UNDERSTANDING AD TECH

Fyber

EXECUTIVE SUMMARY

Ad tech is one of the fastest-growing industries in the world.

From Silicon Valley startups and massive global agencies like WPP, to regional companies that connect advertisers to customers across Europe, Latin America and Asia – the ad tech industry fuels the global economy with billions of dollars worth of investment, large-scale employment and significant ad spend.

Ad tech is also one of the most complex – and thus, misunderstood – industries in the world.

If advertising is the “business or process of making advertisements,” then ad tech (short for advertising technology) is the business or process of using technology to make advertising faster, easier and more effective. This business is driven by powerful algorithms and billions of data points, and while it may not be “rocket science,” understanding how ad tech products and services work can be challenging to the uninitiated.

So you might think of this guide as an informal initiation into ad tech. Our goal is to help you understand this industry, so that you can confidently invest in it – whether that’s giving your time as an employee, your resources as a financial backer, or even just your opinion as part of a conversation at a trade show or networking event.

IN THIS GUIDE

- You’ll learn why ad tech is important to the global economy
- Get some statistics on how the industry shapes up across different regions
- Cut through the jargon with some clear examples of the most common ad tech platforms, tools and processes
- Dive into the glossary at the back to get started on some basic terms and acronyms

Update Note 2017

In 2016 we published a booklet to provide readers with a basic introduction and guide to advertising technology. This booklet has been updated for 2017 to highlight some of the major trends driving growth over the past year, which we believe will continue to play a crucial role in this market in the future.

Strong growth in digital advertising continued in 2016, especially in mobile advertising, with ad spend growing to over $195bn worldwide[1] and forecasts remaining superior compared to traditional media channels.

Source
[1] eMarketer

So without further ado, let's dive head-first into Understanding Ad Tech.

CHAPTER

1 What is Ad Tech?

Advertising is a marketplace. In every market, there are buyers and sellers. In small markets, each seller may sell only one item (be it fruit, textiles, or cars) and buyers can connect directly with them. But in larger markets, sellers may have multiple items, along with different sales people to help them sell specific things — and there may also be other people involved in getting buyers to the market.

There are bus drivers who bring loads of passengers to the market, guides to help people translate currencies and languages, and even buyers who aggregate the needs of multiple other buyers so they can negotiate better prices.

Take this simple example, add lightning-fast computer calculations, hundreds of different ad units, devices and currencies, and couple that with billions of users around the world, and you get an understanding of the current ad tech marketplace.

Automation for efficiency and scale

Up until the current decade, the business of advertising and its surrounding marketplace largely remained unchanged. From TV, to magazines, to radio, advertisers have looked for content that attracts their target consumers. In the 40s, it was soap operas on American radio stations. In the 70s it was glossy international magazines, and in the 80s it was provocative TV ads.

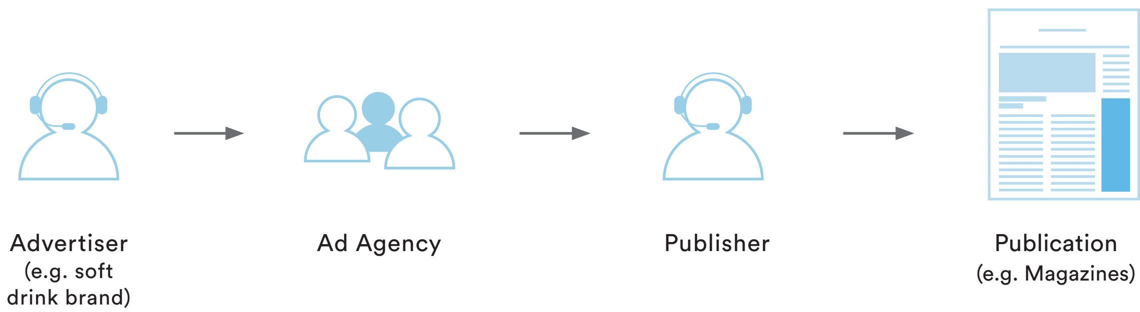
In each case, the process of buying and selling ads was the same (see Example 1 on the right). The advertiser picked up the phone, called an ad agency (or the publication directly), inquired about the rate for the ad space, and then faxed or otherwise delivered a physical order. The ad would then appear days, weeks or even months later.

What changed with the growth of the internet in the early 2000s was the physical nature of the ads themselves, as well as the means of payment. Instead of selling inches in a newspaper or 30-second spots on TV, publishers offered a more intangible currency: online attention.

