



2020

Deconstructing Mobile and Tablet Gaming

FREE VERSION

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Overview and Methodology

2020 Report Overview

NPD's *2020 Deconstructing Mobile and Tablet Gaming* report examines the current state of the U.S. and Canadian mobile gaming market, including the gaming habits of current players (ages 2+), market performance trends, and notable happenings of the past year.

This analysis is broken into three sections, including:

- I. Market Summary
- II. Mobile Gamer Profiles
- III. Mobile Genre Profiles

The **first section** provides an overarching view of the U.S. mobile games market in terms of the number of active gamers (overall, and devices used) and revenue performance, and explores key stories/trends over the past year.

The **second section** focuses on active mobile gamers (ages 2+) and profiles their habits, preferences, and motivations. Summaries include both total market views and profiles by demographic audience.

The **third section** breaks down the mobile gaming market by genre and subgenre, providing a view of relative performance of different types of mobile games, as well as profiles of the players who are playing them.

Data Sources and Methodology

The data reported in this analysis comes from two sources:

Consumer Surveys: Unless otherwise noted, consumer data in this report comes from a survey of 5,000 active U.S. and Canada mobile gamers (ages 2+) conducted in October 2019. Participants in this survey were recruited from two representative pools:

Adults (respondents ages 18+) were recruited for participation directly and completed the survey based on their own habits.

Children/Teens (ages 2–17) were recruited via parent surrogates (with instructions to have the child/teen complete the survey themselves to the extent that they were able).

Respondents qualified as active mobile gamers for the purpose of this study if they owned/had access to a qualifying device (see list below) and had used the device to play a game within 30 days of the survey.

Qualifying Devices: iPhone, iPad, Android smartphone, Android tablet, Kindle Fire/Kindle Fire HD, Windows Surface, other smartphone or tablet

Data on mobile gaming in the context of broader entertainment activities (see pp. 32–35) comes from NPD's *Evolution of Entertainment Study*, which included 5,000 U.S. consumers (ages 2+) and was conducted in June 2019.



Revenue and Performance Data: Mobile gaming revenue and other performance metrics were provided by Sensor Tower.

The U.S./Canada mobile gaming market continues to grow with an estimated

214.1M active players

[U.S. and Canada][Ages 2+]

\$11.82B in games revenue

[U.S. and Canada][iOS and Google Play][2019]



Growth in the playerbase continues to slow (to +2% year-over-year) as the device market has become saturated and fewer new users enter the market. Games revenue continues a trend of growth (+24% year-over-year), driven by strong performance among key leaders across the mobile gaming genres.





60% of Americans/Canadians play mobile games

Mobile gaming continues to be one of the most common uses for smart devices, with strong engagement across all age groups.

Accessibility remains a key feature of mobile gaming appeal, with gamers of all ages appreciating the easy ability to access lots of free/cheap entertainment that can be played on convenient devices (that they probably already have and carry with them) and can be played across a wide range of scenarios (from multitasking at home, to killing time while out, or in focused sessions).



Children

[ages 2 to 12]

18% of Mobile Gamers
(38.2M)

Avg. Weekly Play Time: 6 hours

Avg. Yearly Spend: \$19

- Are still the most likely to use tablets (77% overall), though smartphone use is on the rise (from 63% in 2018 to 77%)
- Tend to stick to kid-friendly genres (puzzle, arcade, action builder, simulation), but expand their interests as they grow older (especially boys)
- Social influences matter—tend to learn about games from friends/family and play because people they know do



Teens and Young Adults

[ages 13 to 24]

24% of Mobile Gamers (50.7M)

Avg. Weekly Play Time: 6 hours

Avg. Yearly Spend: \$17

- Smartphones continue to be their device of choice (95% use them), and tablets are likely to be secondary devices
- Although casual genres are still extremely popular, this audience is among the most likely to play a broader range of experiences, including more mid-core/core genres
- Online presence (especially video) is extremely important for discovery for this group



Mid-adults

[ages 25 to 44]

30% of Mobile Gamers (64.3M)

Avg. Weekly Play Time: 6 hours

Avg. Yearly Spend: \$31

- Smartphones continue to be their device of choice (94% use them), and tablets are likely to be secondary devices
- Play a mixture of genres that likely include both casual experiences and some more mid-core/core genres
- This group is especially likely to appreciate mobile gaming for its convenience and flexibility



Later Adults

[ages 45+]

28% of Mobile Gamers (60.8M)

Avg. Weekly Play Time: 5 hours

Avg. Yearly Spend: \$23

- Are among the most mixed in their device preferences—86% use smartphones, 60% use tablets (with 47% using both)
- Gaming preferences tend toward more casual genres (they are the top players of casino titles) that emphasize completion and progression
- Gaming is likely to be a form of relaxation at home

\$11.82B Mobile Gaming Revenue
 [2019][U.S. and Canada][iOS and Google Play]

56% of revenue is generated by the top three genres:

- Puzzle
- Skill and Chance
- Strategy

These genres have maintained their top position over the past year, and each is largely defined by a high-performing subgenre:

