



// MOBILE INSIGHTS 2022: GROWTH AND MONETIZATION_

Data backed insights to help grow your user base and effectively monetize your game.

BUILDING A FOUNDATION SO YOU CAN CREATE WITH CONFIDENCE

Every year we monitor and report on the overall state of our industry in the annual [Unity Gaming Report](#). One recurring trend is the boom in gaming driven by new player habits formed during the COVID-19 pandemic.

For many studios, news that gaming revenue (ad, IAP, and total revenue) [grew by 30%](#) on average last year can leave them feeling like they're missing out on how to make their game successful enough to earn revenue from it.

Growing a user base and effectively monetizing it can be a challenge for many studios. However, data can tell us a thing or two about how studios find success in these areas.

SUPPORTING THE FUTURE OF YOUR CREATION

This report gives you practical takeaways, backed by hard data, that aim to help you set up your game and studio for success.

It leverages unique Unity data from 28B+ ads served each month, 168M average users reached each day, and 235M+ average monthly installs. It also looks at 46M+ average monthly in-app purchases (IAPs) for a full view of monetization tactics.

Our monetization and user acquisition (UA) experts have analyzed the data to provide you with guidance on:

- Genre and subgenre user distribution
- Soft launch campaign trends
- Ad campaign creative best practices
- In-app purchases trends
- Ad implementation tactics
- Monetization performance

Keep reading to uncover the insights that will help support the future of your creation.



PLAN EARLY TO IMPROVE YOUR CHANCES OF SUCCESS

Discover the genres with the most active user bases to help you match your game development strategies to primed audiences waiting for the next big hit.

KEY TAKEAWAYS

- **30%** of action genre DAU played platformer style games
- **98%** of word genre DAU played classic style games
- **24%** of hypercasual genre DAU played platformer style games, and **23%** played puzzle games

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DAU AND YOUR GAME STYLE

Diving into your next development project can be an exciting undertaking and it begins with deciding what kind of game to make. Sometimes this is a bottoms-up decision where you find a fun game mechanic and create an experience around it. Other times, developers take a top-down approach where they identify a specific game genre to create for.

The [Unity Gaming Report 2022](#) has shown there are significant revenue

opportunities for developers who create and publish three or more styles of games versus developers who publish only two kinds of games (+119% more revenue for studios with three or more).

However, some genres and subgenres have higher concentrations of DAU than others. These standouts could be an opportunity to capitalize on the popularity or lack of popularity of a style and get your game on a path to success faster.

WHAT ARE THE TOP SUBGENRES IN APP STORES BY DAU?

| Genre | Highest DAU subgenre | DAU % | Second highest DAU subgenre | DAU % | Third highest DAU subgenre | DAU % |
|--------------|------------------------|--------|-----------------------------|--------|----------------------------|--------|
| Action | Platformers | 29.33% | Shooters | 18.01% | Sandbox | 11.15% |
| Adventure | Fantasy | 26.11% | Platformers | 20.05% | Search / clues | 11.75% |
| Arcade | Runners | 55.30% | Sandbox | 9.13% | Arcade shooters | 6.49% |
| Board | Tabletop | 67.41% | Coloring | 15.33% | Others | 9.39% |
| Card | Traditional card games | 65.62% | Fantasy | 23.22% | Poker | 9.79% |
| Casino | Slots | 47.49% | Card | 37.52% | Traditional card games | 4.52% |
| Casual | Lifesim | 25.75% | Classic match 3 | 16.09% | Bubble shooter | 11.63% |
| Hypercasual | Platformers | 23.81% | Puzzle | 22.62% | Action | 11.38% |
| Puzzle | Other puzzle | 24.13% | Traditional match 3 | 7.76% | Novel puzzles | 5.40% |
| Racing | Car driving | 51.52% | Racing | 20.03% | Simulator | 18.63% |
| Role-playing | Platformers | 11.97% | Customization | 11.39% | Turn based | 9.28% |
| Simulation | Worldbuilder | 3.64% | Sandbox | 2.16% | Simulator | 1.95% |
| Sports | Realistic | 58.50% | Arcade | 17.28% | Tabletop | 17.27% |
| Trivia | Family / trivia | 59.77% | Other puzzle | 6.69% | Simulator | 0.09% |
| Word | Classic word | 98.08% | Trivia word | 1.17% | Other puzzle | 0.49% |

App store game genres with top three subgenres by DAU percentage.

PLATFORM AND RUNNER STYLES DO BEST IN CASUAL GAME GENRES

Platform or runner style games have the highest percentage of DAU among casual game genres like action, adventure, and arcade.

Almost 30% of the action genre DAU played platformer style games.

BOARD AND WORD GENRES GET THE HIGHEST NUMBER OF PLAYERS WITHIN THE TABLETOP AND CLASSIC SUBGENRES

Tabletop and classic games are popular in the board and word genres respectively, possibly due to the familiarity with classic versions of these games.

98% of word games' DAU played classic style games.

HOW HAS DAU EVOLVED BY GENRE IN THE LAST TWO YEARS?

Overall, 2021 was a good year with most genres seeing an increase in popularity and in DAU with certain subgenres climbing positions in the ranking, such as:

- In the adventure genre, fantasy games gained more popularity in 2021 with DAU increasing from 18% to 26%
- In the arcade genre, runner games have increased their popularity among players with DAU rising from 43% to 55%
- Traditional card games climbed two ranks to the third spot in terms of DAU
- Casual games saw the largest shift in classic match three games. In 2020, it was the 10th most popular casual game subgenre, however, this rank increased to second place in the following year
- Contrary to platformer games of other genres, hypercasual platformer games decreased in popularity from 24% to 18% while puzzle games maintained their popularity with 23% DAU
- Popularity of platforming games has also shown a positive trend for role-playing games. From 2020 to 2021, its DAU increased by six points to 12% and placed in the number one rank

Some subgenres fell out of top three this year:

- Decorate themed games lost their popularity in 2021. In 2020, they were the second highest DAU subgenre in the word genre, however, this ranking has now dropped to fifth place in 2021
- Idle simulation games dropped in popularity in 2021, while sandbox and action sandbox games gained popularity

SOFT LAUNCH TO SCALE AND TEST FOR UA

From the top locations and time of year to launch your game to the specific tactics studios are deploying, it always helps to ensure your game is starting off on the strongest ground possible.

This section will explore benchmarks of what successful studios are doing when it comes to their soft launches.

KEY TAKEAWAYS

- **Canada** is the preferred location for a soft launch
- **January** is the preferred month for a soft launch
- On average, a soft launch takes **six and a half weeks** to complete
- It takes about **seven to eight weeks** for a game to achieve peak DAU



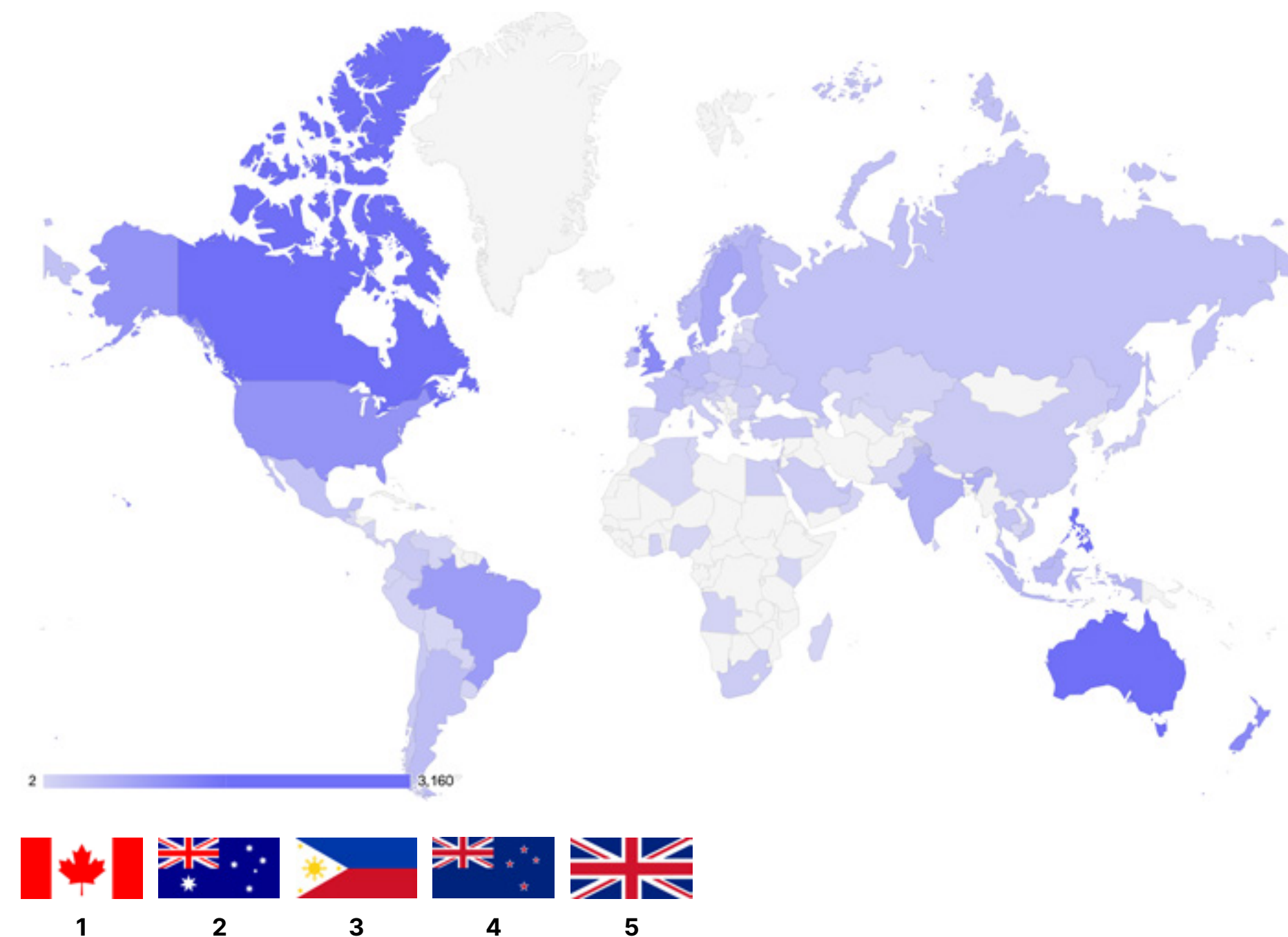
PERFECT YOUR SOFT LAUNCH STRATEGY FOR UA

Studios of all sizes often conduct soft launches to better inform their UA strategy regarding DAU, retention, and return on ad spend (ROAS), before wider deployments. While this seems like a simple and safe option, picking the right location, time, and duration for your soft launch is vital for it to actually serve its purpose. You need to know what is the right choice for your game.

ENGLISH-SPEAKING COUNTRIES WITH HEALTHY ECONOMIES OFFER BETTER CONVERSION RATES

Publishers mostly look for countries that have a high volume of DAU and devices for larger sample size, or countries whose primary language is English. This makes Canada, Australia, and the Philippines top choices for publishers to soft launch in.

WHAT ARE THE PREFERRED COUNTRIES TO CONDUCT A SOFT LAUNCH?



Locations preferred to conduct soft launches, ranked.



SOFT LAUNCH

If you're new to the concept of soft launching a game, it is a user acquisition tactic where a developer releases a game ahead of its scheduled global launch without a full-scaled marketing push.

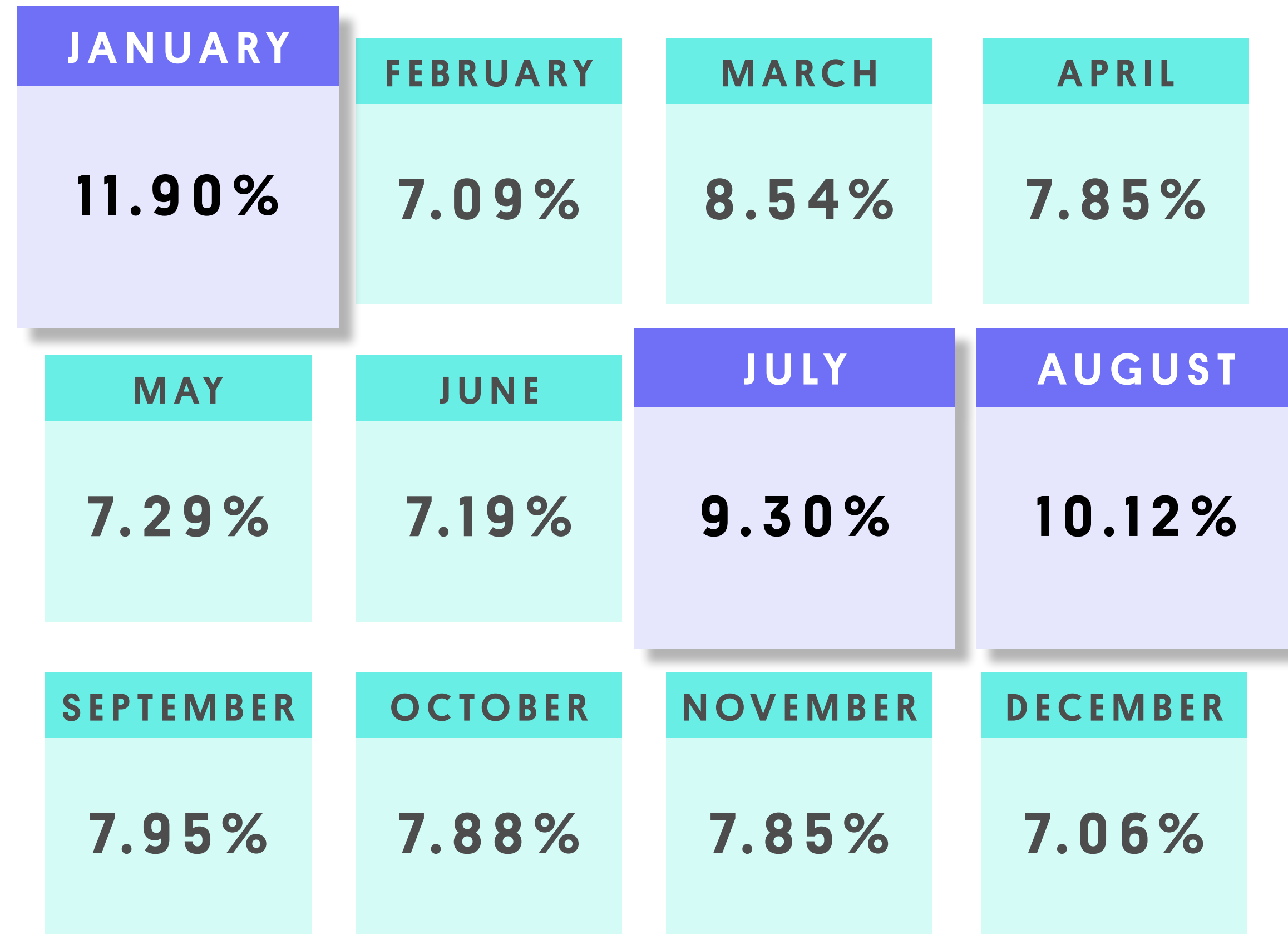
Usually limited to doing user acquisition to a small audience, soft launches are used to identify early issues, fix bugs, test monetization mechanics, and understand user reactions before a greater investment in a launch.

Soft launches also allow publishers to optimize marketing spend by testing user acquisition strategies in markets ahead of wider launches.

TIMING YOUR SOFT LAUNCH FOR OPTIMAL OUTCOME

January is the preferred month to soft launch games with the holiday campaign spending over and people returning to their regular schedules. The price of ad impressions varies with seasonality with traffic in the first three months of the year being often the cheapest, followed by the summer months of July and August.

WHAT ARE THE BEST MONTHS TO CONDUCT A SOFT LAUNCH?



Months used to deploy soft launch and percentage of games launched

SOFT LAUNCH DURATION CAN VARY DUE TO SEVERAL FACTORS

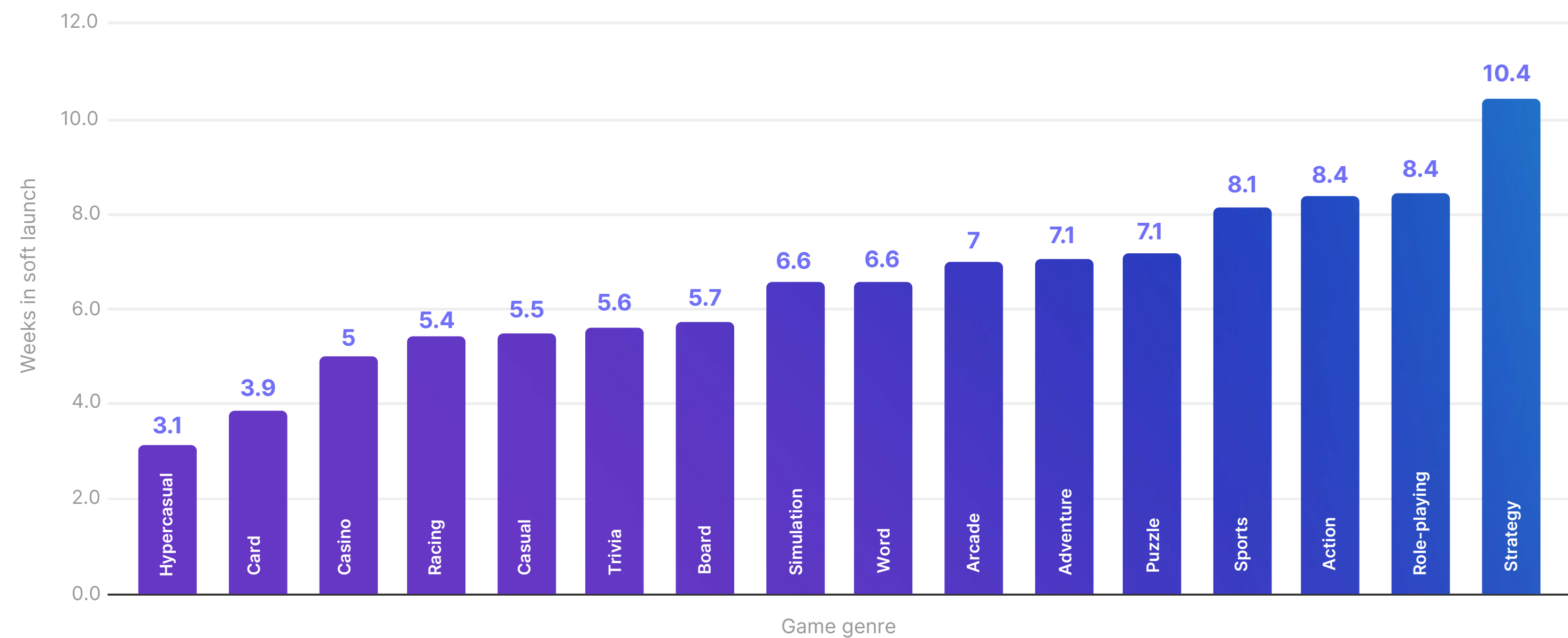
The average duration of a soft launch is six and a half weeks. However, different genres see various lengths for soft launches depending on the complexity of the game, the audience they are intended for, and how quickly they churn players.

Due to their complexity, mid-core games such as action, role-playing, and strategy have the longest soft launch periods of eight to 10 weeks. These genres often have complex gameplay or online elements that need further optimizations after going live, extending the soft launch time.

Casual games, such as hypercasual, card, and casino, have the shortest soft launches of approximately one month before release. This is because these genres often have more simple gameplay loops, shorter session lengths, or shorter player lifespans.

HOW LONG SHOULD A SOFT LAUNCH RUN FOR?

