Google Play

▶▶ GAME GENRE REPORT

MMORPG Genre Report

by Ka Kui Cheng Ye, Serena Shih

This report is part of a series of Google Play deep dives into popular mobile game genres and subgenres. In our last report, we reviewed growth trends and insights from the battle royale genre.

March 2022

▶ Overview

This report is part of a series of Google Play deep dives into popular mobile game genres and subgenres. In our last report, we reviewed growth trends and insights from the battle royale genre. In this one, we turn our focus to MMORPGs, or Massively Multiplayer Online - Role Playing Games.

Our goal in producing these game genre reports is to support developers by helping them optimize existing games or plan new game launches. The reports include KPI benchmarks that help understand a genre's relative performance and identify trends in player behavior to gauge player affinity across genres . We also provide insight into and practical tips to improve engagement, retention, and monetization. We're sharing these insights to help mobile game developer teams prioritize feature roadmaps and develop retention and monetization strategies.

In this report, we reference some genre groupings for mobile games identified by Google Play. While there are no industry standard definitions and there may be different ways to refer to these genres, these genre groupings share similar KPIs to each other (e.g., mins played/DAU, sessions/DAU, buyer percentage, etc.). We're sharing these groupings primarily for the purpose of data analysis. The three game type groupings referenced in this report are:

- Hardcore games: Longer session games focused on meta progression and multi-layered game loops. Tend to have character and gear collection game systems (e.g., MMORPG, Strategy Games , RPG, etc)
- Casual games: Shorter session games focused on passing time and relaxing. Tend to be family friendly and party games (e.g., Match 3, Trivia, Runners, and Simulation)
- Midcore games: Combines elements of both hardcore and casual. Tend to have competitive elements and monetize primarily on cosmetics (e.g., Sports, and Racing)

▶ Overview

Massively multiplayer online (MMO) refers to online games that can be played simultaneously by a large number of players. Players are able to interact in real-time. Collaboration is often a core element of the game, as players are able to join clans or guilds with other players to trade resources, defeat enemies, and gain rewards. In the role playing game (RPG) genre, the player takes on the persona of a character in a fictional world. The MMORPG genre is unique in that hundreds or thousands of players interact simultaneously and in real-time in a virtual world. Some notable MMORPG examples include Lineage, World of Warcraft, EVE and Black Desert Online. With these definitions and examples in mind, it's important to note that not all MMOs are RPGs, and not all RPGs are MMOs.

Most mobile MMORPGs have traditionally come from developers based in Asia. This report covers insights from the top performing Asian and Western themed MMORPGs made by developers from both the East and the West. The report will dive into Google Play data and unless otherwise indicated, data cited is from the 12-month period from October 2020 to 2021. If you want to review your game's performance, use the Google Play Console to compare it against the performance of top titles in MMORPG and other genres. In order to conduct a deep dive into MMORPGs and better capture a global view of the genre, the selected MMORPG titles in this report will differ from the MMORPG benchmark published in the previous 4x Strategy and Battle Royale reports.
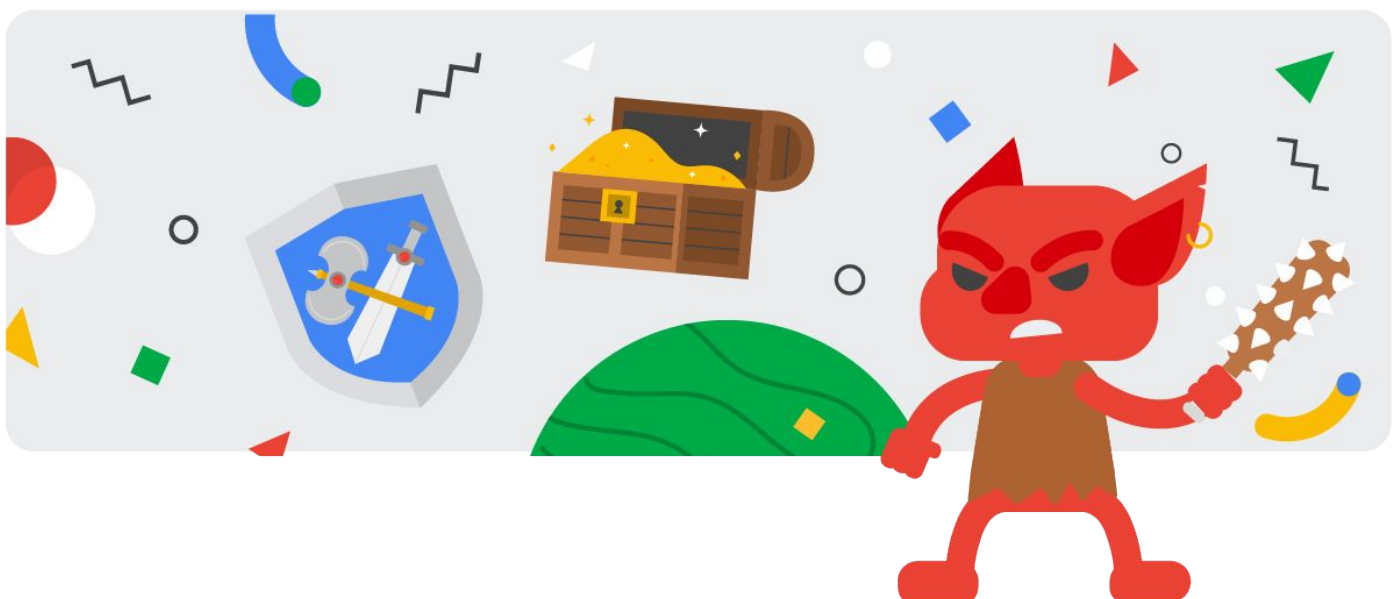
Genre Overview

▶ Genre Overview: MMORPG

MMORPG is now considered a classic gaming genre, dating back to the 1990s. Although MMORPGs have loyal players all around the world, it remains a relatively new genre on mobile.

▶ Genre History

MMORPG is one of the oldest gaming genres, originating in the 1970s with multi-user dungeon (MUD), where characters within the MUD are able to interact simultaneously. Fast forward to the 90's, games like Ultima Online, EverQuest, and Lineage began to define and bring the genre to new heights. World of Warcraft then came along in 2004 and quickly became one of the most popular MMORPGs of all time, making the genre commercially successful and mainstream all around the world.
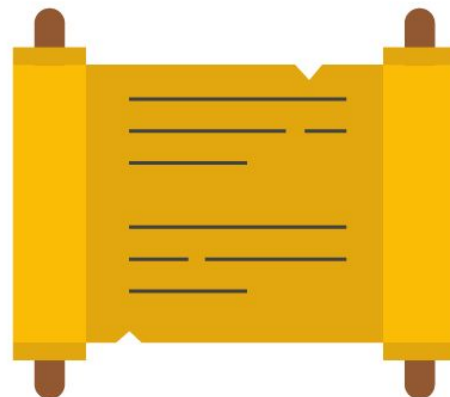
Propelled by a strong mobile game industry, South Korea became the mecca of mobile MMORPGs, publishing successful titles such as Lineage 2M. In the last few years, China has also picked up its pace, publishing multiple MMORPGs that were popular in Asia, as well as bringing classics such as EVE Echoes to mobile.
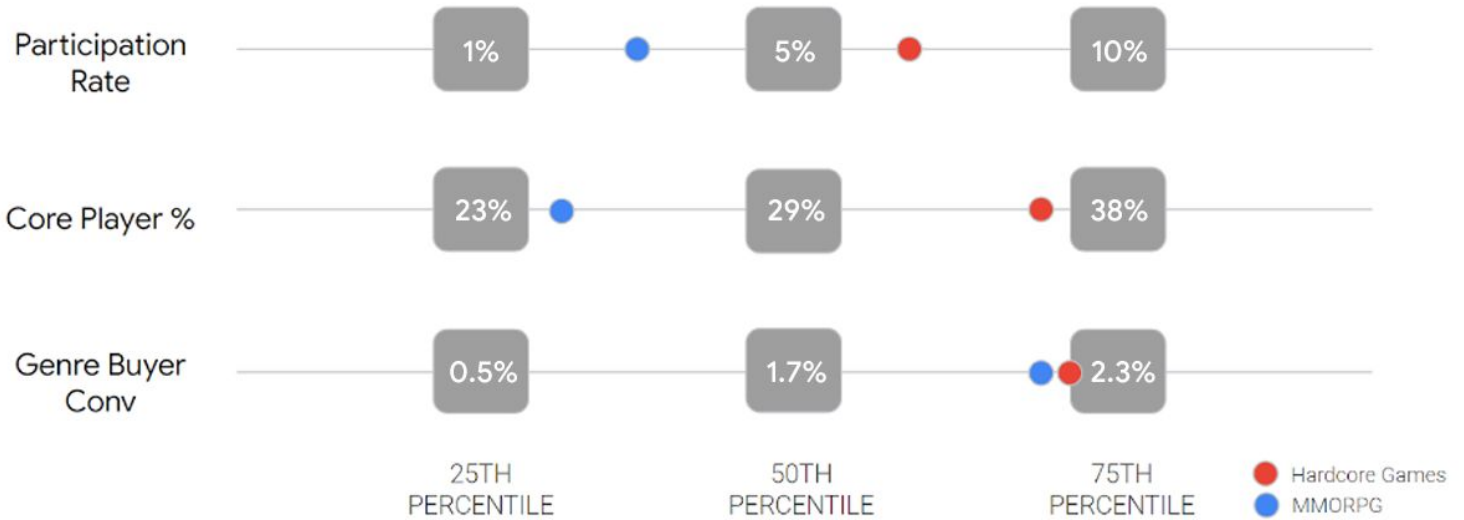
▶ Genre Player Insights

