# An Ad Tech Primer

June 2020

Google

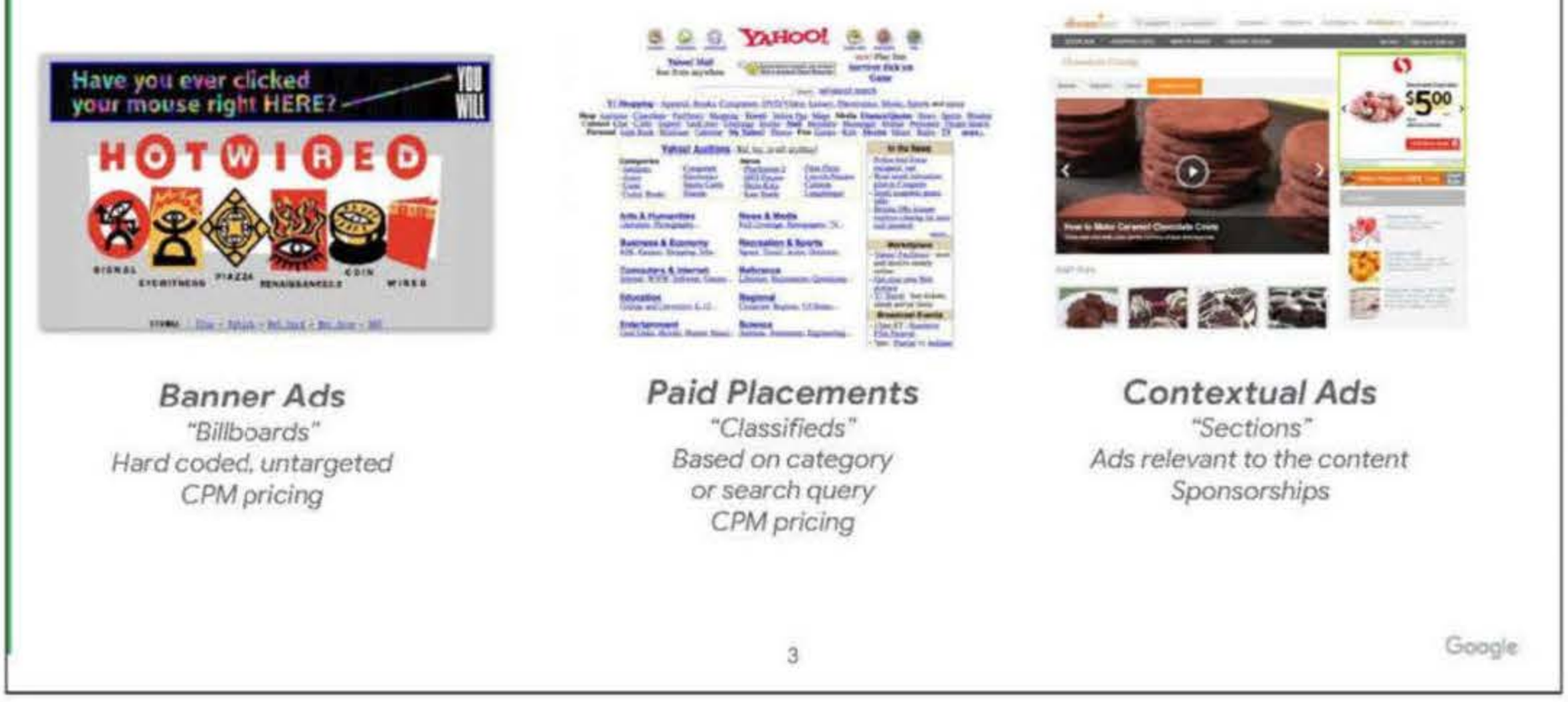
We're engaging with the ongoing investigations led by DOJ and TX AG Ken Paxton.
We continue to produce documents in response to their questions.
We don't know where this investigation is headed, but based on public reports that it could center around Search and ad tech, we wanted to give you an overview of our products work and how we compete in these areas.

