.org/2018/07/23/european-commission-picks-fight-google-android-business-models>.

III. The Unintended Consequences of Regulating Mobile Ecosystems

The regulation of mobile ecosystems presents a complex set of tradeoffs. While regulatory interventions, such as enforcement of the DMCC, aim to promote competition and consumer choice, they also risk unintended consequences that could hinder innovation, reduce incentives to invest, and alter the fundamental dynamics of platform competition. Given this, it is important for the CMA to ensure that conduct requirements do not inadvertently and unnecessarily penalize consumers.

As we explain below, there are at least three important ways in which heavy-handed enforcement of the DMCC may do more harm than good. To start, some of the conduct requirements the CMA is contemplating have been tried in other jurisdictions and failed to deliver benefits. Second, enforcement may delay or prevent the deployment and integration of artificial-intelligence (AI) technologies into existing platforms. Finally, it may nullify valuable product differentiation that currently enables consumers with diverse preferences to choose the platform *they* prefer, rather than having to settle for a one-size-fits-all design.

In recognizing these tradeoffs, the CMA can adopt a more nuanced approach that preserves the benefits of competition, while addressing legitimate concerns in the digital marketplace. This is particularly true given the important competition between Android and iOS. Indeed, even if the CMA decides to designate these activities as SMS, the fierce competition between the platforms means any anticompetitive harms to consumers are likely to be small, and the benefits of regulatory intervention are thus less likely to outweigh the costs discussed below. In short, the risk of regulatory errors is great in markets where there is significant competition.

A. Interoperability, Choice Screens, and App-Store Fees

Regulatory interventions, even when well-intentioned, can lead to unintended consequences that may harm consumers and the broader market. The CMA should be vigilant in identifying and mitigating such risks. For example, regulations aimed at increasing competition by mandating interoperability or data-sharing requirements could inadvertently compromise user privacy and security. Similarly, policies designed to curb perceived anticompetitive behaviour might reduce platforms' incentives to invest in innovative technologies and features.

Lessons from international jurisdictions, particularly the European Union's Digital Markets Act (DMA), offer valuable insights into the potential pitfalls of overregulation. The DMA's stringent requirements have led to significant compliance costs for companies and have sometimes resulted in reduced functionality and a diminished user experience. For instance, mandated changes in platform operations to ensure fairness have, in some cases, led to decreased efficiency and increased complexity for both developers and users.

At least three of the potential interventions contemplated by the CMA appear to raise significant risks of unintended consequences. In a previous invitation to comment, the CMA suggested it would consider mandated interoperability to increase mobile competition, as well as the use of choice screens:

Potential measures could include: i. Requirements for Apple and Google not to restrict interoperability as required by third-party products and services (such as rival browsers, digital wallets and connected devices) to function effectively and compete with Apple's and Google's own products and services...

iii. Requirements for Apple and Google to make changes to choice architecture in factory settings or subsequent device settings; in order to enable users of mobile devices to make active and informed choices about the product or services they use and/or set as a 'default' service.³⁵

As ICLE scholars have discussed in more detail elsewhere, such interventions are unlikely to deliver net benefits to UK consumers.³⁶ In comments submitted to the European Commission, we concluded that:

The forced interoperability proposed under Article 6(7) introduces significant risks to user security. Many of the features targeted for interoperability—such as devices' NFC capabilities and wireless-file transfer functionalities like AirDrop—are integral to the iOS ecosystem's security infrastructure. These features were designed with stringent safeguards to prevent unauthorized access and to ensure that users' sensitive information remains protected. By mandating that third-party developers gain access to these APIs and functionalities, the Commission's approach would create opportunities for exploitation by malicious actors.³⁷

This is not just theoretical speculation. The Microsoft/CrowdStrike outage that kept airlines, hospitals, banks, and other businesses down for hours in July 2024, generating great disruption for thousands, appears to have been caused—at least in part—by an interoperability mandate.³⁸ Likewise, mandated interoperability may have a detrimental impact on device reliability and performance:

For example, allowing third-party applications to run in the background without adequate controls can significantly reduce battery life, as has been observed on competing platforms like Android. As one journalist put it: "Got the case of a quickly dying phone? It might be your background apps!" The issue arises because background activity consumes system resources, often without users' awareness. And because users may be unable to attribute battery degradation to a specific application, developers may have weak incentives to minimize the energy their apps consume.³⁹

³⁵ *Strategic Market Status Investigations into Apple's and Google's Mobile Ecosystems - Invitation to Comment*, COMPET. MARK. AUTH. (23 January 23, 2025), at 27, available at https://assets.publishing.service.gov.uk/media/67911997cf977e4bf9a2f1aa/Invitation_to_comment.pdf (hereinafter 'Invitation to Comment').

³⁶ Geoffrey A. Manne, Dirk Auer, & Mario A. Zúñiga, *Comments of ICLE to Commission Consultation on Proposed Measures for Interoperability Between Apple's iOS Operating System and Connected Devices*, INT'L CTR. L. ECON. (8 January 2025), <https://laweconcenter.org/resources/comments-of-icle-to-commission-consultation-on-proposed-measures-for-interoperability-between-apples-ios-operating-system-and-connected-devices-dma-100203>.

³⁷ *Id.* at 7

³⁸ *Id.* at 8

³⁹ *Id.* at 9

The upshot is that mandated interoperability threatens to degrade aspects of the iOS and Android experiences that consumers value deeply.

Along similar lines, the choice screens the CMA is contemplating have been tried and tested in other jurisdictions, where they have systematically failed to deliver regulators' desired outcomes. For example, the implementation of browser and search-engine choice screens for Android in Europe does not appear to have meaningfully affected competition or market shares for those services.

More fundamentally, there are serious doubts that default placement has the competitive significance typically ascribed to it. As Geoffrey Manne writes, commenting on the U.S. *Google Search* case and the European Commission's Google Search proceedings:

With respect to the conclusion that the cost to users of choosing the non-default option is higher, that is inherently true, of course. But it is arguably trivially so...

Among other things (more of which are discussed below), it must be noted that, even when users are presented with a neutral option (e.g., a "choice screen"), they appear to make essentially the same choices as when presented with a default. In Europe, where Google has since 2020 implemented a search engine choice screen on Android following the EU's 2018 antitrust decision against it, Google's share of the search engine market has barely budged.

By the same token (at least when Google is the non-default) users are apparently quick to switch from a less-preferred default in order to get access to Google Search:

In a 2016 experiment, Mozilla switched the default GSE on both new and existing users from Google to Bing. By the twelfth day, Bing had kept only 42% of the search volume. After some additional time, those numbers dropped to 20– 35%....

It is exceedingly difficult to square these facts with the court's conclusions on the functional irrelevance of non-default options.⁴⁰

Finally, the CMA's previous invitation to comment also contemplated interventions to boost app-store competition, either by forcing Apple to allow third-party app stores or by preventing Google from deploying revenue-sharing agreements that prevent fragmentation of the Android ecosystem:

Potential measures that may be appropriate to promote competition in relation to native app distribution could include:

1. A requirement for Apple to allow alternative app stores to operate on iOS.

⁴⁰ Geoffrey A. Manne, *A Critical Analysis of the Google Search Antitrust Decision*, INT'L CTR. L. ECON. (14 August 2014), at 16-17, available at <https://laweconcenter.org/wp-content/uploads/2024/08/Manne-Google-Search-Decision-Analysis-2024-08-14.pdf>.

2. A requirement that prevents Google from making revenue share payments in return for certain additional requirements in relation to the Play Store, e.g. setting the Play Store as the default app store and not preloading alternative app stores on devices.⁴¹

Beyond the security and reliability concerns discussed above, these measures have the added harm that they target the monetization of today's most successful mobile platforms, with two major consequences. The first is that these platforms can be expected to respond by resorting to inferior monetization strategies that penalize consumers and small developers. The second is that, even with these changes, weaker monetization will have a knock-on effect on the platforms' incentives to innovate, leading to a worse mobile experience for users in the long term.