Participation: (MMORPG vs. All mobile game genres)
To dive into the MMORPG gamer overview, we took a look at the data for all game genres:
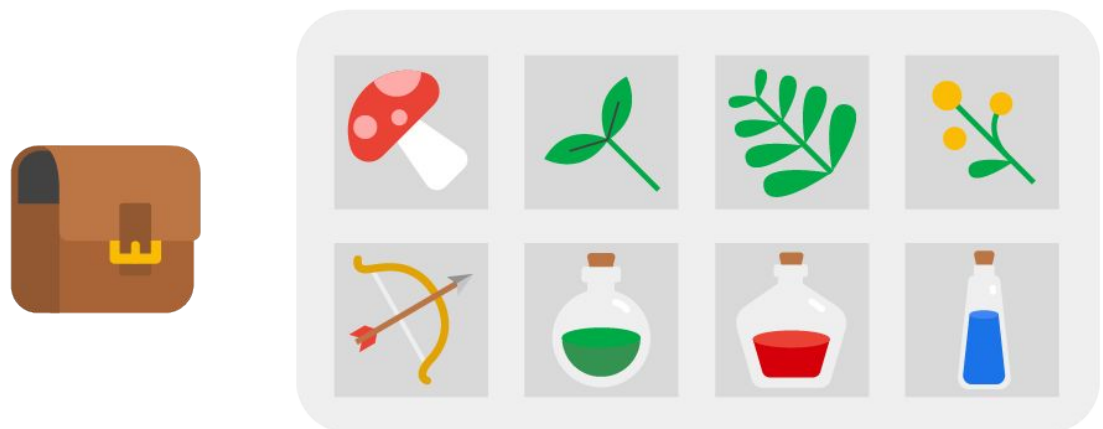
1. Participation rate, which is the percentage of Google Play gamers that engaged with the MMORPG genre.

2. Core player percentage, which looks at the percentage of MMORPG players that spend more than 40 percent of their Google Play gaming time engaging with the MMORPG genre.

3. Genre Buyer conversion, defined as the unique number of MMORPG buyers (players with 1+ transaction) in a 28 day period divided by the number of gamers that engaged with the MMORPG genre in the same period.

	25TH PERCENTILE	50TH PERCENTILE	75TH PERCENTILE
Participation Rate	1%	5%	10%
Core Player %	23%	29%	38%
Genre Buyer Conv	0.5%	1.7%	2.3%

● Hardcore Games
● MMORPG

*Performance bands calculated across all Google Play Play Partnership Game Genres. Highlighting median performance for Hardcore Game Genres
** Source: Google Internal Data

The image above shows us metrics from the 25th, median and 75th percentiles calculated across all Google Play genres (these mobile game genres are created by Google Play Partnerships). We have highlighted the performance of Hardcore game genres and the MMORPG genre in red and blue respectively.

▶ Genre Player Insights

Starting with the participation rate, MMORPG's overall participation rate is about 3 percent, which is lower than the overall 50th percentile of 5 percent. This highlights that MMORPG is still considered to be a more niche genre compared to other genres.

When benchmarking MMORPG core players percentage, we see it skews closer to the 25th percentile when compared with all games. MMORPG's core players make up 24 percent, which falls further from the median and closer to the 25th percentile. Even when compared to core player % of hardcore cohorts, the overall core player % for MMORPG tends to fall lower across the board.

Although the MMORPG genre has more difficulties with overall engagement and attaining core players, MMORPG players' 30D buyer conversion rate sits close to the 75th percentile of all games. This means that MMORPG players tend to be more willing to transact versus any other genre players.

Overall, MMORPG is a niche genre, with players who are selective about their time spent on the game. However, they are also generally more willing to transact and spend once engaged. This presents an opportunity to innovate and expand the genre to a more mainstream audience.
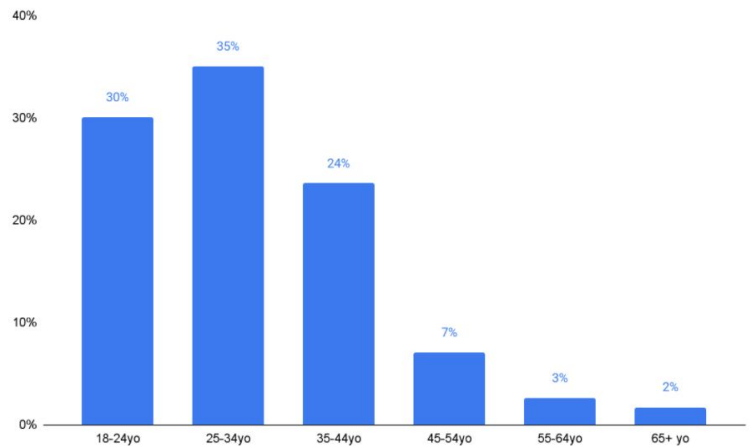
▶ Demographics

MMORPG players skew heavily male with over half of players falling between the age of 25-44 years old.

Gender Distribution

29%

71%
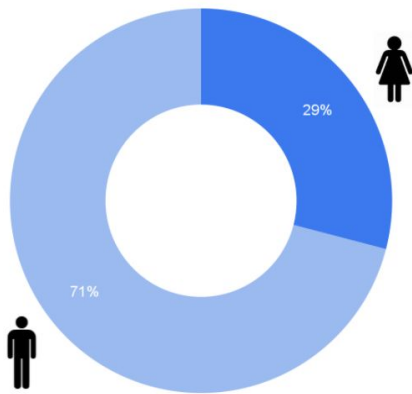
Age Distribution

* Source: Google Internal Data

Historically, MMORPGs were popular on PC in the late 90s and 2000s, which is closer to the 25-44 age group. MMORPGs require a longer timeframe to reach the endgame, which means it's well suited for more "patient" players. With these demographics in mind, make sure to consider your target audience when designing User Acquisition (UA) campaigns. In recent years, one of the ways we've seen developers innovate and expand their player base is by targeting female players through UA.
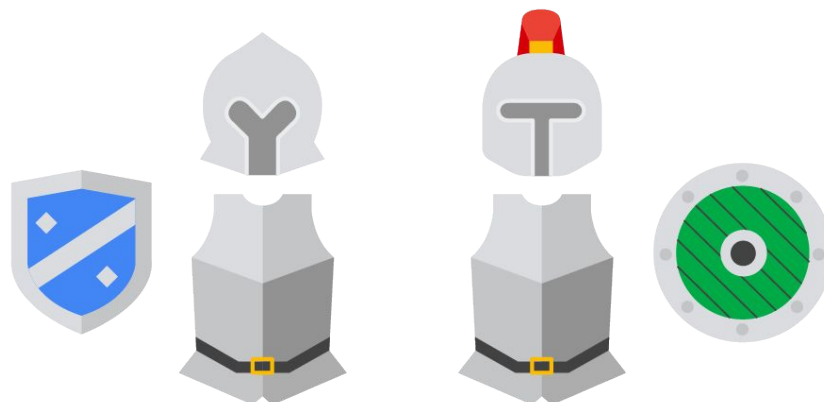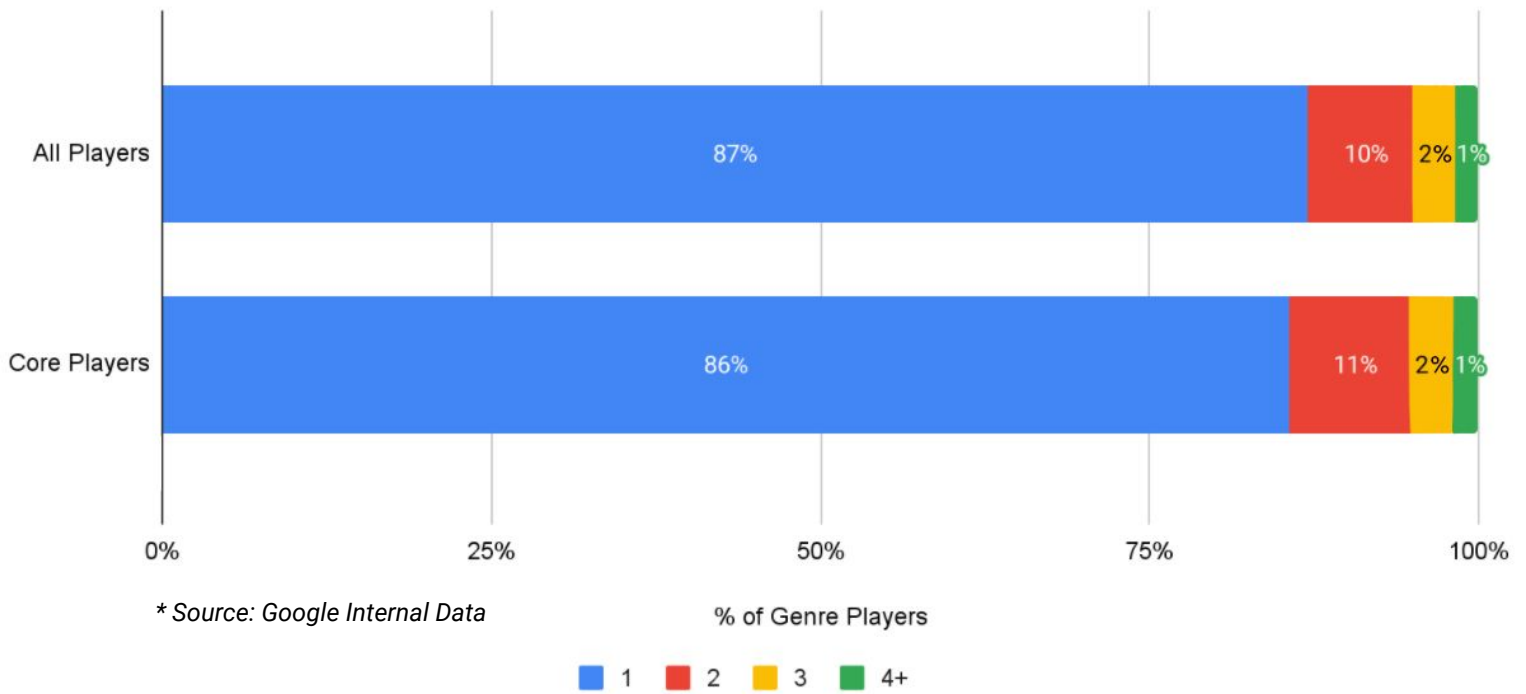
▶ Cross-genre gameplay

