

# Apple's Global App Store Ecosystem and Its Growth, 2025

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June 2026

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## Summary

### Section 1

Billings and sales facilitated by the App Store ecosystem globally in 2025 and recent changes

### Section 2

Regional breakouts and recent dynamics

The App Store is at the heart of a large ecosystem of millions of apps available to more than a billion users worldwide. In 2025, the App Store ecosystem facilitated over **\$1.4 trillion** in billings and sales across the globe.<sup>1</sup>

The App Store ecosystem keeps growing year after year. Over the past six years, the global economic activity facilitated by the App Store ecosystem has more than doubled, as users continue to use apps to purchase groceries, improve productivity, maintain fitness and health, or stay connected with friends and family. And with recent advances in AI technology and tools, new and existing iOS apps beyond AI assistants are incorporating AI features and capabilities, expanding the scope of goods and services available to consumers on iOS now, with more to come in the future. In 2025, more than 40 apps in the top 100 apps based on App Store billings included consumer-facing AI features. Compared to the growth of other top 100 apps, these apps with consumer-facing AI features saw 4 times higher growth in billings in 2025.

Across a wide range of app categories, billings and sales facilitated by the App Store have grown significantly since 2019: digital goods and services more than doubled (2.4x) – driven in part by growth in photo and video editing apps and enterprise apps; physical goods and services nearly tripled (2.8x) – driven in part by increased demand for in-app food and grocery orders; as did in-app advertising revenue (2.9x) from ads placed by developers in their apps on iOS devices.

The overall global growth of the App Store ecosystem was also reflected at a regional level: billings and sales in the US, China, and Europe all doubled, or more, since 2019. The sustained growth of the App Store ecosystem around the world underscores its role as a trusted marketplace that enables developers to reach a large base of users who, in turn, benefit from a wide array of innovative apps.

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<sup>1</sup> The term App Store ecosystem refers to iOS apps downloaded through the App Store. For simplicity and to be consistent with language used in previous studies, it also includes a small number of downloads from alternative app marketplaces or direct downloads from developers' websites that can occur in some jurisdictions, as those apps continue to rely on services provided by Apple.

## The App Store ecosystem globally in 2025

In 2025, the App Store ecosystem facilitated more than \$1.4 trillion in billings and sales worldwide.

Of this total, \$149 billion, or approximately 10%, was attributable to digital goods and services and \$1.1 trillion, or about 79%, came from sales of physical goods and services. In-app advertising revenue from ads placed by developers in their apps on iOS devices accounted for an additional \$151 billion, or roughly 10% of the total. (See **Table 1**.)

**Table 1: Estimated Billings and Sales Facilitated by the App Store Ecosystem Worldwide, 2025 (\$ Billions)\***

<b>Digital Goods and Services**</b>	<b>\$149</b>	<b>10%</b>
<b>Physical Goods and Services***</b>	<b>\$1,137</b>	<b>79%</b>
<b>M-Commerce</b>		
General Retail	\$673	47%
Travel	\$165	12%
Food Delivery and Pickup	\$120	8%
Grocery	\$98	7%
Ride Hailing	\$64	4%
<b>Digital Payment</b>	\$16	1%
<b>In-App Advertising****</b>	<b>\$151</b>	<b>10%</b>
<b>Total</b>	<b>\$1,437</b>	<b>100%</b>

\* Totals may not sum due to rounding. Estimates may not be directly comparable to previous reports due to periodic updates made by third-party sources. Revisions to third-party sources are typically related to incorporating new, higher-quality data sources, adjusting the weights assigned to different sources, or updating foreign-exchange rate assumptions.

\*\* Billings and sales from digital goods and services are not the same as App Store billings. Sales from digital goods and services purchased elsewhere but used on apps on Apple devices are included, while billings from in-app purchases made via the App Store but used elsewhere are excluded. The estimate relies on third-party sources and Apple data. See Appendix for details.

\*\*\* Sales from physical goods and services rely on estimates from third-party sources. M-commerce refers to purchases made on mobile devices (mobile commerce). For general retail and grocery, total e-commerce and m-commerce sales are based on EMARKETER, "Country Retail eCommerce and mCommerce Sales". See Appendix for details.

\*\*\*\* iOS in-app ad revenue is from ads placed by developers in their apps; it does not include ad-network or other ad-tech revenue, advertising on mobile web, or search ads.

Within digital goods and services, the largest contributing categories of apps were games, enterprise apps, and video streaming apps. Within physical goods and services, general retail was the largest subcategory, comprising 47% of the total, followed by travel at 12%, and food delivery and pickup at 8%. Those magnitudes are roughly similar to last year's. This year, travel, food delivery and pickup, grocery, digital goods and services, and in-app advertising all contributed to the total in roughly similar magnitude.

### Definitions of Billings and Sales

"Billings" refers to payments for paid downloads and in-app purchases, including subscriptions, that use Apple's in-app purchase system. "Sales" refers to money spent by customers purchasing goods and services in general. We use the term "facilitated" to include the various ways in which apps contribute to generating billings and sales.

### Methodology

"iOS apps" include apps on iPhone and iPad devices. Apps developed by Apple, such as Apple Music, as well as mobile browser apps, such as Google Chrome, are excluded from this analysis. Categories as presented in this report do not reflect App Store categories.

### In-App Ad Sales

Estimates of in-app ad sales for iOS apps include revenue generated from the publishing of advertisements by developers within apps only. Estimates do not include ad-network or other ad-tech revenue, advertising on mobile web (such as on mobile browser apps) or search advertising.

Apple collected no commission on more than 90% of the \$1.4 trillion in billings and sales facilitated by the App Store ecosystem globally. (See Appendix Table 1 for further methodological details.)

