

MARKETING GUIDE



The Performance Marketing Metrics Cheat Sheet

Every number that matters, with the formulas

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I have spent 12 years buying traffic and hiring the people who buy it, and the one thing that separates operators from button-pushers is fluency with the numbers. Not fancy dashboards. The actual formulas, and knowing which ones lie to you when you read them alone.

This is the cheat sheet I wish someone had handed me on day one. Every metric here has a name, a formula in plain text, a line on what it actually tells you, and a note on how to read it without fooling yourself. Keep it next to your reporting tab and stop guessing.

Spend and pricing models: what you pay for

Every buy is priced on some unit of value. The question is always which unit you are paying for and which one you actually care about. When those two drift apart, you overpay. Here are the cost-per models you will meet on every US ad platform.

Cost-per pricing models

Metric	Formula	What it tells you
CPM (cost per mille)	$\text{CPM} = \text{Ad spend} / \text{Impressions} \times 1000$	What it costs to be seen 1,000 times. The base price of attention on a platform.
CPC (cost per click)	$\text{CPC} = \text{Ad spend} / \text{Clicks}$	What you pay for one click to your destination. The price of intent, not just attention.
CPA (cost per action)	$\text{CPA} = \text{Ad spend} / \text{Actions}$	What each conversion costs, whatever you defined the action as (sale, signup, lead).
CPI (cost per install)	$\text{CPI} = \text{Ad spend} / \text{Installs}$	Mobile app cost per install. The entry price into your app funnel.
CPL (cost per lead)	$\text{CPL} = \text{Ad spend} / \text{Leads}$	What one captured lead costs before any sales work happens.
CPV (cost per view)	$\text{CPV} = \text{Ad spend} / \text{Video views}$	What one qualified video view costs. Definition of a view varies by platform, so check it.

WORKED EXAMPLE

You spend 4,000 dollars and get 800,000 impressions. $\text{CPM} = 4,000 / 800,000 \times 1000 = 5$ dollars. Those impressions drove 6,400 clicks, so $\text{CPC} = 4,000 / 6,400 = 0.625$ dollars. Of those, 128 became customers, so $\text{CPA} = 4,000 / 128 = 31.25$ dollars. Same spend, three different lenses.

WATCH OUT

A low CPM is not a win by itself. Cheap impressions on the wrong audience produce expensive CPAs. Always trace a cheap top-of-funnel number down to the action you actually get paid on before you celebrate.

Engagement metrics: turning impressions into clicks

Engagement metrics are the conversion rates between funnel stages. They are where creative and targeting show up in the math. The two you will live in are CTR and CVR, and the bridge between spend models and click cost is a piece of arithmetic worth memorizing.

Engagement and rate metrics

Metric	Formula	What it tells you
CTR (click-through rate)	$\text{CTR} = \text{Clicks} / \text{Impressions} \times 100$	How compelling the ad is at earning a click. A read on creative and targeting fit.
CVR (conversion rate)	$\text{CVR} = \text{Conversions} / \text{Clicks} \times 100$	How well the landing page and offer close the visitors you paid to send.
eCPC from CPM and CTR	$\text{eCPC} = \text{CPM} / 1000 / \text{CTR}$	The effective click cost implied by a CPM buy and its CTR. Lets you compare CPM and CPC buys.
Impression to conversion	$\text{ICR} = \text{Conversions} / \text{Impressions} \times 100$	The full top-to-bottom rate. Useful for comparing whole campaigns, not single steps.
Engagement rate	$\text{ER} = \text{Engagements} / \text{Impressions} \times 100$	Share of people who interacted (likes, saves, clicks). A soft signal, not a revenue metric.

WORKED EXAMPLE

Your CPM is 8 dollars and your CTR is 2 percent (0.02). $\text{eCPC} = 8 / 1000 / 0.02 = 0.40$ dollars per click. If a CPC buy on the same audience quotes you 0.55 dollars, the CPM buy is cheaper per click, assuming the click quality matches.

KEY TAKEAWAYS

- CTR judges the ad. CVR judges the page and offer. Diagnose them separately or you will fix the wrong thing.
- $\text{eCPC} = \text{CPM} / 1000 / \text{CTR}$ is the one formula that lets you compare a CPM buy against a CPC buy on equal footing.
- Rates only mean something at volume. A 10 percent CVR on 20 clicks is noise, not a result.

Value and economics: does the buy actually pay

This is the chapter that decides whether you keep your job. Cost metrics tell you what you spend. Value metrics tell you what you get back. If you only track one group of numbers, track these, because they are the ones that connect marketing to money.