Let's look at cross-genre gameplay for All MMORPG players and Core MMORPG players:

% of MMORPG Players by # of Games Played in MMORPG

*Source: Google Internal Data
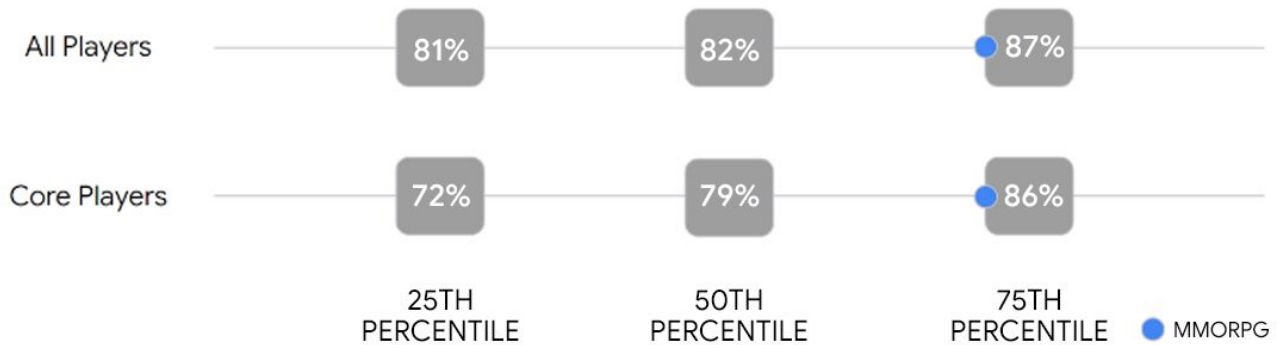
% of Genre Players

■ 1 ■ 2 ■ 3 ■ 4+

For **MMORPG players**, 87 percent of them play only one game in the genre, with a similar percentage (86 percent) of core players engaging with only one game.

▶ Cross-genre gameplay

% of Hardcore Game players engaging with only 1 game in the genre

|	25TH PERCENTILE	50TH PERCENTILE	75TH PERCENTILE
All Players	81%	82%	●87%
Core Players	72%	79%	●86%

● MMORPG

Performance bands calculated across all Google Play Play Partnership Game Genres.
** Source: Google Internal Data

Game Type is a categorization of genres into different levels of gameplay. These can usually be distinguished by the standard type of players that engage with games in the space and are broken out into Casual, Mid-Core, and Hardcore Games. Hardcore Games include genres such as Multiplayer Online Battle Arena, Shooter, Strategy Games, ect.

These behaviors also align with the 75th percentile of hardcore genres, which tells us that other hardcore genres comparatively see higher engagement with multiple titles. However, since MMORPG requires a longer term investment to progress, the cost of switching among MMORPG games is much higher compared to other hardcore genres, likely driving up the percentage of players that only engage with a single MMORPG title.
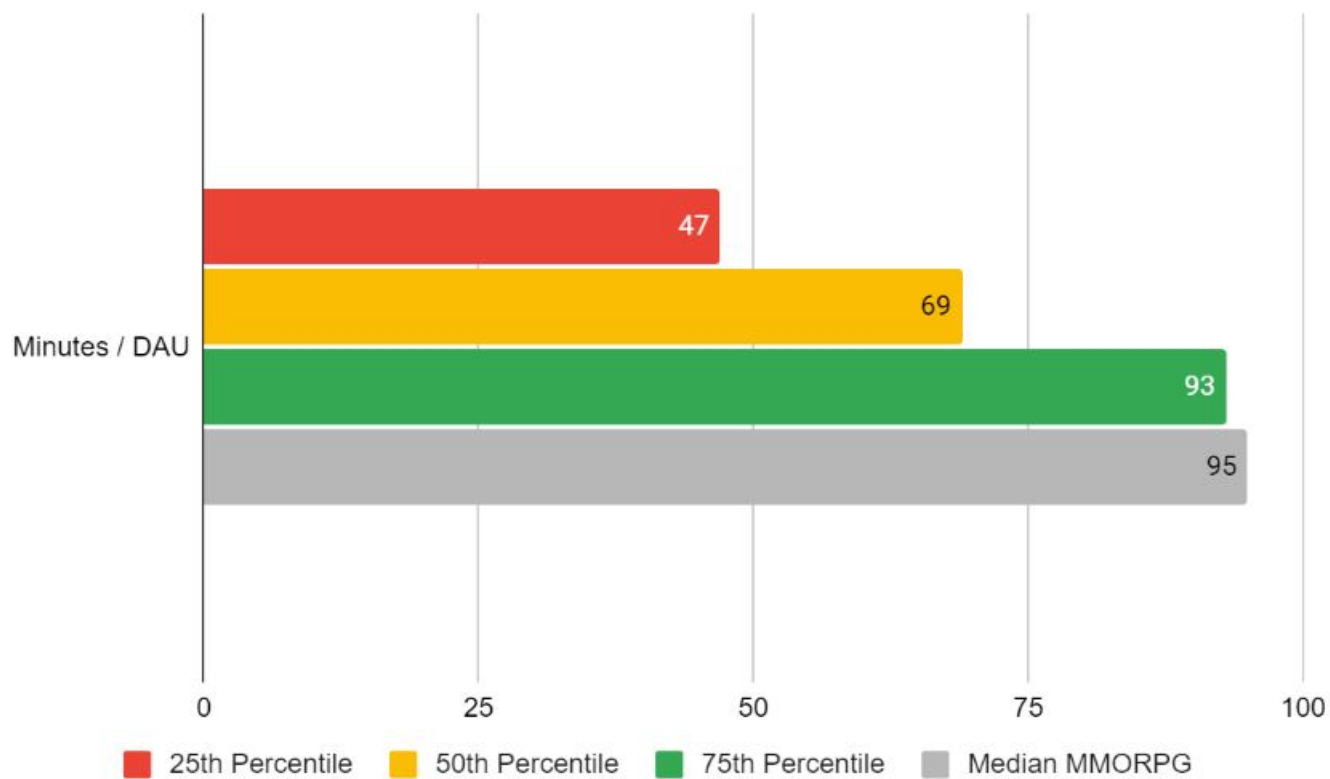
Keeping this player behavior in mind, consider developing content to continue to keep players engaged and focus on creating timeworthy value. Both seasonal and more content-driven LiveOps, can play an influential role.
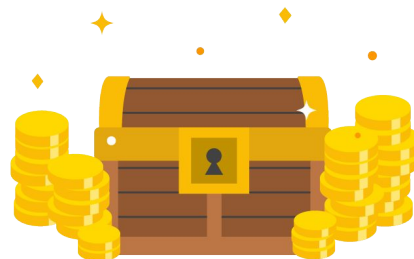
▶ Google Play

KPI Trends

▶ **Engagement & Retention KPIs**

Now, let's turn our attention to the trends in KPIs for the MMORPG genre.

* Looking at Top Grossing Hardcore Games on Google Play as benchmarks
** Source: Google Internal Data

MMORPGs tend to have higher minutes played per user overall. Top performing MMORPG games see a median daily minutes played per user at 95 across 8 sessions, but the top 25th percentile of these games can see upwards of 111 daily minutes per user across 10 sessions.

Taking a deeper look at MMORPG game loop design, and in particular endgame design, can help explain why MMORPG has among the highest minutes per user compared to any other genre. From a content perspective, there are countless endgame options available to users.

▶ Engagement & Retention KPIs

These can be categorized into collaborative Player versus Environment (PvE) content (e.g., dungeons and raids), competitive Player versus Player (PvP) content (e.g., clan battles and seasonal tournaments), and cosmetic collections (e.g., housing, pets, clothes, and mounts). Most of these require players to consistently farm, repeating the same actions over an extended period of time to either unlock the content or gather in-game items and be prepared for future events. As an example, a player may be required to farm and run the same dungeons over the course of many days, even weeks, to get enough crafting material to create a strong enough weapon to participate in either a difficult raid or a massive scale siege.

Additionally, there are two features common in MMORPGs that increase player engagement. The first is clans (also known as guilds) as the central hub for social organization in the games. Through these player-driven communities, players interact both within and outside of the game to organize themselves to play the content together, be it for getting 15 players together for raids or even thousands of players for siege battles. These communities play a central part in creating stickiness within the game, further improving retention.
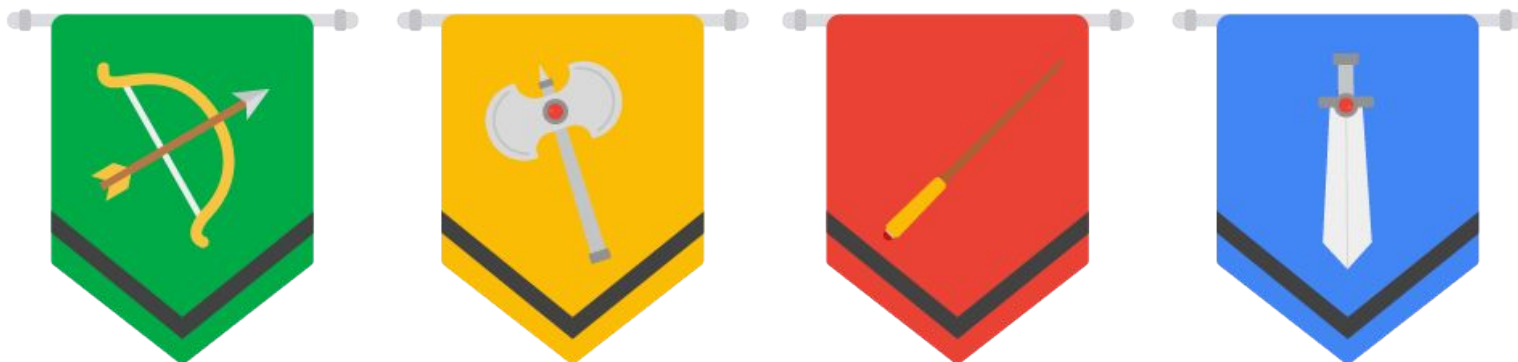
▶ Engagement & Retention KPIs

The second is autoplay. This feature typically facilitates AFK (Away-from-Keyboard) farming and character progression, by allowing users to "one-tap" to move their characters, fight monsters, and complete quests and dungeons. Moreover, many MMORPG players often use emulators on PCs, given that they don't require mobile battery life, making it easier to farm content, and also enabling multi-instancing for concurrent progression on multiple characters. While autoplay and emulators combined seem to increase passive gameplay time, and seemingly decrease active gameplay time, the character progression that takes place in fact leads to more long-term engagement.