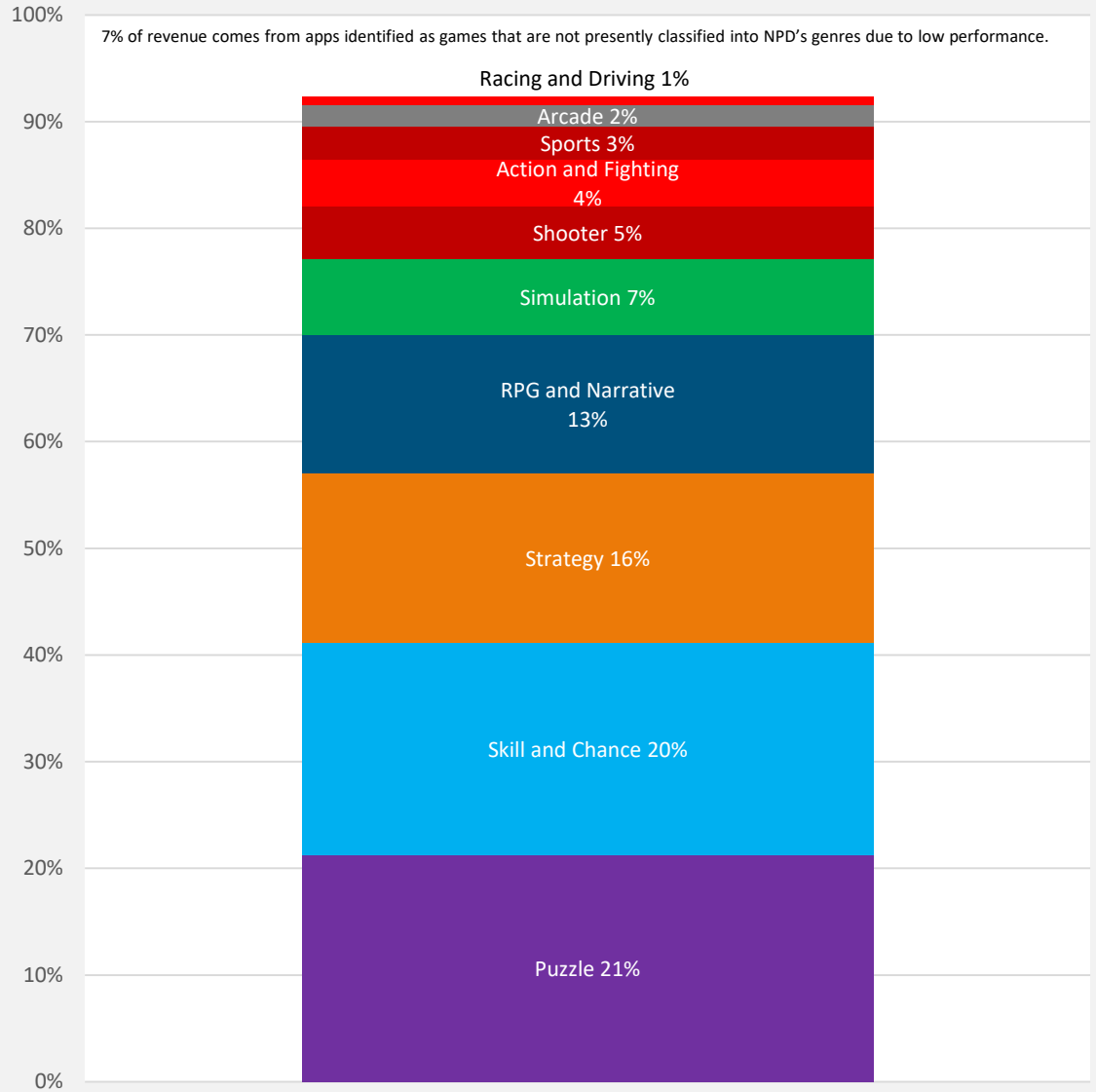
- Matching Puzzle (87% of Puzzle revenue)
- Action (78% of Skill & Chance revenue)
- Collectible Battle RPG (CBRPG) (88% of Strategy revenue)

20% of games see growth in their revenue relative to 2018 performance, with the strongest growth coming from:

- Action (11%)
- Puzzle (10%)
- Strategy (10%)
- RPG & Narrative (10%)
- Shooter (10%)

% of Revenue Contributed by Genre

[2019][U.S. and Canada][iOS and Android]



*Collectible Battle RPG (CBRPG)

Mobile Stories Explored in Full Report

01 2019 WAS A YEAR OF STRONG GROWTH ACROSS THE MARKET

Overall gaming revenue grew 8% through the year as up 10% for mobile, with contributions coming from action, AR games, and especially strong performance among the premium mobile market.

02 BATTLE ROYALE CONTINUES TO EXPAND ITS SHARE

2019 saw battle royale titles continue to lead the mobile market, and the category led all genres – especially leading to a record share of 15% through the 3Q 2019 – as mobile has continued strong growth and 2019 showed no signs of slowing.

03 COMBAT CITY BUILDERS HELP STRATEGY REBOUND

The strategy genre really rebounded from 2017, 2018 through 2019 with 20% in the share of the leading market. The battle royale, action, strategy, and especially through the strategy and action through the 3Q 2019.

04 LOCATION-BASED AR GAMES STRUGGLE TO REPEAT SUCCESSES

A number of location-based AR games have struggled to follow Pokémon GO's strategy of blending strong AR with location-based AR. Location-based AR games, but have not found the same level of success.