B. Integration of AI Services

A further concern is that the CMA should avoid policies that could hinder the integration of AI technologies. Indeed, overregulation could stifle the development and deployment of AI innovations, depriving consumers of the benefits of more intelligent, responsive, and personalized mobile experiences. Encouraging a regulatory environment that supports AI integration is essential to foster continued growth and innovation in the mobile ecosystem.

The CMA's proposed decisions, however, implicitly suggest the authority may pursue policies that prevent incumbent tech firms from competing in this space, thereby preventing the product integrations discussed above and reducing competition in this highly dynamic space. This is nowhere clearer than in the following paragraphs of the Apple proposed decision (largely replicated in the Google proposed decision):

6.135 Furthermore, evidence suggests that Apple may be able to use AI to strengthen its position in respect of its Mobile Platform and wider Mobile Ecosystem:

(a) The trend towards increased integration of AI into mobile devices is likely to reinforce barriers to entry and expansion in Mobile Platforms (discussed above in the section titled 'Barriers to entry and expansion in Mobile Platforms'). Creating a highly integrated platform that facilitates smooth interactions between different products and services across the operating system to compete effectively with Apple's Mobile Platform offering can be costly.

(b) Many third parties submitted that Apple may be able to use AI to strengthen its position in respect of its Mobile Platform and wider Mobile Ecosystem. For example, Apple's position as the operating system provider may enable it to gain a competitive advantage relative to third-party providers of FM services and wider content, particularly if Apple can use AI to disintermediate between end-users and third-party content and service providers.

(c) Finally, evidence we reviewed from third-party investor reports is consistent with the view that AI is more likely to strengthen rather than weaken Apple's position in respect of its Mobile Platform. We reviewed a selection of third-party investor reports published

⁴¹ Invitation to Comment, *supra* note 35 at 24.

between September 2024 and March 2025. Out of 14 reports that commented on Apple's expected financial performance, six mentioned AI. Five out of six of these reports indicated they expected future growth in Apple's financial performance as a result of Apple releasing new AI features in updates to the iPhone.⁴²

AI is currently in the process of being integrated into various aspects of mobile ecosystems, from predictive text and photo categorization to health monitoring and augmented-reality applications. Google's AI-driven features, such as real-time language translation and adaptive battery management, highlight AI's potential to improve usability and efficiency. Apple's focus on on-device AI processing ensures user privacy, while delivering powerful features like facial recognition and intelligent photo sorting. Heavy-handed intervention threatens these valuable product integrations.

Another important fear is that, paradoxically, efforts to prevent incumbent platforms from competing freely in generative-AI markets may backfire and lead to less, not more, competition. Indeed, upstarts like OpenAI are currently acquiring a sizeable lead in generative AI.⁴³ While competition authorities might like to think that other startups will emerge and thrive in this space, it is important not to confuse those desires with reality.

While there currently exists a vibrant AI-startup ecosystem, there is at least a case to be made that significant competition for today's AI leaders will come from incumbent Web 2.0 platforms—although nothing is certain at this stage. The CMA should beware not to stifle that competition on the misguided assumption that competitive pressure from large incumbents is somehow less valuable to consumers than that which originates from smaller firms. This is particularly relevant in the context of merger control.

C. The Importance of Differentiation

Differentiation between iOS and Android is a cornerstone of healthy competition in the mobile ecosystem. Each platform offers a distinct user experience, catering to diverse consumer preferences and fostering innovation through unique approaches to design and functionality. Apple's iOS is renowned for its seamless integration with hardware, stringent privacy controls, and a curated app ecosystem that prioritizes quality and security. In contrast, Android's open-source nature allows for extensive customization, a wide variety of device options, and greater flexibility for developers.

This differentiation not only enhances consumer choice but also drives each platform to innovate continuously. For example, Apple's emphasis on privacy has pushed Android to introduce more robust privacy features, while Android's customization capabilities have influenced iOS to offer more flexible user-interface options in recent updates. The unique strengths of each platform contribute to a dynamic competitive landscape that benefits consumers.