Apple does not collect a commission on purchases of **digital goods and services that are initiated outside of apps**<sup>2</sup> (e.g., purchasing a subscription to a newspaper directly through a web browser), on purchases of **physical goods and services through apps** (e.g., when a user pays for a ride on a ride-hailing app or buys groceries online), or on **in-app ad revenue** (e.g., ad revenue for ads purchased by advertisers outside the app and placed by developers in the app using ad network APIs). Developers also have the option to monetize digital goods and services outside the App Store through webstores and direct-to-consumer offerings with no commission to Apple.

While the present analysis captures the major app monetization strategies available to developers (see **Estimating the size of the App Store ecosystem**), the full economic impact of the App Store ecosystem extends beyond the estimates provided in this report, as the current methodology does not capture all of the ways in which the App Store ecosystem facilitates sales, or all of the benefits created by apps. For example, the App Store supports “companion apps” that raise the value of a company’s goods and services, including smart home apps and health apps. In addition, many apps now use different monetization strategies. As such, this analysis does not account for all the ways in which the App Store ecosystem creates value.

### Estimating the size of the App Store ecosystem

This study relies on the methodology to estimate the billings and sales facilitated by the App Store from the studies conducted by Borck, Burley, Caminade, Fradkin, and von Wartburg ([How Large Is the Apple App Store Ecosystem?, A Global Perspective on the Apple App Store Ecosystem](#), [The Continued Growth and Resilience of Apple’s App Store Ecosystem](#), and [The Global App Store and Its Growth](#)). Due to retroactive changes made to third-party data sources, some numbers in this report have been updated for accuracy and may differ from previous studies.

Consistent with past studies, in this report, the direct monetization of apps represents a small fraction of the overall commerce the App Store facilitates, because developers can monetize their apps in several ways that do not involve transacting through the App Store, such as:

1. Selling digital goods and services outside of the App Store for use within apps on Apple devices (e.g., news and magazine subscriptions, music and video streaming)
2. Selling physical goods and services through apps on Apple devices (e.g., food and grocery delivery or ride hailing)
3. Offering ad-supported content within apps (e.g., ad-supported games)

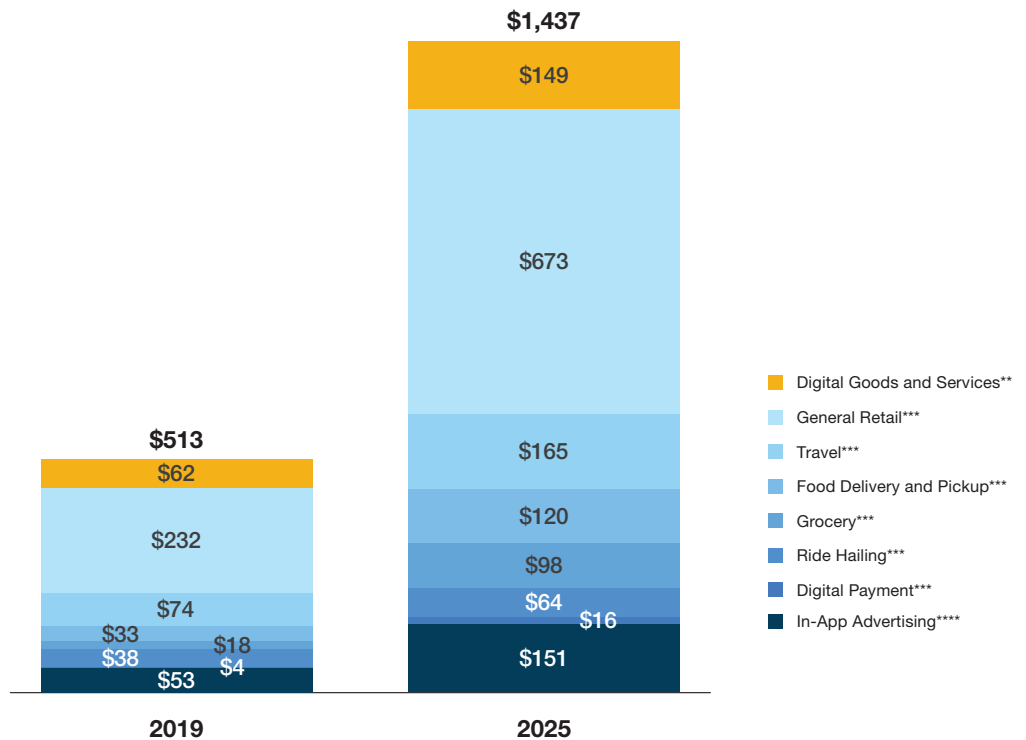
A complete description of the methodology used in this report is included in the Appendix.

<sup>2</sup> In 2025, transactions facilitated by certain in-app links may have been subject to a reduced commission, depending on the jurisdiction.

## The growth in the App Store ecosystem globally, 2019 to 2025

Over the past six years, the size of the App Store ecosystem **has nearly tripled, from \$513 billion in 2019 to more than \$1.4 trillion in 2025.**<sup>3</sup> (See **Figure 1.**) This growth reflects the increased use of apps for all aspects of everyday life – productivity, retail purchases, and grocery delivery, among others. More recently, advances in generative AI tools and technologies have enhanced the features and functionalities of iOS apps available to users.<sup>1</sup>

**Figure 1: Estimated Billings and Sales Facilitated by the App Store Ecosystem by App Category, 2019 to 2025 (\$ Billions)\***



\* Totals may not sum due to rounding. 2019 estimates are based on retroactively updated numbers from third-party data.

\*\* Billings and sales from digital goods and services are not the same as App Store billings. Sales from digital goods and services purchased elsewhere but used on apps on Apple devices are included, while billings from in-app purchases made via the App Store but used elsewhere are excluded. The estimate relies on third-party sources and Apple data. See Appendix for details.

