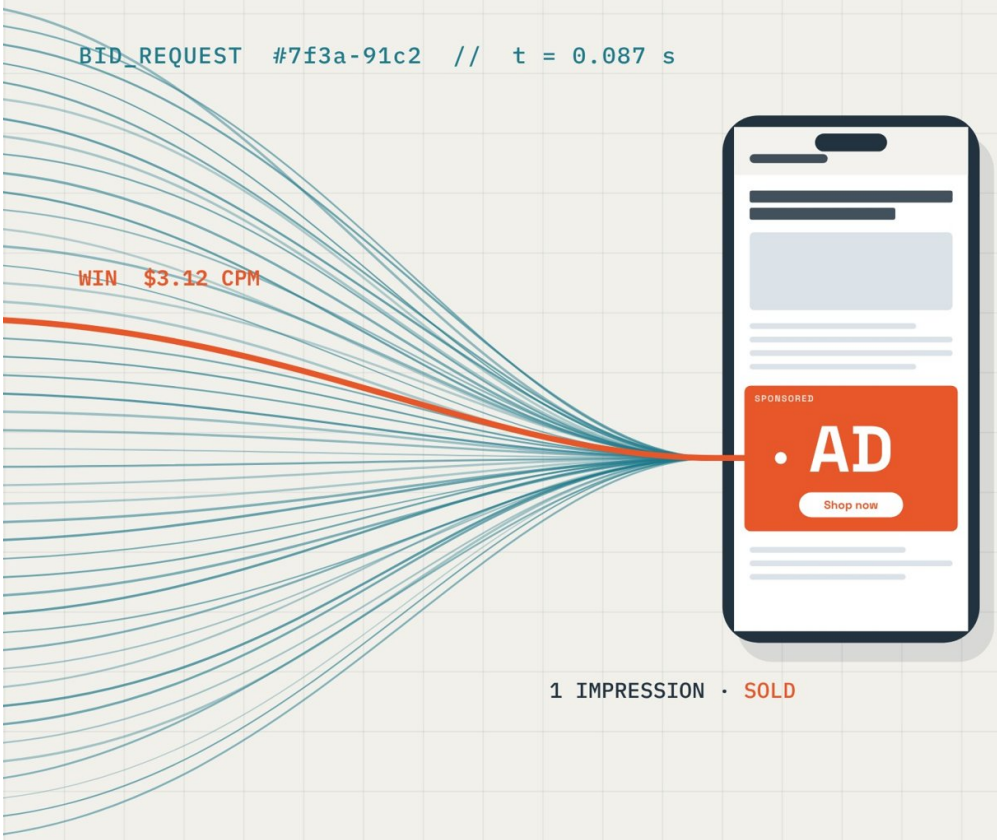


Ad Tech & Programmatic

And a Cookieless Digital Advertising World

Julian Delphiki

UPDATED EDITION

AD TECH & PROGRAMMATIC

And a Cookieless Digital Advertising World

Master the technologies of the online media channel
and excel in programmatic advertising

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The information in this book reflects the digital advertising market at the time of writing. Platforms, regulations and company names change quickly; readers should check current conditions before making business decisions.

Updated edition

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HOW TO READ THIS BOOK

This book moves from the foundations of digital advertising to the mechanics of programmatic trading. You can read it straight through, or dip into any chapter: important terms are highlighted the first time they appear, like **demand-side platform**, and every one of them is collected in the Glossary at the back.

Look out for these features along the way:

KEY CONCEPT

Short, quotable definitions

The essential ideas of each chapter, distilled into a few lines you can come back to.

IN PRACTICE

Examples, checklists and cases

Worked numbers, real company examples and checklists for applying the ideas at work.

KEY TAKEAWAYS

- ✓ A summary at the end of every chapter, so you can review what matters most.