Revenue and unit economics

Metric	Formula	What it tells you
AOV (average order value)	$AOV = \text{Revenue} / \text{Orders}$	Average dollars per order. Raise it and every acquisition dollar stretches further.
ARPU (avg revenue per user)	$ARPU = \text{Revenue} / \text{Active users}$	Average revenue per user over a period. The per-head value of your base.
LTV (lifetime value)	$LTV = ARPU \times \text{Average lifespan (or Gross margin per user / Churn)}$	Total value a customer delivers before they leave. The ceiling on what you can spend to get one.
CAC (customer acq. cost)	$CAC = \text{Sales and marketing spend} / \text{New customers}$	The fully loaded cost to win one customer. Compare it against LTV, never against nothing.
ROAS (return on ad spend)	$ROAS = \text{Revenue} / \text{Ad spend}$	Revenue produced per dollar of ad spend. Fast, but blind to margin and to non-ad costs.
Contribution margin	$CM = \text{Revenue} - \text{Variable costs}$	Dollars left after variable costs to cover CAC and overhead. What actually funds growth.
Payback period	$\text{Payback} = CAC / (\text{Monthly gross margin per customer})$	Months to earn back what you paid to acquire a customer. Shorter means faster reinvestment.
MER (marketing eff. ratio)	$MER = \text{Total revenue} / \text{Total marketing spend}$	Blended return across all channels. The number your CFO trusts more than platform ROAS.

LTV TO CAC, THE RATIO THAT MATTERS

The headline is LTV / CAC. A common target is 3 to 1, meaning a customer returns three times what you paid to acquire them. Below 1 to 1 you lose money on every sale. Way above 3 to 1 usually means you are underspending and leaving growth on the table.

WORKED EXAMPLE

Gross margin per customer is 20 dollars a month and CAC is 120 dollars. Payback = $120 / 20 = 6$ months. If LTV is 480 dollars, $LTV / CAC = 480 / 120 = 4$ to 1. Healthy economics, room to spend more aggressively.

WATCH OUT

ROAS and MER get confused constantly. Platform ROAS counts only that platform's attributed revenue against its own spend, so every channel claims the same sale. MER divides all revenue by all marketing spend and cannot double count. When ROAS looks great but the bank account does not grow, trust MER.

Retention and churn: value after the first purchase

Acquisition gets the headlines, but retention pays the bills. LTV is only as real as your ability to keep people. These are the metrics that tell you whether you are filling a bucket or a sieve, and cohorts are how you read them honestly.

Retention and churn metrics

Metric	Formula	What it tells you
D1 / D7 / D30 retention	$\text{Retention(dN)} = \frac{\text{Users active on day N}}{\text{Users acquired}} \times 100$	Share of a cohort still active 1, 7, and 30 days after they joined. The shape of stickiness.
Churn rate	$\text{Churn} = \frac{\text{Customers lost in period}}{\text{Customers at start}} \times 100$	Share of customers who left in a period. The direct enemy of LTV.
Retention rate	$\text{Retention} = 1 - \text{Churn (as a rate)}$	Share who stayed. The mirror image of churn over the same window.
Cohort retention	Track each signup group's active share month over month	How different signup groups age. Separates a real trend from a mix shift in your traffic.
Revenue churn	$\text{Rev churn} = \frac{\text{Revenue lost in period}}{\text{Revenue at start}} \times 100$	Dollar-weighted churn. Losing small accounts hurts less than losing whales; this shows it.
NRR (net revenue retention)	$\text{NRR} = \frac{(\text{Start rev} + \text{expansion} - \text{churn} - \text{contraction})}{\text{Start rev}} \times 100$	Whether existing customers grow in value on their own. Above 100 percent is a growth engine.

HOW TO READ A RETENTION CURVE

Healthy retention flattens. A curve that keeps sliding toward zero means you never found product-market fit for that cohort. A curve that drops fast then holds a stable floor means you have a core of users who genuinely stick, and that floor times your margin is where durable LTV comes from.

KEY TAKEAWAYS

- Always read retention by cohort, not as a blended average, or a flood of new signups will hide the fact that old users are leaving.
- Revenue churn matters more than logo churn once account sizes vary. Ten small cancellations can weigh less than one large one.
- NRR above 100 percent means you would grow even if you stopped acquiring. That is the strongest signal a business can send.

The funnel: impression to click to install to purchase

Every step of the funnel is a conversion rate multiplied by the step before it. Lay it out end to end and you can see exactly where money leaks. This is how I diagnose a campaign that spends fine but does not produce, one stage at a time.

Funnel stages and step conversion rates

Stage transition	Formula	What it tells you
Impression to click	$\text{CTR} = \text{Clicks} / \text{Impressions} \times 100$	Whether the ad earns attention. Weak here means creative or targeting.
Click to landing view	$\text{LPV rate} = \text{Landing views} / \text{Clicks} \times 100$	Whether the page loads and holds people. Big gap means slow pages or broken links.
Landing to install or signup	$\text{Install rate} = \text{Installs} / \text{Landing views} \times 100$	Whether the offer and store page convince people to take the first commitment.
Install to activation	$\text{Activation} = \text{Activated users} / \text{Installs} \times 100$	Whether new users reach the first real value moment. Where most apps quietly lose people.
Activation to purchase	$\text{Purchase rate} = \text{Purchasers} / \text{Activated users} \times 100$	Whether activated users convert to paying. The last and most valuable step.
Full funnel	$\text{End to end} = \text{Purchases} / \text{Impressions} \times 100$	The compounded rate across every step. Your true cost of a customer starts here.

