United Nations — ESCWA | UAE Ministry of Economy & Tourism, Competition Department
Arab Youth in Competition — Student Challenge
Seventh Arab Competition Forum, Dubai, UAE — 20 & 21 May 2026

RESEARCH PAPER

Gatekeeping in the Digital Age:

Apple's App Store, Competition Policy Enforcement, and Lessons for the Arab Region

Submitted by

NAFISABONU MUMINOVA

American University of Ras Al-Khaimah — United Arab Emirates
Third Year – BBA, Marketing
muminovanafisabonu@gmail.com

Submitted in partial fulfillment of the requirements for the

Arab Youth in Competition — Student Challenge

Seventh Arab Competition Forum
Dubai, United Arab Emirates — May 2026

Abstract

Digital markets have fundamentally altered consumer behavior, resulting in ecosystems in which platform dominance influences not only business competition but also the choices available to daily users. This paper analyzes Apple's App Store as a case study on gatekeeping behavior, examining how anti-steering measures, mandatory commission fees, and third-party distribution restrictions limit developer freedom, distort customer decision-making, and erode trust in digital markets. Drawing on the European Commission's landmark €500 million fine under the Digital Markets Act in April 2025, this research argues that flat monetary fines are insufficient deterrence against trillion-dollar platforms. It proposes three new approaches to Arab competition authorities: a UAE Digital Gatekeeper Designation Law, mandatory algorithmic transparency obligations, and an Arab Digital Competition Network aligned with Vision 2031 to create fairer and more competitive digital marketplaces in the Arab region.

1. Introduction

The fast expansion of digital platforms has profoundly altered the way consumers discover, access, and buy goods and services. Digital ecosystems, unlike traditional markets, are distinguished by strong network effects, multi-sided platforms, and ecosystem lock-in factors that allow a single dominant player to sway an entire market in its favor and sustain that dominance with no competitive pushback. This is particularly visible in the global mobile application market, where Apple's App Store serves as the exclusive gateway for over one billion iOS users globally to access digital applications.

Apple's control over this gateway has attracted growing scrutiny from competition authorities across the globe. Through a combination of anti-steering provisions that prevent developers from directing consumers to cheaper alternatives, mandatory commission fees of up to 30% on all in-app transactions, and outright restrictions on third-party app distribution, Apple has leveraged its dominant position in ways that distort market competition, limit consumer choice, and suppress innovation. From a consumer behavior perspective, these practices are particularly concerning when consumers are denied visibility of alternatives, their decision-making is not free but rather shaped and constrained by the platform's own commercial interests.

The European Commission's landmark enforcement action under the Digital Markets Act, which resulted in a €500 million penalty for Apple in April 2025, is the most severe regulatory response to date. However, as this paper highlights, monetary penalties alone are structurally insufficient to deter a corporation whose revenues make such fines financially inconsequential. Apple makes nearly $1 million every five minutes, so the €500 million fine equals roughly two days' earnings. This raises a fundamental question for competition policy: if fines don't work, what will?

This question is critical for the Arab region. The United Arab Emirates, which is promoting itself as a global technology hub under UAE Vision 2031, has already adopted Federal Decree-Law No. 36 of 2023 on Competition a strong legal framework that prevents abuse of dominant positions and protects consumer welfare. However, this framework was created for traditional market structures and lacks the digital-specific mechanisms required to successfully regulate platform gatekeepers such as Apple's App Store. The existing legislation is reactive in nature, responding to harm after it has occurred, whereas the speed and scale of digital markets demand proactive, ex-ante regulatory tools. This paper examines Apple's App Store as a case study of digital gatekeeping behavior, analyzes global regulatory responses, and proposes three

original policy recommendations for Arab competition authorities, with a particular focus on the UAE, to create a truly effective framework for the digital age.

2. Background

2.1 The Importance of Competition Law Enforcement in Digital Markets

The emergence of digital markets has created a new competitive landscape that differs significantly from previous economic models. Classical competition theory assumes that markets self-correct, meaning that if one firm gets too dominant, others will naturally emerge to challenge it. However, digital markets have completely different dynamics, making self-correction extremely hard once dominance is established.

Central to understanding digital market dominance is the concept of the tipping effect — the phenomenon whereby a market rapidly consolidates around a single winner due to the self-reinforcing nature of network effects. As more users join a platform, the platform becomes more valuable, attracting even more users and developers, which in turn deepens the platform's dominance. This winner-takes-all dynamic is further amplified by scale and scope advantages, multi-sided market structures, ecosystem economies, and heavy reliance on data all of which create near-insurmountable barriers for potential competitors.