05 BRANDED CBRPG'S MAINTAIN STRONG PERFORMANCE

Collectible titles like Pokémon have been significant success stories through 2019, including strong action and mobile AR. In this, they show strong engagement and collectible mechanics.

06 GAME SUBSCRIPTION SERVICES COME TO MOBILE

With 2019 and through the release of the respective services in 2019 – with strong performance and momentum among premium titles, users looking for a new way to play, and more titles being supported. This will include the new titles and the release of subscription.

Mobile Gaming Market Summary

U.S. and Canada



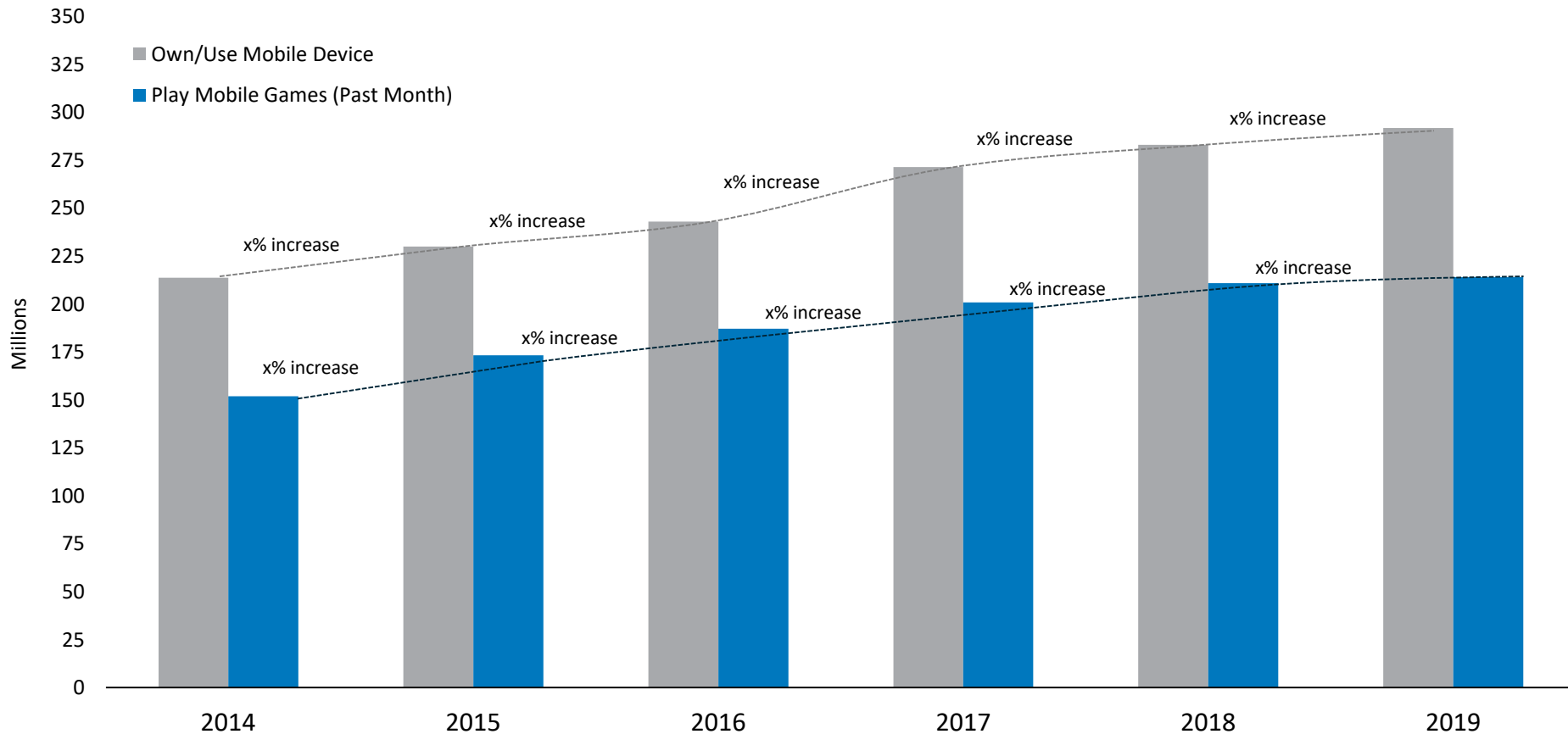


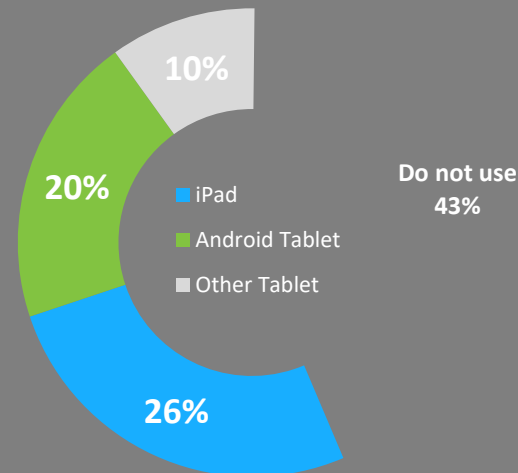
