

Programmatic Display Advertising — Workbook

This workbook turns the course into a campaign you can actually launch. Each section matches a module and moves you from understanding the auction, to building audiences, to setting up deals, to proving the result with viewability, brand safety, and incrementality. Work through it with a real or realistic campaign in mind, and fill the templates as you go — the empty cells are yours to complete.

How Programmatic Actually Works

Map the auction, name the platforms, and trace where a media dollar really goes.

Exercise: Trace one impression

Pick a real website you read that shows display ads. Reload it a few times and watch the ad slots. Then write the journey of a single impression on that page through the RTB chain in your own words, naming each hop.

- Which ad sizes appear on the page, and roughly where do they sit (top, in-content, bottom)?
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- List the sequence: page load, ad request, SSP, bid request to DSPs, winning bid, ad served. Where does the floor price enter?
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- Is this likely a first-price auction? What does that mean for how a buyer should bid?
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- Which single piece of user or context data in the bid request would you most want to target on, and why?
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Worksheet: Platform role map

For your own (or a chosen) advertiser, fill in which specific platform plays each role. Mark any you do not yet have access to, so you know what to set up.

Demand-side platform (DSP) you will buy in

Ad server / counter (e.g. Campaign Manager 360)

Verification vendor (IAS / DoubleVerify / Moat)

Audience data source (first-party CRM / GA4 / CDP)

Identity solution for cookieless (e.g. Unified ID 2.0)

Roles you do NOT yet have access to (action needed)

Worksheet: Where the dollar goes

Estimate the fee stack on a 5.00 dollar gross CPM. Enter each fee, then leave the working-media line blank and calculate it yourself so the math sticks.

Gross CPM you set in the DSP (e.g. 5.00)

DSP platform fee (% or CPM)

Data segment cost (CPM, if any)

Verification fee (CPM)

Estimated SSP take (%)

Working media CPM into the auction (you calculate — leave blank until you do)

One change that would push more dollars into working media

Checklist: Foundations in place

- I can explain RTB to a colleague in two sentences without jargon
- I know which single DSP screen I will be working in day to day
- I have identified my ad server and verification vendor
- I understand that a first-price auction means I pay what I bid
- I can name at least two ways money leaks between advertiser and publisher

Audiences and Targeting

Decide who sees the ad, build the segments, and cap how often they see it.

Exercise: Pick your three audiences

Design a three-line audience structure for one campaign: a first-party retargeting line, a lookalike prospecting line, and a contextual prospecting line. Be specific about the data behind each.

- Retargeting: which first-party list (site visitors, customer match, cart abandoners) and from what source?

- Lookalike: what seed will you model from, and why those users specifically?

- Contextual: which content categories, keywords, or URL lists will you target with no user identifier?

- Which line gets the highest bid, and why does separating them improve both bidding and reporting?

Worksheet: Audience build sheet

Document each audience as an object you will attach to a line item. Fill the known fields; leave size and status blank until the segment populates in the DSP.

Audience name

Type (first-party retargeting / lookalike / third-party / contextual)

Source or seed

Expected match or reach (leave blank until DSP reports it)

Bid level (high / mid / low)

Frequency cap to apply

Status (building / live — leave blank until confirmed)

Exercise: Cookieless stress test

Imagine third-party cookies and the mobile ad ID are unavailable for this campaign. Rework your plan to still deliver.

- Which of your three lines survives unchanged, and which breaks?
 - How do you replace lost third-party reach — contextual, first-party expansion, or a privacy-safe ID?
 - What is the cost difference between leaning on contextual versus paying for third-party segments here?
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Checklist: Audience and frequency ready

- I built one first-party and one contextual audience before buying any third-party data
 - Each audience lives in its own line item with its own bid
 - I set at least one frequency cap at the campaign or account level, not just per line item
 - My prospecting and retargeting caps differ deliberately
 - I have a plan to read the frequency distribution after week one and adjust
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Inventory, Deals, and the Open Auction

Choose where ads run across the open-to-private spectrum and get a deal ID actually spending.