Average duration of soft launches by weeks and genre



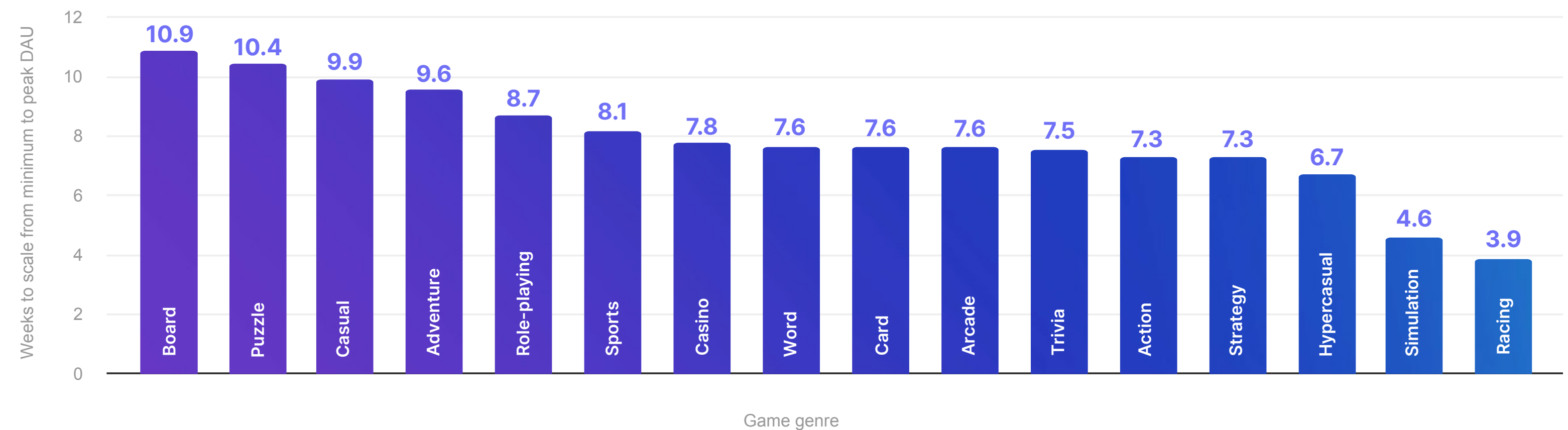
HOW LONG DOES IT TAKE TO REACH PEAK DAU?

THE AVERAGE TIME TO REACH PEAK DAU IS ABOUT 6.5 WEEKS

Hardcore gamers are quick to jump into the latest game, which is why we see games from hardcore genres like simulation, action, strategy, and racing, take about four to seven weeks to achieve peak DAU.

Games that cater to a wider casual audience grow more slowly as evident from board, puzzle, and casual titles taking around 10 weeks to ramp up to peak DAU.

Time for DAU to grow from min. to max. by weeks and genre



Data includes games launched after 2019.

SPEND YOUR AD BUDGET WISELY

A big part of scaling up your user base is making the most of your advertising dollars from early soft launches to wider release stages. To help with this, we analyzed key performance indicators (KPIs) for each genre of game to highlight the most effective genre-to-genre combinations and also identified what types of games advertisers should consider advertising in.

KEY TAKEAWAYS

- Advertising in hypercasual games has **38% higher CTR** than other genres
- Games that are **advertised in games of the same genre** generally perform better with cannibalization not being a concern
- **D7 retention** is much higher for games targeted at casual audiences for word, board, and puzzle games, than hardcore gamers for racing, role-playing, and simulation games.



DRIVING USER GROWTH BY ADVERTISING IN THE RIGHT GENRE

The following heatmaps are separated by game genre that a developer might be looking to advertise. The rows in each table represent common UA metrics, while the columns show the performance of that metric in each targeted game genre.

These heatmaps can inform you on the best genres to advertise your game in and what might be best to avoid so you can get the biggest impact for your ad spend.

Note: We have excluded arcade games from this section's analysis as this store category pertains only to Android.

REFRESH YOURSELF ON USER ACQUISITION CAMPAIGN PERFORMANCE:

If you're new to user acquisition campaigns or just need a refresher these are some common key performance indicators.

Clickthrough rate (CTR)

Measures how frequently users click on your ad.

Installs per 1,000 impressions (IPM)

Measures the number of installs for every 1,000 users who see your ad.

Install rate (IR)

Measures how many clicks on an ad it takes to lead to an install of a game.
















Conversion rate (CVR)

Measures what proportion of people are persuaded by your advertising to take a particular action, such as installing your game.

Day 7 (D7) retention

D7 retention is the share of users playing your game or using your app on day seven after app installation.

SKIP AHEAD TO SEE HOW UA PERFORMS DEPENDING ON THE GENRE CAMPAIGNS ARE RUN ON:

-  [ACTION →](#)
-  [ADVENTURE →](#)
-  [BOARD →](#)
-  [CARD →](#)
-  [CASINO →](#)
-  [CASUAL →](#)
-  [HYPERCASUAL →](#)
-  [PUZZLE →](#)
-  [RACING →](#)
-  [ROLE-PLAYING →](#)
-  [SIMULATION →](#)
-  [SPORTS →](#)
-  [STRATEGY →](#)
-  [TRIVIA →](#)
-  [WORD →](#)

ACTION GAMES

For best campaign results:

- **CTR:** Advertise on hypercasual and trivia games
- **IR:** Advertise on strategy and other action games
- **IPM and CVR:** Advertise on hypercasual and other action games
- **D7 retention:** Advertise on word and board games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 15.14% | 19.77% | 16.00% | 8.67% | 7.70% | 18.03% | 23.24% | 20.39% | 16.20% | 15.25% | 17.38% | 12.55% | 13.28% | 21.02% | 9.91% |
| IR | 24.28% | 18.01% | 11.89% | 15.70% | 14.90% | 15.18% | 20.56% | 8.74% | 19.06% | 18.55% | 18.13% | 21.67% | 18.83% | 11.45% | 19.57% |
| IPM | 36.76 | 35.60 | 19.02 | 13.61 | 11.47 | 27.37 | 47.77 | 17.82 | 30.88 | 28.29 | 31.51 | 27.19 | 25.02 | 24.06 | 19.40 |
| CVR | 3.68% | 3.56% | 1.90% | 1.36% | 1.15% | 2.74% | 4.78% | 1.78% | 3.09% | 2.83% | 3.15% | 2.72% | 2.50% | 2.41% | 1.94% |
| D7 retention | 3.88% | 3.27% | 6.75% | 7.04% | 5.43% | 4.45% | 4.77% | 5.58% | 4.19% | 3.58% | 3.38% | 4.49% | 3.68% | 5.29% | 7.01% |

Performance of advertised action games per genre.

ADVENTURE GAMES

For best campaign results:

- **CTR:** Advertise on hypercasual and action games
- **IR, IPM, and CVR:** Advertise on action and other adventure games
- **D7 retention:** Advertise on word, card, casino, and board games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 10.89% | 10.52% | 4.81% | 4.39% | 3.47% | 7.14% | 11.34% | 4.97% | 10.49% | 8.59% | 8.37% | 7.28% | 8.48% | 5.54% | 5.32% |
| IR | 22.97% | 22.84% | 15.12% | 15.40% | 15.36% | 19.61% | 20.87% | 18.69% | 20.85% | 19.16% | 21.56% | 21.66% | 19.36% | 17.53% | 19.03% |
| IPM | 25.02 | 24.04 | 7.27 | 6.76 | 5.33 | 14.00 | 23.66 | 9.30 | 21.88 | 16.47 | 18.04 | 15.76 | 16.42 | 9.71 | 10.13 |
| CVR | 2.50% | 2.40% | 0.73% | 0.68% | 0.53% | 1.40% | 2.37% | 0.93% | 2.19% | 1.65% | 1.80% | 1.58% | 1.64% | 0.97% | 1.01% |
| D7 retention | 2.81% | 4.45% | 7.54% | 7.93% | 7.74% | 3.98% | 3.41% | 5.38% | 3.10% | 3.26% | 3.43% | 3.10% | 3.74% | 4.97% | 8.46% |

Performance of advertised adventure games per genre.

BOARD GAMES

For best campaign results:

- **CTR:** Advertise on hypercasual and RPG
- **IR:** Advertise on hypercasual and trivia games
- **IPM and CVR:** Advertise on hypercasual and other board games
- **D7 retention:** Advertise on card and word games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 7.06% | 4.48% | 6.12% | 5.41% | 4.07% | 5.98% | 8.24% | 5.19% | 7.22% | 7.27% | 4.52% | 5.57% | 5.08% | 5.21% | 5.83% |
| IR | 9.05% | 10.23% | 12.84% | 8.59% | 11.07% | 12.00% | 14.28% | 12.99% | 9.37% | 8.96% | 11.99% | 13.58% | 11.66% | 13.88% | 10.02% |
| IPM | 6.39 | 4.58 | 7.86 | 4.65 | 4.50 | 7.18 | 11.76 | 6.75 | 6.77 | 6.51 | 5.42 | 7.56 | 5.92 | 7.23 | 5.85 |
| CVR | 0.64% | 0.46% | 0.79% | 0.46% | 0.45% | 0.72% | 1.18% | 0.67% | 0.68% | 0.65% | 0.54% | 0.76% | 0.59% | 0.72% | 0.58% |
| D7 Retention | 6.52% | 8.37% | 10.56% | 12.63% | 10.49% | 9.69% | 5.47% | 11.32% | 5.53% | 6.46% | 5.96% | 6.15% | 8.44% | 9.45% | 12.18% |

Performance of advertised board games per genre.

CARD GAMES

For best campaign results:

- **CTR:** Advertise on board and other card games
- **IR:** Advertise on trivia and hypercasual games
- **IPM and CVR:** Advertise on casual and other card games
- **D7 retention:** Advertise on word and puzzle games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 4.47% | 3.81% | 5.84% | 6.72% | 4.72% | 4.77% | 5.67% | 4.62% | 5.18% | 3.88% | 3.25% | 4.53% | 3.71% | 4.55% | 5.56% |
| IR | 7.00% | 8.31% | 8.21% | 9.14% | 10.15% | 11.55% | 8.63% | 9.41% | 8.93% | 8.44% | 10.31% | 9.69% | 8.64% | 11.56% | 7.38% |
| IPM | 3.13 | 3.16 | 4.79 | 6.14 | 4.79 | 5.52 | 4.89 | 4.34 | 4.63 | 3.27 | 3.35 | 4.39 | 3.20 | 5.26 | 4.10 |
| CVR | 0.31% | 0.32% | 0.48% | 0.61% | 0.48% | 0.55% | 0.49% | 0.43% | 0.46% | 0.33% | 0.33% | 0.44% | 0.32% | 0.53% | 0.41% |
| D7 retention | 6.93% | 10.65% | 13.11% | 13.32% | 9.83% | 10.87% | 5.48% | 14.02% | 6.49% | 8.79% | 10.10% | 9.06% | 9.70% | 11.77% | 14.23% |

Performance of advertised card games per genre.

CASINO GAMES

For best campaign results:

- **CTR:** Advertise on adventure and racing games
- **IR, IMP, and CVR:** Advertise on casual and other casino games
- **D7 retention:** Advertise on casino and card games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|-------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 5.05% | 7.08% | 5.76% | 5.06% | 5.58% | 5.55% | 5.98% | 5.14% | 6.16% | 5.00% | 4.11% | 4.92% | 4.66% | 4.90% | 4.84% |
| IR | 7.13% | 4.86% | 9.20% | 10.09% | 18.80% | 14.78% | 7.71% | 9.96% | 5.17% | 5.79% | 8.34% | 9.53% | 6.41% | 11.94% | 10.24% |
| IPM | 3.60 | 3.44 | 5.30 | 5.11 | 10.50 | 8.20 | 4.61 | 5.12 | 3.18 | 2.90 | 3.43 | 4.68 | 2.99 | 5.85 | 4.96 |
| CVR | 0.36% | 0.34% | 0.53% | 0.51% | 1.05% | 0.82% | 0.46% | 0.51% | 0.32% | 0.29% | 0.34% | 0.47% | 0.30% | 0.58% | 0.50% |
| D7 retention | 3.59% | 3.57% | 6.56% | 8.20% | 8.82% | 5.84% | 3.66% | 6.62% | 3.42% | 3.72% | 4.79% | 4.96% | 4.77% | 4.34% | 6.80% |

Performance of advertised casino games per genre.

CASUAL GAMES

For best campaign results:

- **CTR, IPM, and CVR:** Advertise on hypercasual and racing games
- **IR:** Advertise on hypercasual and casino games
- **D7 retention:** Advertise on card and word games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|-------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 10.05% | 7.29% | 6.10% | 4.27% | 5.06% | 8.65% | 12.00% | 5.42% | 10.56% | 9.13% | 7.02% | 6.45% | 6.57% | 5.92% | 5.30% |
| IR | 13.83% | 13.91% | 8.13% | 10.00% | 18.57% | 16.87% | 22.20% | 13.19% | 15.06% | 11.27% | 17.31% | 14.79% | 12.07% | 17.64% | 10.71% |
| IPM | 13.89 | 10.15 | 4.96 | 4.27 | 9.39 | 14.60 | 26.63 | 7.15 | 15.91 | 10.29 | 12.15 | 9.53 | 7.93 | 10.44 | 5.68 |
| CVR | 1.39% | 1.01% | 0.50% | 0.43% | 0.94% | 1.46% | 2.66% | 0.72% | 1.59% | 1.03% | 1.21% | 0.95% | 0.79% | 1.04% | 0.57% |
| D7 retention | 3.84% | 3.86% | 8.49% | 9.49% | 8.40% | 4.66% | 4.39% | 5.83% | 3.96% | 3.54% | 3.54% | 4.19% | 4.42% | 4.55% | 8.74% |

Performance of advertised casual games per genre.

HYPERCASUAL GAMES

For best campaign results:

- **CTR:** Advertise on role-playing and other hypercasual games
- **IR:** Advertise on trivia games and other hypercasual games
- **IPM and CVR:** Advertise on action games and other hypercasual games
- **D7 retention:** Advertise on word and casino games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 24.23% | 25.40% | 12.06% | 5.53% | 4.72% | 20.81% | 30.64% | 11.62% | 23.92% | 25.78% | 23.03% | 18.45% | 21.86% | 16.58% | 8.24% |
| IR | 12.13% | 10.03% | 12.91% | 15.63% | 16.74% | 12.00% | 16.80% | 15.75% | 12.06% | 10.66% | 11.08% | 13.95% | 11.98% | 17.37% | 15.84% |
| IPM | 29.40 | 25.47 | 15.57 | 8.65 | 7.91 | 24.98 | 51.49 | 18.30 | 28.85 | 27.48 | 25.52 | 25.74 | 26.19 | 28.79 | 13.05 |
| CVR | 2.94% | 2.55% | 1.56% | 0.87% | 0.79% | 2.50% | 5.15% | 1.83% | 2.88% | 2.75% | 2.55% | 2.57% | 2.62% | 2.88% | 1.30% |
| D7 retention | 4.40% | 3.88% | 5.54% | 2.82% | 7.33% | 4.18% | 4.37% | 4.64% | 4.50% | 3.96% | 4.16% | 4.28% | 4.57% | 4.39% | 7.54% |

Performance of advertised hypercasual games per genre.

PUZZLE GAMES

For best campaign results:

- **CTR:** Advertise on hypercasual and action games
- **IR, IPM, and CVR:** Advertise on hypercasual and trivia games
- **D7 retention:** Advertise on card and word games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 8.41% | 5.22% | 5.16% | 4.42% | 3.15% | 6.58% | 10.94% | 5.45% | 7.71% | 7.47% | 6.55% | 5.78% | 4.66% | 5.95% | 5.54% |
| IR | 9.90% | 11.08% | 12.21% | 10.85% | 11.35% | 13.12% | 15.28% | 14.55% | 11.19% | 9.49% | 10.55% | 14.82% | 10.74% | 15.49% | 12.37% |
| IPM | 8.32 | 5.79 | 6.30 | 4.79 | 3.57 | 8.62 | 16.72 | 7.94 | 8.62 | 7.09 | 6.91 | 8.57 | 5.00 | 9.22 | 6.85 |
| CVR | 0.83% | 0.58% | 0.63% | 0.48% | 0.36% | 0.86% | 1.67% | 0.79% | 0.86% | 0.71% | 0.69% | 0.86% | 0.50% | 0.92% | 0.68% |
| D7 retention | 4.84% | 5.71% | 11.24% | 13.48% | 11.26% | 7.28% | 4.42% | 9.49% | 4.37% | 4.74% | 4.79% | 5.72% | 7.22% | 7.60% | 13.23% |

Performance of advertised puzzle games per genre.

RACING GAMES

For best campaign results:

- **CTR:** Advertise on casual and hypercasual games
- **IR:** Advertise on card and other racing games
- **IPM and CVR:** Hypercasual and other racing games
- **D7 retention:** Advertise on board, word and role-playing games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 22.55% | 26.94% | 22.04% | 12.33% | 14.53% | 30.62% | 29.04% | 20.37% | 21.34% | 28.33% | 23.59% | 17.96% | 29.27% | 17.93% | 17.75% |
| IR | 10.69% | 9.41% | 7.41% | 15.15% | 13.02% | 7.78% | 12.90% | 11.58% | 14.48% | 8.74% | 10.26% | 12.84% | 9.72% | 11.65% | 10.80% |
| IPM | 24.09 | 25.34 | 16.34 | 18.68 | 18.92 | 23.82 | 37.45 | 23.59 | 30.90 | 24.77 | 24.20 | 23.07 | 28.44 | 20.89 | 19.17 |
| CVR | 2.41% | 2.53% | 1.63% | 1.87% | 1.89% | 2.38% | 3.75% | 2.36% | 3.09% | 2.48% | 2.42% | 2.31% | 2.84% | 2.09% | 1.92% |
| D7 retention | 6.15% | 6.29% | 8.57% | 6.37% | 6.33% | 6.82% | 5.34% | 7.03% | 5.55% | 7.50% | 6.10% | 6.25% | 5.74% | 6.91% | 7.57% |

Performance of advertised racing games per genre.

ROLE-PLAYING GAMES

For best campaign results:

- **CTR, IPM, and CVR:** Advertise on hypercasual and trivia games
- **IR:** Advertise on hypercasual and other role-playing games
- **D7 retention:** Advertise on card and word games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|-------|-------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|-------|
| CTR | 5.55% | 5.27% | 4.86% | 2.97% | 2.25% | 5.30% | 9.18% | 3.90% | 5.95% | 4.80% | 4.96% | 4.39% | 3.79% | 7.67% | 5.84% |
| IR | 8.22% | 7.19% | 7.18% | 8.05% | 6.19% | 8.95% | 12.90% | 8.24% | 8.17% | 10.25% | 8.80% | 8.09% | 8.79% | 9.69% | 7.91% |
| IPM | 4.56 | 3.79 | 3.49 | 2.39 | 1.39 | 4.75 | 11.84 | 3.21 | 4.86 | 4.91 | 4.36 | 3.55 | 3.33 | 7.43 | 4.62 |
| CVR | 0.46% | 0.38% | 0.35% | 0.24% | 0.14% | 0.47% | 1.18% | 0.32% | 0.49% | 0.49% | 0.44% | 0.36% | 0.33% | 0.74% | 0.46% |
| D7 retention | 4.14% | 3.85% | 4.44% | 7.12% | 6.93% | 3.22% | 3.54% | 4.01% | 3.21% | 3.45% | 3.08% | 2.81% | 5.60% | 4.56% | 6.38% |

Performance of advertised role-playing games per genre.

SIMULATION GAMES

For best campaign results:

- **CTR:** Advertise on hypercasual and role playing games
- **IR:** Advertise on hypercasual and strategy games
- **IPM and CVR:** Advertise on hypercasual and racing games
- **D7 retention:** Advertise on card and casino games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 10.36% | 9.16% | 5.55% | 4.15% | 4.11% | 9.37% | 15.06% | 5.35% | 11.07% | 11.52% | 9.09% | 9.14% | 6.77% | 7.90% | 6.17% |
| IR | 20.27% | 18.62% | 13.33% | 14.91% | 17.93% | 20.34% | 22.89% | 16.91% | 21.78% | 13.41% | 22.27% | 20.94% | 22.58% | 19.72% | 12.32% |
| IPM | 20.99 | 17.06 | 7.40 | 6.18 | 7.37 | 19.06 | 34.48 | 9.05 | 24.11 | 15.46 | 20.24 | 19.15 | 15.29 | 15.58 | 7.60 |
| CVR | 2.10% | 1.71% | 0.74% | 0.62% | 0.74% | 1.91% | 3.45% | 0.91% | 2.41% | 1.55% | 2.02% | 1.91% | 1.53% | 1.56% | 0.76% |
| D7 retention | 3.73% | 3.69% | 5.17% | 8.14% | 6.79% | 3.71% | 3.80% | 4.52% | 3.44% | 3.57% | 3.61% | 3.48% | 4.97% | 3.50% | 5.69% |

Performance of advertised simulation games per genre.