Many developers also ensure that while autoplay allows users to save time, active gameplay is still required to make meaningful progression. For example, autoplay can be used to farm easier dungeons, but active gameplay is required to complete more difficult dungeons. In a sense, this feature functions most similarly to Idle RPG mechanics.
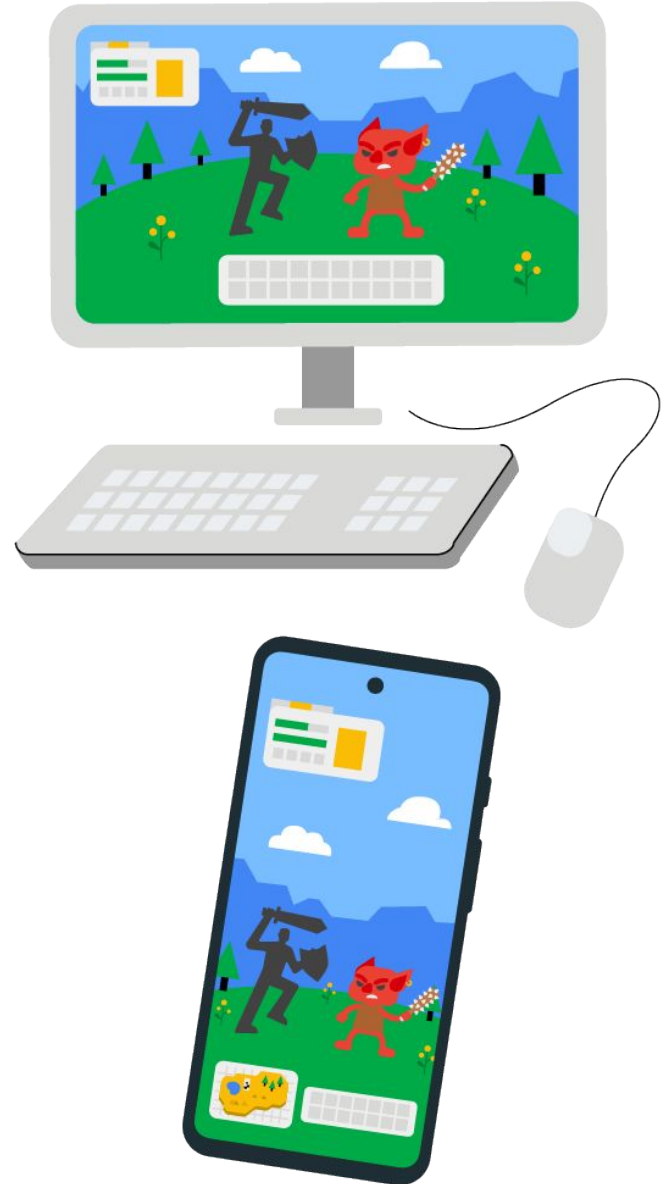
▶ Retention

Let's shift our attention to a new user's engagement on their first day in a mobile MMORPG.
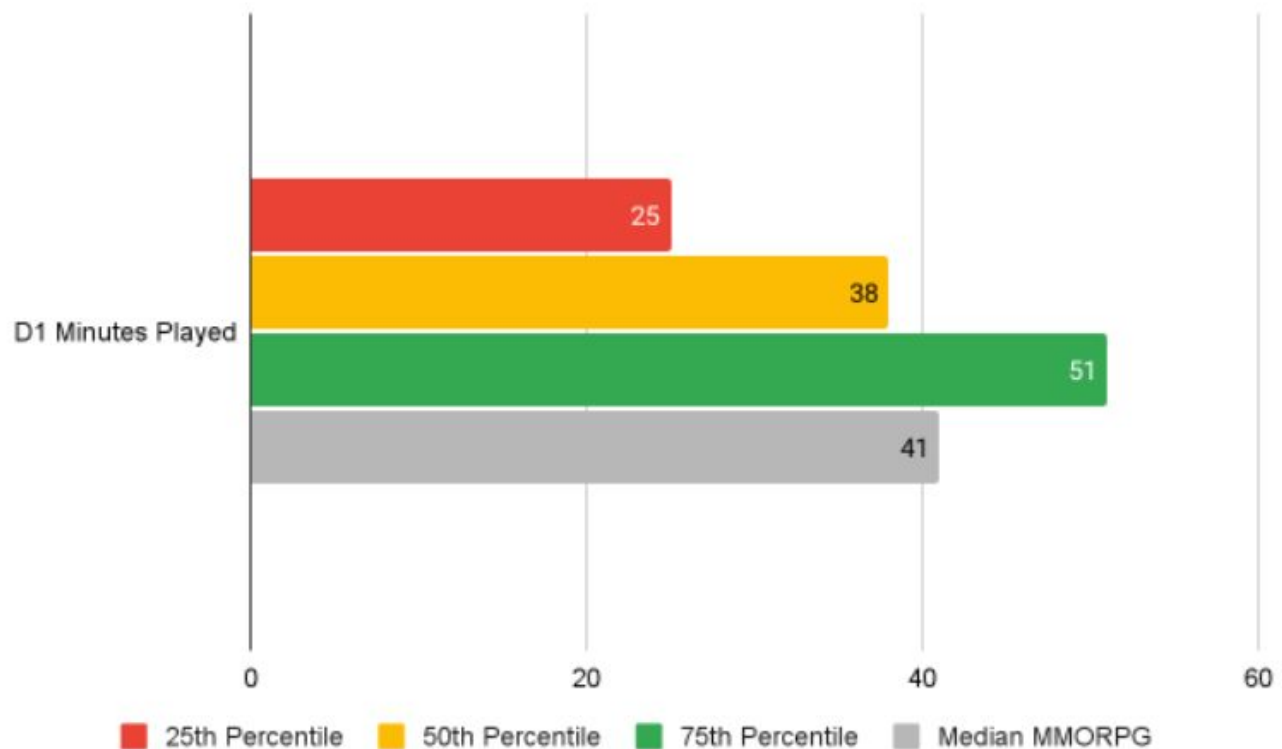
D1 Minutes Played

Percentile	Value
25th Percentile	25
50th Percentile	38
75th Percentile	51
Median MMORPG	41

Looking at Top Grossing Hardcore Games on Google Play as benchmarks
** Source: Google Internal Data

If we look at initial D1 minutes played, defined as the amount of time a new user to the game engages on their first day, we see that MMORPGs initially have similar overall engagement time. Median MMORPG D1 minutes played is around 41 minutes compared to 38 minutes for hardcore games. Given what we learned in the Engagement section, that MMORPGs tend to have higher minutes played per user overall, a user's onboarding experience is key to drive strong retention of new user's entering your mobile title.
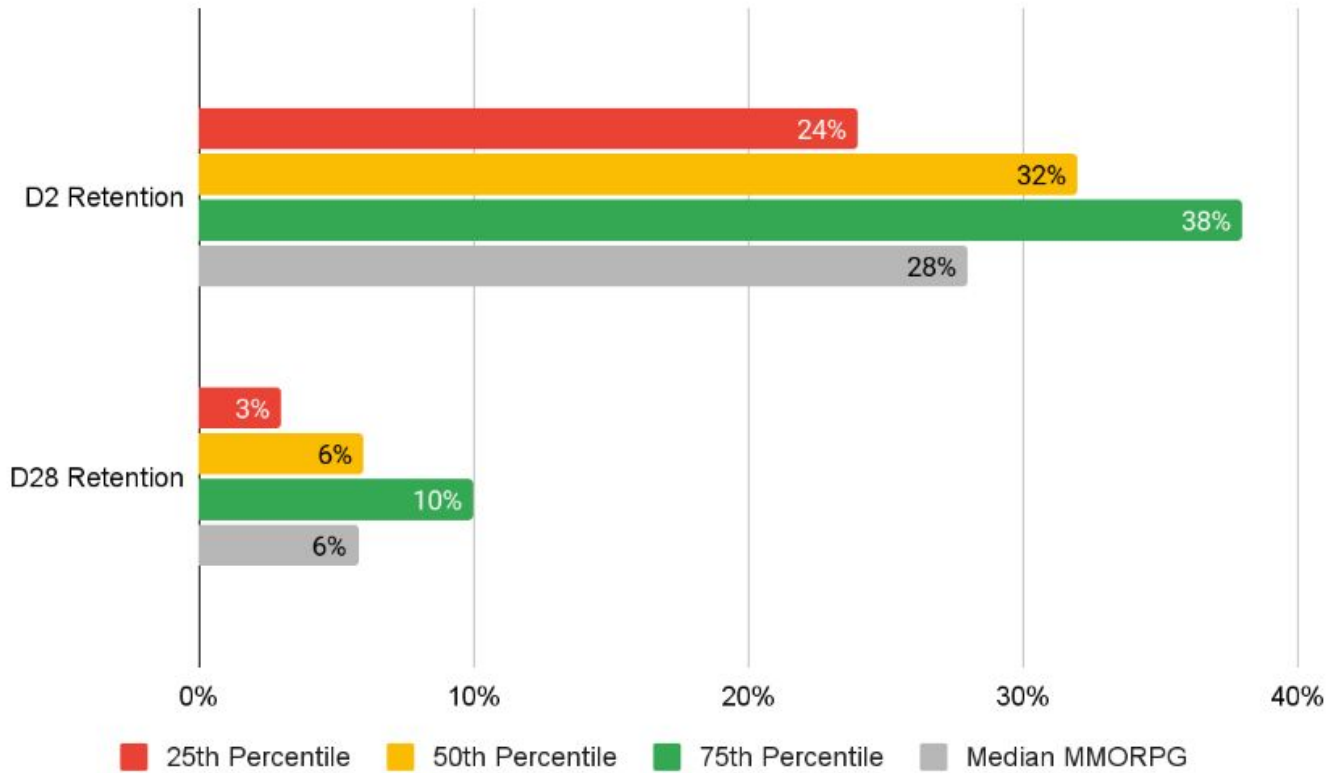
** Looking at Top Grossing Hardcore Games on Google Play as benchmarks*
** Source: Google Internal Data

Using the top grossing hardcore games on Google Play as a benchmark, you can see where the median MMORPG performance falls in terms of D2 retention (defined as the percentage of users that return to the mobile game the day after their first session) and D28 retention (or the percentage of users that return to the mobile game 28 days after their first session).