Source: https://docs.google.com/document/d/1G7NjvqucCm18llqRgEqJBUyB7Cq36SCyku6FJugO2-M/edit

**PTX1646**

**1:23-cv-00108**

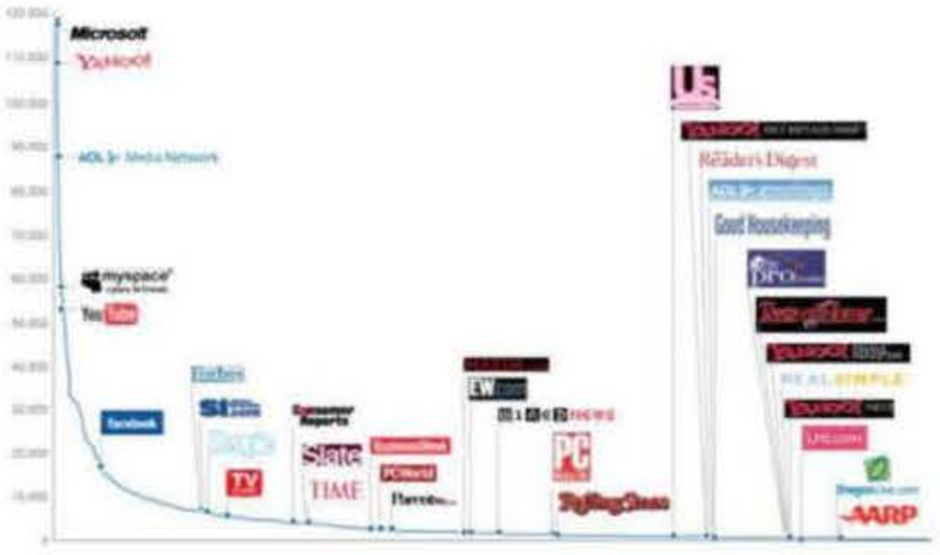
Advertiser+Publisher Direct:
At its simplest, it's an advertiser+publisher transaction. Advertiser wants to reach an audience or context, publisher has this content / audience available. Typically sold on a CPM impression basis but other models exist.




Early banner ads gained a reputation for brand building, and were paid on a CPM basis
In 1994, HotWired.com ran the first banner ad (for AT&T)
Early banner ads were untargeted, much like many print ads
Search ads using paid placement began to proliferate with some search engines accepting payment to appear in the general search results (such as Yahoo! and GoTo.com)
Google was from the very beginning committed to keeping search results unpaid
Google's AdWords introduced:
Ad quality
Modified second price auction

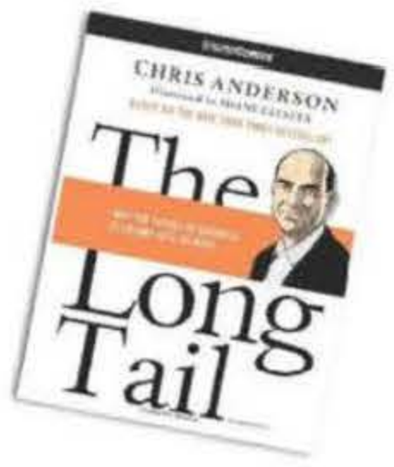
# The ‘long tail’ of the web

## As consumers divided time across a long list of websites, how could advertisers and web publishers connect with each other effectively?