\*\*\* Sales from physical goods and services rely on estimates from third-party sources. M-commerce refers to purchases made on mobile devices (mobile commerce). For general retail and grocery, total e-commerce and m-commerce sales are based on EMARKETER, "Country Retail eCommerce and mCommerce Sales". See Appendix for details.

\*\*\*\* iOS in-app ad revenue is from ads placed by developers in their apps; it does not include ad-network or other ad-tech revenue, advertising on mobile web, or search ads.

<sup>3</sup> We report changes over the six-year period from 2019 to 2025, rather than the five-year period from 2020 to 2025, to reduce the influence of COVID-related distortions in 2020, which affected app usage, consumer behavior, and broader economic activity.

Since 2019, spending on digital goods and services has more than doubled while physical goods and services and in-app advertising have almost tripled (see **Table 2**). Within in-app advertising, the growth was driven by advertising in non-gaming apps.

**Table 2: Estimated Changes in Billings and Sales Facilitated by the App Store Ecosystem Worldwide Since 2019\***

	Change 2019 to 2025
<b>Digital Goods and Services**</b>	<b>+141%</b>
<b>Physical Goods and Services***</b>	<b>+185%</b>
<b>M-Commerce</b>	
General Retail	+190%
Travel	+123%
Food Delivery and Pickup	+264%
Grocery	+437%
Ride Hailing	+69%
<b>Digital Payment</b>	<b>+354%</b>
<b>In-App Advertising****</b>	<b>+186%</b>
<b>Total</b>	<b>+180%</b>

- \* Changes are based on retroactively updated numbers from third-party data. See Appendix for more details.
- \*\* Billings and sales from digital goods and services are not the same as App Store billings. Sales from digital goods and services purchased elsewhere but used on apps on Apple devices are included, while billings from in-app purchases made via the App Store but used elsewhere are excluded. The estimate relies on third-party sources and Apple data. See Appendix for details.
- \*\*\* Sales from physical goods and services rely on estimates from third-party sources. M-commerce refers to purchases made on mobile devices (mobile commerce). For general retail and grocery, total e-commerce and m-commerce sales are based on EMARKETER, "Country Retail eCommerce and mCommerce Sales". See Appendix for details.
- \*\*\*\* iOS in-app ad revenue is from ads placed by developers in their apps; it does not include ad-network or other ad-tech revenue, advertising on mobile web, or search ads.

Within digital goods and services, the growth was largely driven by photo and video editing apps and enterprise apps (e.g., MS Office and Slack). App based entertainment, education, and fitness apps also experienced substantial growth.

Within physical goods and services, grocery spending has grown more than fivefold since 2019, extending trends that began during the pandemic. Digital payments have grown more than fourfold since 2019, as apps like Venmo and Cash App have become more widely used for peer-to-peer transfers and other app-based payments.

A recent and rapidly evolving trend touching iOS apps in both the digital and physical goods and services categories has been innovation driven by advances in generative AI technology and tools.<sup>iv</sup> Beyond the surge in popularity of AI assistants, many iOS apps have incorporated AI technology and tools to introduce new AI-enabled features and capabilities and more personalized, intuitive experiences that enhance how users discover and engage with goods and services. (See **The rise of AI-enabled features and capabilities in iOS apps**.) Developers are also increasingly relying on agentic coding. (See sidebar on **Agentic coding**.) In 2025, more than 40 apps in the top 100 apps based on App Store billings included consumer-facing AI features. Compared with the growth of other top 100 apps, these apps with consumer-facing AI features saw 4 times higher growth in billings in 2025.

### Agentic coding

Agentic coding tools are AI systems that can independently generate, iterate on, and debug code.<sup>ii</sup> Recent advances in agentic coding tools are lowering the barriers to building and maintaining apps. Individual developers and small teams are increasingly able to launch and scale apps with fewer resources. Faster iteration is also enabling more experimentation.<sup>iii</sup> Apple's Xcode 26 now includes features that directly support agentic coding.

## Apple's AI tools and technologies

Apple provides over a dozen AI tools and technologies to developers, such as:

**The Foundation Models framework**, which allows developers to tap into Apple's on-device model for intelligent features in their apps.

**Writing Tools**, which provide access to native AI-text enhancement features (proofreading, summarizing, tone adjustment) in developers' apps.

**Image Playground**, which developers can integrate into their apps allowing users to create images from a description or photo.

For more details, see: [www.apple.com/apple-intelligence](http://www.apple.com/apple-intelligence)

## The rise of AI-enabled features and capabilities in iOS apps

Around the world, large and small developers are integrating AI technologies into their apps, using both third-party technologies—such as Claude from Anthropic, or image-generation models from Stability AI and Midjourney—as well as Apple's tools that leverage on-device capabilities (e.g., Foundation Models).<sup>v</sup> (See sidebar on **Apple's AI tools and technologies**.) Thanks to AI-enabled features, developers have added new features to existing apps or built entirely new apps, that provide enhanced functionality and new or improved user experiences across a wide range of app categories. These AI advancements are also enabling new value-added services for users.