SPORTS GAMES

For best campaign results:

- **CTR:** Advertise on adventure and hypercasual games
- **IR:** Advertise on puzzle and other sports games
- **IPM and CVR:** Advertise on hypercasual and other sports games
- **D7 retention:** Advertise on word, card and casino games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 14.98% | 18.49% | 6.20% | 4.49% | 2.97% | 9.31% | 17.33% | 5.33% | 17.70% | 17.73% | 16.44% | 11.38% | 12.29% | 7.29% | 6.25% |
| IR | 11.53% | 8.76% | 16.36% | 18.12% | 15.70% | 15.61% | 16.62% | 18.34% | 9.96% | 9.25% | 9.60% | 19.11% | 10.97% | 16.42% | 14.59% |
| IPM | 17.27 | 16.20 | 10.14 | 8.14 | 4.67 | 14.54 | 28.81 | 9.77 | 17.64 | 16.40 | 15.78 | 21.74 | 13.49 | 11.96 | 9.12 |
| CVR | 1.73% | 1.62% | 1.01% | 0.81% | 0.47% | 1.45% | 2.88% | 0.98% | 1.76% | 1.64% | 1.58% | 2.17% | 1.35% | 1.20% | 0.91% |
| D7 retention | 5.58% | 5.37% | 7.41% | 7.90% | 7.74% | 5.52% | 5.07% | 6.69% | 6.35% | 5.45% | 5.43% | 5.23% | 5.95% | 6.71% | 8.00% |

Performance of advertised sports games per genre.

STRATEGY GAMES

For best campaign results:

- **CTR:** Advertise on hypercasual and adventure games
- **IR:** Advertise on hypercasual and other strategy games
- **IPM and CVR:** Advertise on hypercasual and action games
- **D7 retention:** Advertise on casino and card games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|-------|-------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 6.72% | 7.18% | 5.05% | 3.51% | 2.76% | 5.80% | 8.01% | 4.56% | 7.06% | 5.69% | 5.52% | 5.10% | 4.78% | 5.03% | 4.51% |
| IR | 8.68% | 6.44% | 7.56% | 9.92% | 11.35% | 9.81% | 11.25% | 9.90% | 7.95% | 7.94% | 9.62% | 9.45% | 10.64% | 10.27% | 10.09% |
| IPM | 5.83 | 4.63 | 3.82 | 3.48 | 3.14 | 5.69 | 9.01 | 4.52 | 5.61 | 4.52 | 5.31 | 4.82 | 5.08 | 5.17 | 4.55 |
| CVR | 0.58% | 0.46% | 0.38% | 0.35% | 0.31% | 0.57% | 0.90% | 0.45% | 0.56% | 0.45% | 0.53% | 0.48% | 0.51% | 0.52% | 0.46% |
| D7 retention | 3.06% | 3.91% | 6.82% | 8.40% | 9.55% | 4.10% | 0.83% | 5.32% | 4.10% | 6.36% | 5.29% | 5.37% | 8.15% | 5.09% | 6.15% |

Performance of advertised strategy games per genre.

TRIVIA GAMES

For best campaign results:

- **CTR:** Advertise on hypercasual and role-playing games
- **IR, IPM, CVR:** Advertise on hypercasual and other trivia games
- **D7 retention:** Advertise on word, board and card games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 9.05% | 7.34% | 6.22% | 5.18% | 5.08% | 7.67% | 11.56% | 5.81% | 7.56% | 10.01% | 7.47% | 7.78% | 6.60% | 8.10% | 8.45% |
| IR | 18.68% | 14.49% | 15.44% | 16.43% | 16.90% | 21.51% | 29.94% | 20.20% | 19.28% | 16.11% | 18.91% | 24.65% | 15.01% | 33.19% | 15.07% |
| IPM | 16.92 | 10.63 | 9.60 | 8.52 | 8.58 | 16.49 | 34.61 | 11.74 | 14.57 | 16.13 | 14.13 | 19.18 | 9.92 | 26.89 | 12.74 |
| CVR | 1.69% | 1.06% | 0.96% | 0.85% | 0.86% | 1.65% | 3.46% | 1.17% | 1.46% | 1.61% | 1.41% | 1.92% | 0.99% | 2.69% | 1.27% |
| D7 retention | 5.00% | 4.82% | 6.41% | 6.39% | 3.83% | 4.80% | 4.46% | 5.56% | 5.09% | 4.46% | 4.25% | 4.21% | 4.95% | 5.90% | 6.60% |

Performance of advertised trivia games per genre.

WORD GAMES

For best campaign results:

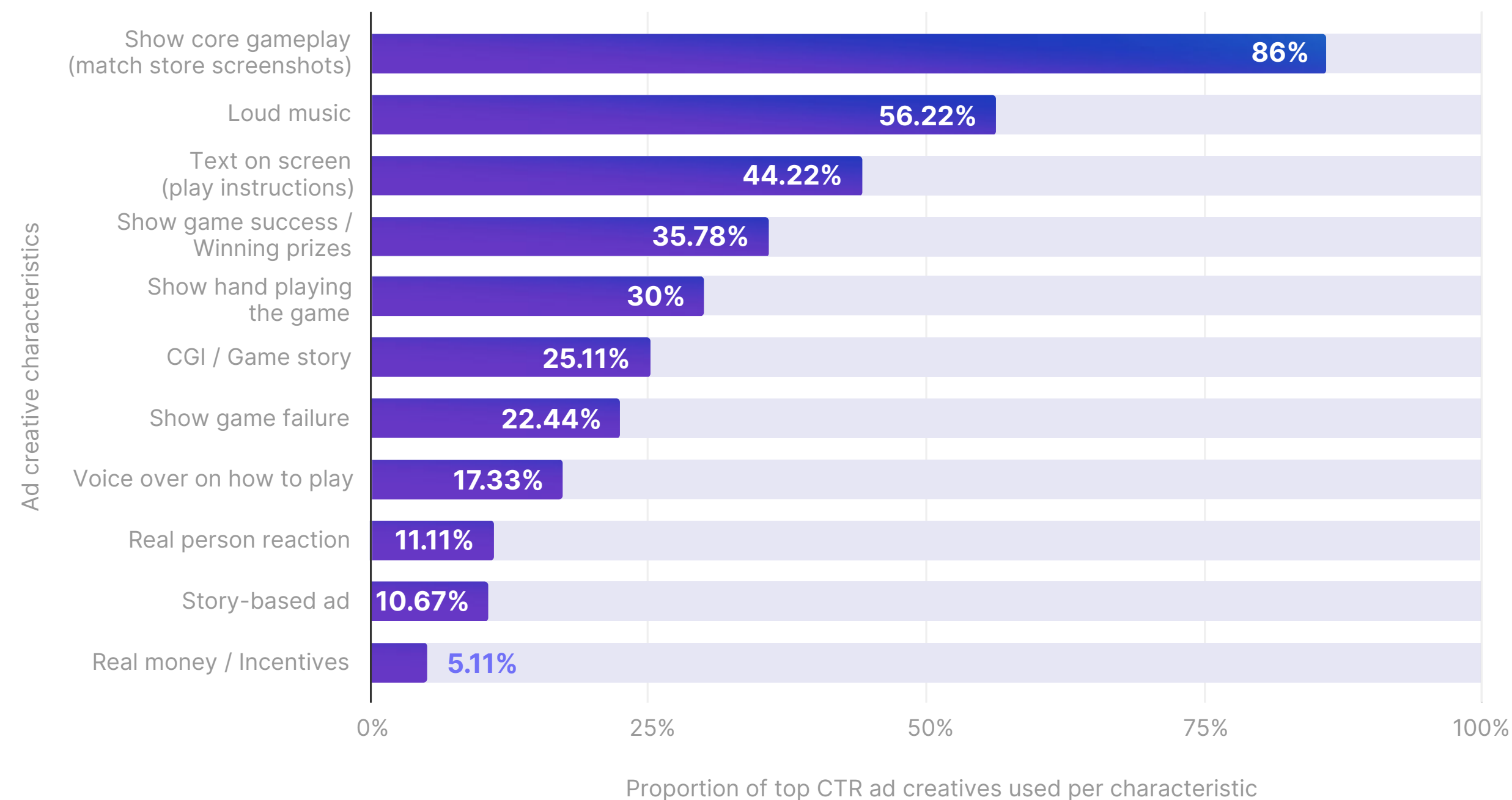
- **CTR:** Advertise on hypercasual and other word games
- **IR:** Advertise on trivia and other word games
- **IPM and CVR:** Advertise on trivia and hypercasual games
- **D7 retention:** Advertise on card, word, casino and hypercasual games

| | Action | Adventure | Board | Card | Casino | Casual | Hypercasual | Puzzle | Racing | Role-playing | Simulation | Sports | Strategy | Trivia | Word |
|---------------------|--------|-----------|--------|--------|--------|--------|-------------|--------|--------|--------------|------------|--------|----------|--------|--------|
| CTR | 5.85% | 3.33% | 5.32% | 5.03% | 3.93% | 4.94% | 7.36% | 4.94% | 5.52% | 5.22% | 3.96% | 5.23% | 3.87% | 6.17% | 6.30% |
| IR | 11.97% | 15.48% | 13.46% | 12.73% | 8.60% | 16.24% | 17.17% | 16.21% | 12.89% | 14.08% | 17.43% | 16.56% | 15.86% | 20.51% | 17.55% |
| IPM | 7.00 | 5.15 | 7.16 | 6.40 | 3.38 | 8.02 | 12.64 | 8.01 | 7.12 | 7.34 | 6.90 | 8.66 | 6.13 | 12.66 | 11.05 |
| CVR | 0.70% | 0.52% | 0.72% | 0.64% | 0.34% | 0.80% | 1.26% | 0.80% | 0.71% | 0.73% | 0.69% | 0.87% | 0.61% | 1.27% | 1.11% |
| D7 retention | 7.00% | 10.62% | 10.76% | 12.38% | 11.49% | 10.20% | 11.23% | 10.51% | 6.88% | 6.84% | 7.54% | 8.96% | 10.18% | 10.01% | 12.25% |

Performance of advertised word games per genre.

WHAT ARE THE MOST EFFECTIVE CREATIVE CHARACTERISTICS?

Top ad creative characteristics



Use of characteristics for ad creatives with the top clickthrough rates

Based on the genre of the game you are advertising, different factors make up the key ingredients of what worked for an ad.

With clickthrough rates being the primary metric that defines the success of an ad, we analyzed ad creatives with different characteristics and ranked them based on that metric to highlight which characteristics performed best.



86% OF TOP-PERFORMING ADS SHOW CORE GAMEPLAY ON THEIR CREATIVE

Top ad creatives that showed actual gameplay performed better than any other ads, even if it was for a few seconds.

| Ad creatives with top performance / Most common strategies | Top 1 | Top 2 | Top 3 |
|--|------------------------------------|------------------------------------|------------------------------------|
| Action | Show game success / Winning prizes | Show game failure | Loud music |
| Adventure | Loud music | Show game success / Winning prizes | CGI / Game story |
| Board | Showing hand playing the game | Show game success / Winning prizes | Loud music |
| Card | Loud music | Text on screen (play instructions) | Static ad |
| Casino | Show game success / Winning prizes | Loud music | Real money / Incentives |
| Casual | Loud music | Voice over on how to play | Text on screen (play instructions) |
| Hypercasual | Show game failure | Loud music | CGI / Game story |
| Puzzle | Showing hand playing the game | Show game failure | Show game success / Winning prizes |
| Racing | Loud music | Text on screen (play instructions) | CGI / Game story |
| Role-playing | Loud music | CGI / Game story | Text on screen (play instructions) |
| Simulation | Loud music | Show game failure | Text on screen (play instructions) |
| Sports | Loud music | Show game success/ Winning prizes | Text on screen (play instructions) |
| Strategy | Loud music | CGI / Game story | Text on screen (play instructions) |
| Trivia | Text on screen (play instructions) | Showing hand playing the game | Loud music |
| Word | Text on screen (play instructions) | Showing hand playing the game | Loud music |

Top three best-performing ad creative characteristics per genre.

Note: We have excluded arcade games from this section's analysis as this store category pertains only to Android.



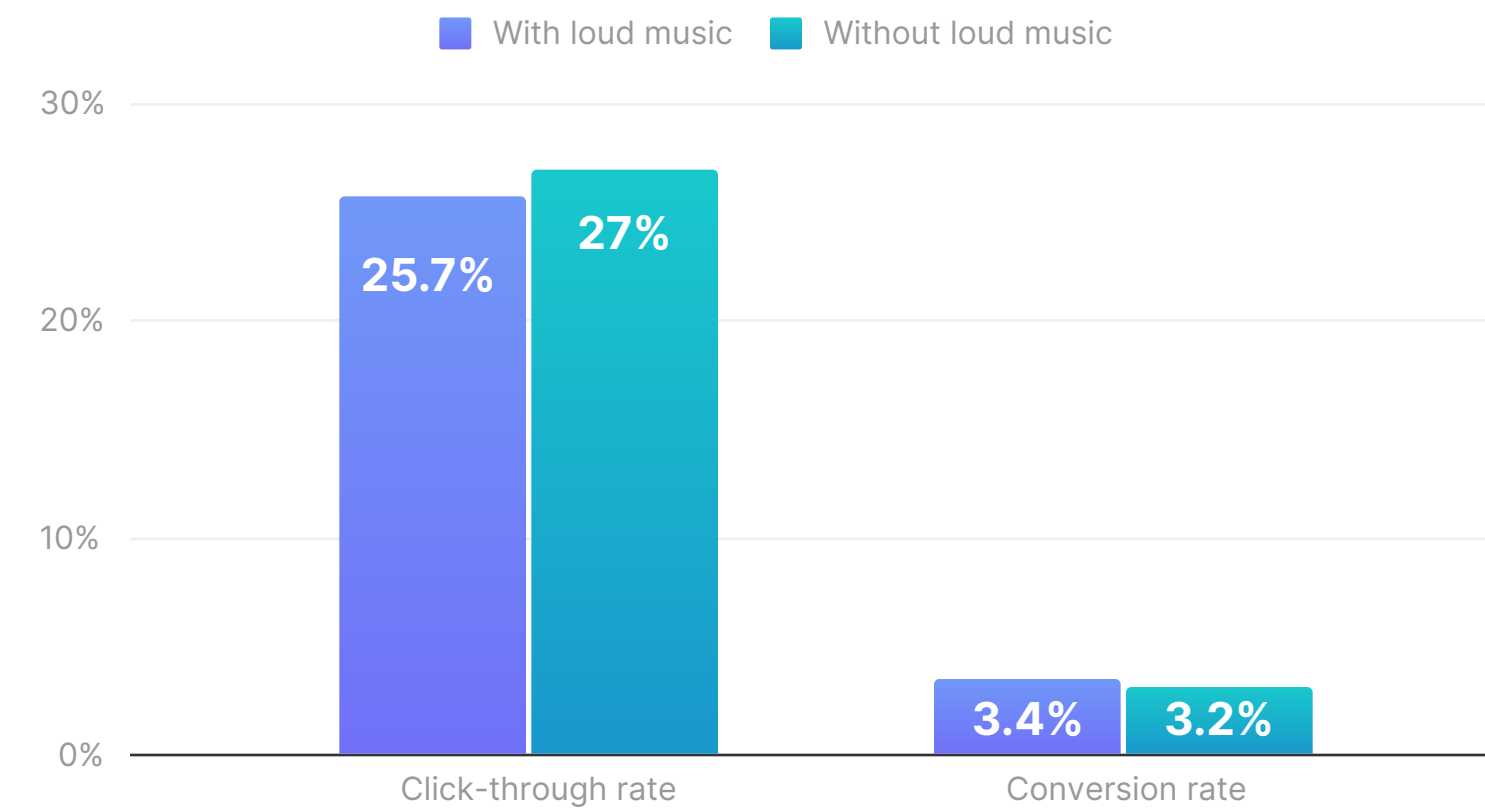
MAKE DATA BACKED DECISIONS FOR YOUR AD CREATIVES

We dug deeper into our data to determine the creative attributes that drive clicks and conversions vs. ads that don't have those characteristics.

On the charts below you can see CTR and conversion rates for ads with and without certain characteristics. Use this data to inform your decisions on how your ad creatives should look for maximized results.

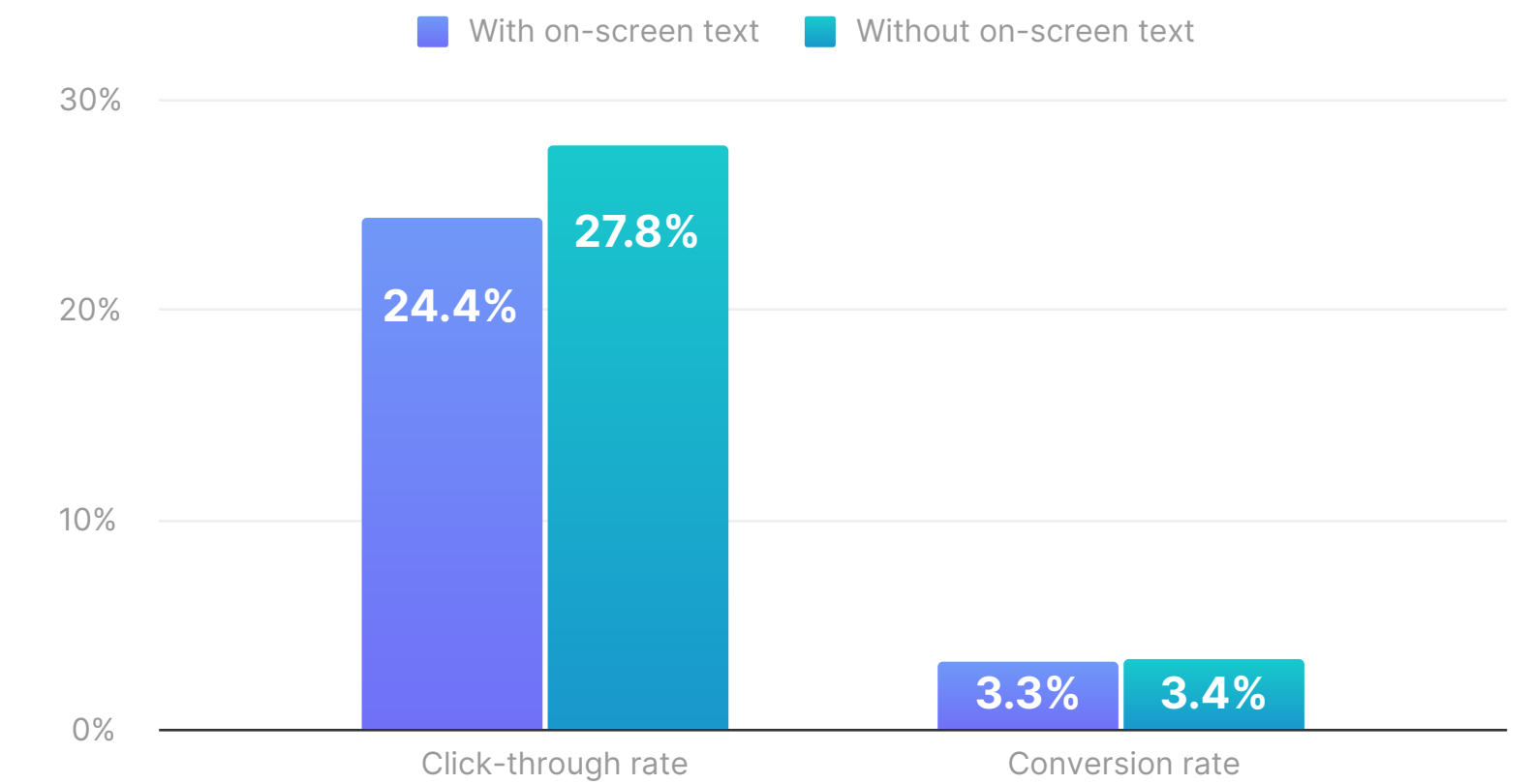
HOW DOES LOUD MUSIC INFLUENCE YOUR AD'S ENGAGEMENT?

Ad creatives with loud music



SHOULD YOU USE ON-SCREEN TEXT IN YOUR ADS?

