Attribution models compared

You run a campaign. A user clicks a Facebook ad, then a Google search result, then an email, then buys. Who gets the credit? That's the problem **attribution models compared** tries to solve. Every model is a rule set for dividing revenue credit across touchpoints. Pick the wrong one, and you kill your best channel or waste budget on a fluke. This is not an academic exercise. It's a cash allocation machine.

The core tension: last-click vs. everything else

Last-click attribution is the default in Google Analytics and most platforms. It gives 100% credit to the final touchpoint before conversion. Simple. Cheap to implement. And almost always wrong. If a user discovered you through a podcast, searched your brand name, then bought, last-click gives the sale to the brand search. That makes your brand search look like a hero. Meanwhile, the podcast looks useless. You cut the podcast budget. Sales drop. That's the trap.

First-click attribution does the opposite. It credits the discovery channel. That makes top-of-funnel content look amazing, but it hides the work your retargeting and email sequences do to close the deal. Both single-touch models are fragile. They work only if your sales cycle is a single session with no research phase. In reality, B2B cycles run 30-90 days with 10+ touches. Single-touch models are dangerous there.

Multi-touch models: the practical options

Linear attribution splits credit evenly across every touchpoint. If a user hits five channels, each gets 20%. It's fair in a mechanical sense. But it dilutes the impact of a decisive moment. A webinar that converts 30% of attendees looks the same as a banner ad that got one click. Linear is a decent starting point if you have no data on which touches actually drive decisions.

Time-decay attribution gives more credit to touches closer to the conversion. The first touch gets the least; the last touch gets the most. This mirrors reality for most B2C purchases. People research, then decide. The final touches are usually the ones that tip the scale. But it undervalues the initial awareness spark. If your brand is unknown, first touches are expensive and critical. Time-decay might starve them.

Position-based (U-shaped) attribution gives 40% to the first touch, 40% to the last touch, and splits the remaining 20% across middle touches. This is the compromise model. It acknowledges that discovery and closing both matter. The middle touches are supporting actors. This works well for B2B sales where a demo (middle touch) is

important but the initial inbound and the final contract negotiation are the real anchors.

> Rule of thumb: If your sales cycle has fewer than 5 touches, use position-based. If it has more than 10, use time-decay. Single-touch models are for low-stakes, high-volume transactions only.

The data-driven illusion: algorithmic attribution

Google Analytics 4 offers a data-driven attribution model. It uses machine learning to analyze conversion paths and assign credit based on statistical probability. Sounds perfect. In practice, it requires a minimum of 300 conversions and 10,000 user sessions in a 30-day window. Below that threshold, the model is unstable. It can flip credit wildly from week to week. One week your email list is the hero. Next week, it's organic search. You can't plan budgets on a moving target.

Data-driven models also suffer from the "black box" problem. You don't know why the model assigned credit a certain way. If you need to justify budget decisions to a CFO, you need a transparent rule. Last-click is transparent. Position-based is transparent. Data-driven is a guess with a math degree. Use it only if you have massive traffic and a team that can validate the model against holdout tests.

Real-world scenarios and the model that fits

Scenario A: You sell a $50 SaaS subscription. Users sign up after reading one blog post and clicking a CTA. Sales cycle: 2 touches. Last-click works fine here. The blog post is the workhorse. Don't overcomplicate it.

Scenario B: You sell $10,000 consulting packages. A client attends a webinar, downloads a whitepaper, books a call, receives a proposal, and then signs. That's 5+ touches. Position-based or time-decay is mandatory. If you use last-click, you'll kill the webinar that generated the lead. If you use first-click, you'll ignore the proposal that closed the deal.

Scenario C: You run an e-commerce store with retargeting. A user sees a Facebook ad, leaves, sees a Google display ad, returns via email, and buys. Time-decay is the safest bet. The email that brought them back is more valuable than the initial Facebook ad. But don't cut the Facebook ad entirely. Without it, the email list wouldn't have that user.

Three myths that waste marketing budgets

Myth 1: Last-click is fine because it's simple. *Reality:* Simple doesn't mean accurate. It

systematically underfunds awareness channels and overfunds brand search.

Myth 2: Data-driven attribution is always better. *Reality:* It requires volume and stability. Most small businesses don't have either. A well-chosen rule-based model beats a noisy algorithmic one.

Myth 3: You can use one model forever. *Reality:* As your marketing mix changes, the right model changes. Adding a new channel (like podcasts or events) can break your existing model. Revisit your attribution setup every quarter.

How to choose without analysis paralysis

If you have fewer than 100 conversions per month, pick position-based. It's a safe default. If you have 100-500 conversions, test time-decay against last-click for one quarter. Run a holdout test: remove one channel and measure the revenue drop. That tells you the real value of that channel. If the drop is bigger than the attribution model predicted, your model is wrong.

If you have 500+ conversions and a dedicated analytics person, implement data-driven attribution in GA4. But also run a simple last-click report as a sanity check. If the two models tell wildly different stories, dig into the path data manually. Look for patterns. The truth is usually somewhere in the middle.

One concrete decision-making insight

The biggest mistake is optimizing for the model instead of the business. If your position-based model says Facebook is underperforming, but you know your best customers come from Facebook, the model is wrong. Trust your qualitative data. Attribution models are tools, not truth. They help you ask better questions. They don't give you final answers. Use them to spot anomalies, then investigate. Don't let a spreadsheet fire your best channel.