### Examples of entirely new apps integrating AI:<sup>4</sup>



**Daydream: AI for Fashion:** Launched exclusively on iOS in 2025, Daydream uses native AI to act as an intelligent digital personal stylist. Users can upload images and use Daydream's "chat to shop" conversational interface to discover new clothing and find outfits for every occasion. Daydream leverages AI to make personalized recommendations based on style preferences and budget, across thousands of brands, and taps into visual intelligence to allow users to find inspiration from their own screenshots.<sup>vi</sup>



**Capy – AI Meeting Translator (2025 Apple Design Award Finalist):** Launched in 2024, Capy is an AI-powered meeting translator app that transcribes and translates meetings in real time into more than a dozen languages, including Spanish, Simplified Chinese, and German. It provides clear and concise AI summaries for users' meeting notes.<sup>vii</sup>

### Examples of apps using AI tools or technologies to offer new features:



**MusicSmart – Liner Notes:** MusicSmart aggregates music knowledge from various sources to allow users to learn about the writers, collaborators, vocalists, engineers, and others who worked on a given track. Powered by Apple Foundation Models, MusicSmart's Credit Summaries feature summarizes music credits from liner notes into a streamlined, easy-to-read format.<sup>viii</sup>



**Linearity Curve Graphic Design (Editors' Choice):** Linearity Curve is an AI-enhanced graphic design and vector illustration app that helps users create digital artwork. The app integrates several AI-powered tools such as text-to-image generation, automatic background removal, and image vectorization, alongside traditional design tools to create and refine original visual content.<sup>ix</sup>

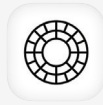
<sup>4</sup> The case studies discuss how apps and developers are using AI tools and technologies as of the date of this report.

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### Examples of apps enabling new value-add services for users:

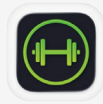


**Goodnotes (2022 App Store Award winner):** Goodnotes is a note-taking app that replaces physical notebooks with a digital workspace.<sup>x</sup> Designed primarily for tablets, it allows users to handwrite, sketch, and annotate PDF documents. Its AI features are available through subscription and support tasks such as handwriting spellcheck, math assistance, and content creation.<sup>xi</sup>



**VSCO: Photo and Video Editor:** VSCO is a creative platform built for photographers that combines professional-grade editing tools, a curated preset library, and AI-powered capabilities that help photographers shoot, edit, and share their work. VSCO also offers photographer-focused community features, portfolio tools, and search and discovery capabilities designed to help creators build an audience around their work.<sup>xii</sup> VSCO is available for free to users discovering photography and with a membership tier for photographers who want the full experience.<sup>xiii</sup>

### Examples of apps using Apple's AI tools and technologies:



**SmartGym (2023 App Store Award winner):** SmartGym delivers an intelligent fitness experience powered by Apple's Foundation Models to build and adjust workouts based on goals, equipment, schedule and performance. The app allows users to ask questions and receive instant advice on form, variations, and muscle engagement.<sup>xiv</sup>



**Triplt:** Triplt is a travel planner app for trip and itinerary organization. Using Apple Foundation Models, Triplt organizes information across multiple providers into a single shareable timeline that updates in real time as plans change. Beyond itinerary management, Triplt includes features like flight alerts, interactive maps, and collaborative trip sharing.<sup>xv</sup>

## Regional dynamics on the App Store ecosystem in 2025

Looking across regions, in 2025, billings and sales facilitated by the App Store ecosystem totaled \$453 billion in the US, \$562 billion in China, \$184 billion in Europe, and \$52 billion in Japan.<sup>5</sup> (See **Table 3**.)

Physical goods and services accounted for the majority of total billings and sales in every region. In China, general retail reached \$363 billion, 65% of China's total billings and sales. In the US, general retail made up 37% of its total billings and sales, in Europe it made up 37%, and in Japan it made up 22%. Travel was the second largest category of spending in physical goods and services in the US, Europe, and Japan, while in China, travel came in fourth after grocery and food delivery and pickup. In China, new entrants in the grocery and food delivery market such as Jingdong in 2025 competed heavily against large food delivery platforms such as Meituan.<sup>xvi</sup>

In terms of total billings and sales, both the digital goods and services category and the in-app advertising category were largest in the US, compared with elsewhere in the world. Compared to other regions, billings and sales of digital goods and services represented a higher share of the total in Japan, with 28% of overall spending. In the US and Europe, digital goods and services represented closer to 15% of overall spending.

**Table 3: Estimated Billings and Sales Facilitated by the App Store Ecosystem, By Region, 2025 (\$ Billions)\***

	US	China	Europe	Japan
<b>Digital Goods and Services**</b>	<b>\$62</b>	<b>\$21</b>	<b>\$24</b>	<b>\$15</b>
<b>Physical Goods and Services***</b>	<b>\$320</b>	<b>\$511</b>	<b>\$135</b>	<b>\$31</b>
<b>M-Commerce</b>				
General Retail	\$167	\$363	\$68	\$11
Travel	\$50	\$36	\$37	\$9
Food Delivery and Pickup	\$42	\$43	\$13	\$2
Grocery	\$17	\$49	\$10	\$8
Ride Hailing	\$34	\$14	\$6	\$1
<b>Digital Payment</b>	\$11	\$5	-	-
<b>In-App Advertising****</b>	<b>\$71</b>	<b>\$29</b>	<b>\$25</b>	<b>\$6</b>
<b>Total</b>	<b>\$453</b>	<b>\$562</b>	<b>\$184</b>	<b>\$52</b>

\* Totals may not sum due to rounding. Regional estimates may not be directly comparable to previous reports due to periodic updates made by third-party sources. Revisions to third-party sources are typically related to incorporating new, higher-quality data sources, adjusting the weights assigned to different sources, or updating foreign-exchange rate assumptions.

\*\* Billings and sales from digital goods and services are not the same as App Store billings. Sales from digital goods and services purchased elsewhere but used on apps on Apple devices are included, while billings from in-app purchases made via the App Store but used elsewhere are excluded. The estimate relies on third-party sources and Apple data. See Appendix for details.

\*\*\* Sales from physical goods and services rely on estimates from third-party sources. M-commerce refers to purchases made on mobile devices (mobile commerce). For general retail and grocery, total e-commerce and m-commerce sales are based on EMARKETER, "Country Retail eCommerce and mCommerce Sales". See Appendix for details.

\*\*\*\* iOS in-app ad revenue is from ads placed by developers in their apps; it does not include ad-network or other ad-tech revenue, advertising on mobile web, or search ads.