⁴² Apple proposed decision at 6.135; Google proposed decision at 6.143.

⁴³ See, e.g., Paul Baier, *Estimated Market Share of Closed-Source LLM Models in 2024*, GENAI INSIGHTS (24 August 2024), <https://gaiinsights.substack.com/p/estimated-market-share-of-closed>.

Regulatory interventions that aim to homogenize these platforms could undermine the very competition they seek to promote. The CMA's policies should respect the distinct characteristics of both iOS and Android, ensuring that regulatory measures do not inadvertently force one platform to emulate the other. Preserving the diversity of approaches within the mobile ecosystem is essential to foster innovation and meet the varied needs of consumers. Indeed, as ICLE scholars put it in an *amicus* brief submitted to the U.S. Supreme Court in the *Epic v Apple* proceedings:

Centralized app distribution and Apple's "walled garden" model (including IAP) increase interbrand competition because they are at the core of what differentiates Apple from Android, the other major competing platform. They play into Apple's historical business model, which focuses on being user-friendly, reliable, safe, private, and secure. Even Epic recognized that Apple would lose its competitive advantage if it were to compromise its safety and security features. For Apple and its users, the touchstone of a good platform is not "openness," but carefully curated selection and security, understood broadly as encompassing the removal of objectionable content, protection of privacy, and protection from "social engineering," and the like. By contrast, Android's bet is on the open platform model, which sacrifices some degree of security for the greater variety and customization associated with more open distribution. These are legitimate differences in product design and business philosophy.⁴⁴

IV. Conclusion

The CMA's investigations of Apple and Google's mobile ecosystems raise important questions about competition and innovation in the digital economy. As our comments explain, however, the assumption that these ecosystems function as an entrenched duopoly with limited competition is misguided. The mobile industry is characterized by dynamic competition, with continuous innovation, significant user choice, and considerable investment in platform development.

Rather than pursue heavy-handed regulatory interventions that could distort incentives and hinder innovation, the CMA should adopt a cautious and evidence-based approach. Apple and Google compete vigorously, not just with each other but also with a broader landscape of technology firms that includes manufacturers, service providers, and developers who operate across various segments of the mobile ecosystem. User churn rates and the contestability of key market segments indicate that competition remains robust.

Interventions that force interoperability, restrict preinstalled applications, or mandate alternative app stores all carry significant risks. Lessons from similar regulatory actions in other jurisdictions suggest that such measures often lead to unintended consequences, including a degraded user experience, increased security risks, and reduced incentives for investment and innovation. In contrast, market-driven differentiation, where consumers can choose between Apple's integrated approach

⁴⁴ Geoffrey A. Manne & Daniel G. Gilman, *ICLE Amicus to US Supreme Court in Apple v Epic*, INT'L CTR. L. ECON. (27 October 2023), at 15-16, available at <https://laweconcenter.org/wp-content/uploads/2023/11/ICLE-Amicus-Apple-v-Epic-SCt-10.27.23-FINAL.pdf>.

and Google's open ecosystem, provides a natural check on anticompetitive behaviour, while maximizing consumer choice.

Given the rapid pace of technological change and the evolving nature of digital markets, a prescriptive regulatory approach could stifle innovation and reduce the competitive benefits that users currently enjoy. Instead, the CMA should focus on clear and proportionate policy measures that address demonstrable harms without undermining the fundamental drivers of competition. The objective should not be to reengineer these ecosystems, but to ensure that competition remains vibrant and that consumers continue to benefit from technological advancements and product differentiation.

In this context, we urge the CMA to approach its investigations with a view toward fostering innovation, preserving incentives for investment, and avoiding unnecessary regulatory burdens that could harm consumers, developers, and the broader digital economy. A well-calibrated approach—grounded in empirical evidence and mindful of the risks of intervention—will ensure that the UK's digital markets remain competitive and dynamic in the years to come.