MMORPG retention rates tend to be lower compared to most other hardcore genres. While short-term retention rates (D2-D7) tend to be lower, longer-term retention rates (D14-D28) resemble those of other hardcore genres. For example, at the 75th percentile, MMORPG D2 retention is around 35 percent, compared to 38 percent in hardcore genres, while D28 retention rate for both MMORPG and hardcore genres is at 10 percent.

Let's take a look at how new user retention MMORPG KPIs have been changing over the past year in Google Play, starting with median player retention rates across the first month between Q3 '20 & Q3 '21.

Median D2-D28 retention trends for top MMORPG titles
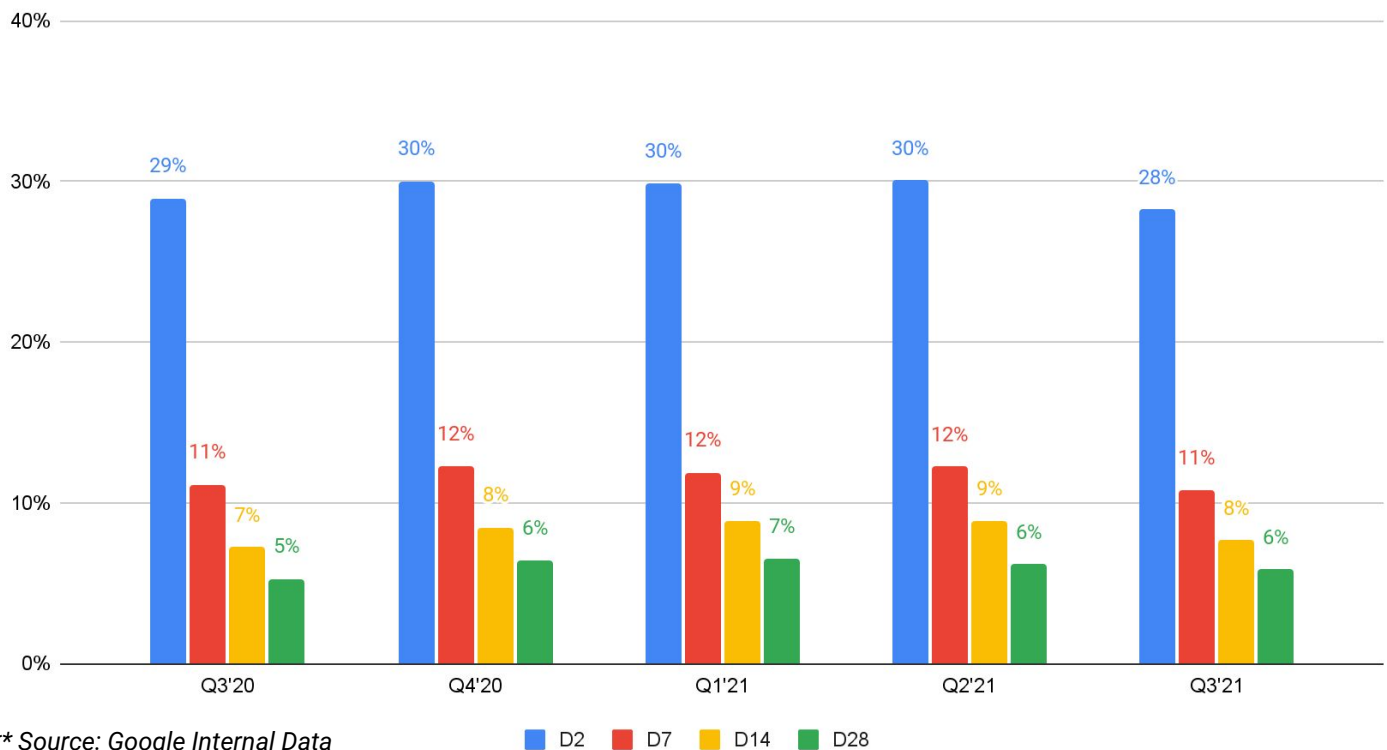
Looking across a collection of top MMORPG titles over the last year, this chart shows us median retention rates across D2, D7, D14 & D28. We can see that MMORPG D2 retention hovers in the high 20 percent, low 30 percent range while D14+ retention rates fall below 10 percent.

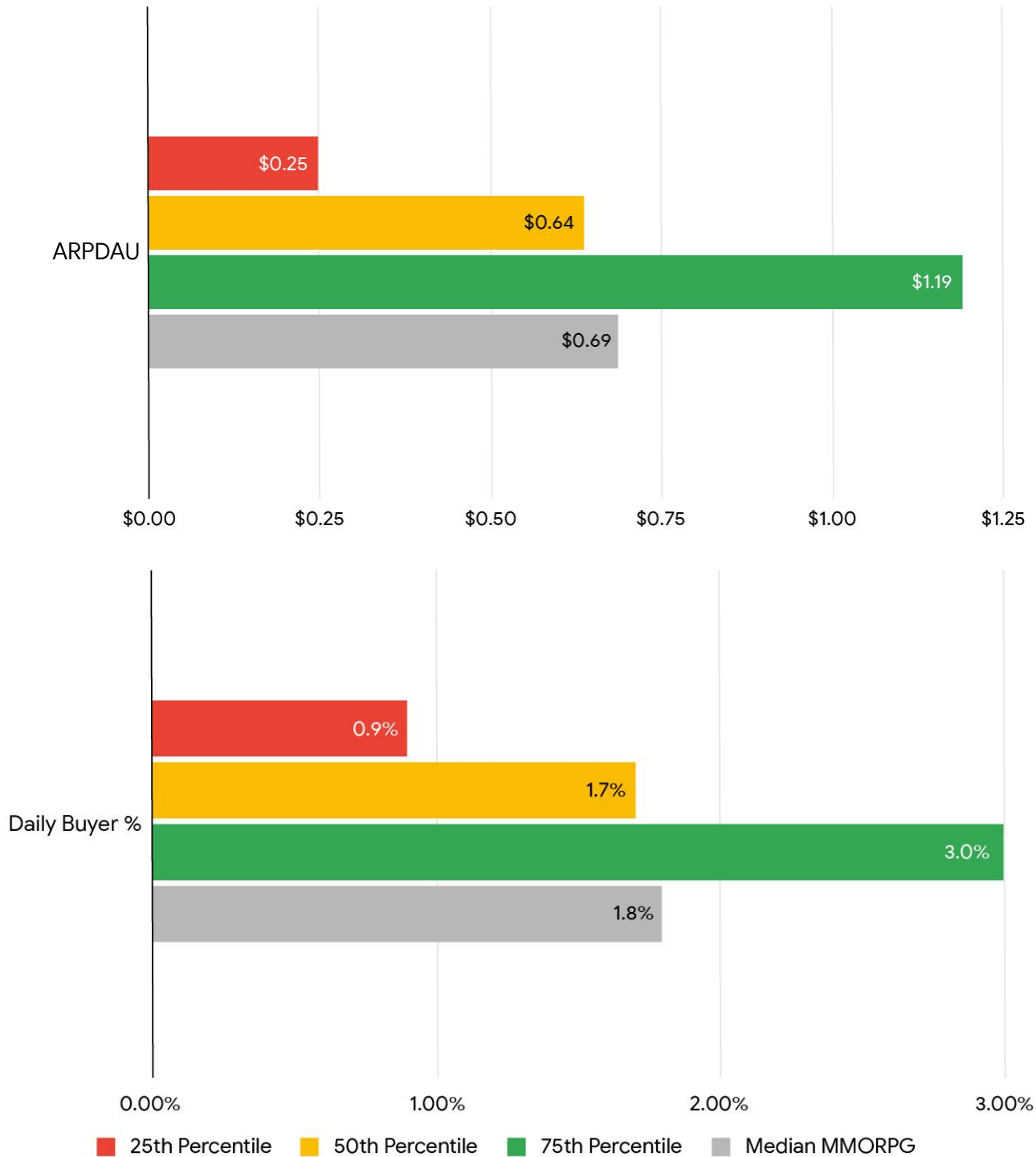## Median D2-D28 retention growth for top MMORPG titles
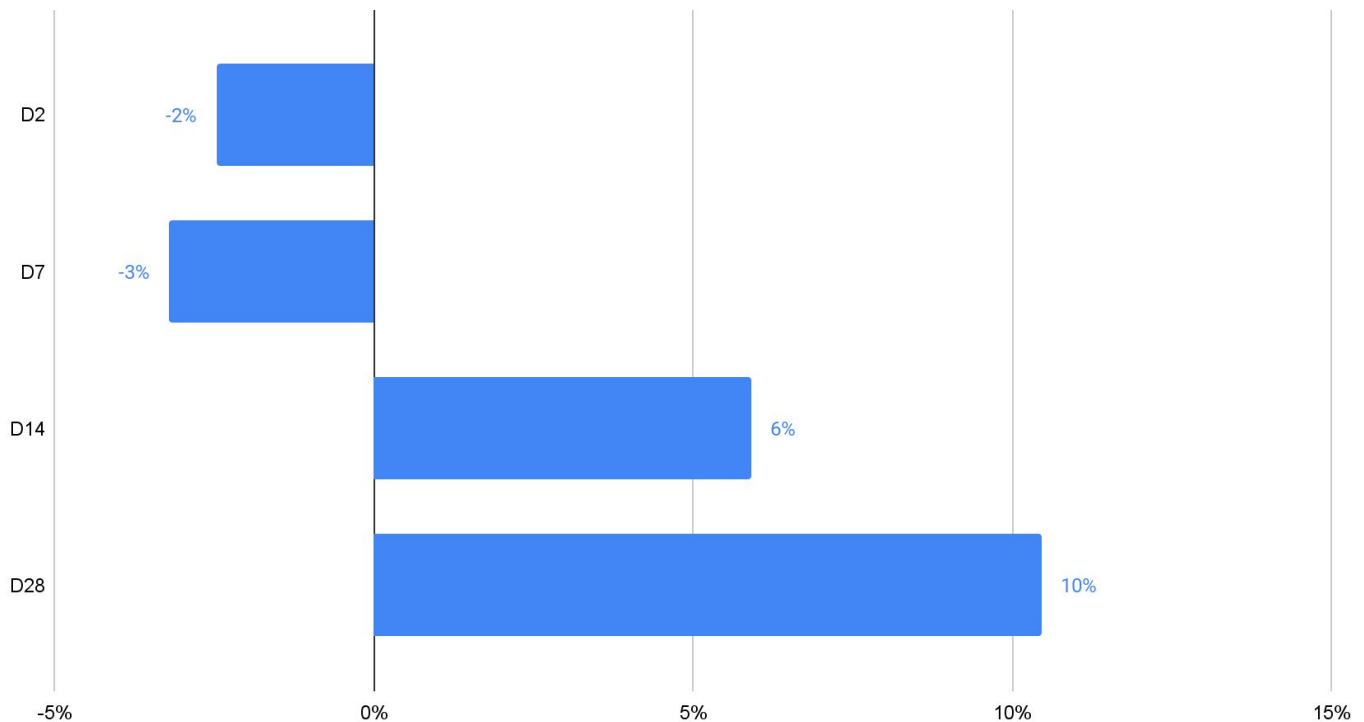
D2	-2%	
D7	-3%	
D14	6%	
D28	10%	