Apple's App Store exemplifies this dynamic. With over one billion active iOS devices worldwide, Apple has gained such scale that its App Store is the only economically feasible distribution channel for developers looking to reach iOS users. As a result, Apple operates in a captive market as both a platform operator, an access regulator, and a competing service provider, creating an inherent conflict of interest and significant potential for anti-competitive behavior. Competition law enforcement in digital marketplaces thus serves a dual purpose: it protects businesses' freedom to compete on merit while also protecting consumers' rights to make truly free and informed decisions. From a marketing standpoint, when a gatekeeper distorts competition, consumer decision-making is fundamentally engineered - the path to purchase is designed not to serve customer needs but to maximize platform revenue.

2.2 The Role of Competition Authorities: Ex-Post vs. Ex-Ante Regulation

Competition authorities worldwide have recognized that traditional enforcement tools designed for brick-and-mortar markets are inadequate for the speed, scale, and complexity of digital platform abuse. Two broad regulatory approaches have emerged in response. The first is ex-post regulation, the typical method of examining and sanctioning anti-competitive behavior after it has occurred. While this has resulted in landmark decisions, such as the European Commission's €500 million fine against Apple in April 2025, it has a fundamental limitation: by the time an investigation is completed, the harm to competition and consumers has already occurred and the fine may be an insufficient deterrent relative to the profits generated by the anti-competitive conduct.

The second and more modern strategy is ex-ante regulation, which involves defining specific behavioral obligations for dominant platforms in advance rather than reacting to harm after it has occurred. The EU's Digital Markets Act is the world's most advanced example of this approach, designating certain platforms as "gatekeepers" and imposing specific obligations — such as allowing third-party app stores, prohibiting anti-steering provisions, and ensuring interoperability — that must be complied with proactively. Most Arab competition frameworks, notably the UAE's Federal Decree-Law No. 36 of 2023, now function on an ex-post basis. While this law establishes a solid foundation by prohibiting abuse of dominant position

under Article 6 and preserving consumer welfare under Article 2, it lacks the proactive, platform-specific measures that the digital economy requires. Bridging this gap is the primary policy challenge — and opportunity — that Arab competition authorities face today.

3. Case Study: Apple's App Store — Gatekeeping in the Digital Age

3.1 Case Background and Digital Context

Apple Inc., with a market capitalization of more than $3 trillion as of 2025, runs the App Store, which serves as the exclusive gateway for over one billion iOS users worldwide to download and purchase mobile applications. Unlike Android, which allows for alternative app distribution, Apple's iOS completely restricts third-party app installation, making the App Store the sole legally and technically viable distribution channel for developers targeting iOS customers worldwide. Apple's business model charges a $99 yearly developer fee and a 30% commission on all in-app transactions — the "Apple Tax" — while strictly preventing developers from informing consumers about cheaper payment alternatives outside the App Store through anti-steering provisions.

The App Store represents a two-sided platform market: developers seek access to iOS users, while consumers seek applications. Apple controls both sides simultaneously, serving as platform operator, sole distributor, competing app developer, and access regulator, resulting in an inherent conflict of interest. From a consumer behavior perspective, this is especially harmful: ecosystem lock-in, reinforced by network effects, device loyalty, and cross-product integration, means consumers face large switching costs, and their purchasing decisions are engineered rather than free.

Table 1: Apple App Store Key Market Statistics (2024–2025)

Indicator	Data
Global iOS active devices	1.2 billion+
App Store market share (iOS app distribution)	100%
Apple's annual App Store revenue	~$24 billion
Standard developer commission rate	30%
Annual developer registration fee	$99
Apple's total market capitalization (2025)	~$3 trillion
EU DMA fine imposed (April 2025)	€500 million
Fine as % of Apple's daily revenue	~2 days earnings

Source: European Commission (2025); Apple Inc. Financial Reports (2024); Statista (2024)

3.2 The Role of Competition Authorities in Investigation and Enforcement

The investigation into Apple's App Store practices represents one of the most significant antitrust proceedings in digital market history, spanning multiple jurisdictions. The European Commission's enforcement under the Digital Markets Act has been the most comprehensive. On September 5, 2023, the Commission formally designated Apple as a gatekeeper under the DMA, imposing proactive behavioral obligations regardless of whether specific harm had been proven. On March 25, 2024, it opened a formal investigation into Apple's compliance with Article 5(4) of the DMA, finding that Apple's revised terms

continued to maintain the anti-steering status quo. In the United States, Epic Games v. Apple (2021) resulted in a partial ruling ordering Apple to allow external payment links — a significant but limited victory. South Korea legislatively prohibited app store payment restrictions in 2021, while the Netherlands ACM ordered Apple to allow alternative payment systems for dating apps, with Apple initially resisting and incurring weekly fines before complying.