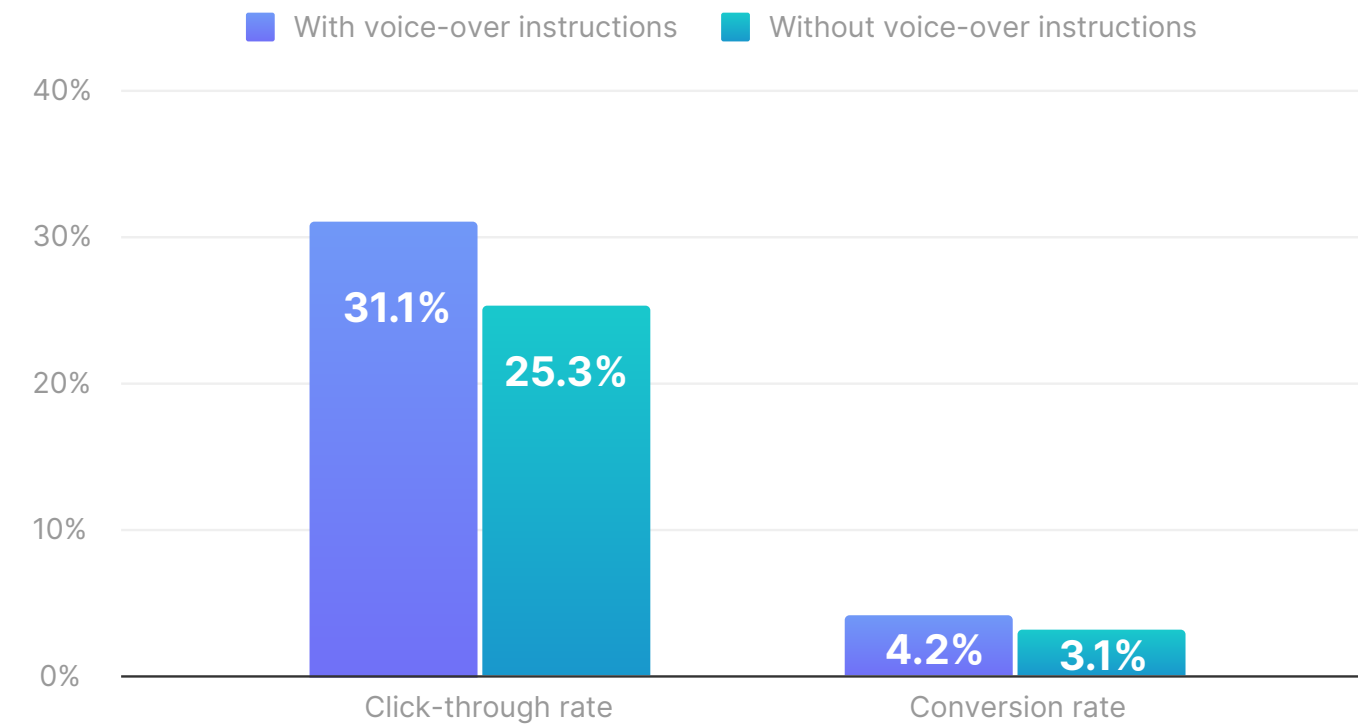
Ad creatives with game instructions provided as text on-screen



Note: These charts show comparison between CTR and conversion rates per ad characteristic

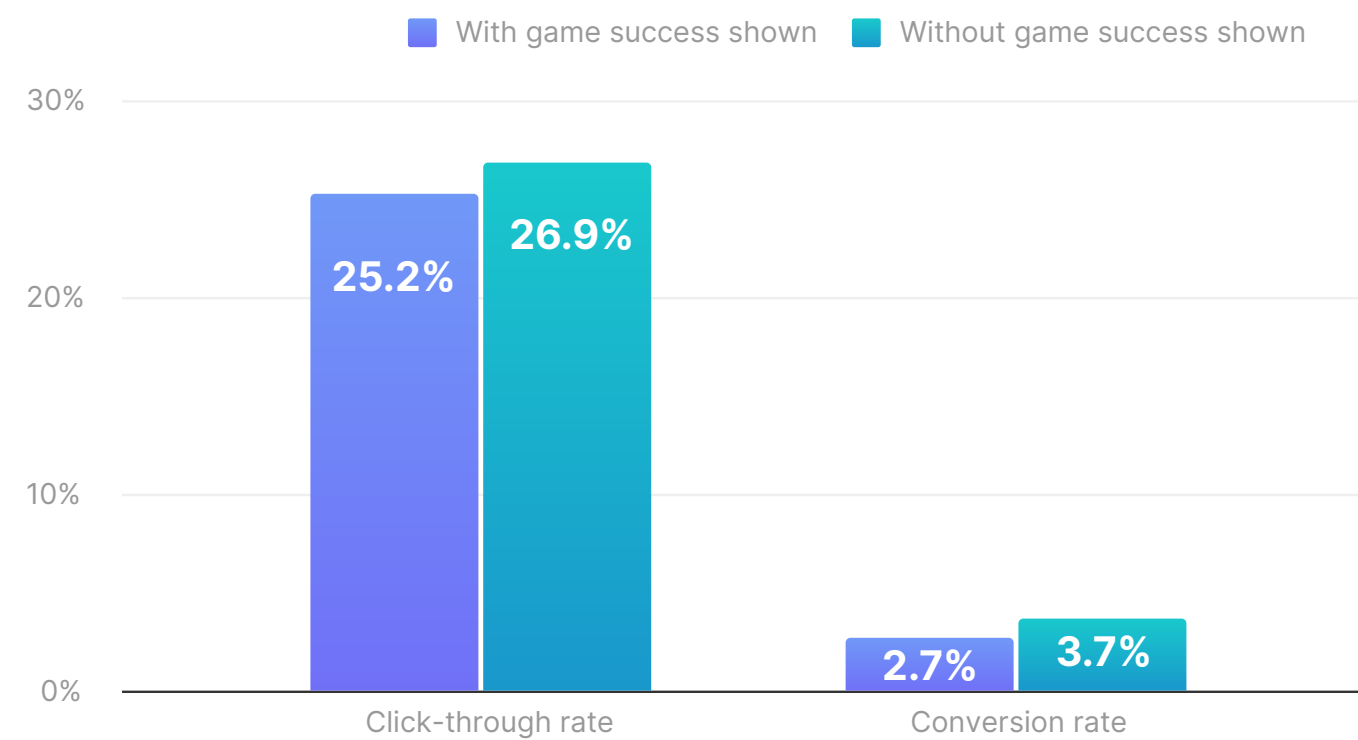
WHAT CAN VOICE-OVER INSTRUCTIONS DO FOR YOUR AD ENGAGEMENT?

Ad creatives with game instructions provided as voice-over



WILL SHOWING PLAYERS WINNING AT YOUR GAME INFLUENCE AD ENGAGEMENT?

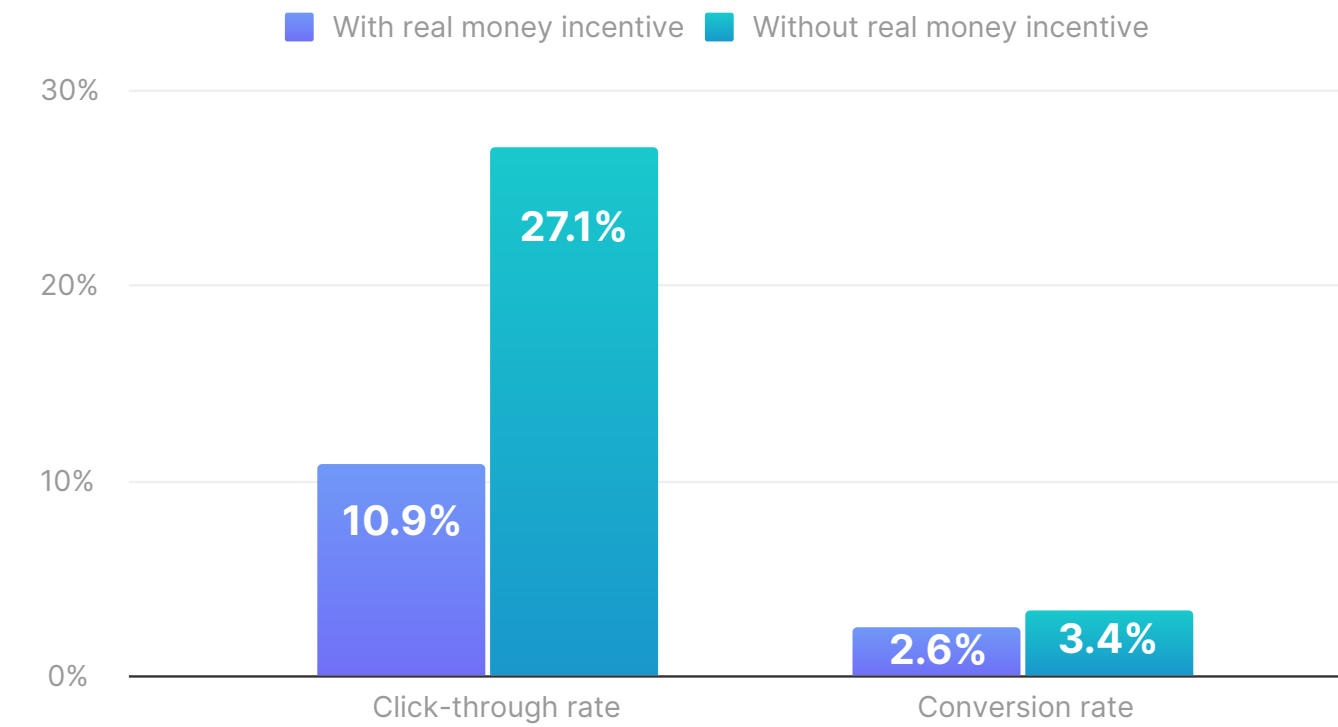
Ad creatives that show game successes or prizes won



Note: These charts show comparison between CTR and conversion rates per ad characteristic

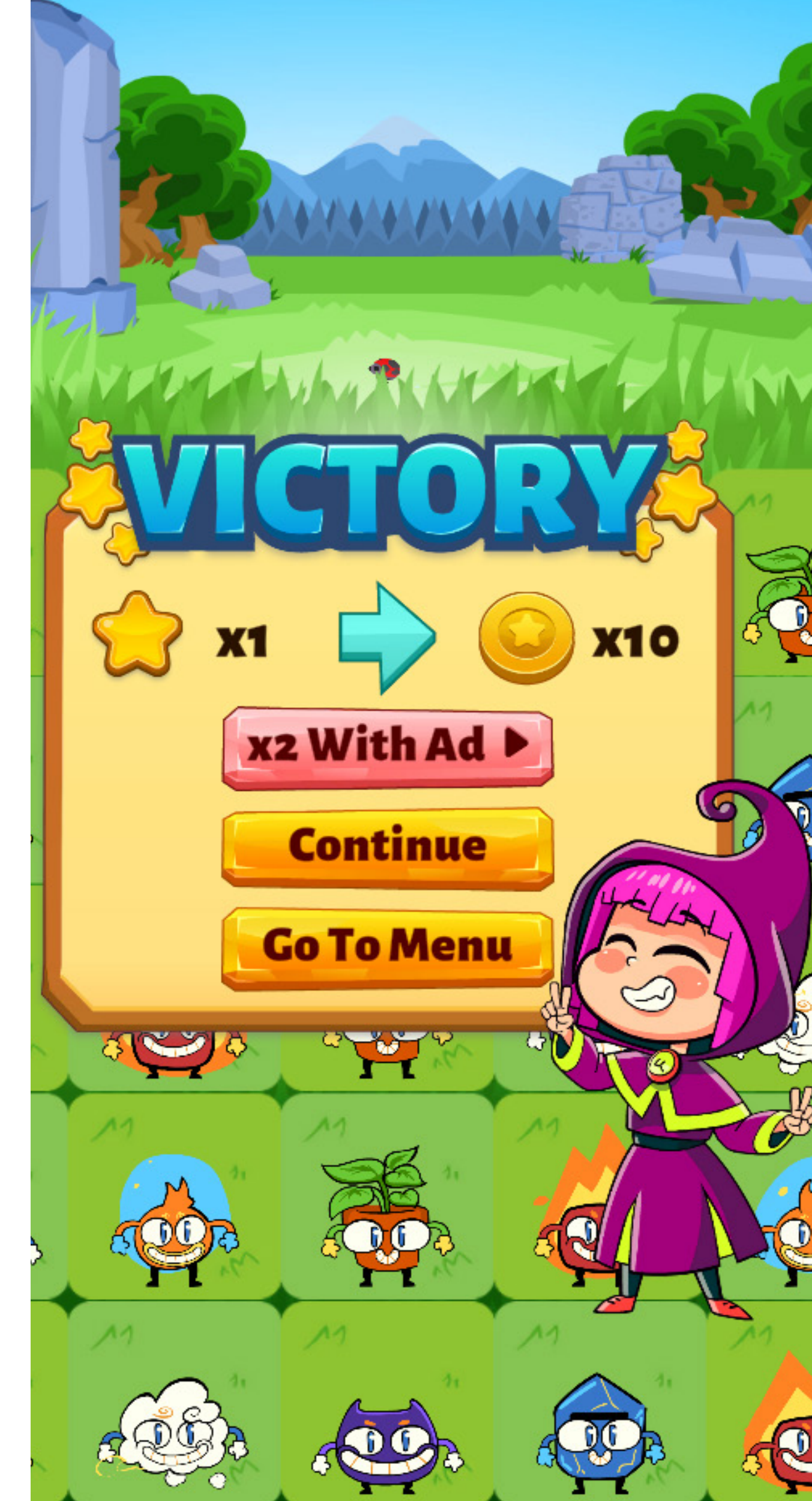
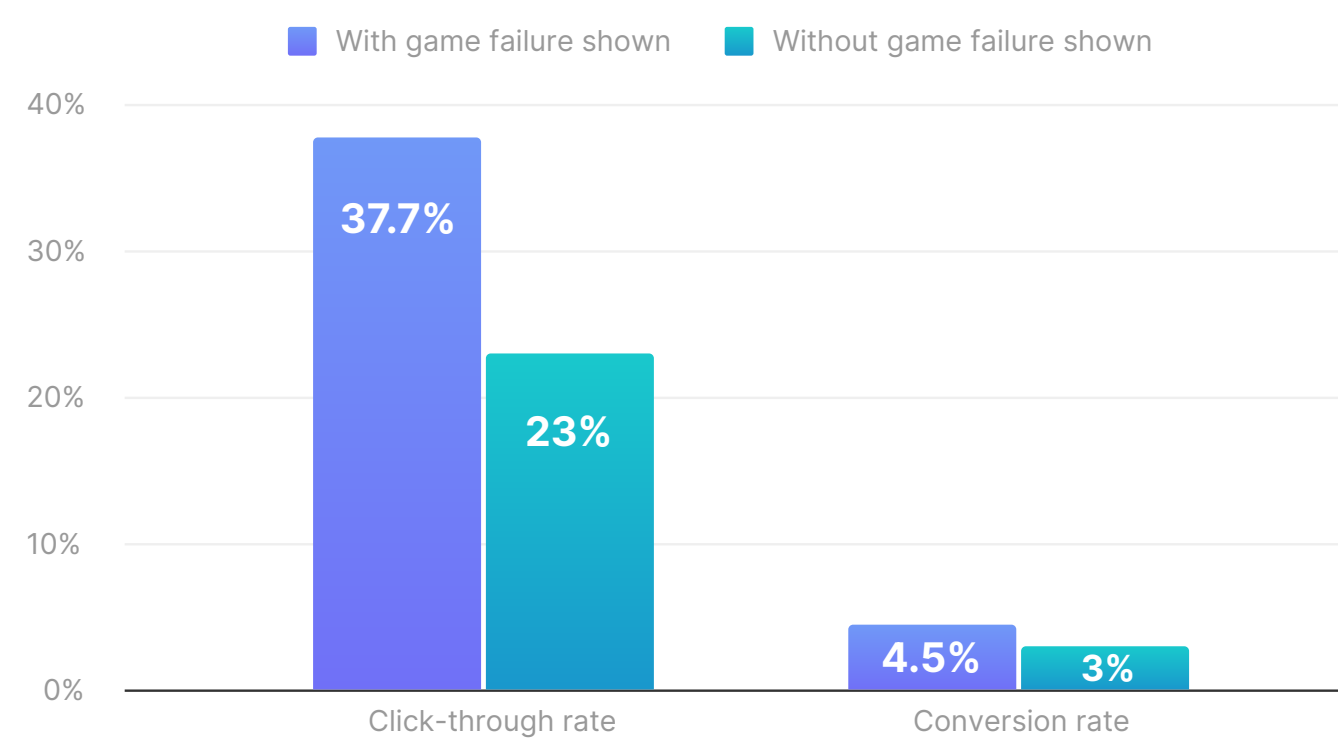
IS OFFERING REAL MONEY INCENTIVES A GOOD IDEA FOR YOUR AD CREATIVES?

Ad creatives that advertise real money incentives



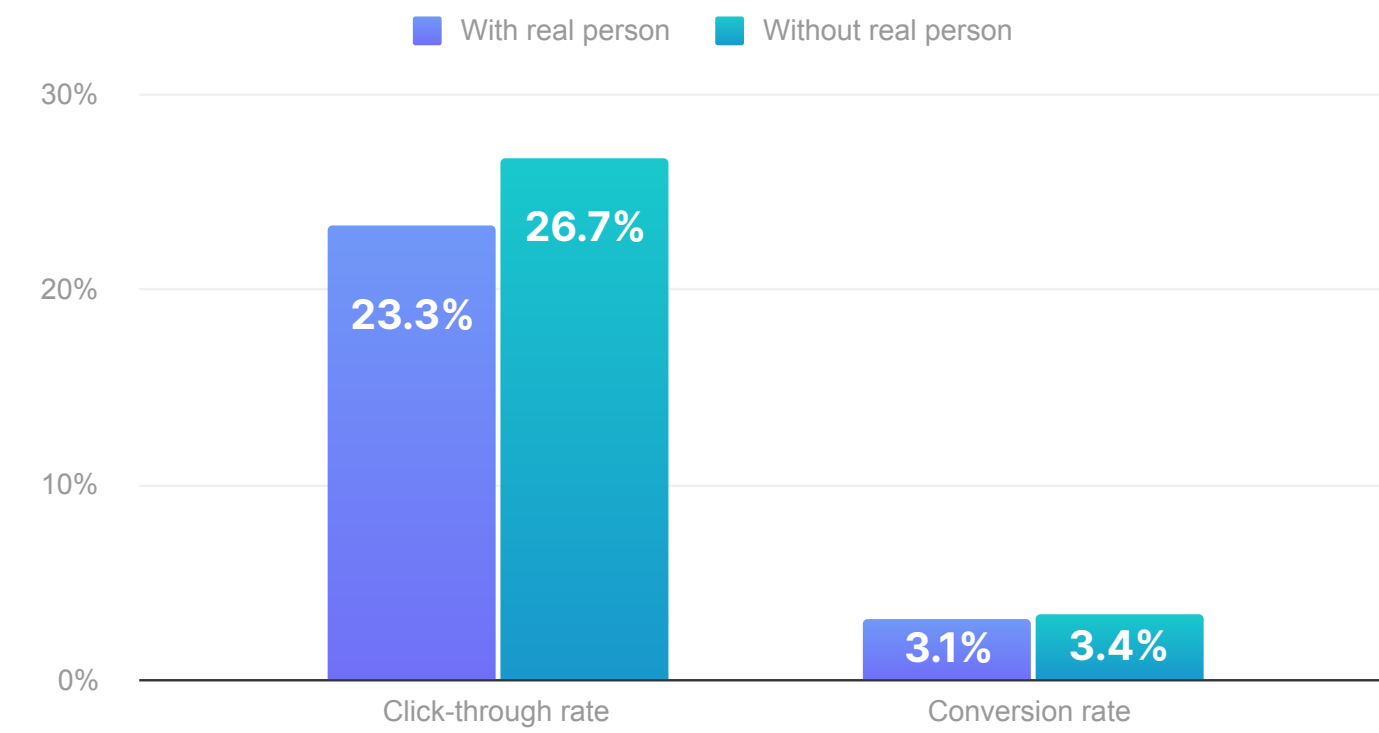
SHOULD YOU SHOW GAME FAILURE ON YOUR ADS?