-5%   0%   5%   10%   15%

*** Source: Google Internal Data*

Looking at Q3 2021 performance compared to Q3 2020 performance, we see that the median early retention rates declined, while median longer term retention has increased. Median D2 retention rates decreased by 2 percent while median D28 retention increased by 10 percent.

As we've seen, MMORPGs require players to engage with a multitude of different content. Given this multitude, MMORPG players take more time to get hooked than other genres. In many cases, onboarding players into all the different core game loops (e.g., questing, item storage, pet training, upgrading gears, etc.) requires many hours of gameplay. Additionally, getting users to endgame typically takes weeks, if not months of consistent gameplay. **Given the longer onboarding process into all the different endgame systems, MMORPGs tend to have lower initial retention rates. However, once a player is invested, they tend to engage with the genre much more than any other genre.**
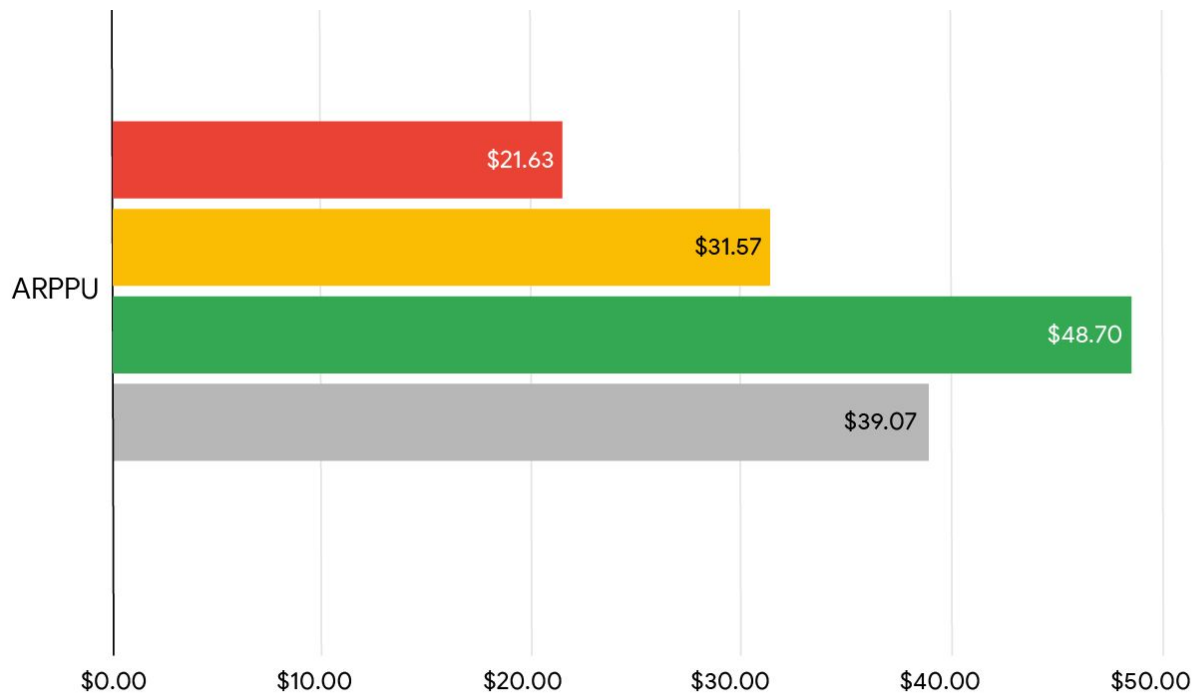
Monetization

▶ **Performance**

ARPDAU

Percentile	Value
25th Percentile	$0.25
50th Percentile	$0.64
75th Percentile	$1.19
Median MMORPG	$0.69

(x-axis: $0.00, $0.25, $0.50, $0.75, $1.00, $1.25)

Daily Buyer %

Percentile	Value
25th Percentile	0.9%
50th Percentile	1.7%
75th Percentile	3.0%
Median MMORPG	1.8%

(x-axis: 0.00%, 1.00%, 2.00%, 3.00%)

Legend: 🟥 25th Percentile 🟨 50th Percentile 🟩 75th Percentile ⬜ Median MMORPG

* Looking at Top Grossing Hardcore Games on Google Play as benchmarks
** Source: Google Internal Data

▶ Google Play

▶ Performance

ARPPU

$21.63	(red)
$31.57	(yellow)
$48.70	(green)
$39.07	(gray)

$0.00 $10.00 $20.00 $30.00 $40.00 $50.00

* Looking at Top Grossing Hardcore Games on Google Play as benchmarks
** Source: Google Internal Data

MMORPG players have among the highest monetization performance compared to other genres. Looking at the median performance in Q3'21, MMORPG ARPDAU is at $0.69, outperforming the median of top hardcore games. At the 75th percentile in Q3'21, MMORPG ARPDAU is at $1.61 greatly outperforming the 75th percentile for hardcore genres of $1.19.

While median MMORPG buyer percentage is comparable with 1.85 percent compared to 1.7 percent for hardcore genres, with median ARPPU is significantly higher with $39.07 vs. $31.57 with the 75th percentile shooting up to $79.60 for MMORPG.

▶ Google Play

These high monetization metrics can be best explained by MMORPG's player-driven economy. Nearly all gameplay features described in the previous engagement section tie back to this economy.

These can be in the form of sources (supply) or sinks (demand) of in-game goods. For example, a player may dedicate hours of game time into farming a highly desirable type of ore and then sell them in the auction house. Another player may decide to buy these ores to craft a highly desirable weapon and then sell them in the auction house.

Finally, another player may buy that weapon and use it in either an endgame raid or siege battle. With every transaction, players are constantly creating supply and demand, dynamically changing prices and further developing the in-game economy.
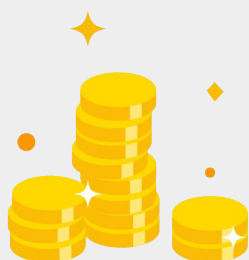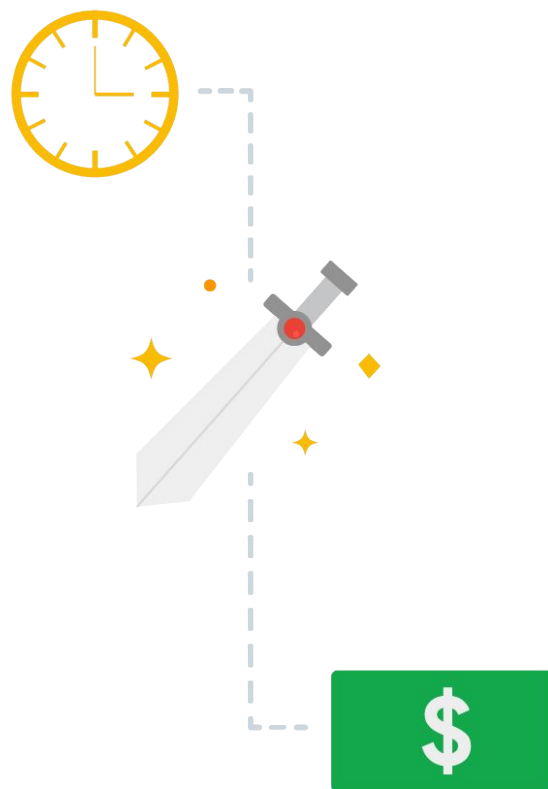
Additionally, players can typically obtain currencies to transact at any point through in-app purchases. As such, there are plenty of monetization opportunities in an MMORPG.