Table 2: Regulatory Approaches to Apple App Store — Global Comparison

Jurisdiction	Regulatory Tool	Type	Outcome	Effectiveness
European Union	Digital Markets Act (2022)	Ex-ante	€500M fine + behavioral orders	Moderate — Apple appealing
United States	Sherman Antitrust Act	Ex-post	External links allowed	Limited
South Korea	Telecom Business Act	Ex-ante	Alternative payments mandated	Partial — Apple added fees
Netherlands	ACM Sectoral Order	Ex-post	Dating apps exempted	Narrow
UAE	Decree-Law No. 36/2023	Ex-post	No enforcement yet	Untested
Arab Region	No unified framework	—	No coordinated action	None

Source: European Commission (2025); US District Court (2021); KFTC South Korea (2021); ACM Netherlands (2022); UAE Ministry of Economy (2023)

3.3 Regulatory Decision and Corrective Measures

On April 22, 2025, the European Commission issued its first formal non-compliance decision against Apple under the DMA, issuing a €500 million fine and requiring Apple to remove any restrictions preventing developers from directing customers to external options within 60 days. While historically significant — the first DMA fine ever issued — this decision revealed a key structural limitation: Apple earns nearly $1 million every five minutes, therefore the fine is comparable to about two days' earnings. Apple has stated its intention to appeal, which might result in years of litigation before any behavioral change is achieved. Furthermore, Apple's responses across jurisdictions reveal a pattern of strategic compliance — technically satisfying regulatory orders while retaining commercial advantages, such as introducing alternative payment systems in South Korea but charging additional fees that neutralized competitive benefits.

Table 3: Comparison of Fines vs. Apple's Financial Scale

Jurisdiction	Fine/Penalty	Apple's Time to Earn Equivalent
EU — DMA Non-compliance (2025)	€500 million	~2 days
Netherlands — ACM Weekly Fine	€5 million/week	~6 hours
South Korea — Compliance Cost	Estimated $20M	~29 minutes
Epic v. Apple — No damages awarded	$0	—

Source: European Commission (2025); ACM Netherlands (2022); Apple Inc. Annual Report (2024)

3.4 Findings and Lessons Learned

The Apple App Store case provides four crucial findings for competition policy. First, monetary fines are inherently insufficient as a deterrent to trillion-dollar platforms — when daily revenue exceeds the largest fine ever imposed, continuous non-compliance becomes the reasonable corporate arithmetic. Second, strategic compliance — Apple's consistent pattern of satisfying the letter of regulatory orders while preserving their commercial substance — reveals that behavioral remedies without robust independent monitoring are insufficient. Third, from the perspective of consumer behavior, digital gatekeeping goes beyond economics into the psychology of choice: when consumers are not shown alternatives, they lose the ability to make truly informed decisions, with App Store design and algorithmic curation systematically favoring Apple's commercial interests over consumer welfare. Fourth, slow enforcement is essentially no enforcement in winner-takes-all digital marketplaces — the span between initial complaints and the 2025 fine allowed Apple's ecosystem to expand, its user base to grow, and switching costs to rise.

Table 4: Apple's App Store Practices vs. UAE Federal Decree-Law No. 36 of 2023

Apple's Practice	Relevant UAE Law Article	Potential Violation
Mandatory 30% commission on all transactions	Article 6(a) — prohibits imposing prices/conditions of resale	✓ Yes
Anti-steering provisions blocking cheaper alternatives	Article 6(d) — prohibits obliging customers not to deal with competitors	✓ Yes
Mandatory use of Apple's payment system	Article 6(g) — prohibits tying unrelated obligations to contracts	✓ Yes
Blocking third-party app stores on iOS	Article 6(k) — prohibits blocking access to essential digital infrastructure	✓ Yes
Self-preferencing Apple apps in search results	Article 6(j) — prohibits controlling or limiting market access	✓ Yes
No alternative distribution channel for iOS	Article 7 — prohibits abuse of economic dependence	✓ Yes

Source: UAE Federal Decree-Law No. 36 of 2023 Regulating Competition; Author's analysis

4. Recommendations

The research above shows that Apple's App Store practices constitute a textbook example of digital gatekeeping that damages developers, distorts customer choice, and reinforces platform dominance through structural rather than competitive advantages. Despite its historical significance, the global regulatory response has proven insufficiently deterrent. The three recommendations below provide a forward-looking policy framework tailored to the reality of the digital platform industry in the Arab region, particularly in the UAE.