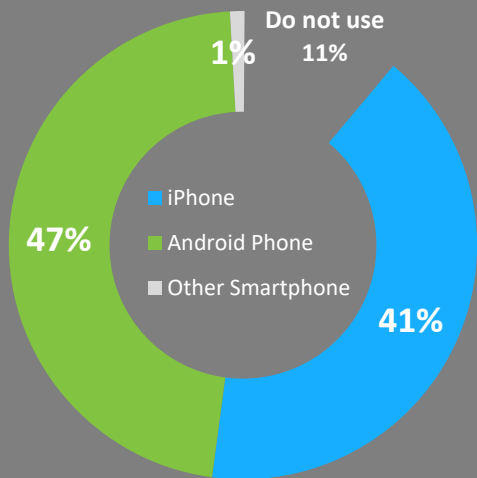
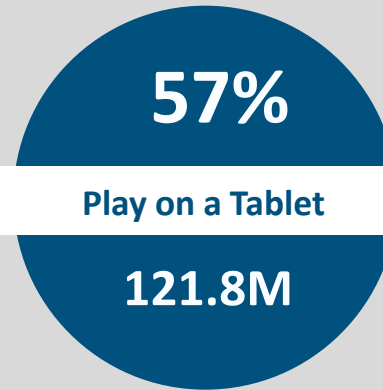
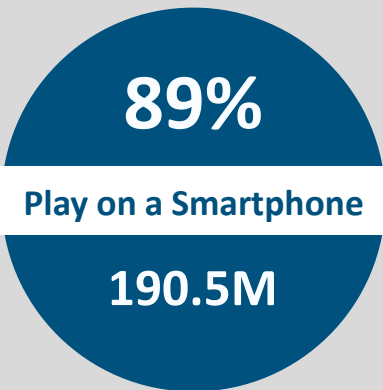
291.8M Mobile Users
214.1M Mobile Gamers
 [U.S. and Canada, Ages 2+]

Market growth—in terms of both device owners and gamers—has begun to plateau as the market has come closer to saturation. As of 2019, it is estimated that 80% of children, teens, and adults own/use a smart device, and that approximately 74% of owners/users use their device in an average month to play a mobile game.

Mobile Device Users and Gamers

[2014–2019] [U.S. and Canada] [Ages 2+]





43% (92.2M)
Play on a Smartphone Only

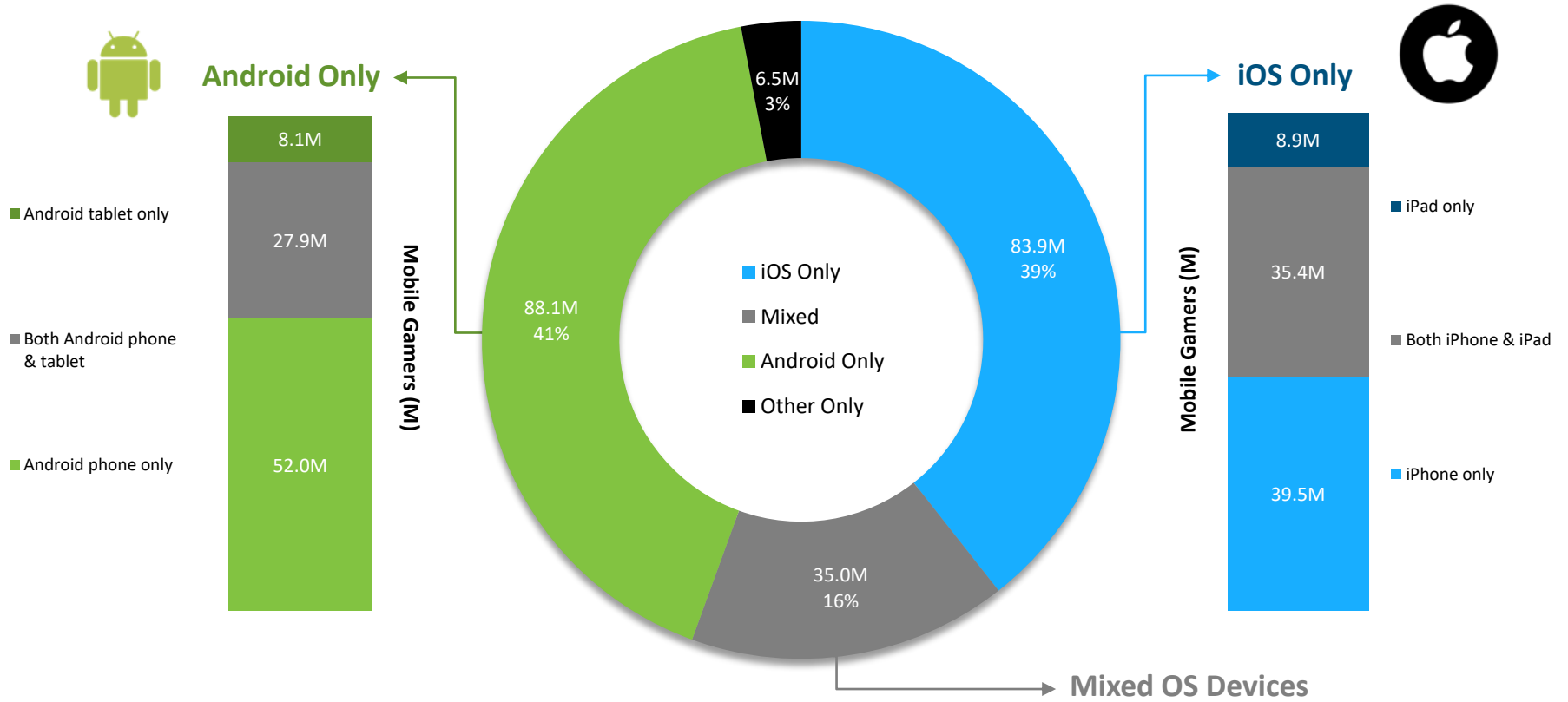
46% (98.4M)
Play on both a Smartphone and Tablet

