

GA4 & Shopify Attribution

A Complete Integration & Attribution Guide

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1. Overview of Attribution Models

Attribution models determine how credit for a sale or conversion is distributed across the marketing touchpoints a customer interacted with before converting. GA4 supports multiple models; Shopify uses its own last-click logic by default.

Model	Description	Available In
Last Click	100% credit to the last touchpoint before purchase	GA4, Shopify default
First Click	100% credit to the first touchpoint in the journey	GA4 (custom)
Linear	Equal credit shared across all touchpoints	GA4 (custom)
Time Decay	More credit given to touchpoints closer to conversion	GA4 (custom)
Data-Driven	ML assigns credit based on actual conversion paths	GA4 (recommended)
Position-Based	40% first, 40% last, 20% spread across middle	GA4 (custom)

2. How GA4 Tracks Traffic Sources

GA4 uses a combination of UTM parameters, auto-tagging (gclid for Google Ads), and its own channel grouping rules to classify sessions into traffic sources. The default channel groups are:

- Organic Search — unpaid search engine traffic
- Paid Search — CPC/PPC from search engines
- Direct — no referrer detected
- Email — tagged email campaigns
- Organic Social — untagged social media
- Paid Social — tagged or auto-detected paid social
- Referral — clicks from external websites
- Affiliates, Display, Cross-network, Unassigned

Channel Source/Medium Reference

Channel	Source / Medium	Notes
organic	google / organic	SEO traffic from Google Search
cpc	google / cpc	Paid Google Ads (auto-tagged)
email	newsletter / email	UTM-tagged email campaigns
social	instagram / social	Organic social posts
paid_social	facebook / paid_social	Meta/Facebook paid ads

Channel	Source / Medium	Notes
direct	(direct) / (none)	No referrer or UTM present
referral	partner.com / referral	Inbound links from other sites

3. Shopify's Built-in Attribution

Shopify tracks attribution independently of GA4 through its own order analytics. Shopify captures the referring URL and UTM parameters at the time of checkout and stores them against each order. You can view attribution in:

- Analytics → Reports → Sales by traffic referrer
- Analytics → Reports → Sessions by referrer
- Order detail page → Conversion summary

Shopify Attribution Models Available

Model	Description	Available in Shopify
Last Interaction	Default for all orders. 100% credit to the last non-direct click.	Yes
Last Non-Direct	Ignores direct sessions; credits last identifiable source.	Yes
First Interaction	Credits the very first session source for the customer.	Yes
Linear	Splits credit equally across all sessions before purchase.	Yes

■ *Shopify Plus merchants can access multi-touch attribution via the Analytics API.*

4. Why GA4 and Shopify Metrics Differ

It is normal — and expected — for GA4 and Shopify to report different revenue and conversion numbers. The table below lists the most common reasons:

Reason	Explanation
Different Tracking Windows	GA4 uses session-based windows; Shopify tracks per order.
Cookie Consent / Ad Blockers	If GA4 tag is blocked, Shopify may still record the order.
Cross-Device Journeys	GA4 stitches cross-device via User ID; Shopify cannot.
Checkout Redirects	3rd-party payment pages can strip UTM/referrer data.
Self-Referrals	Your own domain appearing as a referral source in GA4.
Timezone Differences	GA4 property timezone may differ from Shopify store timezone.
Returns / Refunds	Shopify deducts refunds from revenue; GA4 does not automatically.

Reason	Explanation
Bot / Spam Traffic	GA4 may record bot sessions that never result in a Shopify order.

5. UTM Parameter Best Practices

UTM parameters are the bridge between GA4 and Shopify. When correctly applied, they ensure both platforms attribute traffic to the same source/medium. UTMs are appended to destination URLs in ads, emails, and social posts.

UTM Parameter Reference

Parameter	Required?	Purpose	Example Values
utm_source	Required	Identifies who is sending traffic	google, facebook, newsletter
utm_medium	Required	Marketing medium / channel	cpc, email, social, referral
utm_campaign	Required	Specific campaign name	spring_sale_2026, brand_awareness
utm_term	Optional	Paid keyword (for search ads)	running+shoes, buy+sneakers
utm_content	Optional	Differentiates ads/links in one campaign	banner_v1, text_link, hero_cta
utm_id	Optional	Campaign ID for import into GA4	12345

Naming Convention Rules

- Always use lowercase — utm_source=Google and utm_source=google are treated as different sources.
- Use underscores or hyphens instead of spaces: spring_sale not spring sale.
- Be consistent — decide on naming conventions and document them in a UTM spreadsheet.
- Tag every paid channel — never rely on auto-tagging alone for non-Google platforms.
- Use a URL builder tool (Google's Campaign URL Builder or a shared spreadsheet).

