

Game Analytics Metrics Glossary

Product and game metrics for data analysis

Game metrics analysis is an integral part of the game development experience. Game analytics metrics of various types help you to shed light on all the processes happening - from how your users complete the tutorial to how they move along the funnel towards a purchase. **Mobile game analytics** is a complex area in which you need to consider hundreds of nuances and keep dozens of metrics in mind. There are simpler and more unambiguous metrics like DAU, downloads, sessions, and more complex ones like churn or ARPPU, which can cause more questions than give answers (what is good ARPPU? How many days of inactivity we consider as a churn indicator?)

Active users (DAU, WAU, MAU)

Active Users – people who have had at least one session in a given time period.

DAU – the number of unique users per day (Daily Active Users);

WAU – the number of unique users per week (Weekly Active Users);

MAU – the number of unique users per month (Monthly Active Users).

Ad gross

Ad gross – revenue from ads in a product or a game.

Ad LTV

Ad LTV (Lifetime Value) – ad revenue received from new users for their entire “life” in the project.

Ad revenue

See ad gross.

ARPPU

ARPPU (Average Revenue Per Paying User) – the average income from a paying user (the user who made at least one payment) for a certain period of time.

You can use this important monetization metric to assess the response of paying users to the value of the project.

ARPU

ARPU (Average Revenue Per User) – average income from one active user over a certain period of time.

ARPPDAU (Average Revenue Per Daily Active User) – average income from an active user for one day.

ARPPMAU (Average Revenue Per Monthly Active User) – average income from an active user for one month.

You can use this metric to compare different projects' performance.

ARPU cumulative

Cumulative ARPU is the cumulative average revenue per user. It is used to assess the quality of traffic and select the optimal CPI indicator (Cost Per Install – the price of one download of application).

Average check

Average check – average shopping bill.

average check = gross / transactions,

Where gross is the number of payments for a certain period, and transactions is the total number of transactions for the same period.

Average number of sessions

Average number of sessions – the average number of sessions in a game or product.

Average session length

Average session length (**session duration** or **visit duration** or **average session time**) – average session duration.

average session length = total duration of all sessions/number of sessions

CCU / Users Online

CCU (Concurrent Users) or **users online** – active users who are currently in the application.

Churn by level

Churn by level – an outflow of new users at the level measured for the period.

Churn rate

Churn rate – an indicator of the outflow of users.

You can use this metric to estimate the number of users who left the application during a certain period.

MRR churn rate

MRR churn rate – a measure of the outflow of users, calculated in monetary terms.

You can use this game analytics metric to measure the loss of profits from unsubscribed users over a period of time.

MRR churn rate = (MRR for the previous period – MRR for the current period) / MRR for the previous period,

Where MRR, Monthly Recurring Revenue, is the regular monthly income (most often from subscriptions).

Conversion to first payment

Conversion to first payment – the proportion of users registered in the project in a certain period who have made at least one payment by the current moment.

Conversion to repeat payment

Conversion to repeat payment – the proportion of users registered in the project in a certain period who have made more than one payment to the current moment.

CSAT

CSAT (Customer Satisfaction Score) – an average customer satisfaction index. It allows you to evaluate the experience of user interaction with the company.

Cumulative revenue for N days

Cumulative revenue for N days shows how much on average a user spends for their first N days in the project.

Downloads

Downloads – the total number of downloads of the application.

Gross

Gross – the number of payments for a certain period.

Install

Install – the same as new users metric.

IRR

IRR (Internal Rate of Return).

K-factor

K-factor – viral coefficient, or virus index, or virality index.

You can use this game analytics metric to assess the virality of your project. It points at an app's ability to grow organically and without costs for users' acquisition. It also characterizes the app's growth speed and popularity in the market.

Lifetime

Lifetime is a metric showing how long, on average, a person remains active in a project, that is, the time that has passed from the first to the last application start.

You can use this metric to evaluate changes you've made in the project, as well as to modify user behavior.

Loyal users (LDAU, LWAU, LMAU)

Loyal users – the users who open the application at least two times in a certain period of time.