11% (23.4M)
Play on a Tablet Only

Play rates reflect total reported use of a qualifying device to play a video game within the past month by Americans and Canadians ages 2+. Qualifying device types include Smartphone (iPhone, Android phone, Other smartphone) and Tablet (iPad, Android tablet, Windows Surface tablet, Amazon Kindle Fire/Fire HD, Other tablet).

Primary Mobile Device(s) Used for Gaming

[2019] [U.S. and Canada] [Active Mobile Gamers, Ages 2+]



iOS and Android maintain consistent market share overall, with the majority of mobile gamers using only one OS exclusively.

Android phones remain the most commonly used smartphone (47% of mobile gamers use one, compared to 41% for iPhone), especially among smartphone-only gamers. iPads similarly continue to be the most widely used tablet device (26% of mobile gamers use one, compared to 21% for Android tablets).

Device distribution reflects device(s) gamers reported that they use to play mobile games on at least a monthly basis. Where gamers reported use of multiple smartphones or tables, the device(s) used most were identified as primary.

*market shares of <1M not displayed

Avg. Phone Age: 1.4 years

[36% older than 2 years, 68.8M]

Avg. Tablet Age: 2.1 years

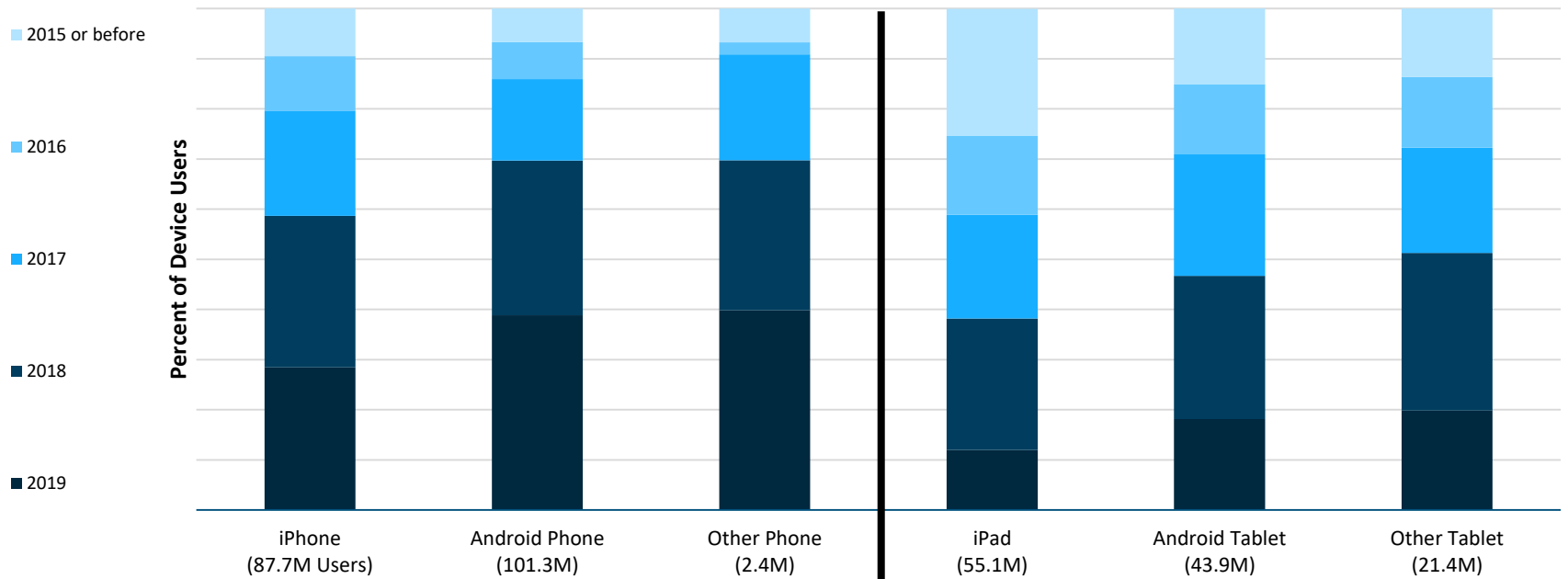
[57% older than 2 years, 68.0M]

Smartphone gamers continue to be more likely to use current (or recent) model phones—64% use a device that is less than two years old, and 46% intend to upgrade in the next year.

Tablet gamers continue to be more likely to use an older tablet device—57% use a device that is over two years old, and only 39% intend to upgrade in the next year.

How recently did you acquire your primary mobile gaming device(s)?