PREFACE

To the Updated Edition

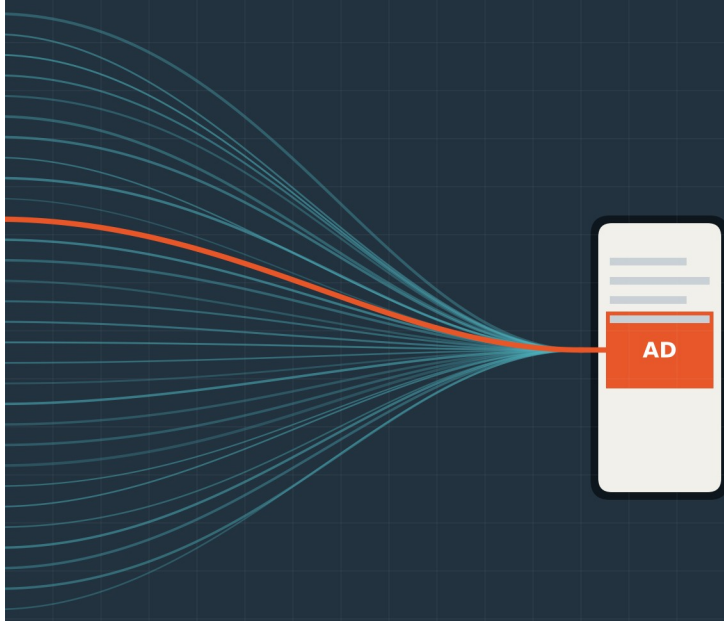
In this updated edition, I will start with the new headache for advertisers: a digital advertising world without cookies. Do not worry if the book opens with a very specific and narrow subject. It is important to understand it, because it is the big problem to solve in the coming years.

After this section about cookies – what they are, how they work and what will happen to them – the book almost starts over, taking a wider view and focusing on the different technologies involved.

PART I

Ad Tech

How digital advertising works, the technology behind it, and how to keep it honest



CHAPTER 1

A Cookieless World

COOKIES ARE SMALL FILES usually stored on a user's device that hold information about that user. Website operators can use them to present individualized web content, which appears when a user visits a particular site or page. Cookies can also remember your previous activity on websites and tailor what is displayed to your interests.

For years, we have been using cookies to track website visitors, improve the user experience and collect data that helps us target ads to the right audiences. We also use them to learn what our visitors browse online when they are not on our websites.

Cookies have been around almost since the beginning of the web. They are the foundational piece of all digital tracking and measurement.

In other words, cookies are helpful! In this chapter, you will learn more about cookies in digital advertising and how these little files might help your business.

But it is private companies such as Apple and Google that decide the fate of third-party cookies in their browsers: Apple blocks them in Safari, and Google spent years preparing to do the same in Chrome before changing course in 2024. They say they act with the user in mind, but it is obviously also for their own benefit, and a push to strengthen their **walled gardens**, in which advertisers place their media investment without the data being shared with other ad networks.

KEY CONCEPT

Walled garden

A "super" publisher – such as Google, Meta or Amazon – that operates a closed, private ecosystem. The data collected inside it can only be used and measured within that ecosystem.

Different types of cookies

TYPE	WHO SERVES IT	WHAT IT IS USED FOR
First-party cookie	Your own website. You own and control the data.	Monitoring user behavior through site analytics and making sure the website works correctly, for a good user experience.
Second-party cookie	Another company, which transfers the data to you through a data partnership.	Allows the purchaser of the data to use it for advertising purposes.
Third-party cookie	A third-party domain (that is, not your website). Third-party technologies capture the data and have full control over it.	Monitoring cross-site user behavior (interests) and delivering digital advertising campaigns.

Third-party cookies are core to digital advertising as we know it today, driving value throughout the customer journey. We use them to target the right customer, deliver customized journeys to individuals, and measure the performance and impact of advertising.

The death of the cookie

The cookieless world is a response to an erosion of trust, and not only trust in cookies. Several factors are at play: user expectations are evolving, with people demanding more transparency and control over their online data; regulatory changes affect how data can be collected and used; and browser updates with stronger controls are limiting traditional data collection.