▶ Monetization strategies

Alongside the player-driven economy, there are many different types of monetization common in MMORPGs, each touching different player motivations for purchasing:

- Pay for progression: Allow players to reach the endgame quicker (e.g., increased experience gain or increasing number of daily quests and dungeons)
- Pay for convenience/time: Saving or maximizing time (e.g., more inventory space or double rewards from quests)
- Pay for cosmetics: Aesthetic collections available in the game (e.g., costumes and outfits, player housing, or pets and mounts)
- Pay for power: Items that provide increasing character power and increases chance of success in other content (e.g., upgrading equipment or consumables)

In addition to directly purchasing goods, most major types of monetization are also prevalent in MMORPGs:

- Gachas: Random chance at obtaining desired items. In MMORPGs, these are typically components used for upgrading equipment. The rare odds for obtaining these items creates an incentive for players to participate in trading.
- Seasonal passes: Unlocks limited-time only rewards (e.g rare cosmetics or increased daily dungeon limits), but requires players to complete specific tasks on a daily, weekly, monthly, or seasonal basis. These typically provide users with discounts on similar goods, in exchange for their gameplay time.
- Subscriptions: Unlocks recurring benefits on a frequent basis (typically monthly). These include exclusive content (e.g., quests or dungeons) or bundled items.
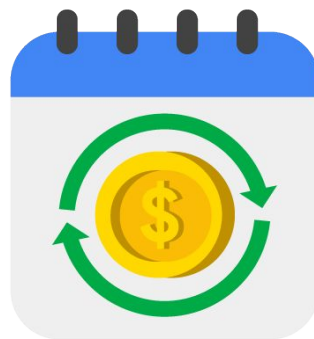
Let's take a look at how PAU/DAU MMORPG KPIs have been changing over the past year, as it gives insight into buyer frequency. PAU / DAU is the ratio of paying active users to daily active users, and it looks at the percent of DAU who paid in the preceding X days.

We will start with median PAU/DAU rates across the first year between Q3 '20 & Q3 '21.

Median (X)D PAU/DAU trends for top MMORPG titles
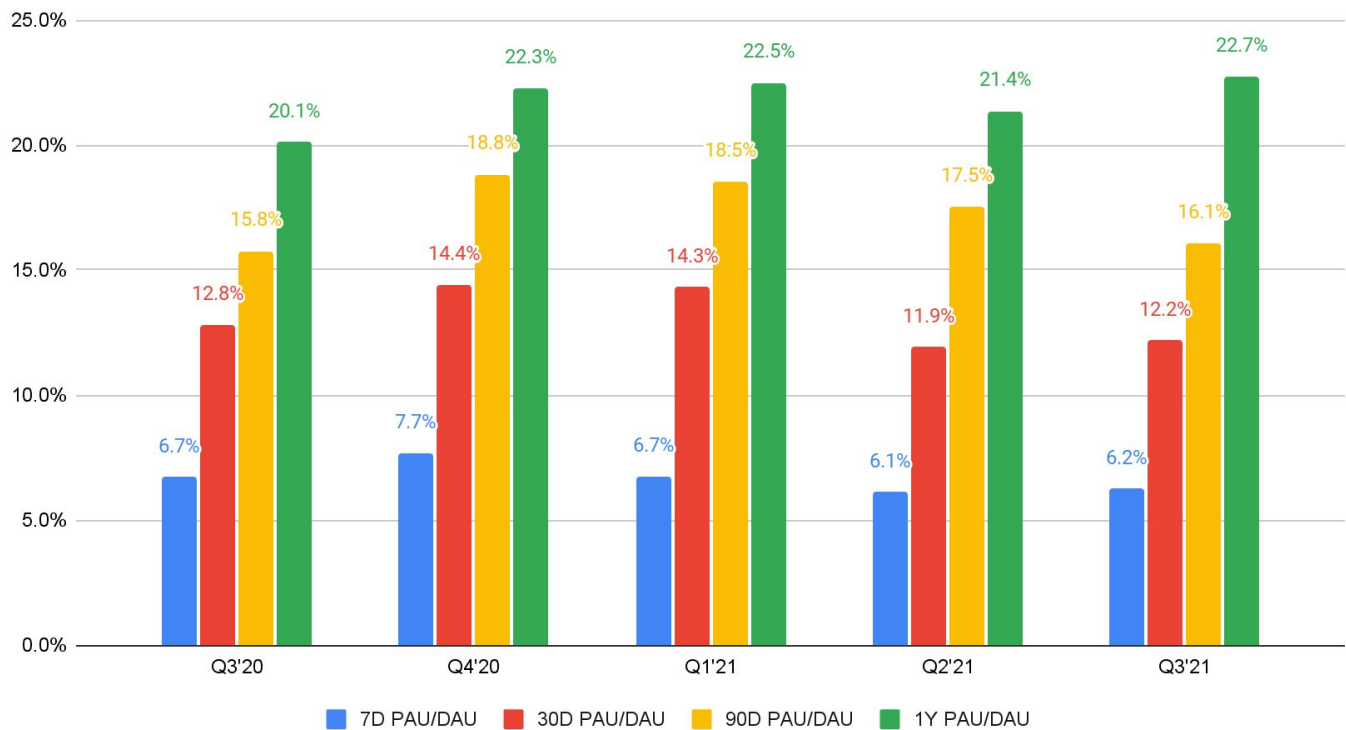
*** Source: Google Internal Data**

Looking across a collection of top MMORPG titles over the last year, this chart is showing the median PAU/DAU rates across 7, 30, 90 and 365 (or 1 year) days. We can see that the median MMORPG 7D PAU/DAU hovers around 6 percent-7 percent while the median 1Y PAU/DAU is around 22 percent. In other words, ~7 percent of MMORPG players have made one or more transactions in the prior 7 days and ~22 percent of MMORPG players have made one or more transactions in the last year.

Median (X)D PAU/DAU growth for top MMORPG titles
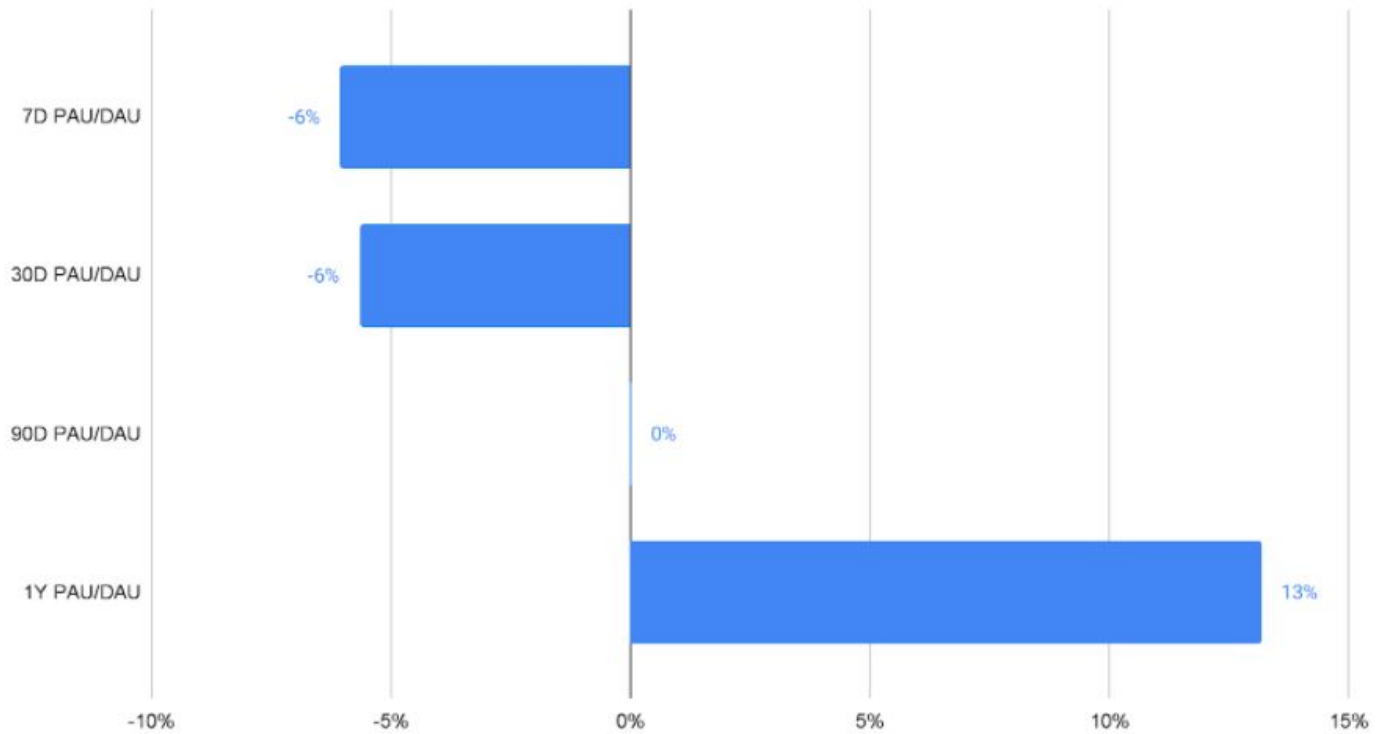
7D PAU/DAU	-6%
30D PAU/DAU	-6%
90D PAU/DAU	0%
1Y PAU/DAU	13%

*** Source: Google Internal Data*

Looking at Q3 2021 performance compared to Q3 2020 performance, 7D and PAU/DAU rates declined, while 1Y PAU/DAU has increased by 13 percent. This implies that there's a shift toward less frequent payments made over a longer period of time, as users move from weekly and monthly transactions to quarterly and yearly.
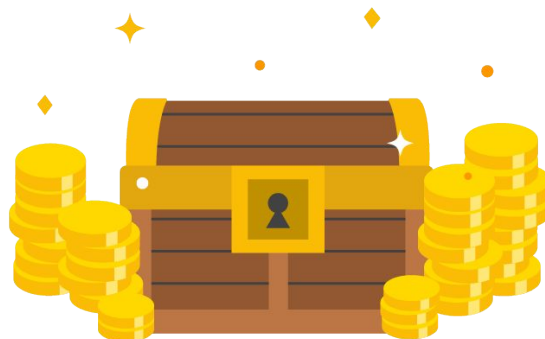
Insights and Tips

▶ **Engagement and Retention Insight and Tips:**

MMORPG is a time-demanding genre with many game play dynamics to learn. As a result, MMORPG players are pickier about choosing which games they will invest their time in. MMORPG players need to be impressed with the mobile title early and engage in building their character's progression in order to convert them to long-term, loyal players. Because endgame tends to happen at a much later stage, the onboarding and progression stages are especially important.