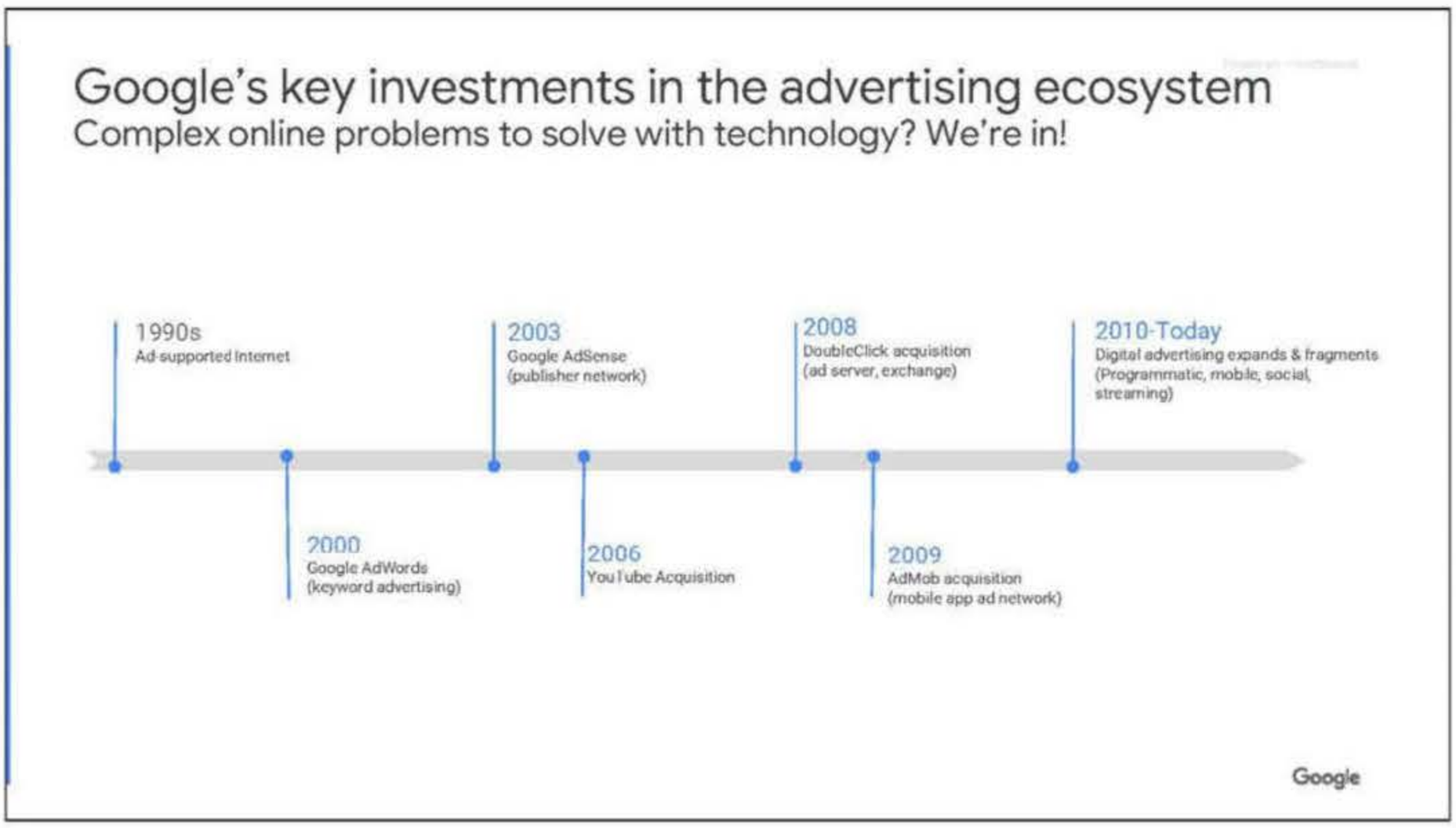









Google




From the very beginning, the ad-supported Internet was an innovation where anyone with a good idea could scale up, reach a mass audience, and make a living.

Our mission is all about helping people find useful information. With this in mind, Google started with keyword advertising, and later evolved to content advertising. We've seen that helpful ads in the right context can benefit the user.

Google's acquisition of DoubleClick in 2008 expanded our relationships with web publishers. Before the DoubleClick acquisition, Google didn't have strong relationships with publishers, particularly the largest online publishers. With the DoubleClick acquisition, we were able to invest in new technology to support web publishers with display advertising and tech expertise.

The media landscape has changed dramatically since then - publishers and advertisers are trying to reach consumers across marketing channels (live TV, streaming, radio, podcasts, web, app,etc) an increasingly fragmented landscape.

And we have a business incentive to help website publishers make money: By supporting the monetization needs of web publishers, we can ensure that people around the world have access to high-quality content online. This is ultimately what keeps the best of the internet open and free for all of us.

# What is “Ad Tech”?

Technology to help digital advertisers and publishers connect to each other at scale