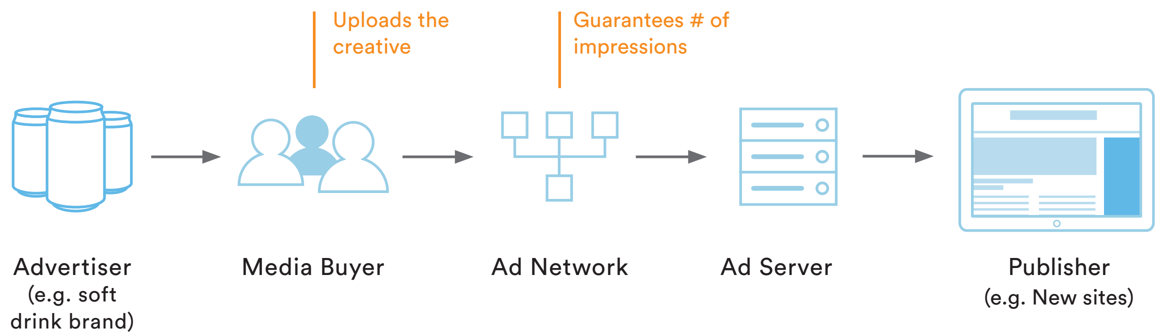
Measured in increments like clicks and the amount of time spent, digital publishers assigned value to their inventory (or the amount of ad space they had available) -- although the means of accounting, payment and reconciliation were still quite analog. The growth of “ad tech” was driven by a need for efficiency and scale in the realm of millions (and now billions) of online interactions.

Advertising is still a marketplace, powered by the relationship between advertisers and publishers of quality content, but digital advertising has become increasingly complex. Automated platforms now do much of the actual buying and selling (see Example 2 on the right). Ad tech intermediaries focused either on supporting publishers or advertisers provide tools and solutions to help them achieve their monetization and marketing goals, respectively.

Example 1
Print advertising deal



Example 2
Direct deal to run digital ad campaign (e.g. video ad) on a popular media site (desktop)



2 Why Is Ad Tech Important?

So what makes the ad tech marketplace such a hotbed of investment activity and media focus?
It's a crucial component of the global economy.

Ad tech is now one of the leading growth industries worldwide

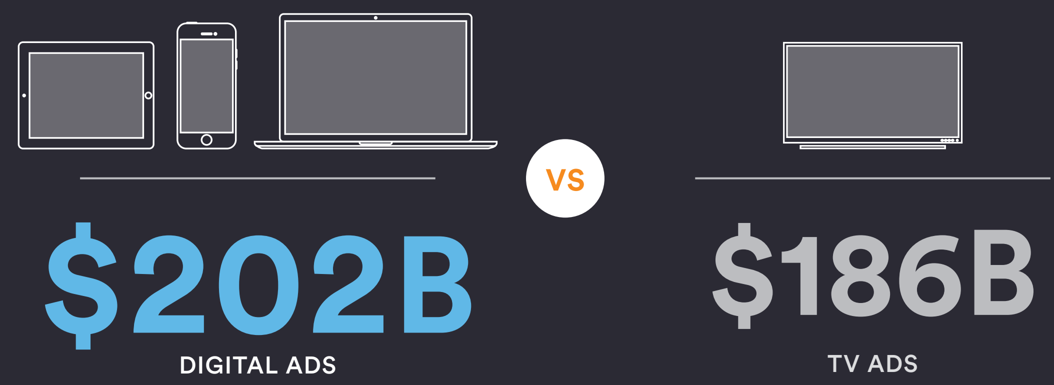
Digital advertising, and with that advertising technology, continues to attract tremendous investment across advertiser spending, investor activity and employment worldwide.

GLOBAL SPENDING

Global digital ad spend has seen significant growth over recent years, and continues to dominate the market. Digital advertising is expected to be the leading media category with a market share of more than 40% this year, beating that of TV. By 2021, Magna forecasts a 50% market share for digital, totaling $299B in ad spend, while TV will plateau at $195B and a 33% share.[2]