6. GA4 ↔ Shopify Channel Mapping

Use this reference to align channel names across both platforms when building cross-platform reports or dashboards.

Channel	UTM Source / Medium	Shopify Label	GA4 Default Channel
Paid Search	google / cpc	Google / CPC	Paid Search
Organic Search	google / organic	Google / Organic	Organic Search

Channel	UTM Source / Medium	Shopify Label	GA4 Default Channel
Email	klaviyo / email	Email	Email
Paid Social	facebook / paid_social	Facebook Ads	Social
Organic Social	instagram / social	Instagram (organic)	Social
Affiliate	partner / affiliate	Affiliate	Affiliate
Direct	(direct) / (none)	Direct	Direct
Referral	blog.site.com/referral	Referral	Referral
SMS	klaviyo / sms	SMS	Other

7. Conversion Discrepancy Checklist

Work through this checklist when GA4 and Shopify conversion numbers do not align. Address Critical and High priority items first.

#	Check	Priority
1	Verify GA4 tag fires on the order confirmation page	Critical
2	Check Shopify checkout for 3rd-party payment redirects	Critical
3	Confirm GA4 property timezone matches Shopify timezone	High
4	Audit all UTM parameters for consistent lowercase naming	High
5	Add your domain to GA4 referral exclusion list	High
6	Enable enhanced measurement for purchases in GA4	Medium
7	Test checkout flow in GA4 DebugView before go-live	Medium
8	Check consent mode settings if cookie banner is active	Medium
9	Cross-check date ranges — both platforms, same period	Low
10	Review Shopify refund impact on revenue figures	Low

8. Recommended Attribution Setup

Follow these steps to configure a clean, consistent attribution setup that minimises discrepancies between GA4 and Shopify.

Step	Area	Action
Step 1	Setup	Enable Google Analytics 4 channel in Shopify (Online Store → Preferences → Google Analytics).

Step	Area	Action
Step 2	Tag	Install GA4 via Google & YouTube app OR via Google Tag Manager (recommended for flexibility).
Step 3	eCommerce	Enable Enhanced Ecommerce events: purchase, add_to_cart, begin_checkout, view_item.
Step 4	Attribution	In GA4 Admin → Attribution Settings: set to Data-Driven model with a 30-day lookback window.
Step 5	UTMs	Build a master UTM spreadsheet shared with the marketing team. Tag all paid and email campaigns.
Step 6	Exclusions	Add your Shopify payment domains (e.g. checkout.shopify.com) to GA4's referral exclusion list.
Step 7	Consent	Implement Google Consent Mode v2 if operating in EU/UK to maintain modelled data in GA4.
Step 8	Validate	Use GA4 DebugView and Shopify test orders to confirm events fire correctly end-to-end.
Step 9	Reporting	Build a Looker Studio dashboard pulling from both GA4 and Shopify data for unified reporting.

9. Key Metrics Reference Table

Use this table as a quick reference when building reports or auditing discrepancies.

Metric	Platform	Definition	Location
Sessions	GA4	Total sessions in the selected period	Analytics → Traffic Acquisition
Users	GA4	Unique users (cookie or User ID based)	Analytics → Traffic Acquisition
Conversions	GA4	Goal completions incl. purchase events	Analytics → Conversions
Purchase Revenue	GA4	Revenue from purchase events (excl. tax/ship)	Analytics → Ecommerce
ROAS	GA4	Revenue / Ad Spend (requires Google Ads link)	Advertising → Performance
Orders	Shopify	Total number of orders placed	Analytics → Overview
Total Sales	Shopify	Gross revenue incl. tax, shipping, discounts	Analytics → Overview
Conversion Rate	Shopify	Orders / Sessions (Shopify-calculated)	Analytics → Overview
Avg. Order Value	Shopify	Total Sales / Total Orders	Analytics → Overview
Returning Customer Rate	Shopify	% of orders from returning customers	Analytics → Customers

■ *Revenue definitions differ: GA4 records net revenue from the purchase event; Shopify records gross sales including taxes and shipping by default.*