<sup>5</sup> Throughout the report, China refers to Greater China. Estimates for Europe include countries in Western, Central, and Eastern Europe (including the UK and the Nordic Region, not including Russia).

Within Europe, looking across the UK, Germany, France, Italy, and Spain, the App Store ecosystem facilitated the highest billings and sales in the UK (\$61 billion), driven in part by the UK's higher iOS market share. Physical goods and services accounted for the majority of billings and sales in all five European countries considered, and general retail was the largest subcategory within physical goods and services in the UK, Germany, France, and Spain. In Italy, travel was the largest subcategory within physical goods and services. Travel consistently ranked as the second largest category across the UK, Germany, France, and Spain, while general retail was the second largest category in Italy. Food delivery and pickup was the third largest category in the UK and Germany whereas grocery was the third largest category in France, Italy, and Spain. (See **Table 4**.)

**Table 4: Estimated Billings and Sales Facilitated by the App Store Ecosystem Select European Countries, 2025 (\$ Billions)\***

	UK	Germany	France	Italy	Spain
<b>Digital Goods and Services**</b>	<b>\$6.7</b>	<b>\$4.4</b>	<b>\$2.5</b>	<b>\$1.3</b>	<b>\$0.9</b>
<b>Physical Goods and Services***</b>	<b>\$46.4</b>	<b>\$18.6</b>	<b>\$8.5</b>	<b>\$4.4</b>	<b>\$5.0</b>
<b>M-Commerce</b>					
General Retail	\$25.2	\$7.6	\$4.6	\$1.5	\$2.2
Travel	\$9.1	\$6.7	\$2.2	\$1.8	\$1.9
Food Delivery and Pickup	\$6.7	\$2.3	\$0.5	\$0.3	\$0.2
Grocery	\$2.8	\$1.3	\$0.7	\$0.6	\$0.5
Ride Hailing	\$2.6	\$0.6	\$0.5	\$0.1	\$0.2
<b>In-App Advertising****</b>	<b>\$8.0</b>	<b>\$4.0</b>	<b>\$2.9</b>	<b>\$1.1</b>	<b>\$0.7</b>
<b>Total</b>	<b>\$61.1</b>	<b>\$27.0</b>	<b>\$14.0</b>	<b>\$6.8</b>	<b>\$6.6</b>

\* Totals may not sum due to rounding. Regional estimates may not be directly comparable to previous reports due to periodic updates made by third-party sources. Revisions to third-party sources are typically related to incorporating new, higher-quality data sources, adjusting the weights assigned to different sources, or updating foreign-exchange rate assumptions.

\*\* Billings and sales from digital goods and services are not the same as App Store billings. Sales from digital goods and services purchased elsewhere but used on apps on Apple devices are included, while billings from in-app purchases made via the App Store but used elsewhere are excluded. The estimate relies on third-party sources and Apple data. See Appendix for details.

\*\*\* Sales from physical goods and services rely on estimates from third-party sources. M-commerce refers to purchases made on mobile devices (mobile commerce). For general retail and grocery, total e-commerce and m-commerce sales are based on EMARKETER, "Country Retail eCommerce and mCommerce Sales". See Appendix for details.

\*\*\*\* iOS in-app ad revenue is from ads placed by developers in their apps; it does not include ad-network or other ad-tech revenue, advertising on mobile web, or search ads.

Across Korea, Australia and New Zealand, and Brazil, physical goods and services accounted for the majority of total billings and sales. Food delivery and pickup was the second largest subcategory in physical goods and services in Korea, followed by travel and grocery. By contrast, in Australia and New Zealand travel ranked ahead of food delivery and pickup and grocery. In Brazil, travel was also the second largest subcategory, and was very closely followed by food delivery and pickup. (See **Table 5**.)

**Table 5: Estimated Billings and Sales Facilitated by the App Store Ecosystem, Select Countries and Regions, 2025 (\$ Billions)\***

	Korea	Australia & New Zealand	Brazil
<b>Digital Goods and Services**</b>	<b>\$2.6</b>	<b>\$3.5</b>	<b>\$1.4</b>
<b>Physical Goods and Services***</b>	<b>\$22.7</b>	<b>\$13.9</b>	<b>\$7.4</b>
<b>M-Commerce</b>			
General Retail	\$12.5	\$5.1	\$4.2
Travel	\$3.0	\$4.7	\$1.3
Food Delivery and Pickup	\$4.3	\$1.1	\$1.2
Grocery	\$2.5	\$1.8	\$0.3
Ride Hailing	\$0.4	\$1.1	\$0.4
<b>In-App Advertising****</b>	<b>\$1.5</b>	<b>\$3.1</b>	<b>\$1.2</b>
<b>Total</b>	<b>\$26.8</b>	<b>\$20.5</b>	<b>\$10.0</b>

- \* Totals may not sum due to rounding. Regional estimates may not be directly comparable to previous reports due to periodic updates made by third-party sources. Revisions to third-party sources are typically related to incorporating new, higher-quality data sources, adjusting the weights assigned to different sources, or updating foreign-exchange rate assumptions.
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- \*\*\*\* iOS in-app ad revenue is from ads placed by developers in their apps; it does not include ad-network or other ad-tech revenue, advertising on mobile web, or search ads.

### *Regional trends (2019 to 2025)*

Growth in billings and sales facilitated by the App Store ecosystem was substantial and broad-based across digital goods and services, physical goods and services, and in-app advertising in the US, China, and Europe between 2019 and 2025. (See **Table 6.**)

Within physical goods and services, growth varied significantly by category and region. In the US, billings and sales in digital payment increased by more than twelvefold since 2019, far outpacing other categories, driven by the increasing adoption of mobile and contactless payments such as Venmo and Cash App. In China, grocery saw the strongest growth at almost 6.6x especially in urban areas where shoppers increasingly demand fast delivery of fresh produce or daily staples.<sup>xviii</sup> In Europe, general retail, food delivery and pickup, and grocery all grew by roughly the same magnitude.