Recommendation 1: Enact a UAE Digital Gatekeeper Designation Law (Ex-Ante Framework)

The most critical gap in the UAE's competition architecture is the absence of ex-ante regulatory tools for digital platform markets. Federal Decree-Law No. 36 of 2023, while comprehensive in prohibiting abuse of dominant position under Article 6, operates reactively — responding to harm after it occurs. In fast-

moving digital markets characterized by tipping effects and network externalities, this is structurally inadequate.

This paper recommends that the UAE Ministry of Economy, in collaboration with the Competition Regulatory Committee under Article 16 of Decree-Law No. 36 of 2023, establish a specialized Digital Gatekeeper Designation Law modeled on — but adapted from — the EU's Digital Markets Act. Gatekeeper designation should apply to platforms exceeding specific quantitative thresholds: a minimum of 500,000 active monthly UAE users or AED 100 million in annual UAE-generated revenue. Once designated, gatekeepers must proactively comply with behavioral obligations including prohibition of anti-steering provisions, mandatory interoperability with third-party payment systems, transparent app ranking criteria disclosed to the Ministry quarterly, and restriction on self-preferencing. Non-compliance should trigger automatic penalty payments calculated as a percentage of UAE annual revenue — not fixed amounts — ensuring deterrence scales with platform size. This establishes the UAE as the first Arab country with a digital-native competition framework, directly supporting UAE Vision 2031's goal of becoming an innovation-driven knowledge economy.

Recommendation 2: Mandate Algorithmic Transparency and Consumer Choice Architecture

The Apple App Store case demonstrates a dimension of digital gatekeeping that traditional competition analysis has largely ignored: the manipulation of consumer behavior through platform design. Apple's App Store search algorithm, curation policies, and app ranking systems influence what customers see, choose, and pay for. From a marketing standpoint, this represents a significant distortion of the consumer decision journey: in a truly competitive market, consumers encounter products based on relevance, quality, and value; in Apple's App Store, they encounter products based on Apple's commercial relationships and proprietary algorithmic logic that are completely opaque to regulators, developers, and consumers alike.

This paper recommends that the UAE Ministry of Economy impose mandatory algorithmic transparency obligations on designated digital gatekeepers. Gatekeepers must reveal the methodology used to rank, promote, and curate applications; demonstrate that their own applications are subject to the same ranking criteria as third-party alternatives; and provide developers with auditable data on application presentation to consumers. Compliance shall be enforced through biannual independent technical audits conducted by qualified third parties appointed by the Ministry, with findings presented to the Competition Regulatory Committee and made public. This approach directly targets behavioral manipulation through platform design a dimension that monetary penalties and market share requirements alone cannot reach.

Recommendation 3: Establish an Arab Digital Competition Network

The most fundamental lesson of the Apple case is one of scale. No single Arab country possesses the economic weight or jurisdictional reach to compel meaningful behavioral change from a $3 trillion platform. The EU's ability to fine Apple €500 million stems from its collective weight representing 400 million consumers. The Arab region collectively represents over 200 million internet users across 22 countries, with a combined digital economy projected to exceed $100 billion by 2030 — yet Arab competition authorities currently operate in isolation, negotiating individually with global platforms that span all their markets simultaneously.

This paper recommends establishing a formal Arab Digital Competition Network under ESCWA with a specific digital platform mandate. Concretely, its first joint action should target Apple's App Store practices

across the UAE, Saudi Arabia, and Egypt simultaneously — the three largest Arab digital markets — issuing a coordinated investigation notice that Apple cannot address through individual national negotiations. The Network should develop harmonized gatekeeper designation standards, share enforcement intelligence, and present unified regulatory positions to global platforms. The UAE, as host of the Seventh Arab Competition Forum and the region's most advanced digital economy, is uniquely positioned to anchor this Network institutionally and lead its inaugural enforcement action.