Source
[2] Magna Global Dec 2016

Worldwide Digital Ad Spending vs. TV Ad Spending
Billions of $, 2017



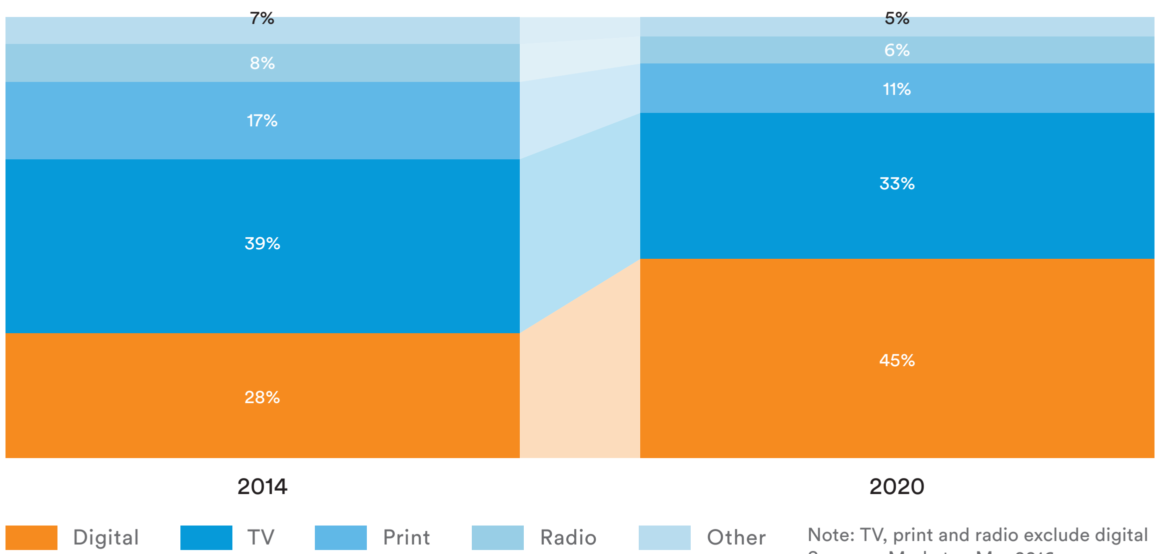
US SPENDING

The US is one of the world's most developed advertising markets, particularly in digital advertising, and 2016 was no exception with the market seeing continued growth. As the market matures the compound annual growth rate for the period 2016 – 2021 is still expected to be above 13%, with digital video outperforming this at 16%, estimated to grow 24% year over year in 2017.[3]

The US digital ad market should reach $83 billion this year, edging out TV at just $73 billion, and much of that growth is driven by programmatic or automated advertising platforms.[4]

Sources
[3] eMarketer Mar 2017
[4] eMarketer Mar 2016

US Total Media Ad Spending by Media
% of total



Note: TV, print and radio exclude digital
Source: eMarketer, Mar 2016

PROGRAMMATIC SPEND FUELED BY MOBILE ADVERTISING

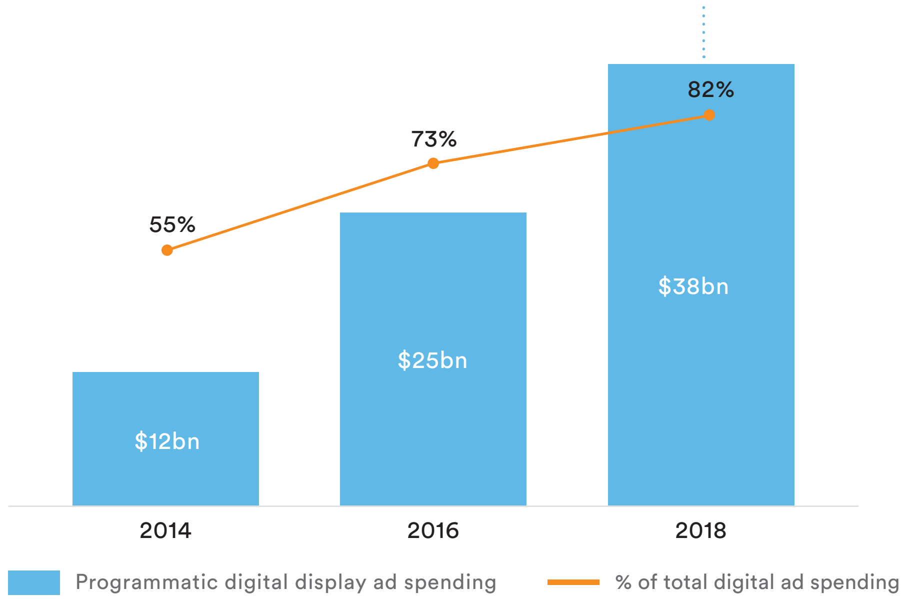
One important part of digital advertising is programmatic trading, the process in which deals are initiated, executed and reconciled by algorithms – often in real time. This segment demonstrates particularly high growth.

In 2013, just a small fraction (7 percent) of US advertisers spent more than half of their online advertising budgets programmatically. Already by 2014, 55% of all digital display ad spend was placed in an automated way.