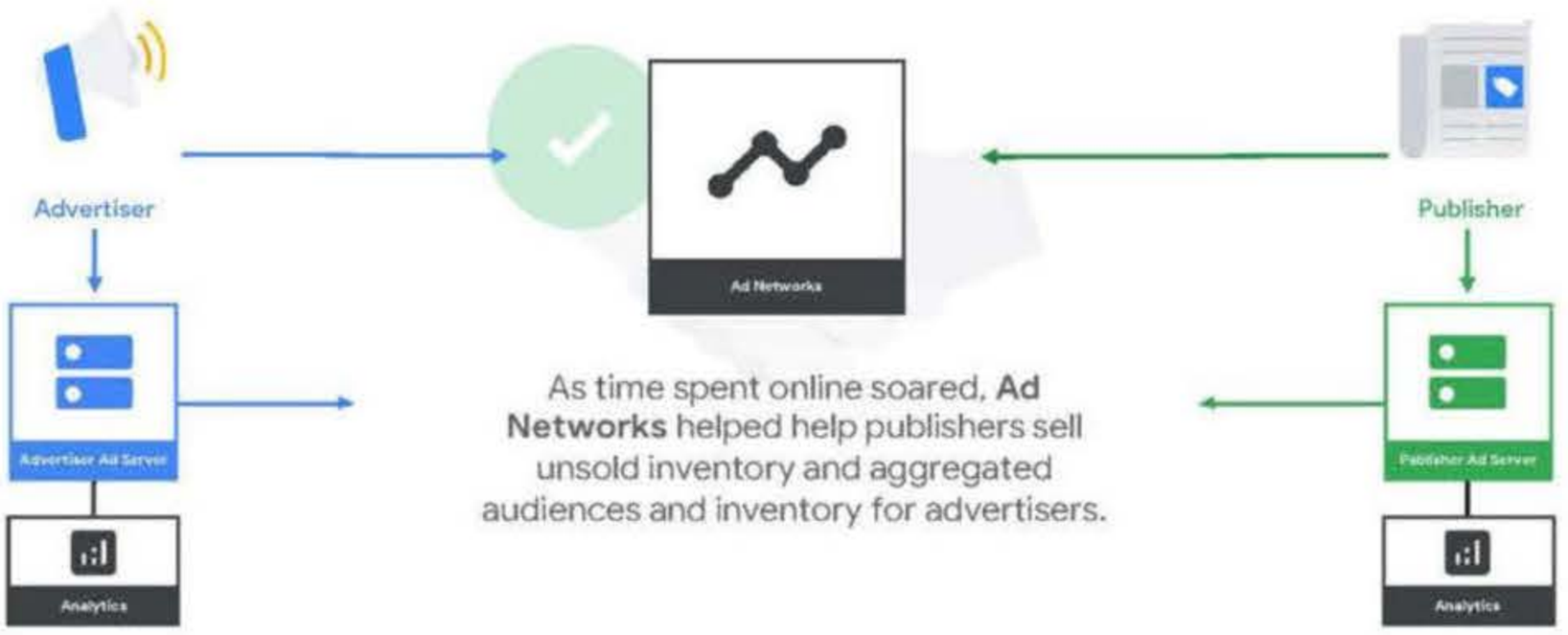
As digital buying & selling expanded, **Ad servers** managed placements, creative trafficking and reporting for advertisers & publishers

**Analytics** tools helped advertisers and publishers understand how visitors engage on their sites & apps.

Google

# What is “Ad Tech”?

Technology to help digital advertisers and publishers connect to each other at scale




As time spent online soared, **Ad Networks** helped help publishers sell unsold inventory and aggregated audiences and inventory for advertisers.