Ad creatives that show game failure



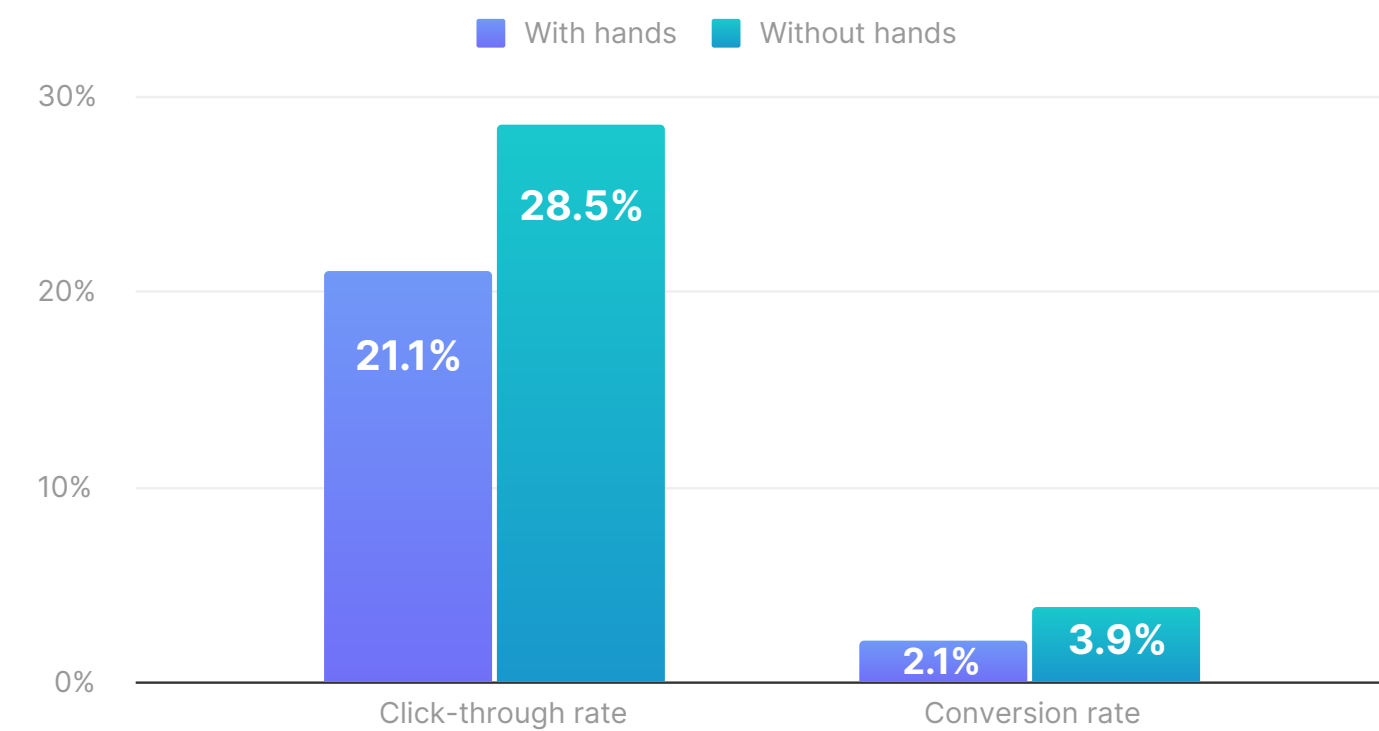
IS CAPTURING A REAL PERSON'S REACTION A GOOD IDEA?

Ad creatives that capture real person reaction



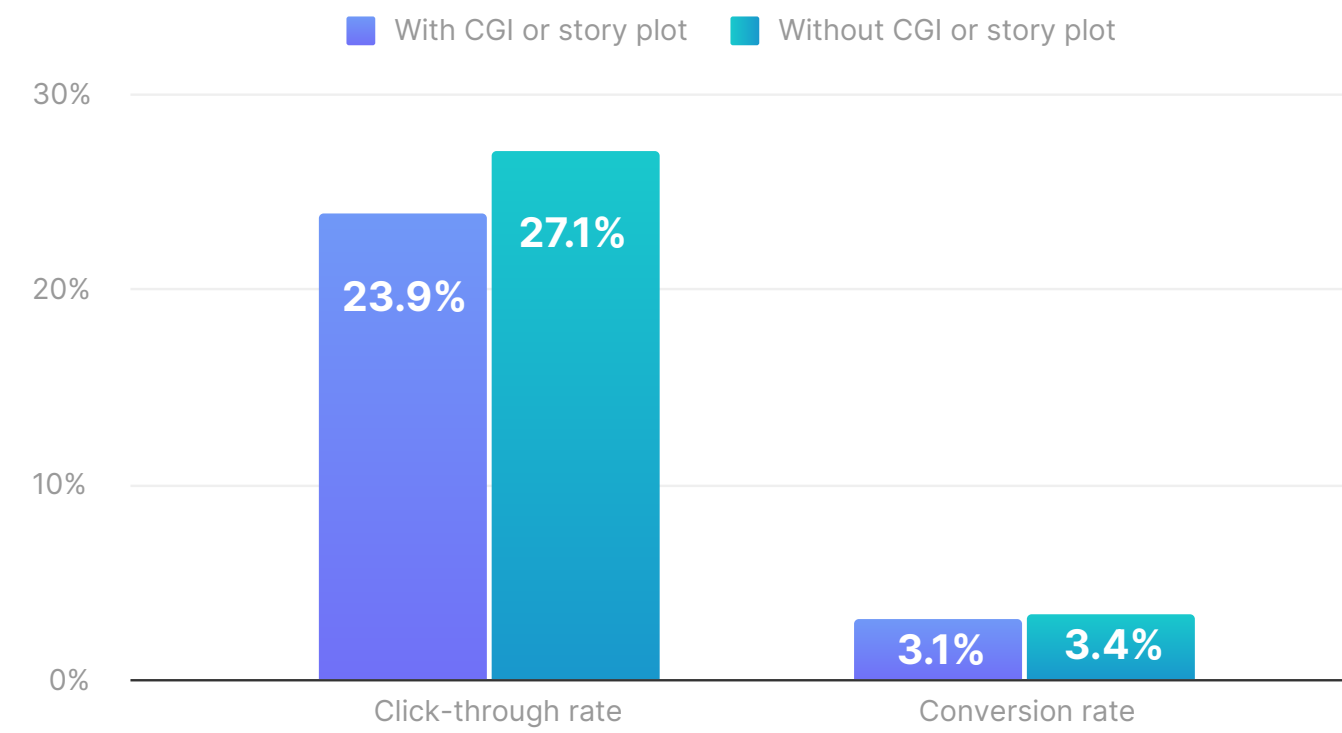
HOW ABOUT SHOWING HANDS PLAYING THE GAME ON YOUR AD CREATIVES?

Ad creatives that capture hands playing the game



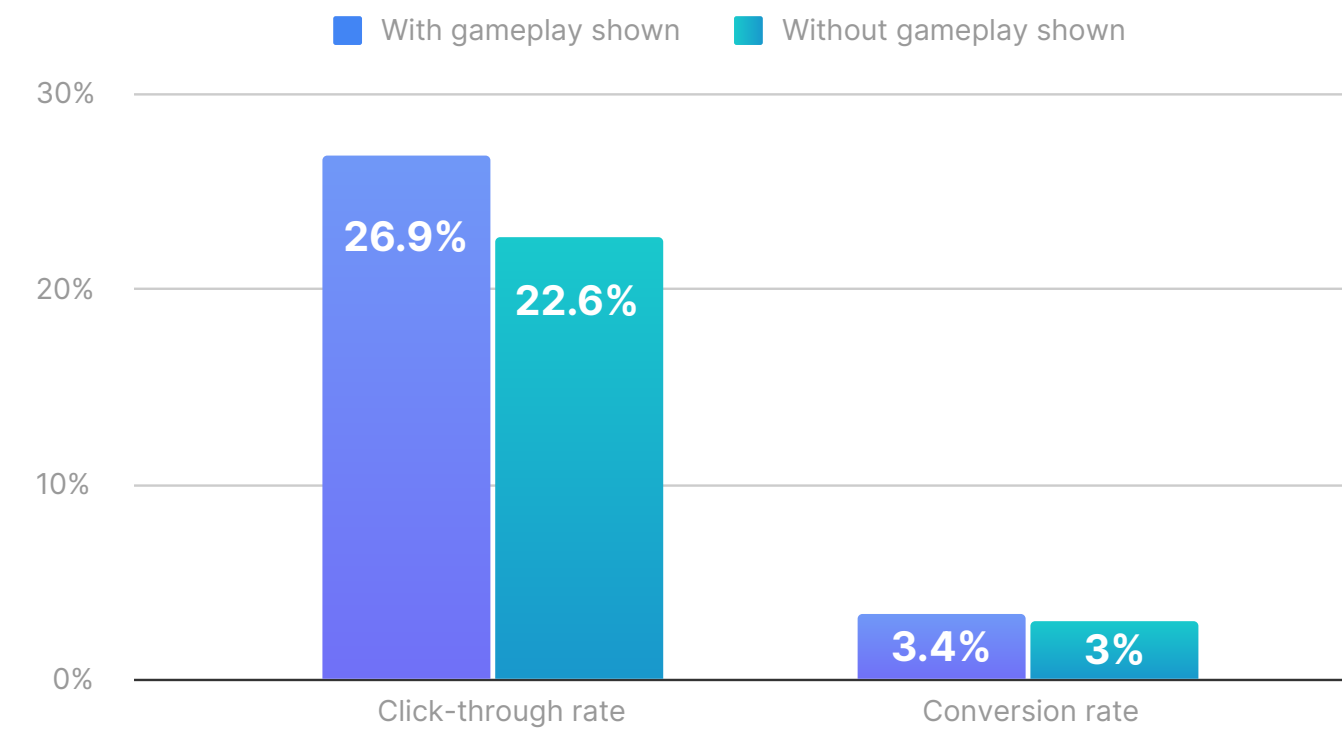
SHOULD YOU PUT EMPHASIS ON SHOWING CGI OR SHOWING YOUR STORY PLOT?

Ad creatives that focus on CGI or story plot



SHOWING CORE GAMEPLAY ON YOUR ADS: YES OR NO?

Ad creatives that demonstrate core gameplay



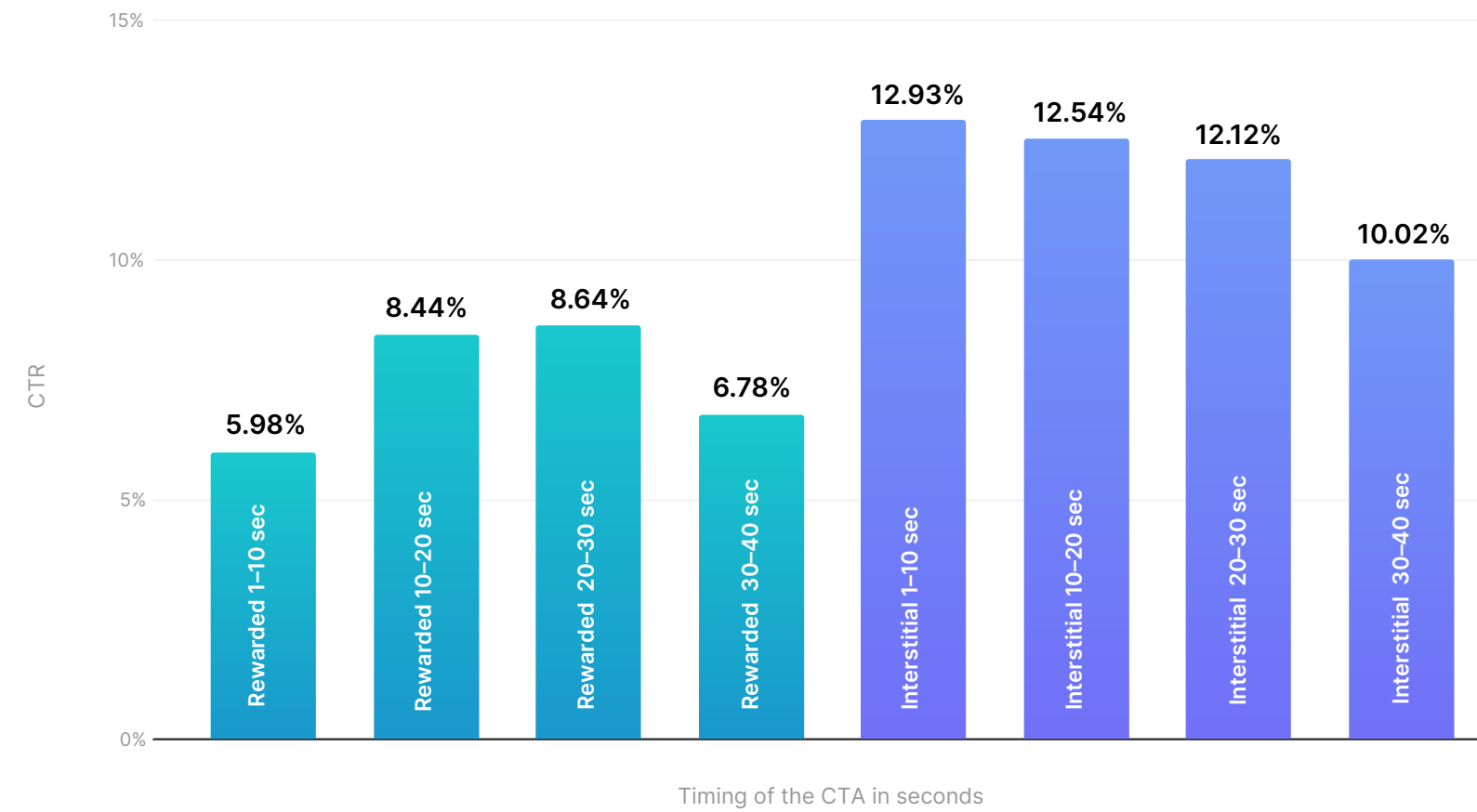
Note: These charts show comparison between CTR and conversion rates per ad characteristic



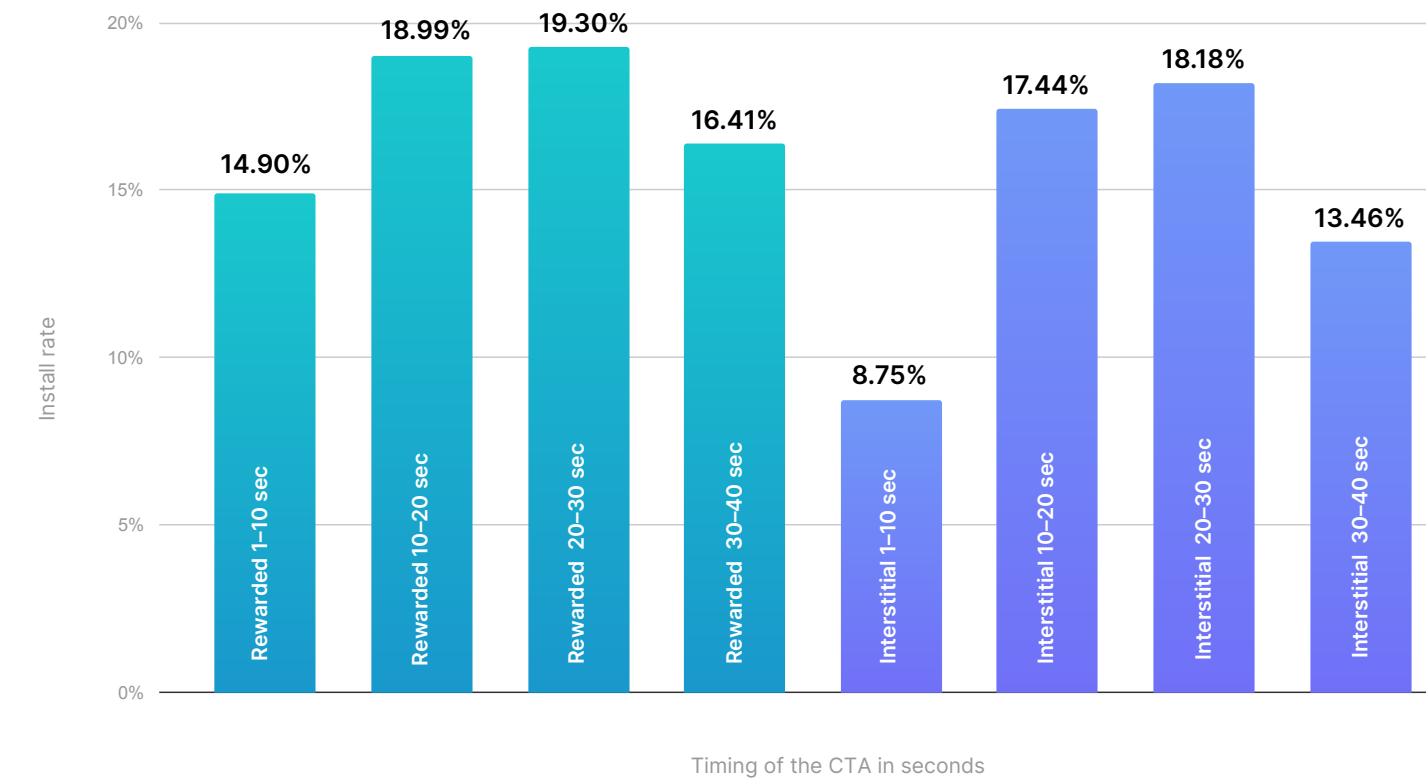
TIMING THE CTA ON YOUR ADS MATTERS

The moment you show your calls-to-action (CTA) within your ads influences CTR, conversion, and install metrics and can vary depending on the ad format being used. Explore these charts to see optimal moments to introduce your CTA for three main metrics: CTR, conversion rate, and install rate.

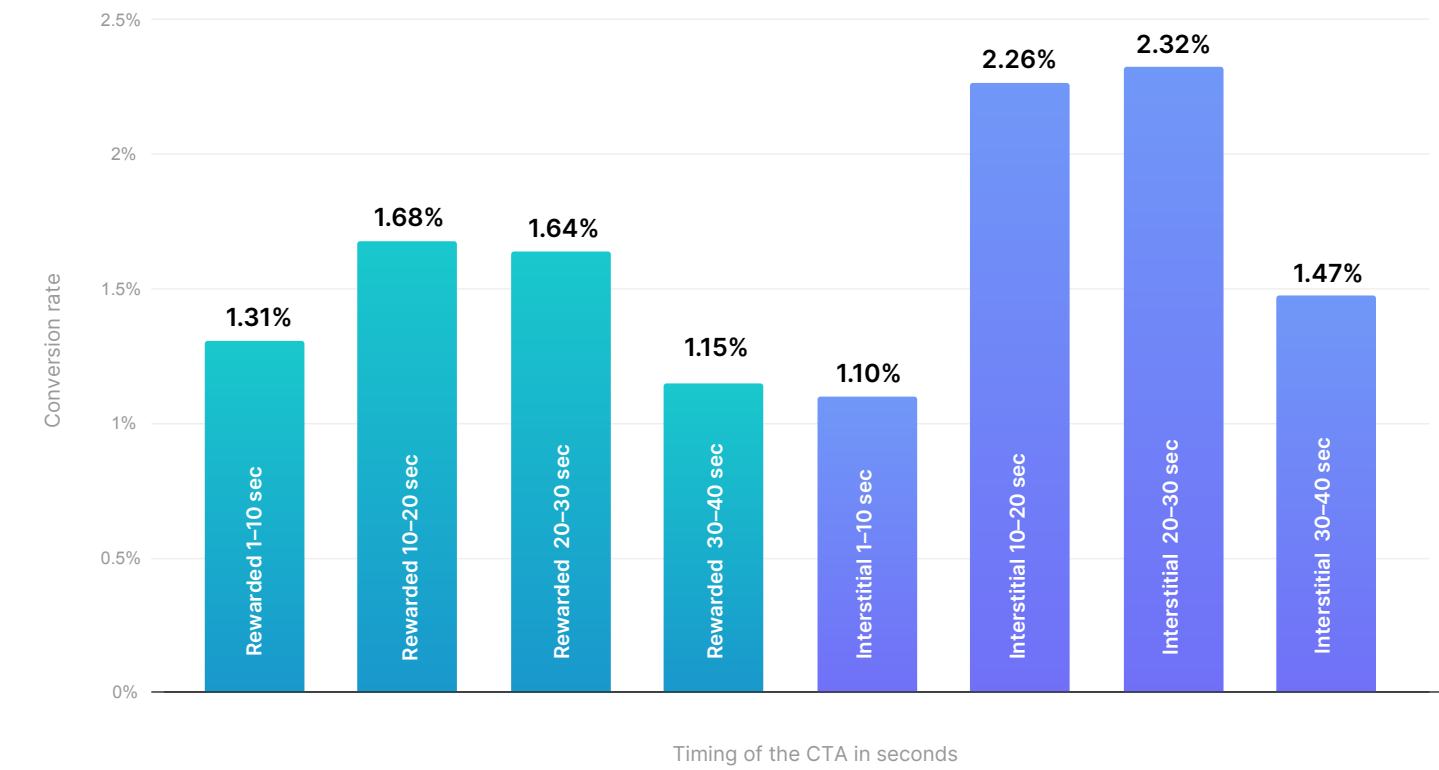
CTR by timing of the CTA for interstitials and rewarded videos