LDAU – the number of unique loyal users per day (Loyal Daily Active Users).

LWAU – the number of unique loyal users per week (Loyal Weekly Active Users).

LMAU – the number of unique loyal users per month (Loyal Monthly Active Users).

LTV or CLV

LTV (LifeTime Value), or CLV (Customer Lifetime Value) – the average amount of money from one user for his entire "life" in the project.

In product analytics, LTV is used to optimize the costs spent on acquiring users, anticipate revenue in advance, evaluate the effectiveness of the acquisition channels, choose the most financially attractive user segments, and much more.

Max users online

Max users online – the maximum number of users that was active on a particular day.

New paying users

New paying users – the number of users who made the first payment in the application in a certain period of time.

New Users

New users – users who opened the application for the first time.

NPS

NPS (Net Promoter Score) – user loyalty index.

$$NPS = \% \text{ promoters} - \% \text{ detractors},$$

Where %promoters is the percentage of loyal users and %detractors is the percentage of dissatisfied users.

NPV

NPV (Net Present Value).

Paying conversion

Paying conversion – the conversion to the payment.

Paying share

Paying share – the share of paying users.

$$\text{Paying share} = \text{paying users} / \text{active users},$$

Where paying users are those who made at least one payment, and active users are those who have had at least one session at a given time period.

Paying users

Paying users (payers) – the percentage of all unique users active for a certain period who made at least one payment.

Paying users retention

Paying users retention – coefficient of return of paying users.

PCCU

PCCU (Peak Concurrent Users) – the maximum number of users simultaneously running the application.

Premium currency accrual

Premium currency accrual – accrual of premium currency.

Retention

Retention shows the ability of the project to keep users engaged.

Day 0 retention – the proportion of users who opened the application for the second time within one day after the first login.

Day 1 retention – the proportion of users opening the application one day after the first visit.

Day 7 retention – the proportion of users opening the application seven days after the first visit.

Day 28 (30) retention – the percentage of users entering project 28 (30) days after the first visit.

Revenue

Revenue – the amount of income for a certain period.

ROI

ROI (Return On Investment) shows how much money you make from your investment.

Rolling Retention

Day N rolling retention – the percentage of users who opened the project N days after the first visit or later.

ROMI

ROMI (Return on Marketing Investment).

Sessions

Sessions – the number of sessions in the application for a certain period.

Sessions per user

Sessions per user – the number of sessions per user (total number of sessions divided by the total number of users).

Social LTV

Social LTV (Social Lifetime Value) – a mobile game analytics metric that combines the main indicator of project quality (LTV) and its virality indicator (K-factor).

*Social lifetime value = lifetime value * (1 + K-factor),*

Where lifetime value is the average amount of money paid by one user, and K-factor is the virality index.

Sticky factor

Sticky factor is an analytical indicator. You can use it to assess the regularity of visits as well as the stability and loyalty of your user base.

Total daily play time

Total daily play time is a game metric that shows how much time a user spends in a product.

Total daily play time = total sessions length / active users,

Where total sessions length is the total duration of all gaming sessions, and active users is the total number of active users.

Total gross

Total gross – the sum of all payments and advertising revenue.

Total gross = gross + ad gross,

Where gross is the number of payments for a certain period, and ad gross is the advertising revenue.

Total Revenue

Total revenue – the sum of net revenue and advertising revenue.

Total revenue = revenue + ad gross,

Where revenue is net revenue and ad gross is ad revenue.

Total users

Total users – the number of application users who have a database representation on the selected date.

Transactions

Transactions – the total number of transactions for a certain period.

Transactions by user

Transactions by user – the average number of transactions completed by one user during a certain period.

Tutorial conversion

Tutorial conversion – the proportion of new users who have successfully completed the tutorial.

Unit sales

Unit sales – selling items for premium currency.

Users by level

Users by level – distribution of players by their level in the game.

Users online

Users online or **CCU (Concurrent Users)** – active users who are currently in the application.