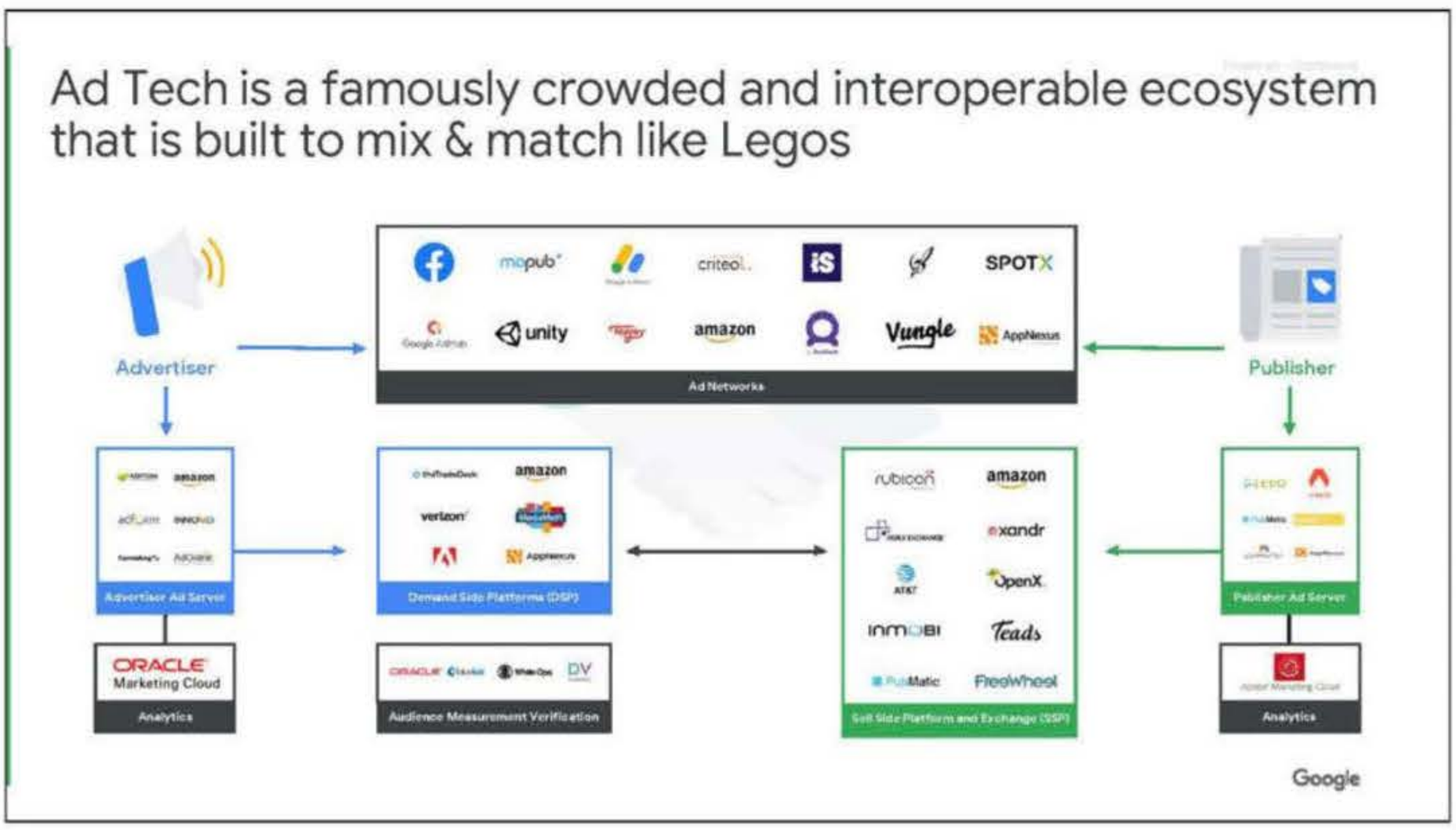
Google

# What is “Ad Tech”?

Technology to help digital advertisers and publishers connect to each other at scale

Programmatic enabled buyers and publishers to buy & sell in *real-time* using **demand-side platforms** and **sell-side platforms.**

Google




As advertisers and publishers scaled, enter programmatic.