**Table 6: Estimated Changes in Billings and Sales Facilitated by the App Store Ecosystem, Select Regions Since 2019\***

	US	China	Europe
<b>Digital Goods and Services**</b>	<b>+190%</b>	<b>+55%</b>	<b>+290%</b>
<b>Physical Goods and Services***</b>	<b>+244%</b>	<b>+140%</b>	<b>+230%</b>
<b>M-Commerce</b>			
General Retail	+369%	+127%	+280%
Travel	+160%	+60%	+178%
Food Delivery and Pickup	+252%	+210%	+274%
Grocery	+426%	+557%	+266%
Ride Hailing	+54%	+104%	+92%
<b>Digital Payment</b>	<b>+1104%</b>	<b>+103%</b>	<b>-</b>
<b>In-App Advertising****</b>	<b>+182%</b>	<b>+173%</b>	<b>+206%</b>
<b>Total</b>	<b>+225%</b>	<b>+136%</b>	<b>+233%</b>

\* Changes are based on retroactively updated numbers from third-party data. See Appendix for more details.

\*\* Billings and sales from digital goods and services are not the same as App Store billings. Sales from digital goods and services purchased elsewhere but used on apps on Apple devices are included, while billings from in-app purchases made via the App Store but used elsewhere are excluded. The estimate relies on third-party sources and Apple data. See Appendix for details.

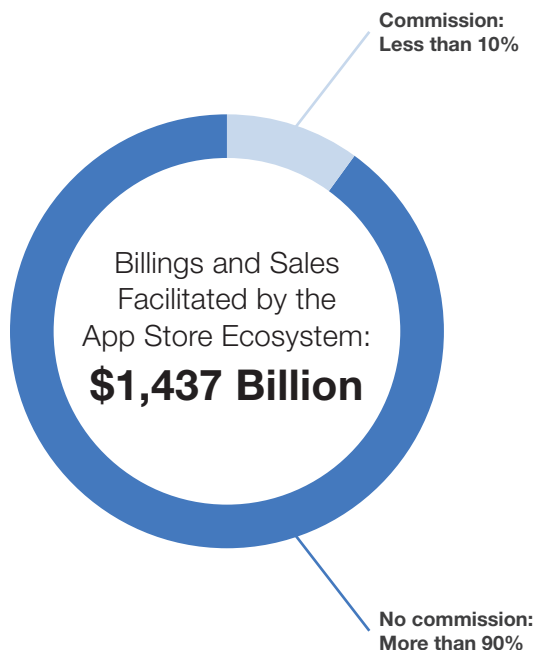
\*\*\* Sales from physical goods and services rely on estimates from third-party sources. M-commerce refers to purchases made on mobile devices (mobile commerce). For general retail and grocery, total e-commerce and m-commerce sales are based on EMARKETER, "Country Retail eCommerce and mCommerce Sales". See Appendix for details.

\*\*\*\* iOS in-app ad revenue is from ads placed by developers in their apps; it does not include ad-network or other ad-tech revenue, advertising on mobile web, or search ads.

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## Appendix

**Appendix Table 1: Breakdown of Where Apple Collects a Commission on Billings and Sales Facilitated by the App Store**



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Apple collects a commission on:

- **Digital goods and services** that are purchased *in or through* the App Store, for example:
  - \* In-app subscriptions to music streaming apps like Pandora
  - \* In-app subscriptions to education apps like Duolingo
  - \* In-app purchases of games' bonus features

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Apple does not collect a commission on:

- **Digital goods and services** that are purchased outside of the App Store, for example:
  - \* Subscriptions to multiplatform video streaming apps like Hulu
  - \* Subscriptions to audiobook apps like Audible
  - \* Subscriptions to music streaming apps like Spotify
  - \* Subscriptions to news and magazine apps like the NY Times
- **Physical goods and services** ordered within-app, for example:
  - \* Ordering a ride through the Uber app
  - \* Placing an order on the Amazon app
  - \* Ordering grocery delivery through Instacart
  - \* Transaction fees on digital payments occurring through apps
- **In-app advertising** for apps that make money through in-app advertising, for example:
  - \* Non-gaming apps like Pinterest and YouTube
  - \* Gaming apps like Rolly Vortex and Helix Jump

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## *Methodological approach*

The study considers three primary app monetization strategies that developers rely on:

- **First, to sell and distribute digital goods and services.** Sales and distribution of digital goods and services can occur through the App Store in the form of paid app downloads and in-app purchases, through linking out to webstores where content is consumed in-app but payments are made outside of the App Store, or through the sale of digital content and subscriptions from multi-platform apps that allow for the use and consumption of the app, both in the App Store ecosystem and elsewhere. Examples of apps using this monetization strategy include those for gaming, dating, video and music streaming, fitness and health, and news and magazines.
- **Second, to sell physical goods and services through the app.** Apps using this monetization strategy are e-commerce apps generally, including apps for ride hailing, food delivery and pickup, grocery delivery and pickup, general retail, and travel, as well as digital payment apps.
- **Third, to sell in-app advertising.** Examples of apps using in-app advertising as their primary monetization strategy are social network and short video sharing apps.

Different methodologies and data sources are used to estimate billings and sales facilitated by the App Store ecosystem for each of these monetization strategies. Data sources include data from Apple, app analytics companies, market research firms, and individual companies. To ensure the reliability and robustness of the estimates, key inputs are validated and compared from different data sources and updated over time if needed.

As a result, the estimates in this report may differ from those presented in previous years' reports due to methodological improvements and adjustments for changes in underlying third-party data. Where and when applicable, the reliance on updated estimates is noted in this report.