WORKED EXAMPLE

100,000 impressions at 2 percent CTR give 2,000 clicks. 90 percent reach the landing page (1,800 views). 20 percent install (360). 50 percent activate (180). 10 percent purchase (18). Compounded, that is 18 purchases from 100,000 impressions, a 0.018 percent full-funnel rate. Lift the install step from 20 to 30 percent and you get 27 purchases from the same spend, a 50 percent gain from one stage.

WATCH OUT

Fix the leakiest step, not the easiest one. Doubling a 2 percent CTR helps, but if 80 percent of installs never activate, the activation step is where the same effort returns far more. Find the biggest drop, then work on that.

Blended and diagnostic ratios: connecting the numbers

Single metrics mislead. The ratios that combine them are where judgment lives. These are the composite numbers I check when a single metric looks off, because they tell me whether the problem is real or an artifact of how something was measured.

Composite and sanity-check ratios

Metric	Formula	What it tells you
LTV to CAC	LTV / CAC	The core health ratio. 3 to 1 is a common target; below 1 to 1 you lose money per customer.
CAC payback	$CAC / \text{Monthly gross margin per customer}$	How long capital stays tied up before a customer pays it back. Cash flow, not just profit.
Break-even ROAS	$\text{Break-even ROAS} = 1 / \text{Gross margin percent}$	The minimum ROAS to not lose money. At 50 percent margin you need 2.0 ROAS just to break even.
Gross margin percent	$\text{GM percent} = (\text{Revenue} - \text{COGS}) / \text{Revenue} \times 100$	Share of revenue left after direct costs. Sets the break-even ROAS you must clear.
Blended CAC	$\text{Total S and M spend} / \text{All new customers (paid and organic)}$	The honest cost of growth including organic. Paid-only CAC flatters you.
Spend to revenue (MER)	$\text{Total revenue} / \text{Total marketing spend}$	The one number that survives attribution debates. Whole business in, whole business out.

BREAK-EVEN ROAS IN ONE LINE

If your gross margin is 40 percent, $\text{break-even ROAS} = 1 / 0.40 = 2.5$. That means a 3.0 ROAS campaign is only modestly profitable, not the home run the dashboard implies. Always know your break-even before you judge a ROAS number.

KEY TAKEAWAYS

- A ROAS target with no margin behind it is a vanity number. Compute break-even ROAS first, then set goals above it.
- Blended CAC keeps you honest when organic and brand lift are quietly carrying your paid results.
- When two metrics disagree, the more aggregate one (MER, blended CAC) is usually closer to the truth of the bank account.

Healthy benchmarks: ranges, not gospel

Everyone wants the magic numbers, so here they are, with a warning. These are broad US ranges I have seen hold up across accounts. They shift hard by industry, product price, platform, season, and audience temperature. Use them to sense-check, never as a target to hit blindly. Your own trailing data beats any table here.

Rough healthy ranges (US, vary widely by product and market)

Metric	Typical range	How to read it
CTR (paid social)	0.5 - 2.0 percent	Below the low end, suspect creative or audience fit. Above it, scale the winner.
CTR (paid search)	2 - 6 percent	Search intent lifts CTR. Brand terms run much higher and should be read separately.
Landing page CVR	2 - 5 percent	Ecommerce clusters here. Lead gen forms often run higher, high-ticket much lower.
CPM (paid social)	5 - 20 dollars	Driven by audience competition and season. Spikes hard in Q4 retail.
LTV to CAC	3 to 1 target	Below 1 to 1 loses money. Far above 3 to 1 often means you are underspending.
CAC payback	under 12 months	Consumer wants faster. SaaS can tolerate longer if retention is strong.
ROAS	clear your break-even	There is no universal good ROAS. 2.0 can be great or terrible depending on margin.
D1 / D7 / D30 retention (apps)	roughly 25 / 12 / 6 percent	Casual apps sit low, habitual and utility apps much higher. Read against your category.
Monthly churn (consumer subs)	3 - 8 percent	Lower is better. Above 10 percent monthly makes durable LTV nearly impossible.
NRR (SaaS)	100 - 120 percent good	Above 100 percent means expansion beats churn. 110 percent plus is excellent.

WATCH OUT

The fastest way to make a bad decision is to chase a benchmark that does not fit your business. A luxury product with a 500 dollar AOV and a mobile game with a 5 dollar purchase live in different universes. Benchmark against your own trailing 90 days first, and use these ranges only to tell you when a number is strange enough to investigate.

KEY TAKEAWAYS

- Benchmarks are smoke detectors, not scoreboards. They tell you where to look, not whether you won.
- Your own historical data is the only benchmark that is truly yours. Build the habit of comparing this month to your own trend.
- When a metric sits far outside these ranges, it is more often a tracking or definition problem than a real one. Verify the measurement before you act.

Where to go next

Print this, pin it near your reporting, and the formulas will stop being something you look up and start being something you think in. The operators who win are not the ones with the fanciest dashboards. They are the ones who can look at three numbers, do the math in their head, and know within a minute whether a campaign is worth another dollar. Pick two metrics you do not currently track, add them this week, and watch how much sharper your decisions get once the economics are in front of you instead of guessed at.

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