[2019] [U.S. and Canada] [Active Mobile Gamers, Ages 2+]



	iPhone	Android Phone	Other Phone	iPad	Android Tablet	Other Tablet
Avg. Device Age (years)	1.5	1.2	1.2	2.4	1.9	1.8
Use Older Device (>2 years old)	41% (36.3M)	30% (30.5M)	30% (0.6M)	62% (34.4M)	53% (22.8M)	49% (10.4M)

Reflects reported timeframes of device acquisition (purchased or received) for primary mobile gaming device(s). Color coding indicates where users are more likely (than the average) to have a device over 2 years old (GREEN) or less likely (RED).



\$11.82B Gaming Revenue

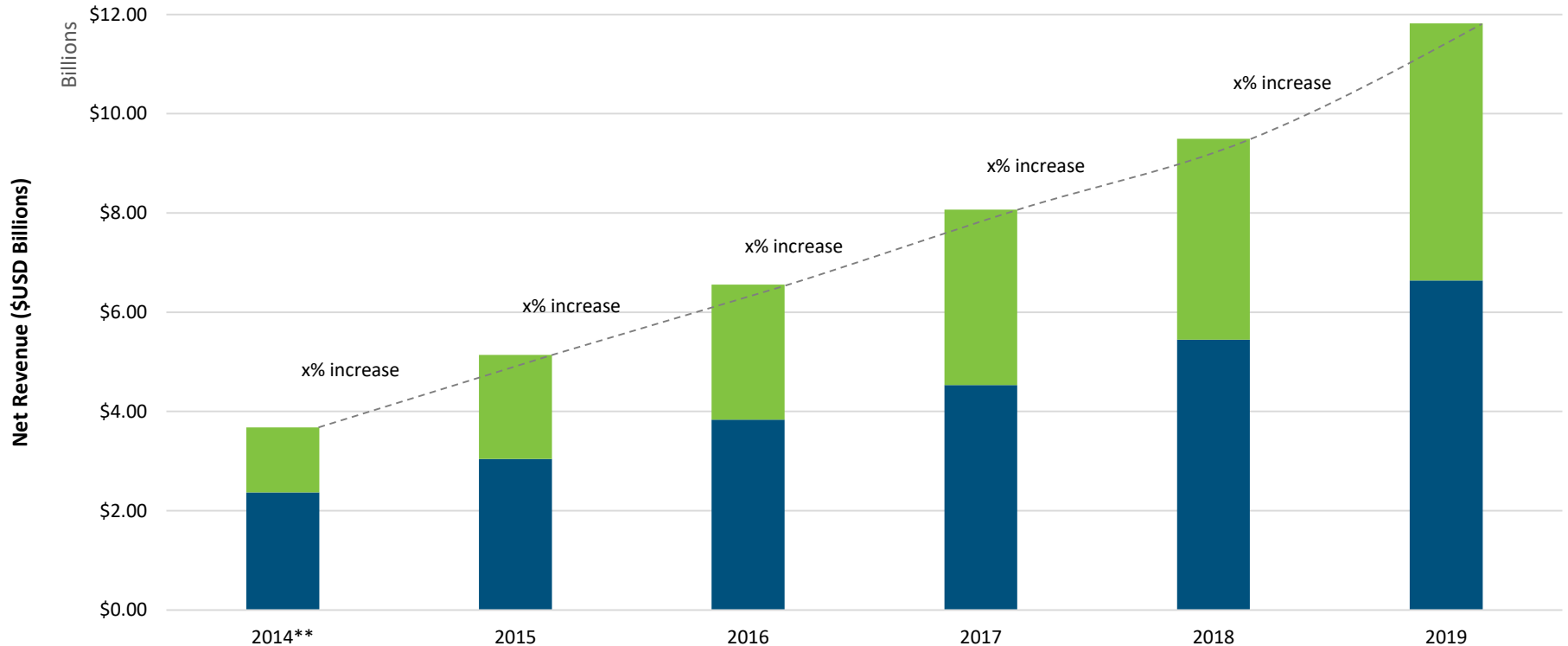
[U.S. and Canada]

The U.S. and Canadian mobile markets have continued the trend of strong growth year-over-year, with games generating over \$11.8B on iOS and Google Play in 2019.

Mobile Gaming Revenue

[2014–2019] [U.S. and Canada] [Net Revenue]

■ App Store Net ■ Google Play Net



Reflects total revenue for games (including both premium game sales and in-app purchase sales) in the iOS App Store and Google Play Store.

** Google Play revenue for 2014 includes 11 months (Jan.-Nov.). App Store revenue includes 12 months (Dec.-Nov.).

*** This does not include games only distributed through third-party storefronts or websites (notably *Fortnite* on Android).

Mobile Gaming Market Leaders

2019 has been a year of strong growth.

Overall, the North American mobile gaming market grew by 18% in 2019, up from 15% in 2018. This growth was driven by strong performance in the free-to-play segment, which accounted for 95% of total mobile game revenue in 2019, up from 93% in 2018.

Among the top-grossing titles, Candy Crush Saga and Pokémon Go continued to lead the market, while Clash Royale and Clash of Clans also performed well. The average revenue per user (ARPU) for mobile games in 2019 was \$1.25, up from \$1.15 in 2018.







Looking ahead, the mobile gaming market is expected to continue its growth in 2020, driven by the increasing popularity of free-to-play games and the expansion of mobile gaming into new markets and demographics.