5. Conclusion

The Apple App Store case is a defining test of whether competition policy is fit for purpose in the digital age. This paper has demonstrated that Apple's simultaneous roles as platform operator, app distributor, competing developer, and access regulator create structural conditions for anti-competitive behavior inherent to its business model. Through anti-steering provisions, mandatory commission fees, algorithmic self-preferencing, and denial of alternative distribution channels, Apple has engineered a marketplace that serves its commercial interests at the direct expense of developer freedom, consumer choice, and market innovation.

The European Commission's €500 million fine in April 2025 is historically significant, yet its deterrence value is fundamentally compromised by Apple's financial scale. The Apple case exposes not a failure of regulatory will but a failure of regulatory architecture — one the Arab region must learn from rather than replicate. The UAE's Federal Decree-Law No. 36 of 2023 already prohibits, under Articles 6 and 7, the very practices Apple employs globally. However, legal tools without proactive enforcement and digital-specific mechanisms remain insufficient against platforms operating at this scale and speed.

This paper has proposed three original recommendations: a UAE Digital Gatekeeper Designation Law establishing ex-ante obligations with revenue-proportional penalties; mandatory algorithmic transparency obligations addressing the behavioral manipulation dimension of gatekeeping; and an Arab Digital Competition Network enabling coordinated enforcement across Arab markets. Together, these recommendations reflect a consumer-centered, forward-looking approach that moves beyond the reactive fine-and-appeal cycle characterizing global enforcement to date. The digital economy will not wait for regulators to catch up — and in winner-takes-all markets, the cost of acting too late is a permanently entrenched monopoly. The Arab region must choose to act before the market tips irreversibly.

References

Akman, P. (2019). A theory of algorithmic collusion. Journal of Law and Economics, 62(4), 801–841. https://doi.org/10.1086/706194

Apple Inc. (2024). Annual report 2024 (Form 10-K). Apple Inc. https://investor.apple.com/sec-filings/default.aspx

Apple Inc. (2025). European Digital Markets Act (DMA). Apple Legal. https://www.apple.com/legal/dma/

Authority for Consumers and Markets (ACM). (2022). ACM: Apple must allow alternative payment systems for dating apps. https://www.acm.nl/en/publications/acm-apple-changes-unfair-conditions-allows-alternative-payments-methods-dating-apps

European Commission. (2022). Regulation (EU) 2022/1925 — Digital Markets Act. Official Journal of the European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R1925

European Commission. (2023, September 5). Commission designates Apple as gatekeeper under the Digital Markets Act. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_4328

European Commission. (2024, June 24). Commission sends preliminary findings to Apple under the Digital Markets Act. https://digital-markets-act.ec.europa.eu/commission-sends-preliminary-findings-apple-and-opens-additional-non-compliance-investigation-2024-06-24_en

European Commission. (2025, April 22). Commission finds Apple and Meta in breach of the Digital Markets Act. https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1085

Hunton Andrews Kurth. (2025, April 25). European Commission fines Apple and Meta for non-compliance with the DMA. https://www.hunton.com/privacy-and-information-security-law/european-commission-fines-apple-and-meta-for-non-compliance-with-the-dma

Organisation for Economic Co-operation and Development (OECD). (2021). Competition policy in the digital age. OECD Publishing. https://www.oecd.org/competition/competition-policy-in-the-digital-age.htm

Parker, G., Van Alstyne, M., & Choudary, S. P. (2016). Platform revolution: How networked markets are transforming the economy. W. W. Norton & Company.

Perkins Coie. (2025, June 5). European Commission finds Apple's steering practices breach the DMA. https://perkinscoie.com/insights/update/european-commission-finds-apples-steering-practices-breach-dma

Rochet, J. C., & Tirole, J. (2003). Platform competition in two-sided markets. Journal of the European Economic Association, 1(4), 990–1029. https://doi.org/10.1162/154247603322493212

Statista. (2024). Number of active Apple devices worldwide. Statista Research Department. https://www.statista.com/statistics/802090/worldwide-apple-devices-active/

United Arab Emirates. (2023). Federal Decree-Law No. (36) of 2023 regulating competition. UAE Ministry of Economy. https://www.moet.gov.ae/en/home

United Nations Economic and Social Commission for Western Asia (ESCWA). (2024). Arab business legislative frameworks 2023. United Nations. https://www.unescwa.org/publications/arab-business-legislative-frameworks-2023

US District Court, Northern District of California. (2021). Epic Games, Inc. v. Apple Inc., Case No. 4:20-cv-05640-YGR.