While this analysis captures the major app monetization strategies, it does not capture all of the ways in which the App Store ecosystem facilitates sales or all of the benefits created by apps. For example, it does not capture benefits that companies derive from “companion apps” that raise the value of their goods and services, including smart home apps and health apps. Apps developed by Apple, such as Apple Music, as well as mobile browser apps, such as Google Chrome, are excluded from this analysis.

### Apple's commission structure

The App Store's commission rate is 30%, but most app developers selling digital goods and services are eligible to pay a reduced rate of 15% on sales made via in-app purchases or paid downloads (for example, through the Small Business Program and the Video Partner Program).<sup>6</sup>

In 2025, the App Store's commission rate and transactions facilitated by certain in-app links may have been subject to a reduced commission, depending on the jurisdiction.

## Sales and distribution of digital goods and services

Developers can choose to monetize their iOS apps in several ways, which has implications for the appropriate way to estimate total sales that the App Store facilitates. For example, some developers can choose to monetize their iOS apps only through the App Store, and those apps can only be used on the iOS platform. For these types of apps, App Store billings are equivalent to sales generated by the app.<sup>7</sup> For iOS apps that sell digital goods and services only through the App Store, this study counts total billings, which include Apple's commission (see sidebar on **Apple's commission structure**). Billings represent the total amount customers pay.

Other developers may choose to monetize their iOS apps outside of the App Store – through the reader rule for instance – while the content is consumed on an iOS app. Some monetize both through the App Store and other platforms or devices, and the app content can be consumed on multiple devices. In both cases, purchases and consumption need not be platform specific, and therefore purchases may not reflect where the consumption of the product or service occurs. For games, this year our methodology has been updated to account for spending on games purchased outside the App Store and consumed within iOS apps. We use data from AppMagic on direct-to-consumer revenue and total in-app billings (App Store and Play Store) to calculate the ratio of direct-to-consumer revenue to in-app billings.<sup>xviii</sup> This ratio is then used to adjust upward our estimate for games that is based on App Store billings.

In the case of multiplatform apps that have digital content that can be consumed either in-app or on another device, to illustrate why App Store purchases may not adequately reflect consumption, consider for example a subscription to the video streaming service Netflix.<sup>8</sup> A user can purchase a subscription to Netflix on their desktop or mobile browser, for example, but watch most of the content through the Netflix app on iOS devices. In this instance, App Store billings would be zero and would understate the value of the Netflix product enjoyed through apps on Apple devices.

When purchase and use differ significantly, App Store billings do not reliably measure engagement with iOS apps, and a different approach is used for attributing the appropriate share of billings and sales to the App Store ecosystem. In those cases, estimates rely on the proportion of use that occurs on apps in the App Store ecosystem to estimate how much of the total sales of multi-platform apps (App Store plus non-App Store) is facilitated by the App Store ecosystem.

This study estimates the volume of sales facilitated by the App Store ecosystem for several categories of apps: video streaming, music streaming, e-books and audiobooks,

6 Since 2021, all new developers and developers who earned up to \$1 million USD on the App Store in the prior calendar year are eligible to enroll in the Small Business Program. Aside from the Small Business Program and the Video Partner Program—for qualifying streaming services—other programs and policies through which Apple offers a reduced commission rate include the Apple Reader Rule, where apps can apply for the External Link Account Entitlement program and users can manage their account and content outside of the app, and the News Partner Program—for subscription news publications that provide their content to Apple News. For subscriptions, Apple's commission rate is 30% for the first year and 15% in subsequent years.

7 In some jurisdictions apps can now be distributed through alternative app marketplaces or direct downloads from developers' websites. For categories in which we rely exclusively on App Store billings, we may be underestimating total billings and sales, however, at this time the impact is unlikely to meaningfully impact the report's results. Further refinements to our methodology will be considered as needed.

8 The apps mentioned throughout this report may not be available in all App Stores due to regional restrictions or other factors, including the developer's discretion or the specific location of their business operations.

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newspapers and magazines, and enterprise. This study also considers variation in users' app consumption habits across categories, using third-party research. For example, consumers often listen to audiobooks through apps on mobile devices, but are more likely to stream videos on smart TVs. Additionally, when the data is available, variation in the consumption patterns of iOS (and non-iOS) users by app type is taken into account. Estimates of total sales rely on inputs from third-party sources, typically market research firms.<sup>xix</sup> The sales are apportioned using the share of content consumed in apps on any platform, based on information collected from marketing surveys, company reports, or data on usage patterns.<sup>xx</sup> Finally, usage is apportioned to Apple iOS devices specifically using the iOS market share for each device category in each respective country.<sup>xxi</sup>

Enterprise apps, which allow businesses and organizations to provide tools and capabilities on smartphones and tablets, are treated differently than consumer apps. Usage patterns are more heterogeneous for enterprise apps than for consumer apps, and app- and desktop-based usage of enterprise products tend to be more integrated. We estimate sales separately for major enterprise apps or families of apps – Microsoft Office 365, Google Workspace (i.e., enterprise versions of Google productivity tools such as Gmail and Google Docs), Adobe (Acrobat), Dropbox, Box, Webex, Zoom, and Slack. We also include an aggregate market-level estimate for mobility management apps, which allow employees to securely access business content.

### *Sales of physical goods and services through the app*

Many developers monetize their apps by selling physical products through their apps. These include:

- Apps that let customers purchase physical goods and services. This study broadly refers to these as m-commerce apps.<sup>9</sup> The group includes apps for general retail, ride hailing, food delivery and pickup, grocery delivery, and travel.
- Apps that enable digital payments or transfers, such as peer-to-peer transfer apps.

#### *M-commerce*

Globally, mobile apps have become an increasingly popular e-commerce channel. Apps from retailers such as Amazon and Target allow consumers to browse and purchase physical goods directly in the app and arrange for delivery. In addition, mobile apps – including those for ride hailing, food delivery and pickup, grocery delivery and pickup, and mobile pickup ordering – have been central to the creation or expansion of certain business models.