Additionally, the rise of esports and live streaming on mobile devices is expected to drive further growth in the mobile gaming market. As mobile gaming continues to evolve, developers are expected to focus on creating more engaging and social gaming experiences that drive long-term player retention.

Reflects ranking based on total revenue for games (including both premium game sales and in-app purchase sales) in the iOS App Store and Google Play store.

*** These rankings do not reflect revenue from games only distributed through third-party storefronts or websites (notably *Fortnite* on Android).

Revenue change reflects difference in total revenue associated with the ranking (e.g., the revenue contributed by the third-ranked title in 2019 is up/down xx% relative to the revenue contributed by the third-ranked title in 2018).

Grossing Rank	2018	2019	Revenue Change for Rank
1	 Candy Crush Saga	 Candy Crush Saga	+/-XX%
2	 Pokémon Go	 Pokémon Go	+/-XX%
3	 Slotomania	 Roblox Mobile	+/-XX%
4	 Clash of Clans	 Clash of Clans	+/-XX%
5	 Candy Crush Soda Saga	 Fortnite***	+/-XX%
6	 Roblox Mobile	 Slotomania	+/-XX%
7	 Fortnite***	 Homescapes	+/-XX%
8	 Toon Blast	 Coin Master	+/-XX%
9	 Clash Royale	 Toon Blast	+/-XX%
10	 Final Fantasy XV: A New Empire	 PUBG Mobile	+/-XX%

Mobile Gamer Profiles

2

Mobile Gamer Profiles

Understand who mobile gamers are and how they engage with the mobile platform differently based on their stage of life.

Included in the full report:

- **Total Market and Stage-of-life Summaries**
 - Player demographics
 - Discovery sources for games
 - Device uses and reasons for gaming
 - Mobile gaming habits
 - Mobile investment (time and money)
- **Context for Mobile Gaming**
 - Other activities done on mobile devices
 - General gaming habits
 - Participation in different entertainment activities
 - Share of entertainment time and spend
 - Sourced from NPD's 2019 *Evolution of Entertainment* study
- **Demographic Audience Profiles**
 - Summaries of 20 different demographic groups (by age and gender) that provide details about how they play mobile games and what they most enjoy



Mobile Genre Profiles

3

Mobile Genre Profiles

Explore how different types of games fit into the mobile gaming market and see summaries of each distinct subgenre.

Included in the full report:

- **Genre and Subgenre Performance**
 - Total revenue (Dec. 2018–Nov. 2019)
 - Year-over-year revenue comparison
- **Genre Market Sizing**
 - Number of gamers who play genre
 - Overlaps between genres
- **Genre Profiles for 27 Subgenres**
 - Summaries of key leaders and performance
 - Analysis of notable game types and trends
 - Demographic distribution of players
 - Market share of revenue and players
 - Top genre overlaps

Genre	Subgenre	Description/Examples
Puzzle	Matching	Match-3, bubble shooters, block/ <i>Tetris</i>
	Brain Puzzle	Word puzzles, number puzzles, brain training games
	Hidden Object	Locate specified objects in a series of images
	Physics Puzzle	e.g., <i>Angry Birds</i> , <i>Where's My Water?</i> , <i>Paper Toss</i>
	Quiz and Trivia	e.g., <i>Trivia Crack</i> , <i>Heads Up!</i> , <i>Jeopardy</i>
Skill and Chance	Skill and Chance (Non-Casino)	Familiar board, card, dice, and tile games
	Casino–Chance	Chance-based casino games, e.g., Slots
	Casino–Skill	Skill-based casino games, e.g., poker, blackjack
	Casino–Integrated	Games featuring a variety of casino games
Arcade	General Arcade	Classic arcade games, “fever” games, platformers
	Endless Runner	e.g., <i>Jetpack Joyride</i> , <i>Minion Rush</i> , <i>Temple Run</i>
	Music and Rhythm	Tap, swipe, or otherwise react in time with the music
	Location-Based	e.g., <i>Pokémon GO</i> , <i>Ingress</i>
Simulation	Simulation	Simulate a social environment or role
	City Builder	Simulate building a city or farm (no combat elements)
Strategy	General Strategy	Focus on skillful planning and tactical thinking
	Combat City Builder	Build a city and army, e.g., <i>Clash of Clans</i>
	Trading Card Game (TCG)	Mimics a traditional strategic tabletop card game
	Tower Defense	e.g., <i>Clash Royale</i> , <i>Plants vs. Zombies</i> , <i>Bloons TD</i>
	MOBA	Multiplayer Online Battle Arena, e.g., <i>Arena of Valor</i> , <i>Vainglory</i>
RPG and Narrative	RPG and Narrative	Focus on character development and progression. May include combat.
	Collectible Battle RPG	RPGs with collection mechanics, e.g., <i>Summoners War</i>
Action and Other	Shooter–Traditional	First-person, third-person, arcade, vehicular
	Shooter–Battle Royale	Players compete to be the last person standing
	Action and Fighting	Action Combat, 2D or 3D fighting games
	Action Builder	Explore, craft, and build, e.g., <i>Minecraft</i> , <i>Terraria</i>
	Racing and Driving	Racing simulators, drag racers/arcade racers
	Sports	Simulate sports gameplay or sports team management

Appendices

4

Smartphone Gamers: Smartphone owners/users (if a shared device) who have played a game on their smartphone in the past month.