In detail, these were the major milestones:

2017	Apple introduces Intelligent Tracking Prevention (ITP) in Safari, steadily restricting third-party cookies until Safari blocks them completely in 2020.
2018	The GDPR comes into effect in the European Union.
2020	The CCPA comes into effect in California, and Google announces the deprecation of third-party cookies in Chrome.
March 2021	Google says it will not build alternative identifiers to track individuals across the web once third-party cookies are phased out.
April 2021	Apple launches iOS 14.5, allowing app users to opt out of cross-app tracking.
June 2021	Google delays the end of third-party cookies in Chrome, moving it to 2023. More delays follow.
July 2024	Google drops its plan to deprecate third-party cookies in Chrome.
April 2025	Google also drops the planned user-choice prompt: Chrome keeps third-party cookies.
October 2025	Google retires most of the Privacy Sandbox technologies.

Behind all this is the rise of a more conscious consumer, who sees privacy as a right, cares about data protection and understands that protecting it is a shared responsibility.

For years, the industry prepared for the day Chrome would switch off third-party cookies. That day never came. In July 2024, Google announced it would not deprecate them after all, and in April 2025 it dropped even the plan for a new user-choice prompt. By October 2025, most of the Privacy Sandbox technologies built to replace cookies had been retired.

Does that mean the cookieless world was a false alarm? Not at all. Safari has blocked third-party cookies since 2020, Firefox partitions

them by default, and Apple's App Tracking Transparency has made cross-app tracking opt-in. Add consent rules such as the GDPR, and the signals advertisers can rely on keep shrinking. The cookie did not die, but it stopped being something a serious strategy can depend on.

Preparing for a cookieless world

The recent changes represent the perfect opportunity to transform:

- Less third-party data is available, so we need to accelerate the collection of first-party data.
- Cookie consent rates are falling, so we need a fair exchange of value for data.
- Third-party solutions based on universal IDs, or "cookie replacement solutions", will require more due diligence.
- Third-party data sets used to enhance audience selection or clients' own data will also require more due diligence when leveraging cookieless solutions.

We have three main strategies to be prepared:

STRATEGY	KEY QUESTIONS TO ASK
1. First-party data acceleration	How do we collect more consented data directly from our customers, and give them something of value in return?
2. Cookieless targeting	Do we leverage contextual targeting to its full potential? Are we using first-party and contextual signals to optimize our creatives? What tools can we leverage beyond context?
3. Measurement	What is our cookieless roadmap? What should we prioritize? What solutions do we have to drive business growth?

Measurement in a cookieless world

Measurement cannot be an afterthought. Knowing what to measure, and how to measure it, will be as important in the cookieless world as it is today.

We will have three different methodologies to gather metrics about our campaigns:

- Conversion APIs
- Aggregated and anonymous data modeling
- Uplift experiments

There is no point in developing them in detail here, as it is still uncertain which one will be the "winner" that the industry adopts as its standard.

That said, I want to point out that the level of scrutiny online still goes far beyond anything we would accept offline (and yes, sorry for the division).

If we allowed the same level of tracking and lack of privacy in the offline world, people would rebel. Imagine that every time you enter a store, an assistant follows you, noting every item you look at and how long you spend in each section, and then sells that information to other stores. It's invasive. It's disturbing. So why do we accept this level of intrusion in the online world?

One reason might be ignorance. Many users don't really understand how online tracking works. They don't see the digital "assistants" recording every click, every page visit, every internet search. The technology behind this tracking is invisible to most people, which makes it less tangible and, therefore, less alarming.

Another reason could be that some generations have grown up in an environment where privacy is almost nonexistent. Young people who have always been connected to the internet don't know a different world. For them, constant surveillance is the norm. They have no memory of a time before digital tracking, so they don't know what to fight against. Privacy is not a priority when it has never really been experienced.

"Imagine that every time you enter a store, an assistant follows you, noting every item you look at

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