US programmatic ad spend is poised to grow at double-digit rates throughout 2018, having reached more than $25 billion last year and is expected to exceed $38 billion next year, with mobile making up the majority of the programmatic display ad spend.[5]

Source
[5] eMarketer Sep 2016

US Programmatic Digital Display Ad Spending
Billions of $ and % of total digital display ad spending



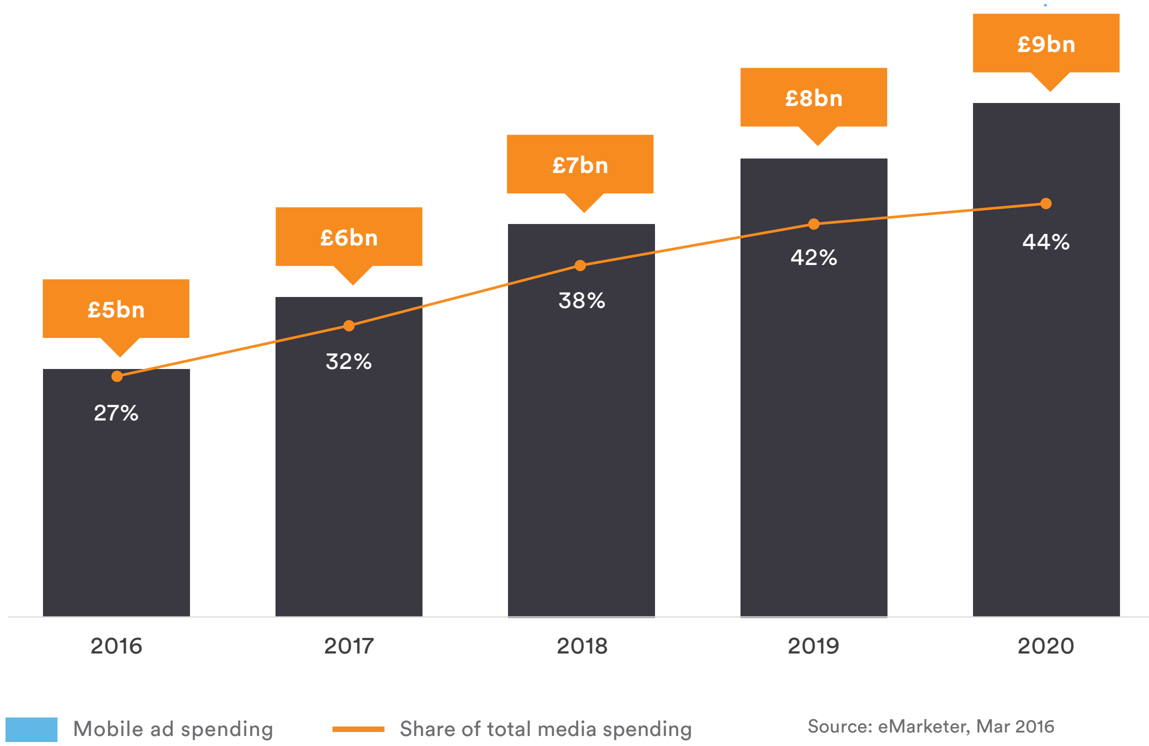
Note: Digital display ads transacted via an API, incl. publisher-erected APIs and more standardized RTB technology; incl. native ads and ads on social networks; incl. advertising that appears on desktop/laptop computers, mobile phones, tablets and other connected devices; incl. banners, rich media, sponsorship, video and other
Source: eMarketer, Sep 2016

EMEA SPENDING

Despite the challenges stemming from the EU's strict data privacy laws and the ongoing economic fluctuations within the broader regions of Eastern and Western Europe, industry analysts predict significant growth in ad tech. **In the UK, for example, mobile ad spending was expected to surpass desktop in 2016, growing to almost £9 billion by 2020, which would equal more than 44% of the country's total advertising spend.**[6]

Source
[6] eMarketer Mar 2016

UK Mobile Ad Spending
Billions of £ and % of total media spending



Source: eMarketer, Mar 2016

PROGRAMMATIC VIDEO IS GROWING

Across Europe, media companies predict that programmatic video will increasingly fuel their businesses. **Programmatic video revenues will reach €154 million in France and €74 million in Germany** this year, for example, up from €109 million and €49 million, respectively in 2016.

Programmatic Digital Video Net Ad Revenues in the EU, 2014-2020
Millions of € and % of total digital video net ad revenues

Year	2014	2015	2016	2017	2018	2019	2020
UK	€ 86	€ 135	€ 222	€ 280	€ 385	€ 492	€ 602
—% of total digital video net ad revenues	18.5%	22.8%	32.2%	37.2%	46.3%	53.8%	60.1%
France	€ 47	€ 67	€ 109	€ 154	€ 215	€ 297	€ 358
—% of total digital video net ad revenues	15.2%	18.6%	26.1%	32.5%	39.7%	49.3%	54.1%
Italy	€ 24	€ 38	€ 64	€ 109	€ 163	€ 209	€ 245
—% of total digital video net ad revenues	9.1%	12.3%	17.7%	27.1%	36.6%	42.9%	46.6%
Germany	€ 14	€ 31	€ 49	€ 74	€ 131	€ 186	€ 254
—% of total digital video net ad revenues	5.0%	9.3%	13.1%	17.4%	27.9%	35.8%	44.9%
Spain	€ 10	€ 15	€ 41	€ 57	€ 69	€ 82	€ 98
—% of total digital video net ad revenues	9.3%	11.5%	28.1%	34.1%	37.5%	41.8%	46.5%