- A smartphone is a cellular telephone that can support and run third-party applications and has internet access.
- **Qualifying Devices:** iPhone, Android phone, Windows phone, other smartphones

Tablet Gamers: Tablet owners/users (if a shared device) who have played a game on their tablet in the past month.

- A mobile tablet is a wireless, portable computer with a touchscreen interface that is capable of running applications and accessing the internet.
- **Qualifying Devices:** iPad, Android tablet, Windows Surface tablet, Kindle Fire/Fire HD tablet, other tablet devices

Mobile Gamers: Individuals who have used a smartphone, tablet, or both device types to play a mobile game in the past month.

OS: The operating system running on a smartphone or tablet. For the purpose of this analysis, the primary operating systems are designated as Apple iOS (iPhone and iPad devices), Google Android (on Android phones and tablet devices), and other (including Windows devices, Amazon, Blackberry, etc.). Each OS has a proprietary app store.

Free-to-Play (F2P): A business model where the app/game is free to download from the app marketplace.

In-App Purchases (IAP): Content that is available for purchase within the game using real money. These can include subscriptions, consumable offerings (e.g., currencies, boosts, energy, etc.), and permanent content purchases (e.g., level packs, customization elements, characters, etc.).

Mobile Gamer Spend Segments: Categories of mobile gamers based on self-reported total spend in the past year across mobile games that they play. These segments include:

- **Non-Payers:** individuals who report that they spent no money on any mobile games they played in the past year.
- **Moderate Payers:** individuals who report that they spent money on mobile games in the past year, but that their total spend was less than \$100.
- **Heavy Payers:** individuals who report that they spent over \$100 total on mobile games they played in the past year.

Mobile Gamer Play Segments: Categories of mobile gamers based on their average self-reported weekly play time across all mobile games that they play. These segments include:

- **Light Players:** individuals who report that they spend less than one hour a week playing mobile games.
- **Moderate Players:** individuals who report that they spend between one hour and five hours a week playing mobile games.
- **Heavy Players:** individuals who report that they spend over five hours a week playing mobile games.

Investment Index: Segments based on individuals' combined investments of time and money spent on mobile games. This index includes nine potential pairings of play and spend patterns, ranging from minimal investment (i.e., those who play very little and do not spend money on mobile games) to extreme investment (i.e., those who play and spend significant amounts).

Number of Gamers (M)	Non-Payer (\$0/year)	Moderate Payer (\$0.99-\$100/year)	Heavy Payer (>\$100/year)
Light Player (<1 hour/week)	Minimal	Low	Moderate
Moderate Player (1-5 hours/week)	Low	Moderate	Heavy
Heavy Player (>5 hours/week)	Moderate	Heavy	Extreme

Entertainment Categories:

The analysis presented on pp. 32–35 is based on NPD’s *2019 Evolution of Entertainment* study that examined the types of entertainment activities that U.S. consumers (ages 2+) participate in across 11 different categories.

Categories examined were TV/movies, books, music and other audio (not audiobooks), toys, video games, arts & crafts, going out, online, active, live events, and experiences. The activities associated with each category included:

- **TV/Movies**
 - Watching TV/movies via cable or satellite subscription
 - Watching TV/movies via paid streaming service
 - Watching TV/movies on purchased or rented Blu-ray/DVD
 - Watching TV/movies purchased or rented digitally
 - Watching TV/movies via a free streaming service
 - Watching TV/movies obtained from peer-to-peer sources
 - Going to see a movie in a movie theater
- **Books**
 - Reading print books
 - Reading digital books
 - Reading magazines
 - Reading comic books, graphic novels, or manga
 - Listening to audiobooks
- **Music & Other Audio (not audiobooks)**
 - Listening to music
 - Listening to podcasts or other audio (e.g., talk/news radio)
- **Toys**
 - Collecting and/or playing with action toys
 - Collecting and/or playing with blocks or building sets
 - Collecting and/or playing with dolls/accessories
 - Collecting and/or playing with electronic toys
 - Collecting and/or playing with outdoor toys
 - Collecting and/or playing with plush toys
 - Collecting and/or playing with toy vehicles
 - Playing board games, card games, other traditional games, and/or working on puzzles
 - Playing with toys/objects not otherwise specified
- **Video Games**
 - Playing games on a mobile device
 - Playing games on a console device
 - Playing games on a desktop or laptop computer
 - Playing games on another system/device
- **Arts & Crafts**
 - Participating in art or crafting activities
- **Going Out**
 - Going out to eat or drink
 - Visiting a “food & fun” location or event
- **Online**
 - Checking and/or posting to social media
 - Watching or posting content on YouTube (or similar)
- **Active**
 - Participating in fitness or sports activities
 - Participating in outdoor recreational activities
- **Experiences**
 - Visiting an amusement or theme park
 - Visiting a recreation/entertainment center
 - Visiting an educational/cultural center
 - Visiting a casino or other gambling establishment
- **Live Events**
 - Attending a concert, sporting event, theater performance, comedy show, or other live event

Don't miss this opportunity to understand key trends driving the mobile gaming market.

For more information, contact Cooper Waddell at 760-579-7120 or email cooper.waddell@npd.com.