Install rate by timing of the CTA for interstitials and rewarded videos



Conversion rate by timing of the CTA for interstitials and rewarded videos



REWARDED VIDEOS

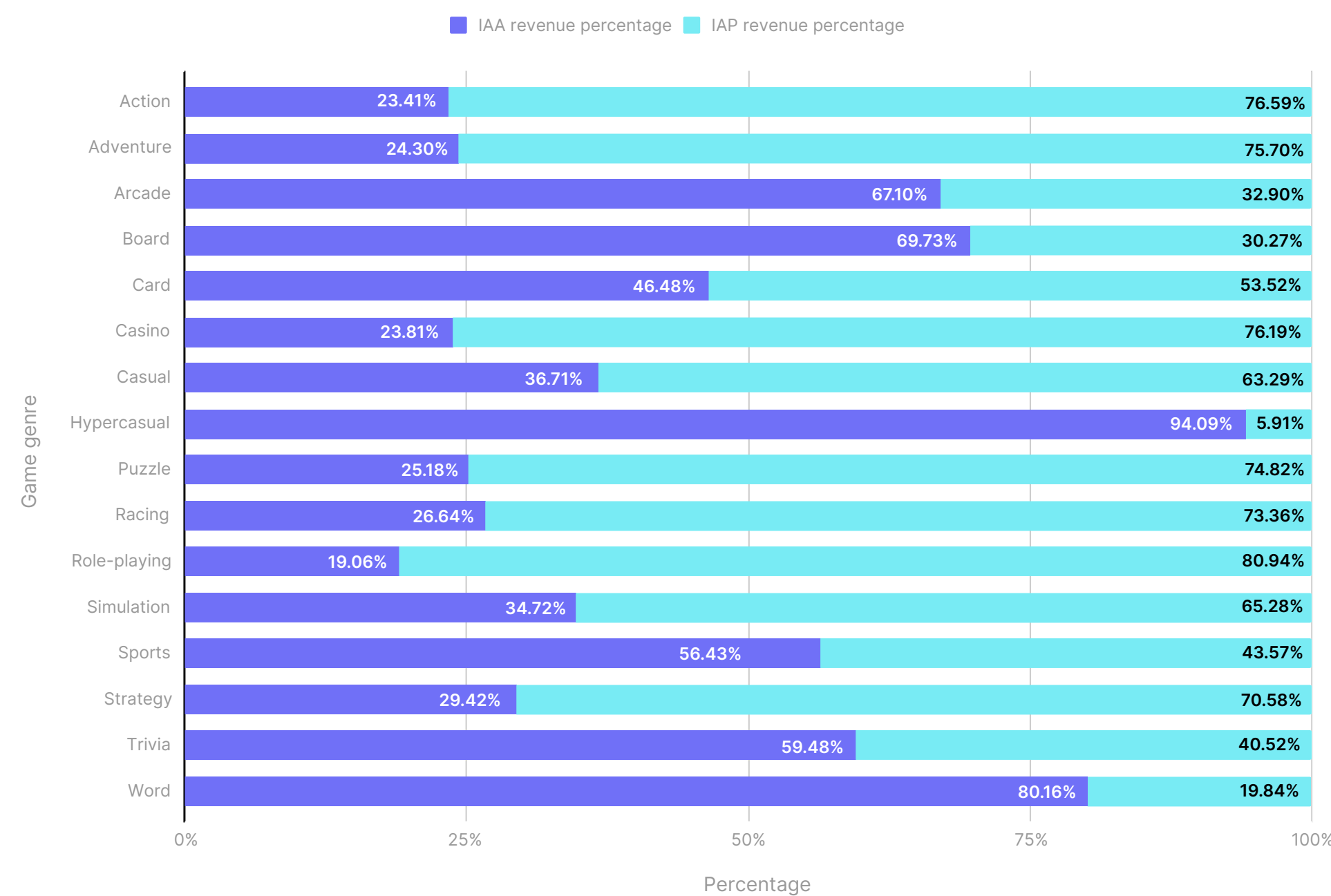
The majority of the clicks come in after three-quarters of the ad is viewed, around 20 seconds into the ad.

INTERSTITIALS

The majority of clicks come in at the start of the video, around the first 10 seconds. Although the clicks for interstitials come sooner in an ad, the users who genuinely want to install the advertised game will view the ad a bit more as we see conversions and installs rates peak at around the 20-second mark.

WHAT MONETIZATION STRATEGIES WORK BEST IN EACH GENRE?

IAA vs. IAP revenue per genre



Revenue percentage of ads vs. IAP revenue per genre.

ARCADE AND WORD GAMES RELY ON IAA WHILE ROLE-PLAYING GAMES TEND TO USE IAP

Shares of IAP and ad revenue show balanced distribution among different genres for the most part with IAP revenue taking a larger percentage of total game revenues.



IN-APP PURCHASES (IAP)

IAP allows users to pay real money for features or items while playing a game such as a special building, game currency, a battle pass, a power-up, a new skin, or many other types of consumable items or feature subscriptions.

This method can make gameplay even more interesting and exciting, resulting in better engagement and longer sessions.

IN-APP ADS (IAA)

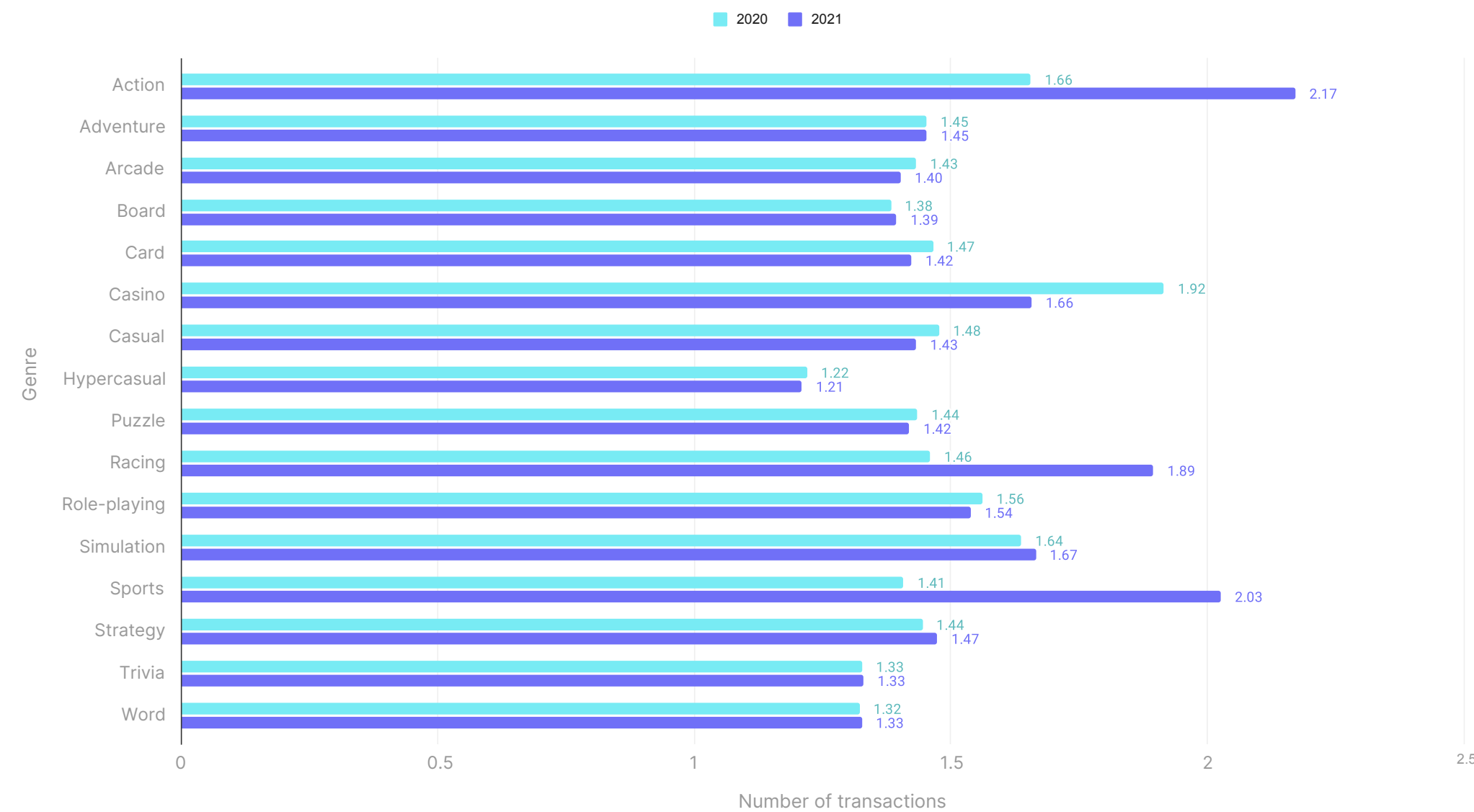
IAA are ads integrated into games at different moments in gameplay as a way of earning additional revenue by offering the placement to advertisers to compete for.

IAP ARE INCREASING EVERY YEAR

Players are making more in-app purchases than ever, especially with the average number of transactions per user increasing across almost all genres. Action, racing, and sports genres in particular saw significant increases over the last year.

WHAT GENRES HAVE THE MOST PURCHASES PER PAYER?

Average number of transactions per payer by game genre



A MAXIMUM OF 1.8% OF DAU MAKE PURCHASES

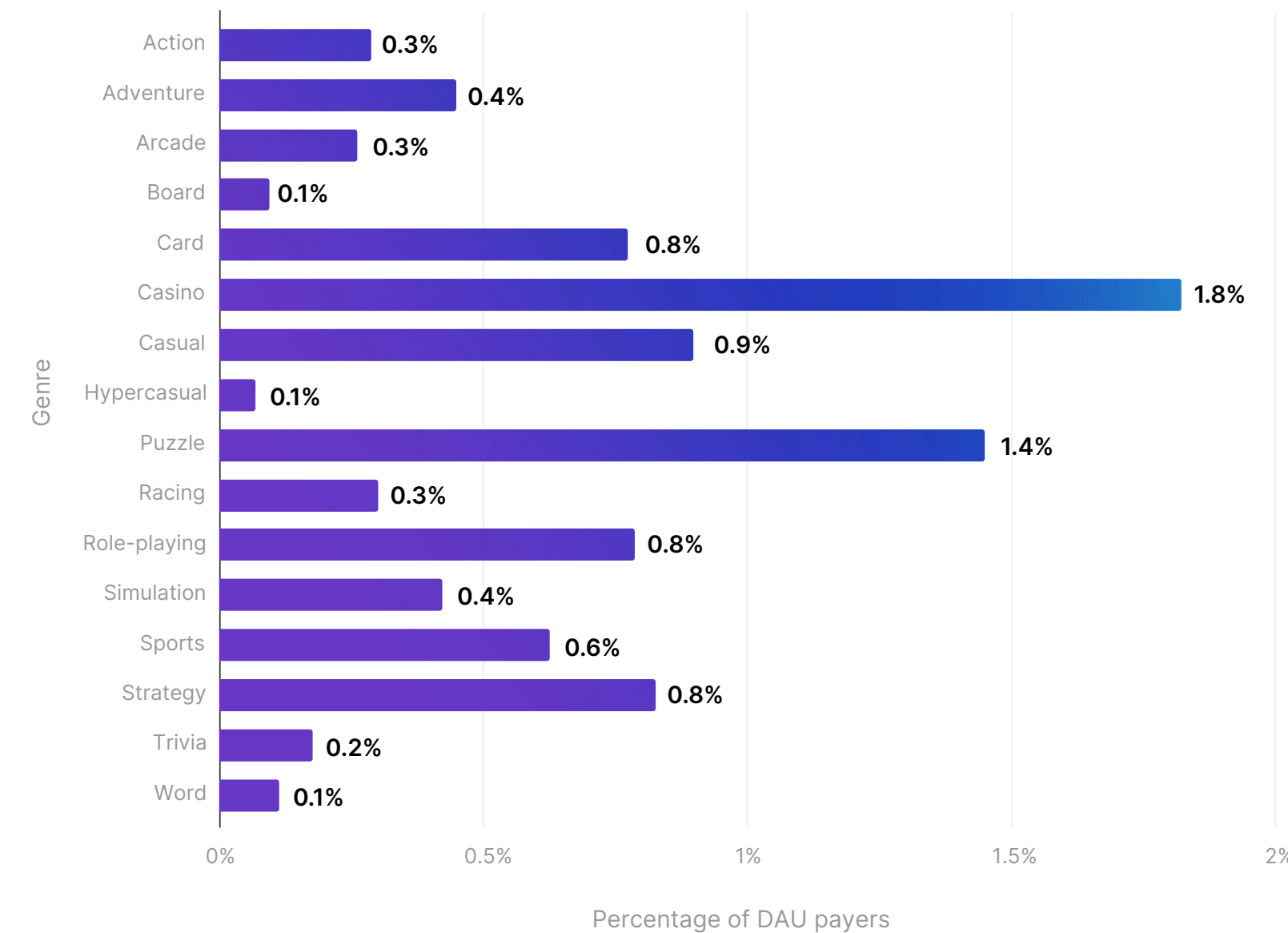
Casino and puzzle games have the highest daily payer percentage at 1.8% and 1.4% as the gameplay loop for these game types is well suited for purchases due to their transactional nature.

Role-playing and strategy games are also effective for IAP as they have longer game sessions which mean players spend more time in-game, leading to better chances for purchases.

Hypercasual, board, and word games have shorter gameplay sessions and are generally better suited for IAA.

WHAT GENRES HAVE THE MOST DAILY PAYING USERS?

Daily payer percentage by game genre



Data from games that were advertised in 2021.

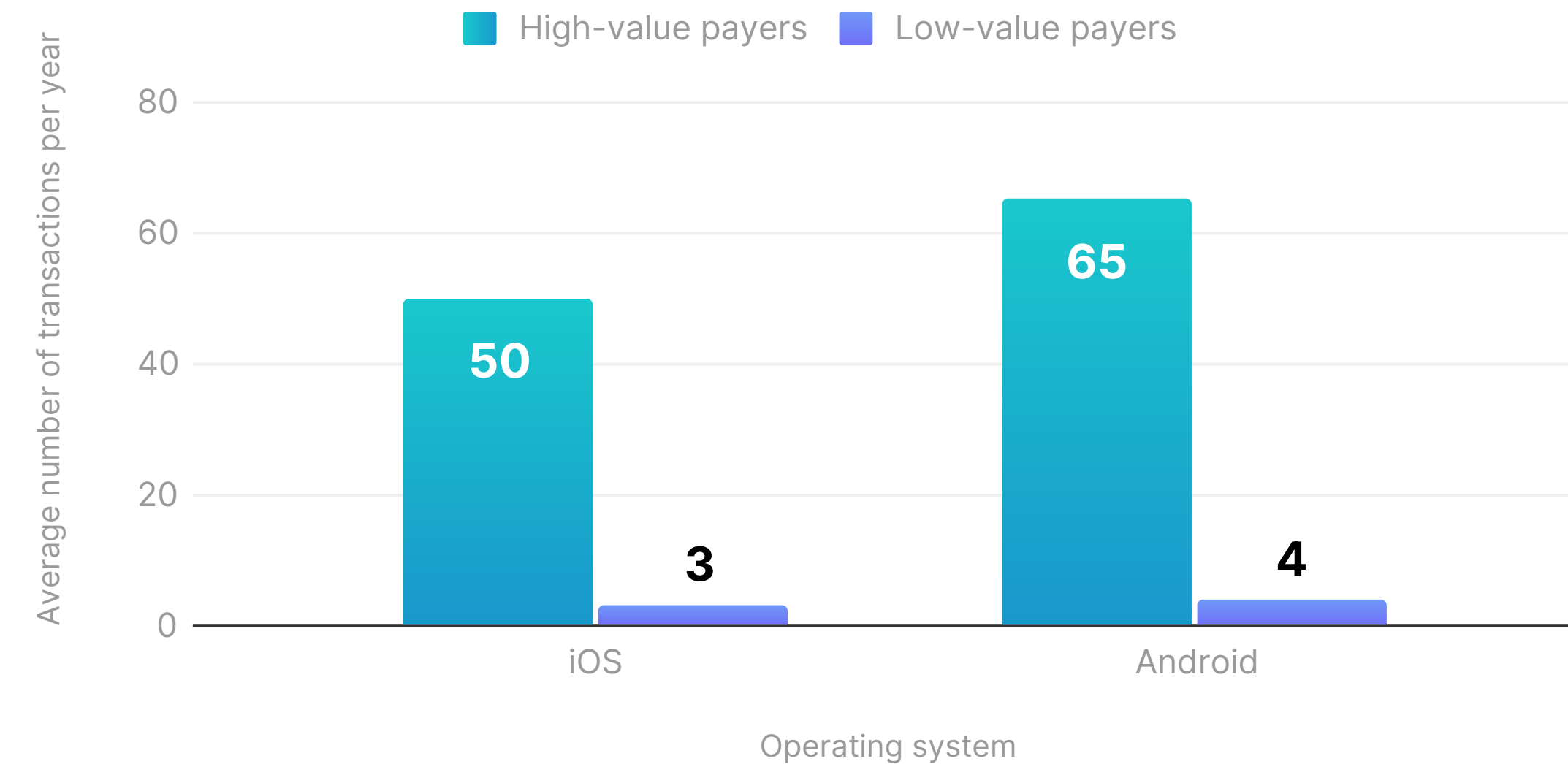
OVER 70% OF TOTAL IAP REVENUE FOR A GAME COMES FROM THE TOP 5% OF PAYERS

High-value payers also make an average of 50-65 transactions a year compared to three to four for low-value payers.

Even among paying players, there is only a small portion of them that actually generate most of a game's IAP revenue. Consider taking a more granular approach when segmenting ads that are based around where revenue is being generated from and not an 'ads for all' approach.

WHO IS MAKING THE MOST TRANSACTIONS?

Average annual transactions for high and low-value payers on iOS and Android



SEGMENTING USERS

HIGH-VALUE PAYERS

Players who have high enjoyment for a game resulting in them being the biggest spenders. Usually, this group of users drives the most IAP revenue for mobile apps and game publishers.

We have defined "high-value payers" as the top 5% of monetary spenders that pay for IAP within a mobile game.

LOW-VALUE PAYERS

Casual players who make fewer transactions on an annual basis. They don't spend too much on in-game extras and are happy to play the game as it is.

We have defined "low-value payers" as players who have made at least one IAP transaction but aren't in the top 5% of payers.

CREATE PLACEMENTS THAT PERFORM

Choosing how to implement ads in your game can come with a lot of unknowns. Answers to questions about what ad mix to implement, format, length, volume, and timing can feel like secret knowledge known only by the top studios.

Players also interact with ads differently across game genres which should inform your monetization strategy.

KEY TAKEAWAYS

- **Rewarded video ads** are best suited for certain genres, but not all
- **90%** of all users completely watch a rewarded video ad
- The rewards in your rewarded ads are crucial to entice players to **watch the full ad**
- Playables have **3x better CTR** than video only ads
- The right amount of banners in your game **depends on the genre**
- The first interstitial ads are usually triggered at **five minutes** into gameplay and the first rewarded ad shows at **six minutes**

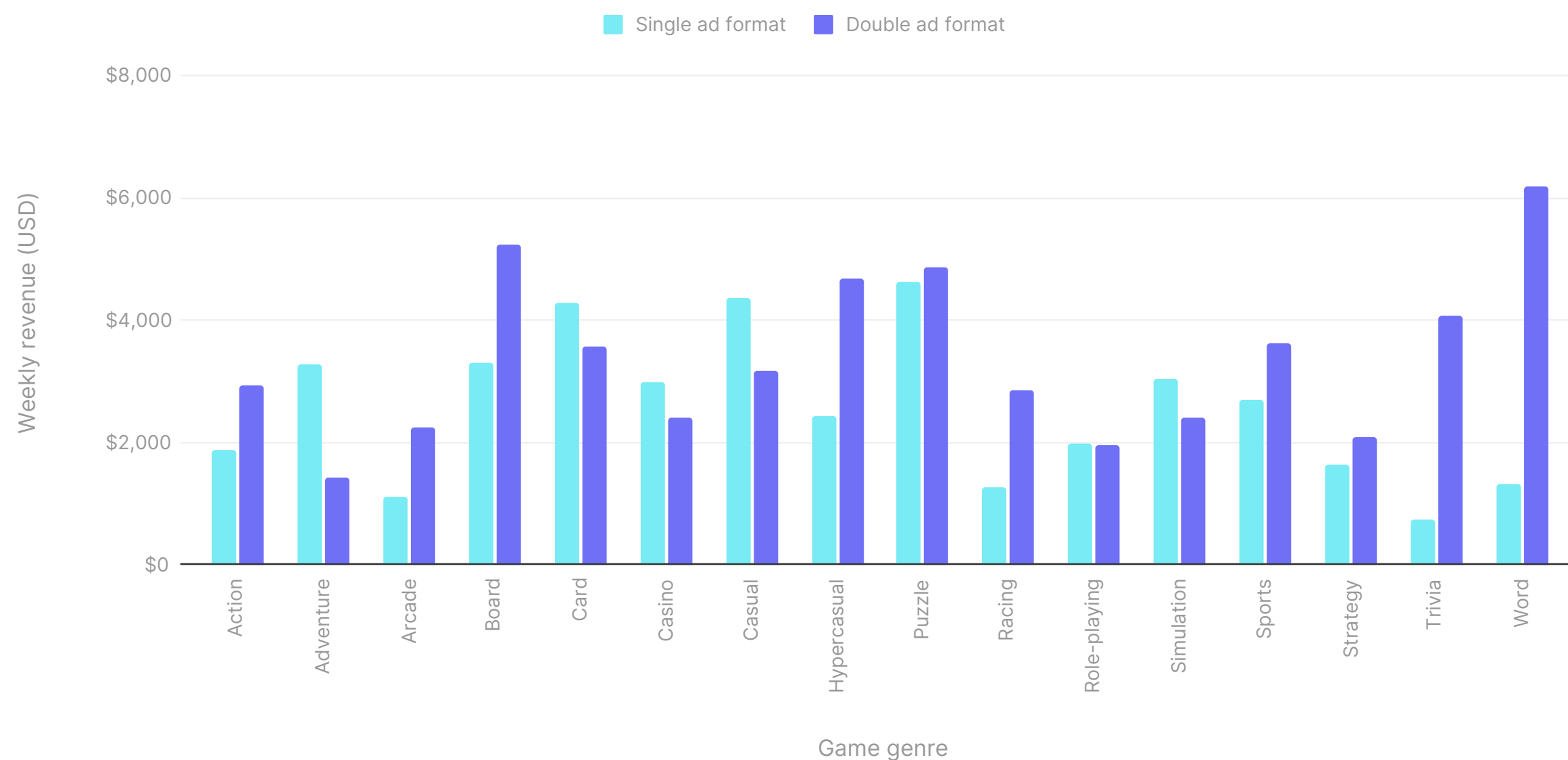


SHOW THE RIGHT ADS IN YOUR GAME

Ad implementation can look very different from genre to genre. While there is no one size fits all solution, revenue and engagement data can tell us a lot about what strategies work and which ones do not.