Source: IHS, "Video advertising in Europe: The Road to Programmatic Ubiquity" commissioned by SpotX (formerly SpotXchange), Sep 9, 2015

APAC SPENDING

While the APAC region may have been somewhat slower to adopt ad tech en masse, due to language barriers and overall market fragmentation, the days of playing catch-up are over. Digital ad spending in Asia Pacific is expected to increase by more than 19% in 2017 to $83 billion from $70 billion in 2016, outgrowing the US market.

Digital advertising, a combination of online and mobile, is forecast to reach more than $110 billion in the APAC region by 2021, driven by dynamic markets like China, Japan, South Korea or India. The comparable lower ad spend per capita today is only one indicator of the strong growth potential APAC shows.[7]

Sources
[7] BI Intelligence Jul 2016
[8] Source: eMarketer Sep 2016, Oct 2015

Mobile keeps growing — and fueling much of that ad tech growth

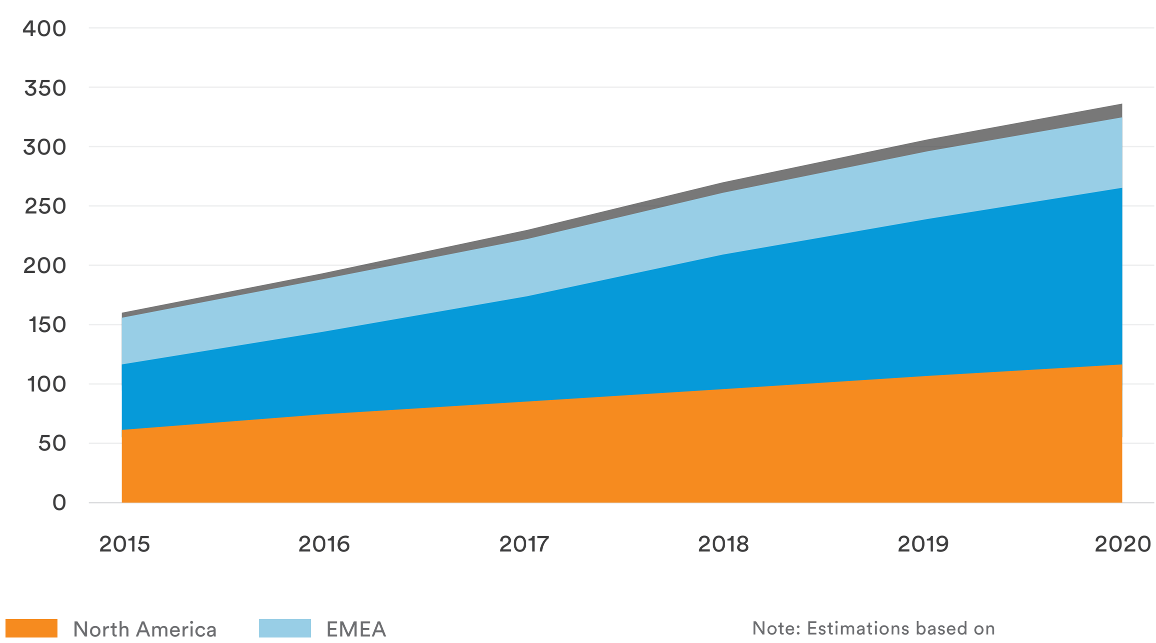
Once called the "third screen," mobile is now the first screen, and people are spending more time on mobile than any other device. Where customers spend their time, so go the advertisers (and their hefty budgets).

TIME SPENT

For example, 2015 was the first year that US consumers spent more time on apps than on what previously had been considered the world's game-changing medium: TV. Compared to the mobile web, apps dominate the digital space and account for the almost two and a half hours spent each day on mobile smart devices by US adults.[8]