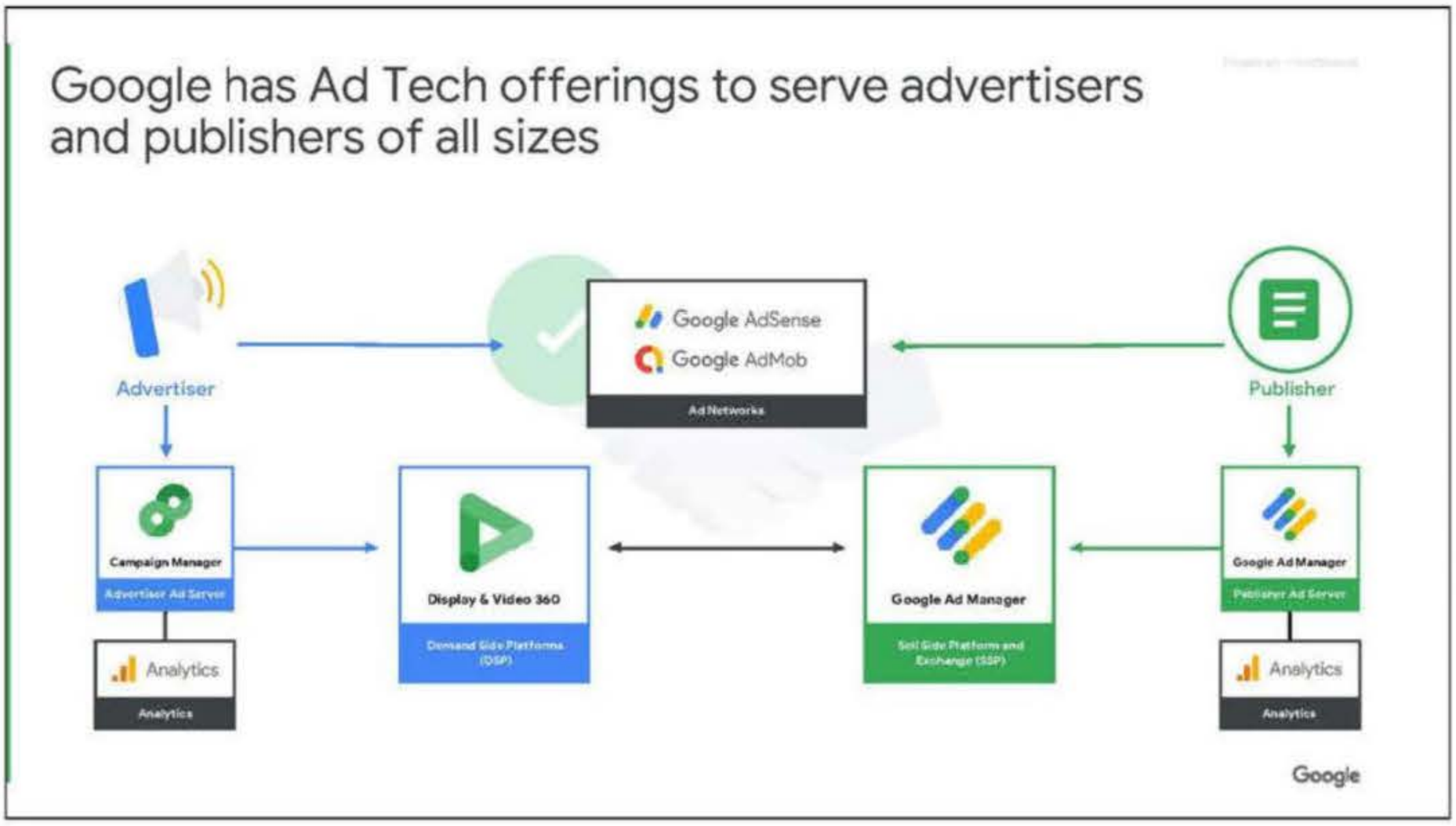
Google competes in many places across the programmatic ecosystem and has distinct, separate products in these areas.

But we are far from the only player - We compete with many companies both large and small in each of these spaces .

And both advertisers and publishers rarely choose just one company to work for.

The average advertiser uses 4 Demand Side Platforms simultaneously; the average large publisher uses up to 6 different Sell Side Platforms simultaneously.

And most large advertisers and publishers participate in multiple ad networks, all looking to get diversity of unique inventory and demand respectively.




As advertisers and publishers scaled, enter programmatic.

Google competes in many places across the programmatic ecosystem and has distinct, separate products in these areas.

But we are far from the only player - We compete with many companies both large and small in each of these spaces .

And both advertisers and publishers rarely choose just one company to work for.

The average advertiser uses 4 Demand Side Platforms simultaneously; the average large publisher uses up to 6 different Sell Side Platforms simultaneously.

And most large advertisers and publishers participate in multiple ad networks, all looking to get diversity of unique inventory and demand respectively.

## Enabling an ad-supported web helps support Google's mission

Our mission is to organize the world's information and make it **universally accessible** and useful.

Google

# Ad Tech Mythbusting

Google

We're engaging with the ongoing investigations led by DOJ and TX AG Ken Paxton.
We continue to produce documents in response to their questions.
We don't know where this investigation is headed, but based on public reports that it could center around Search and ad tech, we wanted to give you an overview of our products work and how we compete in these areas.