WHAT SHOULD YOUR AD FORMAT MIX LOOK LIKE?

Average weekly revenue for single vs. multiple ad formats implemented



SINGLE AD FORMAT USED

Genres like adventure, card, casino, casual, and simulation generate higher revenue from using a single ad format of either rewarded video or interstitial ads.

Using a single ad format could generate revenue of \$2,500 to \$4,500 USD a week on average for games in these genres.

MULTIPLE AD FORMATS USED

Genres like word, trivia, board, and action generate significantly more revenue on average from using two ad formats: Rewarded video and interstitial.

Using multiple ad formats could generate revenue of \$4,000 to \$6,200 USD a week on average for games in these genres.

REWARDED ADS ARE BEST SUITED FOR CERTAIN GENRES, BUT NOT ALL

Role-playing and strategy games tend to generate more revenue from rewarded video ads.

Genres like word, board, card, and puzzle games earn more revenue from interstitial ads.

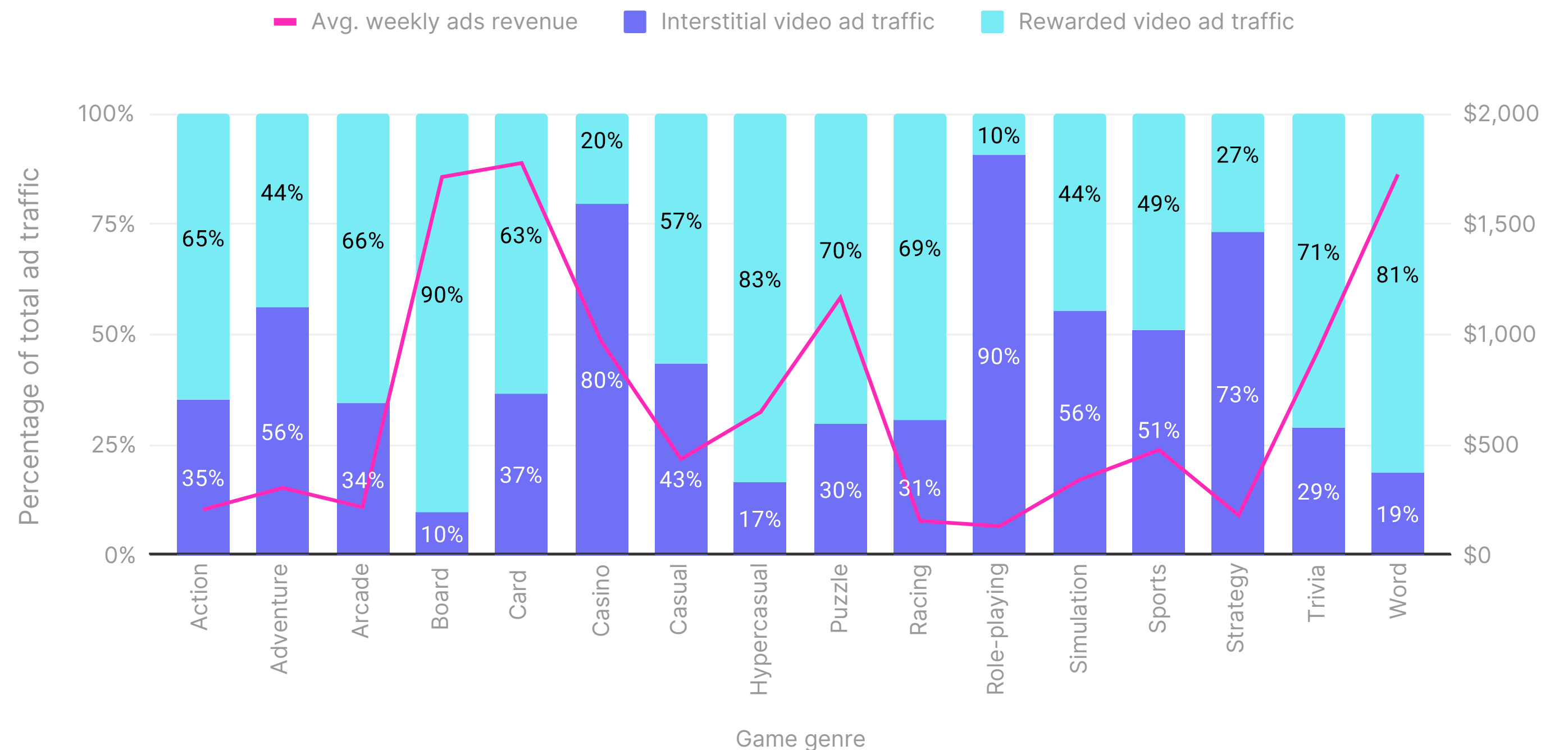
OPPORTUNITY FOR ROLE-PLAYING AND STRATEGY GAMES

Role-playing games are heavily skewed towards rewarded ads, but make less from ads in general as they focus more on IAP.

For studios who can implement rewarded video well, there are significant revenue opportunities as our research has shown that not only can you gain ad revenue, but there can be **positive effects on IAP and user retention** as well.

WHEN SHOULD YOU USE REWARDED VIDEOS?

Percentage of rewarded ad traffic vs. interstitial ad traffic vs. average weekly ads revenue



90% OF ALL USERS COMPLETELY WATCH A REWARDED AD

When ad watching is incentivized with free rewards, most users tend to see the ad in its entirety.

CASUAL GENRES MOST LIKELY TO WATCH THE FULL AD

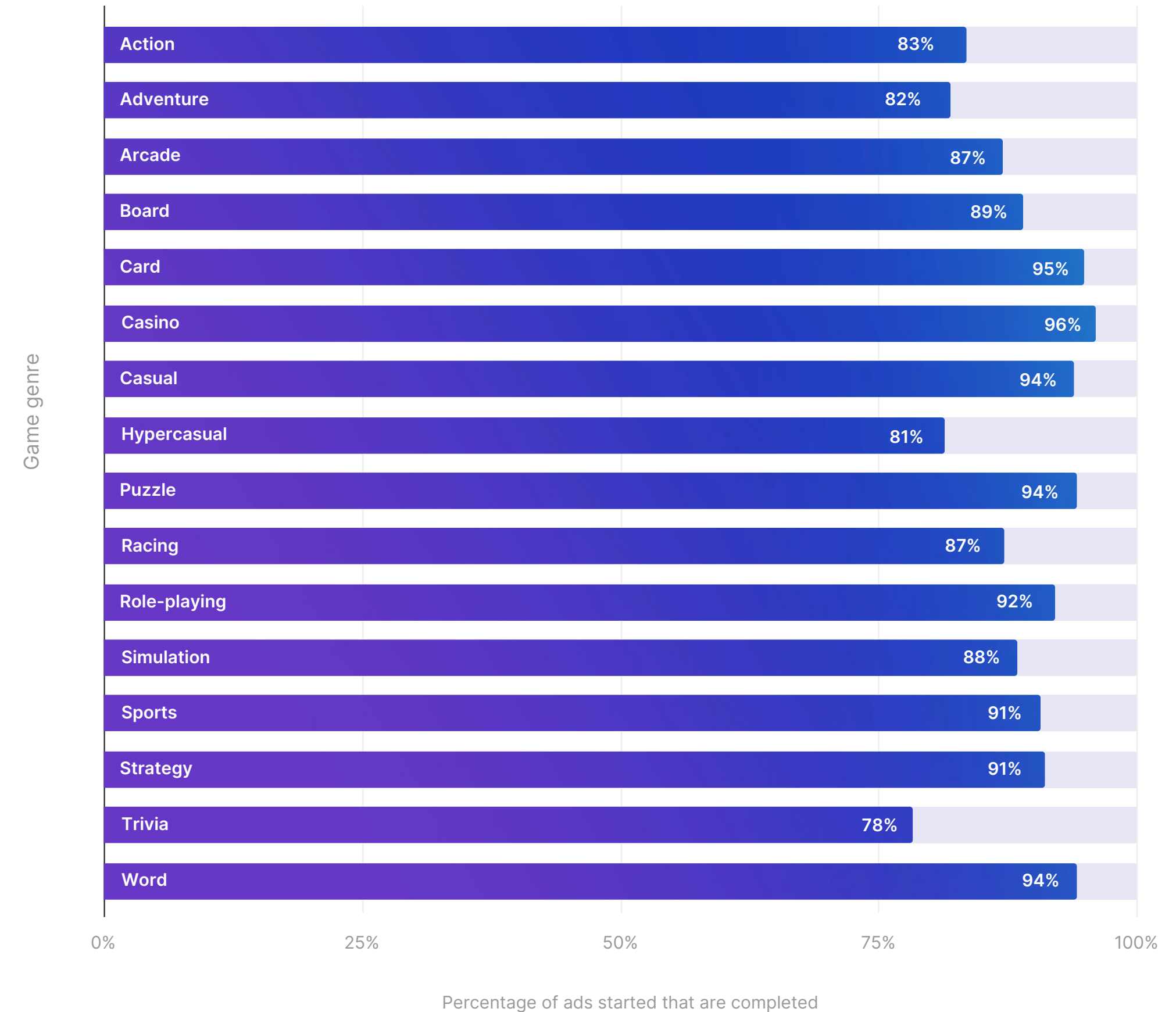
- Casino: 96%
- Card: 95%
- Puzzle: 94%
- Word: 94%
- Casual: 94%

HARDCORE GENRES MOST LIKELY TO WATCH THE FULL AD

- RPG: 92%
- Strategy: 91%
- Sports: 91%

WHAT IS THE COMPLETION RATE FOR REWARDED VIDEO ADS ACROSS GENRES?

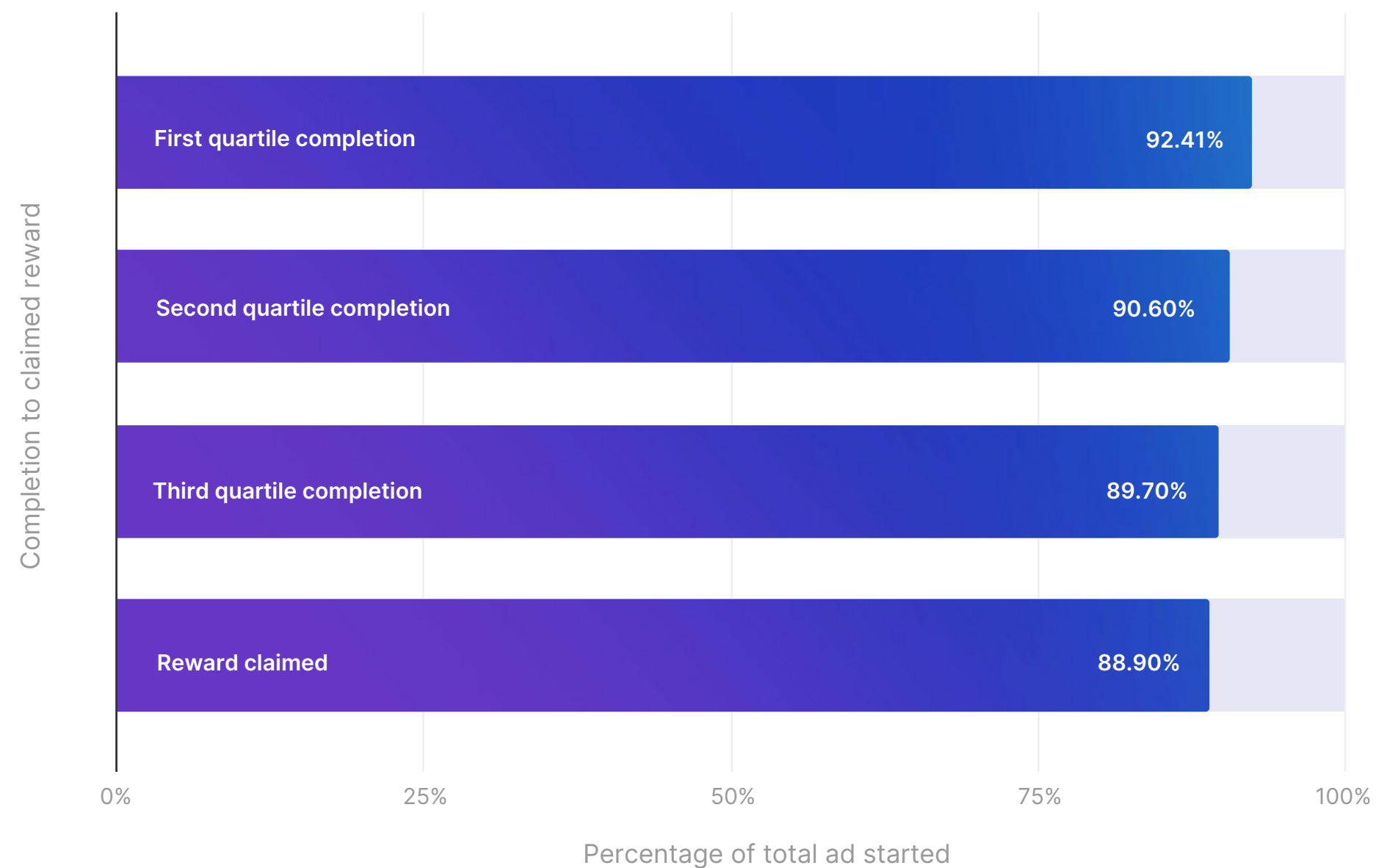
Rewarded video ad completion rate by genre



PICK THE RIGHT REWARDS FOR YOUR REWARDED ADS

The reward in your ad needs to be compelling so that the player returns to gameplay after viewing.

Rewarded video ads funnel drop off



10.3%
OF USERS WILL CLOSE
THE AD AFTER WATCHING
THREE-QUARTERS OF IT

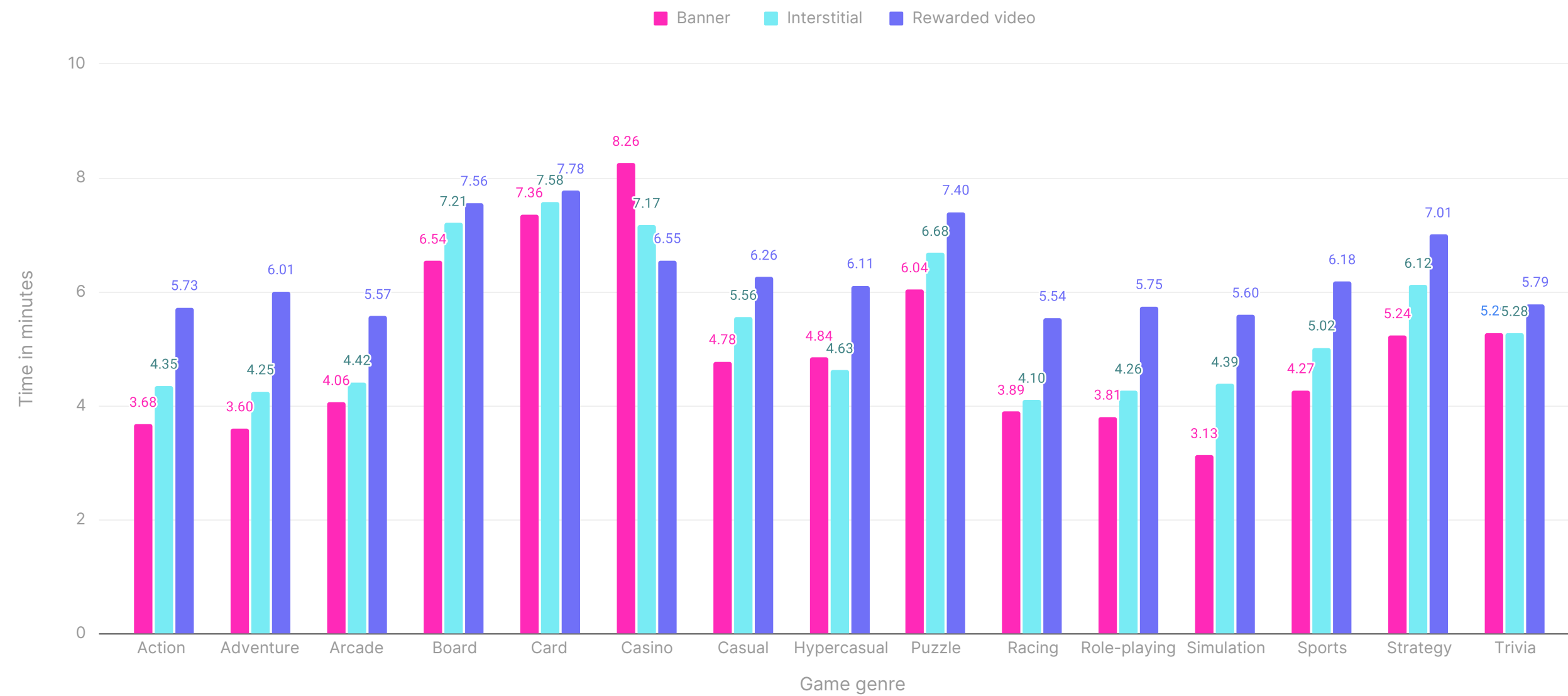
88.9%
OF USERS WHO WATCH THE
ENTIRETY OF AN AD WILL
CLAIM THE REWARD AT THE END

11.1%
OF USERS WHO WATCH THE
ENTIRETY OF AN AD WILL NOT
CLAIM THE REWARD

GETTING YOUR AD TIMING RIGHT

On average, the first interstitial and banner ads are triggered around five minutes after the user opens the app and the first rewarded video ad shows at around six minutes.