Moreover, MMORPG is a social genre. As communities form within the game, players tend to spend a lot of time socializing, in addition to engaging with endgame content. Nurturing a healthy and nontoxic community is important to retain users and increase player engagement. It ensures that everyone feels safe to enjoy your title.
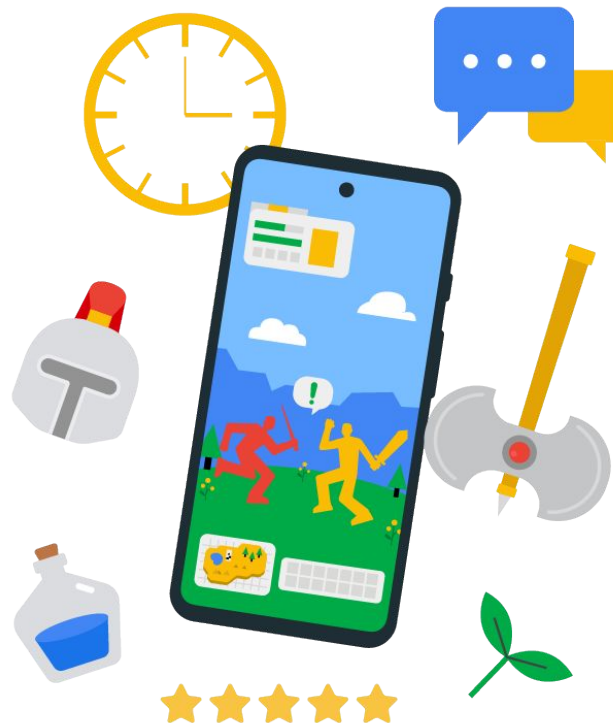
▶ Tips for optimizing your MMORPG's engagement:

01 Prioritize key features as part of onboarding

First impressions are important, and even more so for MMORPGs. New players tend to churn more than in other genres due to low retention rates and a long path to endgame. However, once they are onboarded, their engagement is high. Consider introducing core features early on, and pay special attention to the content between onboarding and endgame. Ensure that onboarding (e.g., questing) also provides users a preview of endgame content early on (e.g., dungeons and PvP battles).

02 Respect users' time

MMORPGs are generally time demanding, and users tend to spend more time playing than in any other genre. Find the right balance between time and progression, while providing users with engaging content. Consider different users' progression paths and their rewards. One example is incorporating auto-questing and auto-combat seamlessly to mobile-first users by allowing progression while the screen is inactive, but also rewarding active screen gameplay.

03 Facilitate social aspects.

Part of the genre's unique appeal is the social community within the titles. Facilitating seamless and organic communication among users enhances overall engagement and title loyalty. How quickly can players find a clan or guild that fits their goals for the game? More importantly, striking the right balance between new and experienced users will ensure a healthy community. One example could be providing experienced users with in-game incentives to support new users.

04 Consider the balance between casual and hardcore players

Provide incentives for both types of users to continue to engage with your title, such as sign bonuses that provide short-term boosts (e.g., running a short term event that provides increased experience gained during normal gameplay), as well as more hardcore endgame benefits (e.g., consumables). While hardcore players tend to be key influencers in the community, such as guild leaders and raid leaders, MMORPGs still require casual players to participate and have enough concurrent players for most game's content.

Google Play

05 Keep the game fun and fair

Many MMORPGs have PvP as part of their core endgame appeal. If this is the case for your title, consider how paying can affect not only user progression, but also competition with other players and overall competitive balance. Offer compelling gameplay rewards to ensure that new users are not excluded from participating in these PvP battles.
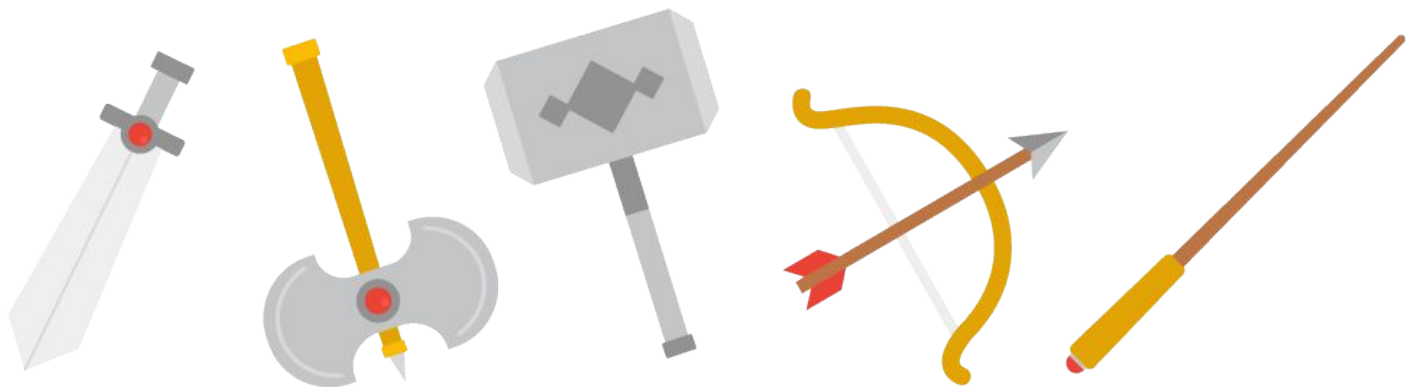
▶ Monetization Insights and Tips:

Buyers in the MMORPG genre are among the biggest spenders of any genre. This presents an opportunity for developers. However, keep in mind that given the social nature of the genre, players can easily research and understand the value of the amount they pay, so offering fair value is key.

Almost every action in all the major game loops tie back to the in-game economy. This complexity is part of the appeal in player-driven economies, but can also lead to excesses and imbalances. Maintaining a healthy and balanced game economy ensures that players don't burn out, and more importantly, ensures the longevity of your title.

01 Offer a variety of value to users.

Leverage players willingness to pay by providing significant value. For example, don't only focus on monetizing gear, consumables, or time-saving assets (e.g., inventory space), consider offering additional variety like, for instance, cosmetics that may appeal to players and their motivations.

02 Alternate pricing strategies

Give players the choice to pay at the frequency they're most comfortable. For example, think beyond limited-time offers and bundling, and consider the role of subscriptions and monthly passes. MMORPG players tend to make purchases on a weekly or monthly basis, rather than daily, so ensure that the timing of the value provided to them is appropriate. For example, provide quality-of-life upgrades for subscribers, which would increase convenience but not grant them unfair advantages or power gains. Conducting A/B tests will help optimize for the best value.

▶ Monetization Insights and Tips:

03 Monitor all major sources and sinks of difference in-game currencies

Carefully monitor sources and sinks of different in-game currencies. In particular, pay attention to <u>free vs. paid sources</u> and ensure that there's a healthy balance between the two, such that users are spending the currencies they're acquiring on a consistent basis. Pay attention to assets that users may be hoarding, which may signal a lack of demand for the specific asset or may otherwise devalue it, further decreasing incentives to pay.

04 Provide better guidance on the value of in-game currencies

MMORPGs have among the highest number of currencies, especially when limited-time only LiveOps currencies are utilized. These can often lead to confusion and unclear value to players resulting in buyer burnout or lower conversion. Provide clear value and guidance on all currencies and an easy way to track them, this will improve the user experience and their likelihood of transacting.

05 Protect users from imbalance spend

While providing upgrades and value through monetization is important, don't forget about users who are never-payers and low-payers. Building expensive paywalls and pay-to-win features may cause them to churn. Retaining these players, who are vital to the MMORPG community, can ensure that your game remains fun, viable, and balanced.

▶ Conclusion:

MMORPG is a dynamic genre with player-driven communities and economies. As a more hardcore genre, it is harder to acquire new players. But MMORPG players are more loyal, tend to dedicate more time to the titles they play, and have a high willingness to spend once they're invested. Ultimately, developers need to keep in mind all the various game loops and their impact on the game economy to maintain a healthy balance that doesn't churn out both casual and hardcore players.

Although the genre hasn't grown as rapidly as others over the past year, it is still a well established gaming genre with a rich community. While South Korean and Chinese developers have recently created some of the biggest hits in the genre, there's ample opportunity for Western developers, on the back of the genre's popularity on PC, to innovate and capture a broader mobile MMORPG audience.

We hope this report has provided insights to support your MMORPG development, whether you are still in the development phase or live on mobile platforms. We will continue to provide these genre reports to highlight exclusive Google Play data and offer detailed analyses to help grow game businesses. If there are genres you would like covered in the future, please send us your feedback using this quick survey.

Ka Kui Cheng Ye
Developer Growth Consultant
Google Play

Serena Shih
Strategic Partnerships Manager
Google Play

▶ Additional Resources

Check out Google Play's other resources for mobile game developers:

- [4x Strategy Game Genre report](#)
- [Battle Royale Game Genre Report](#)
- [Google Play Academy](#)
- [Games Business Fundamentals](#)
    - [Map and monitor your game's economy](#)
- [A KPIs Guide for Google Play Apps and Games](#)