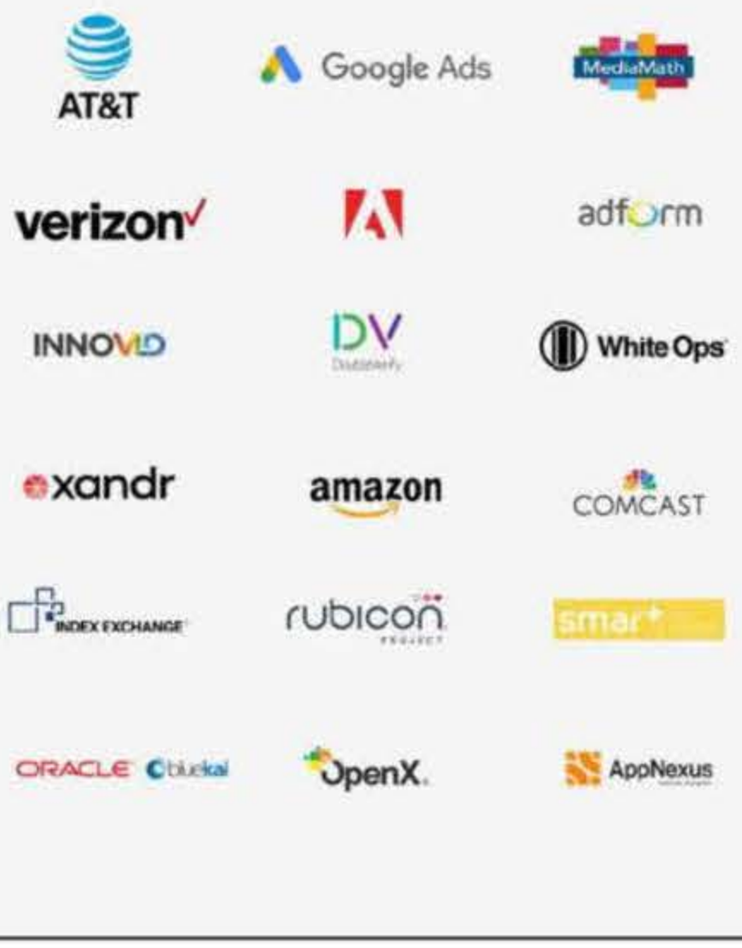
Myth #1

## Google has no real competitors in ad tech.

Ad tech is famously crowded and competitive. There are thousands of companies, large and small, working together and in competition with each other to power digital advertising across the web, each with different specialties and technologies.

Ad Tech is also far from being a 'zero sum' business competitively. Advertisers typically use four DSPs simultaneously, publishers use as many as six sell-side platforms to maximize yield.

Source: Advertiser Perceptions




Amazon went from a non-player just two years ago to becoming #3 in the digital ads market. Amazon now operates the most popular demand side platform, and the second-most popular sell-side platform.
Other companies are making key investments to position themselves as strong competitors; for example, AT&T acquiring TimeWarner and AppNexus.
Unlike TV, online is the most competitive segment where we face competition from Amazon, News Corp, Verizon's Oath, Comcast, and others.

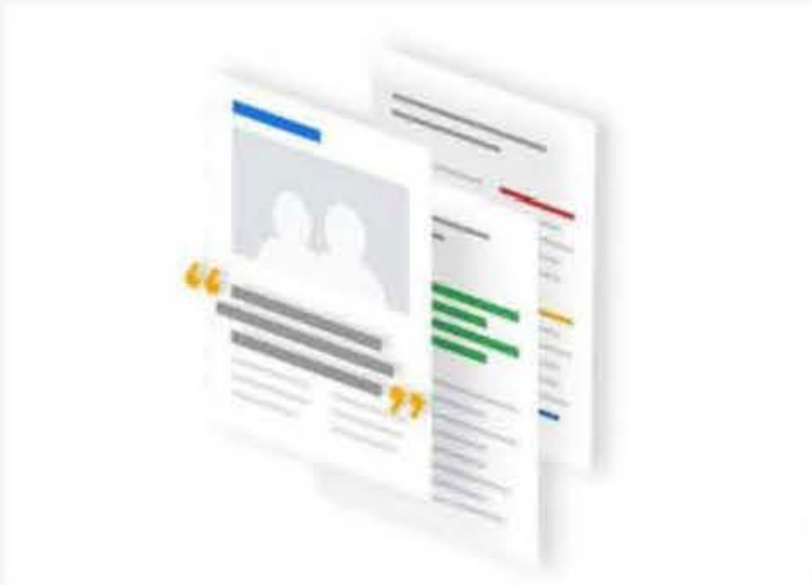
And the marketplace is working -- today, advertising costs continue to fall.
The price of advertising has dropped 40% in the last 10 years. Efficient digital ads have also cut the percentage of GDP going to advertising by 25-30% in the last 20 years, providing savings that businesses can pass along to consumers.

Our ad tech solutions are popular, but publishers and advertisers can and do turn to dozens of other highly popular or new disruptive solutions.
This includes specialists and vertically-integrated rivals like AppNexus, Verizon's Oath, Rubicon Project, and Amazon.
Publishers and advertisers typically mix and match multiple competing platforms and solutions at the same time to buy and sell ad inventory. On average, the top 10,000 publishers use roughly 10 partners to sell their ad inventory.