Sales on m-commerce apps do not occur through Apple's in-app purchase system.<sup>10</sup> Third-party data are used to estimate the volume of sales of physical goods and services from transactions on mobile apps.<sup>11</sup> Results are provided for several categories of apps: general retail, food delivery and pickup, travel, grocery, and ride hailing.

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9 M-commerce refers to the buying or selling of goods and services on mobile devices, either through mobile apps or mobile browsers.

10 Since the launch of the App Store, Apple's policy has been to not charge a commission on sales of physical goods and services.

11 The sales associated with purchases made on mobile browser apps are excluded.

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For many of the m-commerce categories, this study relies on Statista’s Digital Market Outlook and Mobility Market Outlook data for online sales revenue. In 2022, Statista updated its methodology for estimating industry revenues by using current exchange rates, rather than fixed exchange rates, with the goal of being more accurate. As a result, its estimates for all years, including 2019 and 2024, were retroactively updated.

For general retail, total m-commerce sales estimates are based on EMARKETER data. For grocery in the US, total e-commerce sales estimates are also based on EMARKETER data. In 2025, EMARKETER updated its methodology for estimating e-commerce and m-commerce. As a result, its estimates for 2019 were retroactively updated. EMARKETER periodically updates its estimates for several reasons, including, but not limited to, incorporating new, higher-quality data sources, adjusting the weights assigned to different sources, and refreshing foreign exchange assumptions (i.e., changing the base year used in currency conversions).

For each app category, the total volume of e-commerce or m-commerce sales relies on estimates from third-party sources, typically market research firms.<sup>xxii</sup> This study then apportions the volume of sales, if necessary, to purchases that occur via smartphone and tablet apps. For example, for online food delivery and pickup, customers may place orders via an app, a mobile browser, or a desktop browser. The share of each app category’s sales that occurs via mobile apps is estimated using information collected from marketing surveys or data on usage patterns.<sup>xxiii</sup> Finally, usage attributable to Apple platforms is apportioned based on the overall iOS market share.<sup>12,xxiv</sup>

### **Digital payments**

Digital payment apps continue to become increasingly popular worldwide, although the landscape differs substantially across countries. In China, currently the largest market for digital payments, two QR code-based payment apps, Alipay and WeChat Pay, dominate both online and brick-and-mortar points of sale. These apps charge merchants a fee on purchases paid for with their apps. In the US, peer-to-peer transfer apps such as Venmo and Cash App are already popular and have grown significantly in recent years.

This study estimates transaction fees collected by developers from customers or merchants for payments and transfers made through apps on the iOS platform.<sup>13</sup> For peer-to-peer transfer apps in the US, we use the ratio of total transaction fees to total payment volume (TPV) from Venmo and Cash App to estimate the transaction fees collected by the apps. For QR code-based payment apps in China, we start with an estimate of TPV from a third-party research firm. We then estimate WeChat Pay and Alipay total transaction fees using their published fee rates and deductible policies. Finally, we apportion usage to Apple platforms based on data on the overall iOS share in each region.

### **In-app advertising**

In-app advertising is a frequently used and effective method of monetizing apps whereby developers publish advertisements within their apps. Prominent examples of apps that

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12 Apportioning by iOS market share almost certainly results in a conservative estimate because owners of iOS devices tend to spend relatively more than owners of Android devices.

13 This study excludes digital payment apps and services based on near-field communication, such as Apple Pay. Mobile commerce transactions that occur within an app and are paid with Apple Pay are included in m-commerce sales.

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make money primarily through in-app advertising are Instagram, YouTube, and Pinterest. Examples of games include Rolly Vortex and Helix Jump. These apps tend to be free to download and use, but in-app advertising can also be a complementary monetization strategy for paid apps or apps with in-app purchases.

Users have been spending more and more time on their mobile devices, particularly in apps, which has led to an increased share of digital marketing expenditures going toward in-app advertising. Given that apps are used frequently throughout the day – for example, during commutes or moments of downtime – in-app advertising allows advertisers to reach users in ways that other marketing channels cannot. Compared with mobile web, the app environment is a more effective way for advertisers to reach their audiences, with in-app advertisements allowing for personalized and contextually relevant ad messages.

Technology research firm Omdia estimated that in-app ad revenue from ads placed by developers in their iOS apps was \$151 billion globally in 2025, with around \$31 billion tied to games.<sup>xv</sup> This estimate only includes revenue generated from the publishing of advertisements within apps and excludes advertising on mobile web (including mobile browser apps), search advertising, and Apple Ads. Omdia derived this estimate from ad sales reported by large digital advertising firms, and then used data analytics from mobile ad platforms to apportion the iOS share, limited to in-app advertising only (i.e., by removing mobile web advertising), and to adjust for ad price differences between the iOS and Android app platforms. This study uses Omdia’s research for in-app ad sales. In 2025, Omdia updated its estimates from previous years to better reflect observed market performance and align with internal modelling standards. In addition, it revised its historical estimates downwards to reflect updated assumptions on the distribution of active installed devices and publisher activity. When calculating changes from 2019 to 2025, this study uses Omdia’s retroactively updated estimates.

### *Additional dimensions not included in estimates*

The App Store enables consumers to sign up for subscriptions and make purchases of digital goods and services. This may lead to incremental sales for app developers regardless of the platform chosen by users to consume the digital goods and services. Apps have also allowed traditional firms and industries to expand their offerings of a wide range of products via connected devices – devices that typically require the use of apps to control and monitor them. The App Store has enabled a new generation of home devices like smart thermostats and doorbells, for example, as well as new possibilities for health such as connected blood pressure cuffs, smart scales, and even hearing aids.

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## About the authors



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