Digital Ad Spending by Region, 2015-2020

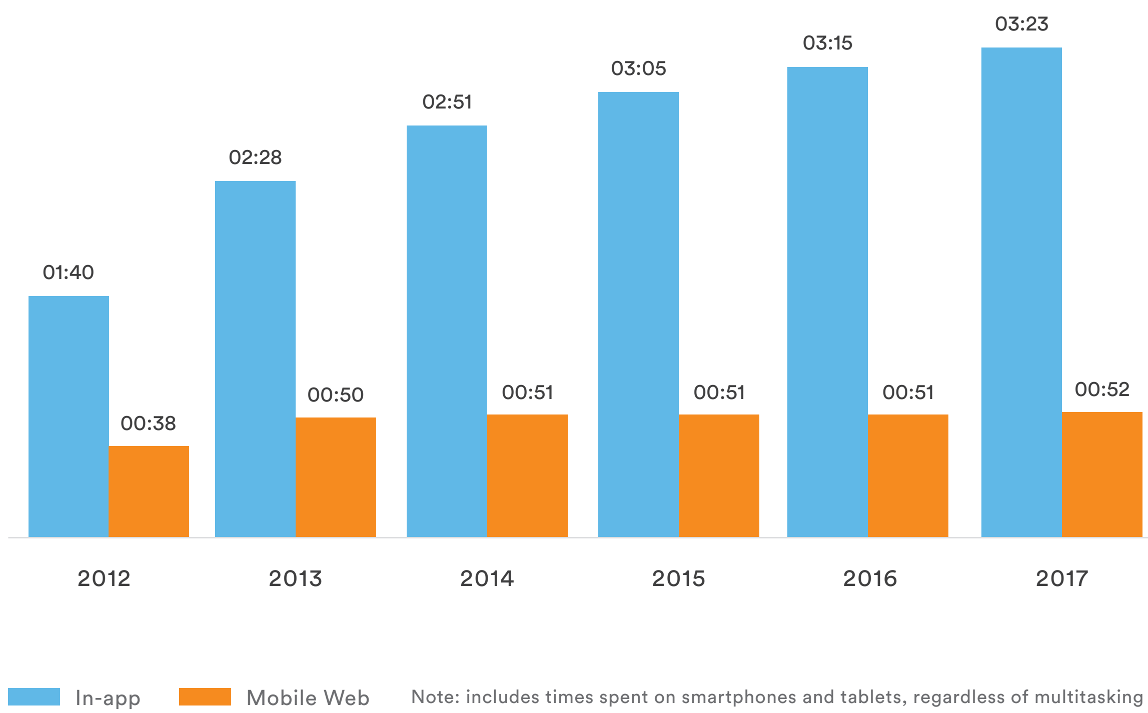
Billions of $



Note: Estimations based on BI Intelligence and Strategy Analysis data, both from Jul 2016

Average Time Spent per Day with Mobile Internet among US adults, 2012-2017

hrs:mins



Note: includes times spent on smartphones and tablets, regardless of multitasking
Source: eMarketer, Sep 2016

MOBILE VIDEO

Mobile video is one of the fastest-growing channels when it comes to content consumption. **In the US in 2017, people will watch an average of 31 minutes of mobile video per day, up from just 9 minutes in 2012[9].** By 2021 video is estimated to make up more than 75% of all mobile traffic.[10]

THE MOBILE APP MARKETPLACE

The mobile app marketplace is forecast to top the $100 billion mark by 2020. Too far ahead? In just 2016, it topped $60 billion, up 50% from 2015[11].

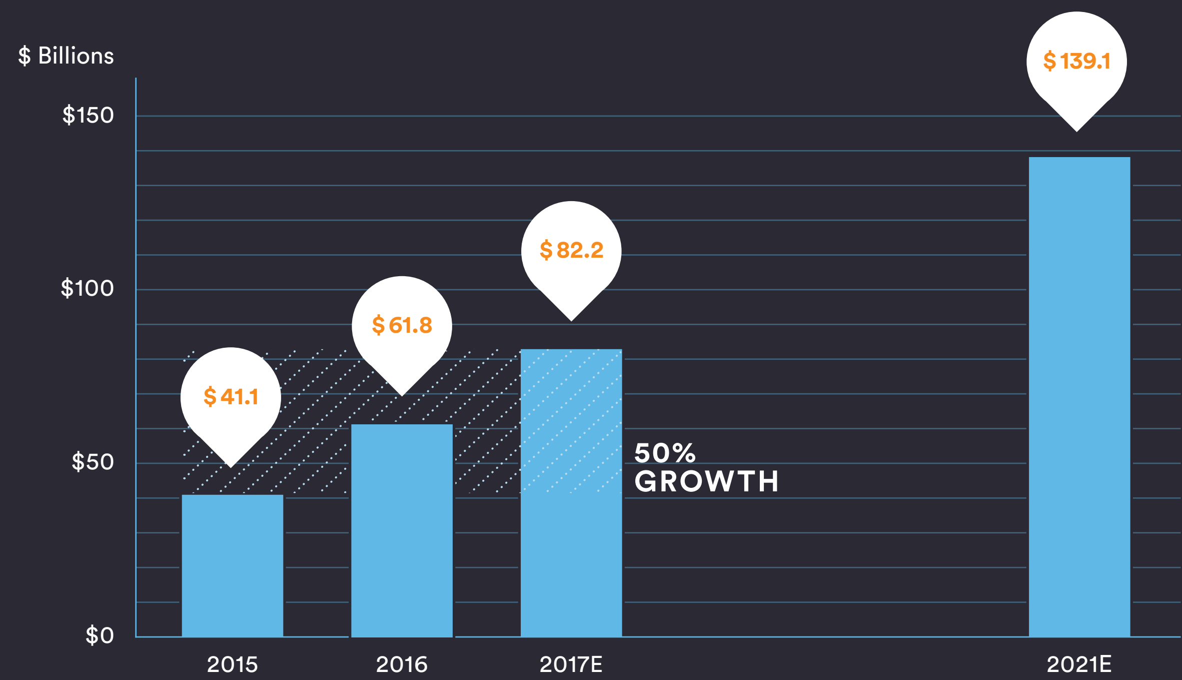
Sources
[9] eMarketer Apr 2016
[10] Cisco Feb 2017
[11] App Annie
[12] eMarketer (f. page)

