

Looker Studio Dashboards — Workbook

This workbook turns the course into a built dashboard. You will plan your KPIs, connect GA4, Search Console, and Google Sheets, then construct charts, controls, blends, and calculated fields step by step. Work through one section per module, fill in every field with your own numbers, and by the end you will have a live, shareable report and an ad-spend tracker sheet that feeds it.

Getting Started and Connecting Your Data

Plan what the dashboard must answer and stand up clean GA4, Search Console, and Sheets connections.

Exercise: Define your dashboard's job

Before connecting anything, write down who reads the dashboard and the exact questions it must answer. A dashboard built to answer specific questions is always tighter than one built from whatever fields exist.

- Who are the three main viewers and what decision does each make from this dashboard?
- List the five headline KPIs the dashboard must show on the first screen.
- Which data lives only in a spreadsheet (ad spend, targets, offline sales) and must come from the Sheets connector?
- What date range is the default the team cares about most: last 7, 28, or 90 days?

Worksheet: Data source connection log

For each source you connect, record the details so you and any collaborator know exactly what is wired up and how fresh it is.

Source name (GA4 / Search Console / Google Sheets)

Account or property / verified site / spreadsheet name

Connector type and table choice (e.g. Search Console: Site Impression vs URL Impression)

Data freshness setting (e.g. 12 hours, 15 minutes)

Owner credentials or Viewer credentials

Known limitation noted (sampling, 16-month retention, (other) row)

Checklist: Clean-source checklist before building

- ☐ Signed in at lookerstudio.google.com and created a blank report
- ☐ GA4 property confirmed (not legacy Universal Analytics) and connected
- ☐ Decided Search Console table type: Site Impression for queries OR URL Impression for pages

- [] Google Sheet has headers in row 1, one record per row, no merged cells or mid-data blank rows
- [] Opened each data source and corrected any field type Looker Studio guessed wrong (Cost as Currency, Date as Date)
- [] Set a sensible Data freshness on each source

Building Charts and Laying Out the Dashboard

Translate your KPI list into the right charts and arrange them on a clean, themed page.

Exercise: Match each question to the right chart

For every question your dashboard must answer, pick the chart type that answers it best, then justify the choice. This prevents the common mistake of a ten-slice pie chart.

- For each of your five KPIs, will it be a scorecard, a time-series, a table, a bar, a pie, or a geo map, and why?
- Which metric most deserves a period-over-period comparison arrow on its scorecard?
- Which ranking question (top pages, top queries, top channels) becomes a sorted table with a heatmap?
- Is there a true part-of-a-whole question with five or fewer slices that justifies a pie or donut?

Worksheet: Chart spec sheet

Specify each chart before building it so the dashboard is intentional rather than assembled by trial and error.

Chart title
Chart type
Data source
Dimension(s)
Metric(s) and aggregation
Sort order and row limit
Comparison on? (Previous period / Previous year / none)
Page it lives on (Overview / Acquisition / SEO)

Checklist: Layout and theme polish

- [] Top row holds three to five scorecards with comparison arrows enabled
- [] One wide time-series sits below the KPI row with weekly or monthly granularity
- [] Show grid and Snap to grid turned on; tiles aligned with Arrange > Align and Distribute
- [] Theme and brand palette set once in Theme and layout (or extracted from logo)
- [] Header band with title, logo, and date-range control set to report-level so it shows on every page
- [] Report split into named pages: Overview, Acquisition, SEO

Filters, Controls, and Interactivity

Make the report self-serve with controls and the correct filter scope, then enable drill-down.

Exercise: Plan controls and filter scope

Decide what viewers should be able to change versus what should be locked. Mapping this on paper avoids controls that secretly move the wrong charts.

- Which dimensions deserve a viewer-facing control (channel, country, device, landing page)?
- Which control should be scoped to only some charts, and which charts go in its group?
- What permanent rule belongs at report level (exclude internal traffic) versus page level (SEO page = organic only)?
- Which single chart needs its own chart-level filter that differs from its neighbors?

Worksheet: Control and filter register

List every control and filter with its scope so the interactivity is documented and debuggable.
Control or filter name

Type (date-range / drop-down / input box / advanced / slider / Include filter / Exclude filter)

Field it acts on

Scope (report-level / page-level / chart-level / grouped to specific charts)

Include or Exclude condition and value

Charts affected (verified in View mode)

Checklist: Interactivity verification

- ☐ Date-range control in header defaults to the team's preferred window
- ☐ At least one drop-down filter (e.g. channel) added and tested
- ☐ Scoped control grouped with only its intended charts and verified
- ☐ Report-level filter excludes internal traffic; page-level filter limits the SEO page appropriately
- ☐ Cross-filtering enabled on key charts so clicking an element filters the page
- ☐ Optional metrics and a drill-down (Country > Region > City) added where useful
- ☐ Every interaction tested in View mode, not just Edit mode

Blending, Calculated Fields, and Sharing

Join sources, compute derived metrics, and ship the dashboard by link, scheduled email, and embed.

Exercise: Design your blend and your calculated fields

Plan the join before you build it, because a wrong key silently nulls or inflates rows. Then list the formulas that will clean and label your data.

- What metric do you need that no single source has, and which two sources combine to produce it (e.g. GA4 Revenue + Sheets Cost = ROAS)?
- What is the exact join key, and is it spelled and formatted identically on both sides?

- Which join type is correct: Left outer to keep all GA4 rows, or Inner to keep only matches?
- Which CASE buckets, REGEXP cleanups, and date conversions will you create as calculated fields?

Worksheet: Calculated field definitions

Document every calculated field so the formulas are reusable and reviewable by a teammate.

Field name

Purpose (bucket / clean / label / derived metric)

Formula (CASE / CONCAT / REGEXP_EXTRACT / REGEXP_REPLACE / TODATE / math)

Field type and format (Number, Currency, Percent, Date)

Created at data-source level or chart level

Sanity check result (compare against source totals)

Checklist: Ship-it checklist

- [] Blend grain verified: one row per join key on each side so totals are not inflated
- [] Derived metric (e.g. ROAS = Revenue / Cost) created and cross-checked against each source
- [] Sharing set deliberately: Can view vs Can edit, and Owner vs Viewer credentials decided
- [] Scheduled delivery configured (e.g. weekly PDF of Overview page) to the distribution list
- [] Embedding enabled in File > Embed report and iframe sized to the 1200px canvas
- [] Embedded report opened in an incognito window to confirm a real viewer sees it correctly

Your Action Plan

1. Write the dashboard brief: viewers, decisions, five headline KPIs, and the default date range.
2. Connect GA4, Search Console (choosing the correct table type), and your Google Sheet, then fix field types and freshness.
3. Build the KPI scorecard row with period-over-period comparisons and one wide time-series.
4. Add the ranking tables, bar charts, and a geo map, choosing chart types by the question each answers.
5. Theme the report, align tiles on the grid, and split it into Overview, Acquisition, and SEO pages with a report-level header.
6. Add a date-range control plus drop-down and input controls, scoping each with grouping where needed.
7. Set report-, page-, and chart-level filters and verify the stack in View mode.
8. Enable cross-filtering, optional metrics, and drill-down for self-serve exploration.
9. Blend GA4 with the ad-spend sheet on Date and Campaign, then create CASE, REGEXP, and date calculated fields including a ROAS metric.
10. Share with the right credentials, schedule a weekly PDF, embed the live iframe, and confirm the viewer experience in incognito.