Myth #2

## Only 50% of advertising spend makes its way to publishers. Google takes most of the money from news publishers that use its ads products.

On average, when marketers use Google Ads or Display & Video 360 to buy display advertising space from publishers using Google Ad Manager, publishers keep **69%** more of the revenue. When publishers use the Ad Manager platform to sell ads directly to advertisers, they keep substantially more.



Myth #3

## Google has a dominant ad tech position that makes it impossible for new entrants.

Ad Tech is far from being a 'zero sum' business competitively. Advertisers typically use four demand side platforms simultaneously, publishers use as many as six sell-side platforms to maximize yield.

In fact, the most popular DSPs today are relative newcomers to ad tech: Amazon Advertising and The Trade Desk.

Source: Advertiser Perceptions

Myth #4

## Google has made product decisions that have harmed competition.

Our products are built with interoperability at the core, thriving on integrations with hundreds of exchanges, ad servers, demand-side platforms networks, measurement & other technology partners to enable the customization and choice that our customers require.

# Ad Tech Competition FAQ

Google

Source: https://docs.google.com/document/d/1oNdgL74fkuMPyoGjLgbWFNWG07uQdXeBXS25lQaKwRA/edit

## FAQ #1

Google stopped allowing competitors to buy **YouTube** inventory, costing companies millions of dollars and giving Google an even larger competitive advantage.

- **Less than 5%** of YouTube Inventory was purchased programmatically in 2015, when the decision was made.
- YouTube shifted resources and development to enabling "TrueView," a **cost-per-view model** not supported by programmatic platforms.
- Competitive DSPs continued to grow - particularly in online video - since 2015.

Google

FAQ #2

Through **Dynamic Allocation,** Google for years had a "last look" policy that gave advertisers using Google products a last-second advantage to outbid advertisers who used competitor products.

- Dynamic allocation was a feature to help publishers receiving the best price for an impression from indirect demand.
- Without it, historically an impression would be sold the moment a demand source would match or exceed the publisher's minimum bid even if another demand source (not yet called) would generate an even higher price for the impression.
- AdTech players (and Ad Manager) later evolved to process multiple demand sources simultaneously

Google

FAQ #3

Google revamped its auction process to harm **Header Bidding** and advantage its own product AdX.

- Header Bidding runs an 'auction of exchanges' in the header outside of Ad Manager's auction
- Open Bidding allows publishers to run this 'auction of exchanges' within Ad Manager, including the ability to compete with Google's AdX.
- In 2019, Google launched a unified 1st price auction, in which all bids are subject to consistent rules and the winning bidder pays the price it bid.

Google

Header Bidding, essentially an auction of auctions, comes with compromises for the publisher and the end user:
significantly increased latency
decreased transparency
User privacy issues
Bidding against oneself
Opportunity for fraud
Google's Open Bidding auction is open to rival ad exchanges and networks. So, the Google ad exchange competes directly with rival demand sources in Open Bidding.
In Google Ad Manager, the highest bid wins the auction, regardless if it's Header Bidding or Open Bidding. With Header Bidding, publishers are charged a minimal ad serving fee (less than 1%). With Open Bidding, publishers are charged 5-10% depending on the ad type / format (web, mobile, video).
Open Bidding and Header Bidding is completely optional for publishers to participate in.
There is no correlation with the Google Ad Manager auction and search ranking / results.
From Chris:
Correct that AdX does NOT buy into header bidding. however, if you go down this path, I'd characterize as AdX competing with the 'header bidding results' effectively in real time because of how dynamic allocation works in Ad Manager (takes the result of the HB auction and compares against AdX + OB). So I'd thread the needle to suggest that the auction is essentially flat at this point.

As for why we went to 1st price, I'd stick with the fact that 1. the rest of the industry went their first and 2. we wanted to simplify the auction for buyers and sellers, both of whom were spending too much energy trying to close the gap btwn 1st and 2nd price in the auction - effectively trying to recreate a 1st price auction in a 2nd price environment - just a big waste of time for everyone invovled

# Questions?

Google

Source: https://docs.google.com/document/d/1oNdgL74fkuMPyoGjLgbWFNWG07uQdXeBXS25lQaKwRA/edit