Average time spent per day with major media by US adults, 2012-2018
hrs:mins

Year	2012	2013	2014	2015	2016	2017	2018
Digital	4:10	4:48	5:09	5:28	5:43	5:53	6:01
Mobile	1:28	2:15	2:37	2:53	3:06	3:15	3:23
► Video	0:09	0:17	0:22	0:26	0:29	0:31	0:34
Desktop	2:24	2:16	2:14	2:12	2:11	2:10	2:08
► Video	0:20	0:22	0:23	0:24	0:25	0:25	0:24
TV	4:38	4:31	4:22	4:11	4:05	4:00	3:55
Total*	11:39	11:55	11:57	12:00	12:05	12:07	12:08

Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on desktop/laptop while watching TV is counted as 1 hour for TV and 1 hour for desktop/laptop; *does not add up to this total as not all media is shown | Source: eMarketer, Apr 2016

Mobile App Forecast – Annual Gross Revenue
Worldwide



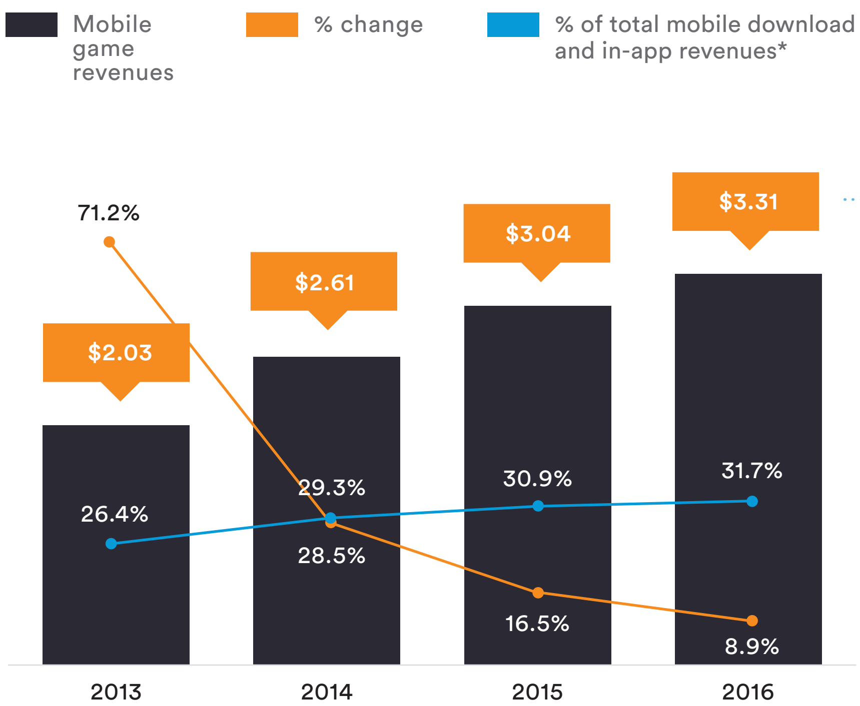
Source: App Annie (consumer spend on app stores)

MOBILE GAMES DOMINATE

And when it comes to mobile apps, games dominate in terms of revenue and time spent. **Analysts expect mobile game revenues to top $3 billion in 2016[12].**

US Mobile Game Revenues 2013 - 2016

Billions, % change and % of total mobile download and in-app revenues*



Note: includes game downloads and in-app purchase on e-readers, mobile phones and tablets; excludes ad-supported revenues and subscriptions; *includes downloads of ebooks (including audiobooks), games, music and video, as well as game in-app purchase and other; includes e-readers, mobile phones and tablets; excludes ad-supported revenues and subscriptions
Source: eMarketer, Feb 2015; confirmed and republished, July 2015

FUELING THE GLOBAL ECONOMY

What these disparate forecasts for ad spending, time spent and overall revenues show, is that the ad tech landscape is a fertile ground for investment and growth. But to fully understand why, we need to dig a bit deeper into how the technology serves the broader market.