Time difference between app start and first ad impression

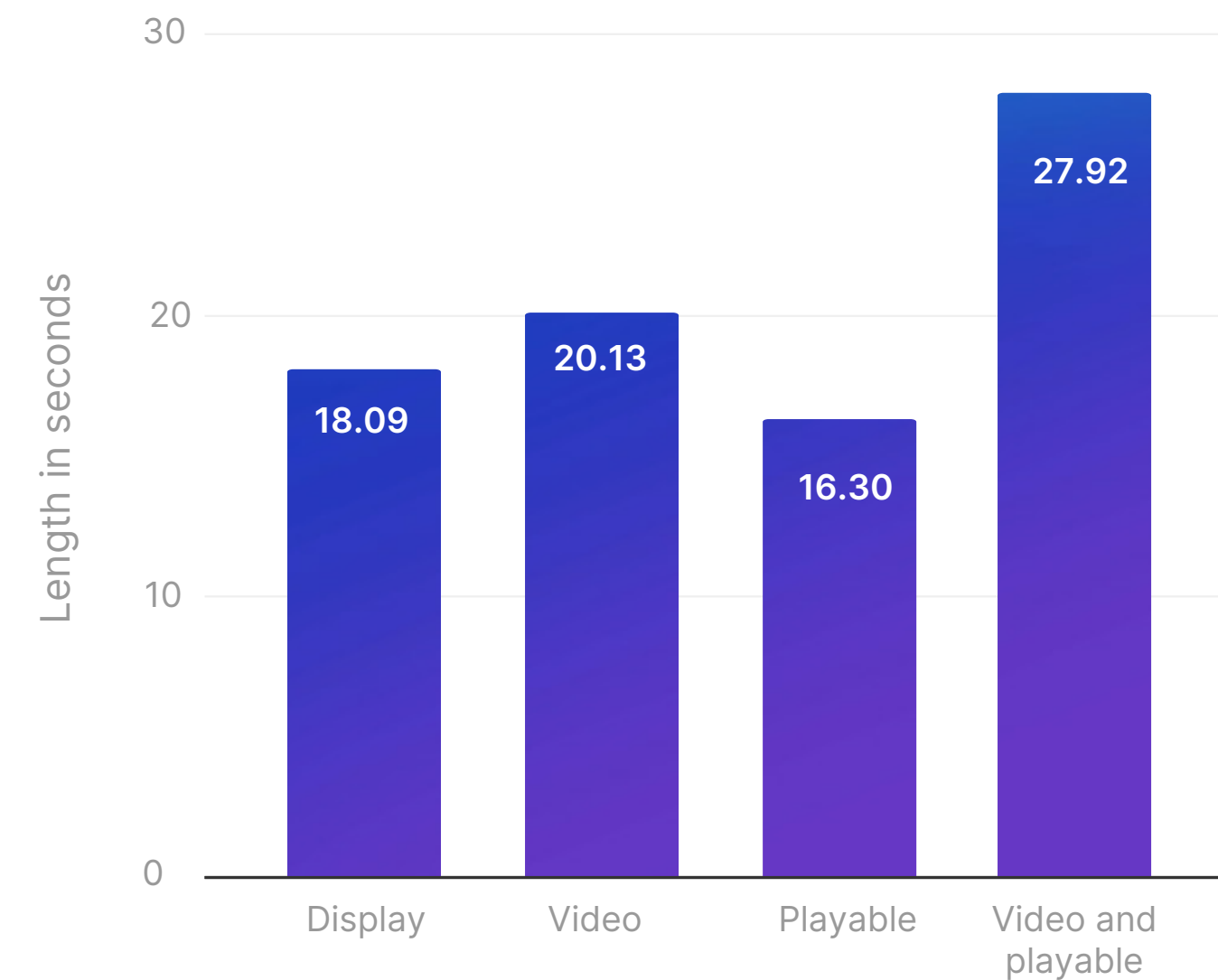


PLAYABLE ADS ARE THE MOST EFFECTIVE IN GETTING USERS TO CLICK THROUGH

Players click on playables ads faster once the ad appears than other creatives, regardless of whether it's static or video.

WHICH AD FORMATS DO PLAYERS CLICK ON THE FASTEST?

Time it takes for users to click on different ad formats once the ad appears

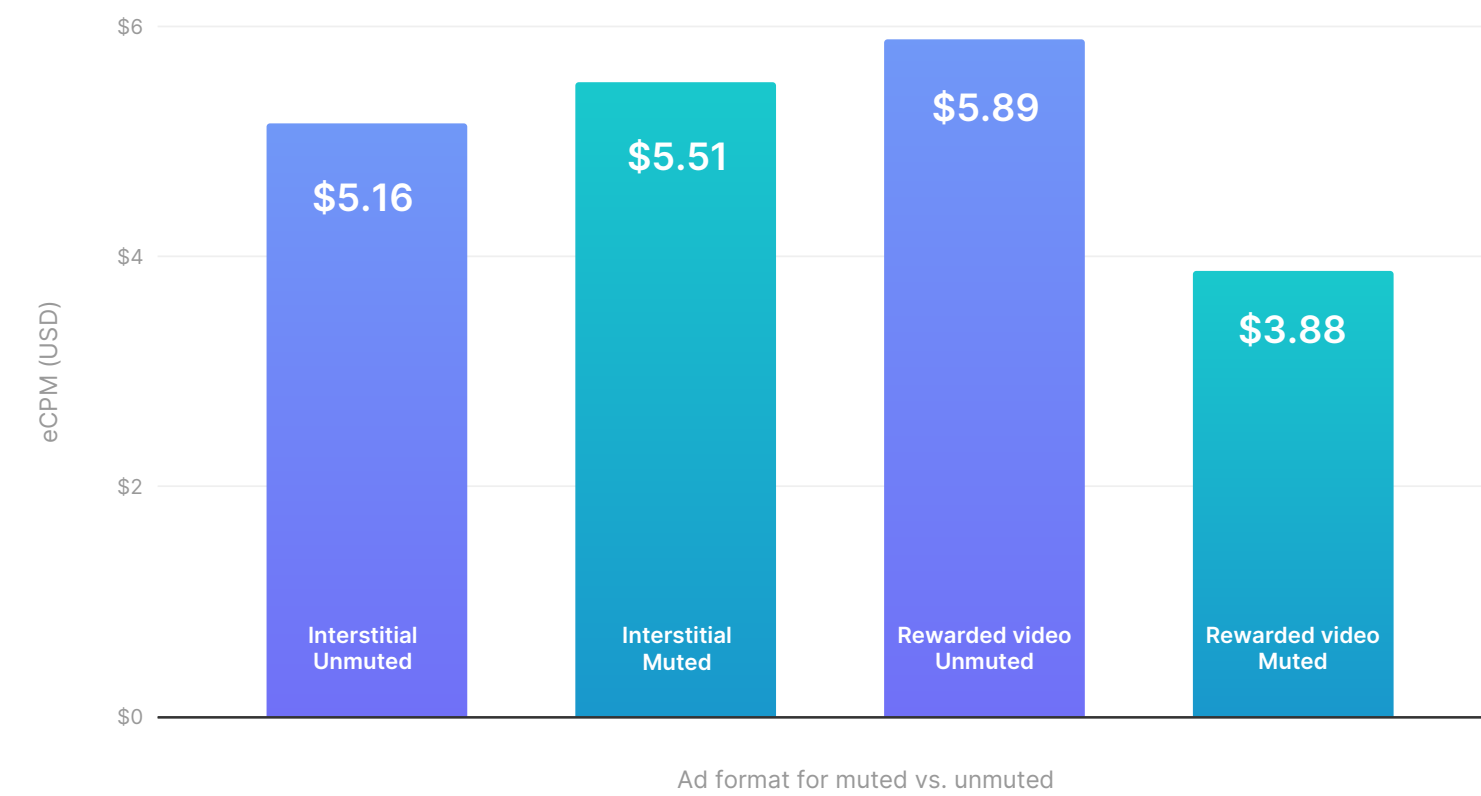


AD PLACEMENT DESIGN FOR BETTER PERFORMANCE

Some ad partners allow you to edit the settings of your in-game ads so that you can customize your players' experience with them. Below, we've examined four settings that can affect how they perform in games in relation to eCPM.

TO MUTE OR NOT TO MUTE?

eCPM for muted vs. unmuted interstitial and rewarded ads



For interstitials, eCPM for muted ads performs 36 cents better than unmuted ones.

Rewarded video ads that are not muted perform better than muted ads by \$2.03 for eCPM.

SHOULD YOU FORCE PLAYERS TO WATCH YOUR AD?

eCPM for allowing users to skip ads on interstitial and rewarded ad



Giving users the choice to skip interstitial ads leads to better eCPM by \$3.07.

For rewarded video ads, not allowing players to skip the ad produces a considerably larger eCPM by \$4.20.



eCPM

For a refresher, effective cost per thousand impressions or eCPM is an estimate of the revenue you receive for every thousand ad impressions. It is calculated with a simple formula:

$$\text{eCPM} = \frac{\text{Total ad earnings}}{\text{Impressions}} \times 1,000$$

WHAT SHOULD YOU NAME YOUR SKIP BUTTONS?

eCPM performance for "Skip" or "Close" button



There is a \$1.44 higher eCPM from interstitials calling their UI button "Close".

For rewarded video ads, calling it "Skip" increased eCPM by \$1.58.



CLOSE VS. SKIP

Shows a close icon instead of a skip icon. This means that the user will use the close button to skip to the end card instead of using the fast forward button.



KEEP TABS ON YOUR REVENUE

Tracking key performance indicators of your monetization efforts from IAA or IAP is essential to measure progress and know if your strategy is paying off.

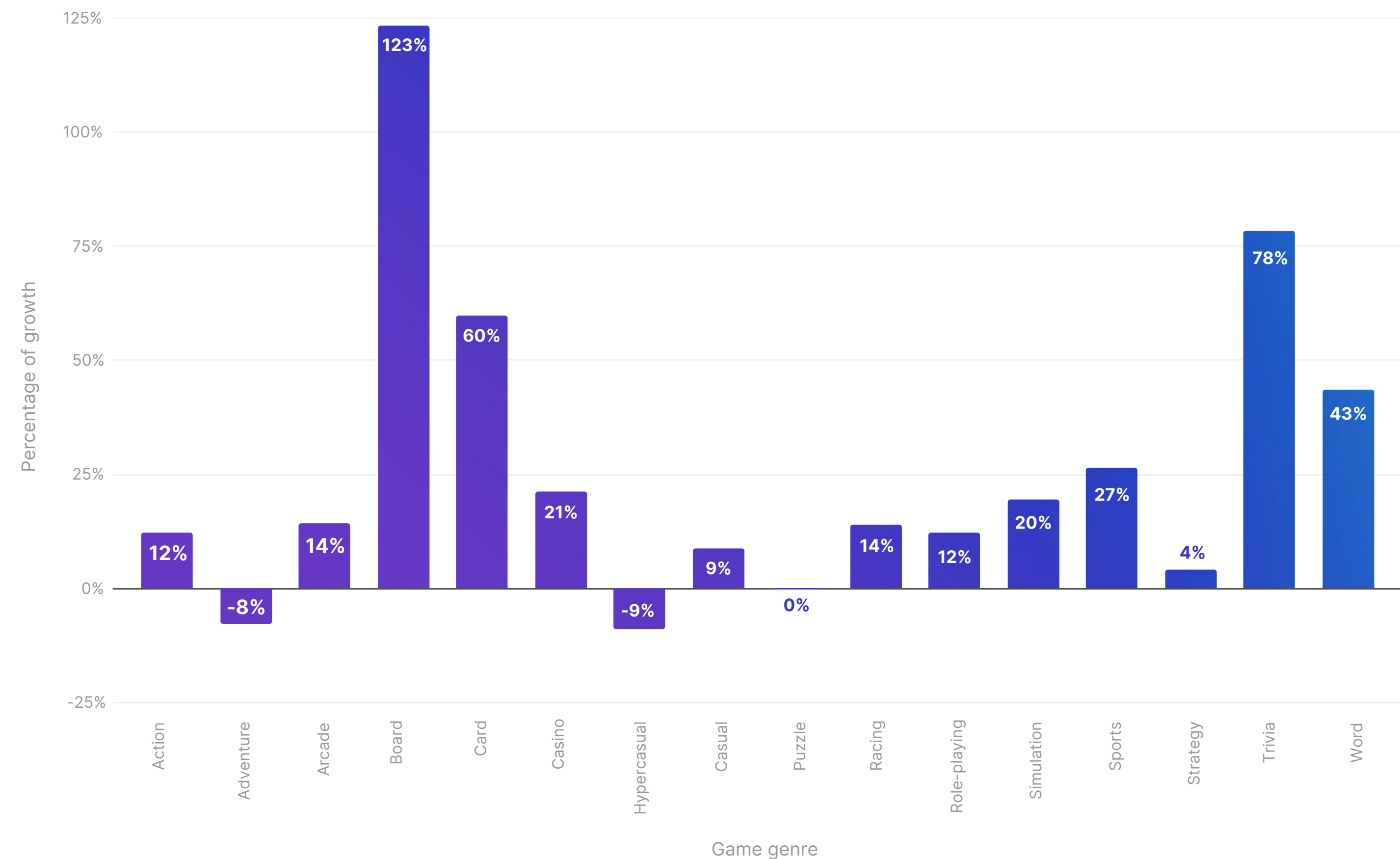
The following two charts show how the industry is performing when it comes to monetization per genre.

CASUAL GAMES HAVE GENERATED THE MOST AD REVENUE IN THE LAST TWO YEARS

Board, card, and trivia games had high performance in 2021 as they nearly doubled their ARPDAU compared to other genres that saw roughly 15% improvement in the same time period.

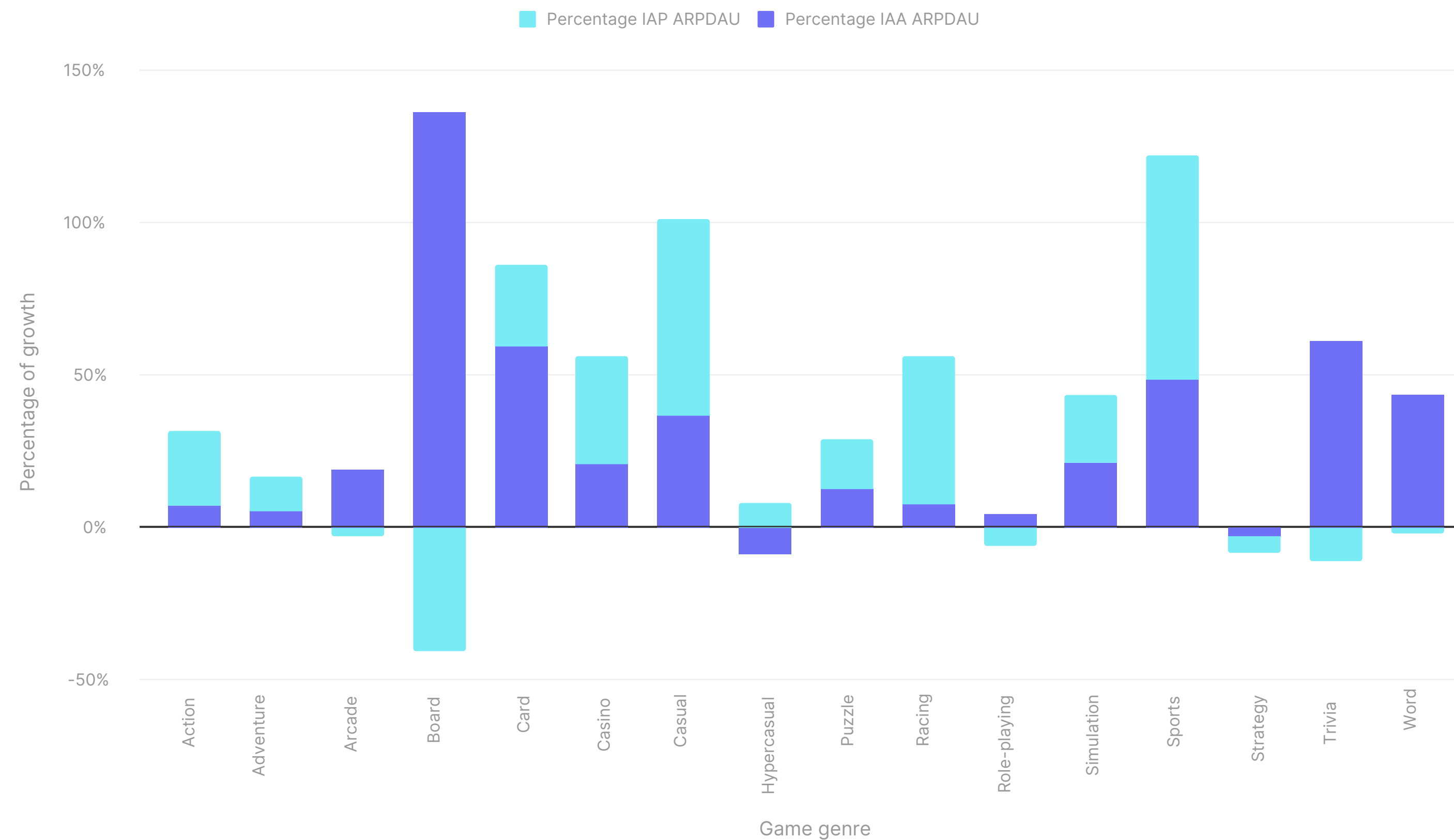
WHICH GENRES HAVE HAD THE MOST ARPDAU GROWTH?

IAA ARPDAU growth across genres in 2021 to 2020



WHAT WAS THE GROWTH OF IAP AND IAA ACROSS GENRES?

ARPDau growth for IAP and IAA across genres in 2021 to 2020



BOARD, SPORTS, AND CASUAL GENRES HAVE INCREASED IN IAA ARPDau PERFORMANCE

Contrary to the IAA performance, IAP ARPDau experienced shrinkage for board games in 2021. Sports and casual games saw the biggest growth in IAP ARPDau in 2021, both genres also have a positive trajectory for IAA ARPDau performance.

Hypercasual games had relatively little growth for IAP ARPDau and slight shrinkage in IAA ARPDau, which can be attributed to a high volume of players of the genre.

Findings in the [Unity Gaming Report 2022](#) show the hypercasual genre experienced significant growth in revenue generated, but on account of the high number of daily active players of the genre, the same growth is not experienced in ARPDau performance.

CREATING A FUTURE FOR YOUR GAME

Achieving scale for user growth and monetization return is an important milestone for game developers. Succeeding at this means they are well on their way to creating a sustainable future for their game. However, mastering earning enough from IAP and ads to reinvest into user acquisition or development activities doesn't happen overnight. But with careful planning, decision making, and execution that follows the steps in this report, developers of any size can be confident they've set their game up for a long future.



GROW AND MONETIZE YOUR GAME

Unity Ads gives you the tools to help drive your revenue and growth goals. Whether you're a publisher, advertiser, or both, you can get the expertise needed to support your monetization and user acquisition strategy.

[Learn more](#)

STAY INFORMED ABOUT UNITY ADS

Sign up for our Unity Ads newsletter to get the latest content, product, and industry news sent straight to your inbox.

[Sign up](#)

ABOUT UNITY

Unity (NYSE: U) is the world's leading platform for creating and operating real-time 3D (RT3D) content. Creators, ranging from game developers to artists, architects, automotive designers, filmmakers, and others, use Unity to make their imaginations come to life. Unity's platform provides a comprehensive set of software solutions to create, run and monetize interactive, real-time 2D and 3D content for mobile phones, tablets, PCs, consoles, and augmented and virtual reality devices.

The company's 1,800+ person research and development team keeps Unity at the forefront of development by working alongside partners to ensure optimized support for the latest releases and platforms. Apps developed by Unity creators were downloaded more than five billion times per month in 2020.

For more information, please visit unity.com.

ABOUT THE DATA

The data in this report is drawn from the Unity Gaming Services portfolio of products, and specifically games that use monetization and user acquisition services. It leverages original data from 28B+ ads served each month, 168M average users reached each day, and 235M+ average monthly installs. It also looks at 46M+ average monthly in-app purchases (IAPs) enabled by Unity.

We take data privacy seriously and have omitted and anonymized information from this report that would individually identify any single game, developer, or publisher. Games are broken out into publicly available categories as defined on the iOS and Google Play stores where available. The data shown in the charts and graphics is original to Unity.

AUTHORS

Data analysis and expert point of view for this report were provided by the Unity Publisher Operations team. Together they have decades of experience in gaming working for studios of all sizes from indie to AAA. At Unity, the Publisher Operations team is relied on by customers for monetization, user acquisition, and general development guidance based on their data analysis.



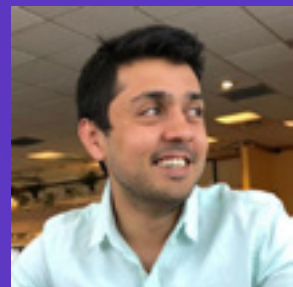
Emory Irpan, Head of Publisher Operations, Americas

Emory has over a decade of experience in games, and has been honored in publications like Forbes 30 under 30 for his work in the gaming industry. Before leading Unity's Publisher Operations team, Emory worked on multiple indie games and AAA franchises like The Sims and Call of Duty.



Levent Can, Partner Manager, Publisher Operations, Americas

Levent comes from industrial engineering and business analytics background and joined Unity from Ubisoft's Analytics & Reporting team in 2021.



Arjun Gohil, Senior Partner Manager, Publisher Operations, Americas

Arjun comes from a rich data background in the gaming industry. He previously worked for Electronic Arts and Ubisoft in various BI and Analytics roles.



Nathan TenBoer, Lead Partner Manager, Publisher Operations, Insights

Nathan has nine years of experience in data analytics, focusing mainly on live mobile game management and optimizations. At Unity, he has driven several market facing insights releases while also providing support to Unity customers.



Wing Yan (Kristen) Sze, Partner Manager, Publisher Operations, Americas

Kristen has over four years of quantitative research experience across mobile ad monetization, user experience and psychology domains. She previously worked as a senior analyst at Scopely.