Worksheet: Inventory strategy by goal

For one campaign goal, decide your mix across the four buying methods. State why each is in or out. Campaign goal (e.g. launch reach, always-on retargeting, premium sponsorship)

Open auction — use? for what?

Preferred Deal — use? with which publisher?

Private Marketplace (PMP) — use? with which publisher?

Programmatic Guaranteed — use? justify the volume commitment

Which method wins the impression if two overlap, and is that what you want?

Exercise: Deal will not spend — diagnose it

A deal you set up shows as active but has delivered zero impressions for two days. Walk the troubleshooting checklist and write what you would check, in order.

- Is your line-item bid at or above the deal's floor CPM?

• Is the deal ID keyed to your correct DSP seat ID?

• Do your creative sizes and formats match what the deal offers?

• Is a brand-safety, domain, or inventory filter of your own blocking the publisher? Are the flight dates live?

Worksheet: Supply-path check

Take one publisher you value and inventory it. Use the deal-tracker template alongside this to record the cleanest path.

Publisher / domain

How many SSP paths offer this inventory to your DSP

Authorized as DIRECT or RESELLER in ads.txt?

Lowest clean CPM path

Any suspiciously cheap path on a premium domain (possible spoof)?

Decision: which path(s) to keep, which to drop

Checklist: Inventory and deals ready

- I chose a buying method for each goal rather than defaulting to open auction
- Every deal ID is confirmed keyed to my DSP seat
- Creative sizes match each deal before launch
- I scheduled a next-day check on every new deal
- I checked ads.txt status and consolidated redundant supply paths

Viewability, Brand Safety, and Measurement

Pay only for ads that can be seen, keep the brand safe, and prove what the spend returned.

Worksheet: Quality controls setup

Define the viewability, brand-safety, and fraud controls for one campaign before launch. Fill targets and vendor segments; leave measured results blank for after the flight.

Target viewable rate (e.g. 70%)

Pre-bid viewability segment applied (vendor + name)

Brand-safety / suitability segment applied

Content categories excluded

Domain blocklist source / allowlist (if used)

Measured viewable rate after flight (leave blank until measured)

Viewable CPM after flight (leave blank until measured)

Exercise: Build the incrementality argument

Your stakeholder says display 'did nothing' because last-click conversions are near zero. Construct the honest counter-argument and the measurement that would settle it.

- Why does last-click systematically undervalue display? Use the typical 0.05 to 0.1 percent CTR in your reasoning.
- How would you design a conversion-lift study with a holdout control group for this campaign?
- Why are view-through conversions weaker evidence than a lift study?
- Which single number would you put in front of finance: cost per incremental action, or last-click CPA? Defend it.

Checklist: Honest and provable

- A pre-bid viewability segment is live so I do not pay for unviewable slots
- A verification vendor's fraud and brand-safety segment is applied
- I will read the actual placement report and grow my blocklist from it
- I report viewable CPM, not just CPM
- I planned a conversion-lift or brand-lift study to measure incrementality
- My final report states cost per incremental action in plain language

Your Action Plan

1. Confirm access and roles: get a seat in your DSP, link your ad server, and enable a verification vendor (IAS or DoubleVerify).
2. Build your data foundation: place the site tag, create a first-party retargeting list, and connect GA4 or your CRM for audiences.
3. Design a three-line audience structure — retargeting, lookalike prospecting, contextual prospecting — each in its own line item.
4. Set frequency caps at the campaign or account level, with tighter caps on retargeting than prospecting.
5. Negotiate one or two deals (a PMP or Preferred Deal) with publishers whose audience matters, and load the deal IDs.
6. Run the next-day deal check: confirm each deal is active, keyed to your seat, with matching creative and a bid above the floor.
7. Apply pre-bid viewability and brand-safety segments, content-category exclusions, and a domain blocklist before going live.
8. Launch, then in week one read the frequency distribution and placement report; adjust caps and add bad domains to the blocklist.
9. Run supply-path optimization: identify and drop redundant SSP paths, favouring authorized DIRECT supply and your deals.
10. Set up a conversion-lift or brand-lift study with a holdout, and at flight end report viewable CPM, reach, and cost per incremental action in plain language.