3 How It All Works

Ad tech companies sit between advertisers, who are trying to reach users on computers, smartphones and other devices, and publishers and media companies that attract those people with content. These companies use data, algorithms and computer science to create, target and deliver ads with incredible speed and precision. Ad tech companies can loosely be defined based on whether they primarily serve advertisers (demand) or publishers (supply).

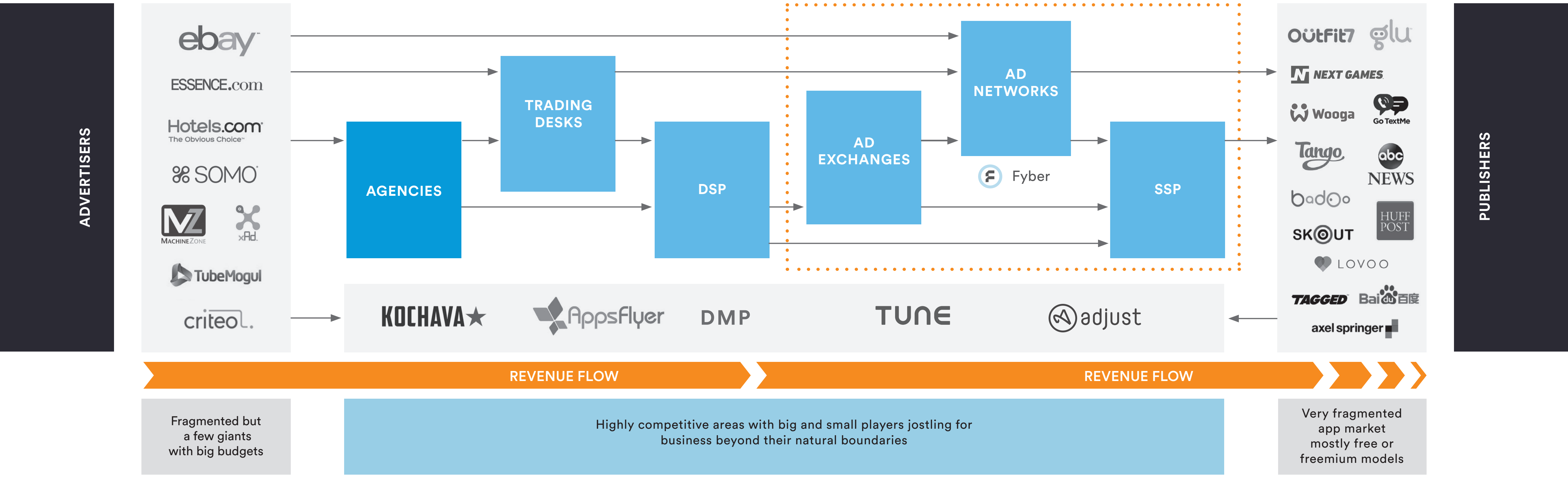
FROM ADVERTISERS TO PUBLISHERS TO USERS

The diagram below shows a high-level overview of the types of companies that power the advertising technology marketplace.

Advertisers can include global Fortune 500 brands like consumer packaged goods (CPG) companies and beverage-makers like Coca-Cola, as well as e-commerce companies and retailers like eBay. Mobile app and game developers can be advertisers as well, particularly when they are trying to acquire new users for their apps.

Publishers can include major media companies like The Guardian and AOL/Huffington Post, as well as smaller, independent news and entertainment sites. On mobile, the definition of publisher expands to include app developers of all types, including games, communication apps and social apps.

With programmatic advertising, the revenue flows from advertisers to publishers through automated means – replacing the phone calls, faxes and paper Insertion Orders (IOs) used to manage and track deals in the past.



Advertiser Objectives

Advertisers seek to get their messages in front of the right audience at the right time – at the best possible price. In some cases, the goal of a campaign is to drive awareness or improve the way their target audience "feels" about the brand. In other cases, they want to drive an actual purchase. Programmatic advertising gives advertisers access to audiences at scale, with precision targeting, tracking, as well as the ability to attribute whether a campaign was responsible for increasing a specific sale.

WHO SUPPORTS THEM?

Media agencies	Media agencies purchase media on behalf of advertisers, with the goal of getting their messages in front of the right audiences at the best possible price
Trading desks	As an extension of media agencies, trading desks purchase ads across multiple platforms programmatically
DSPs	Independent platforms that aggregate demand from advertisers around the world, funnel it into an automated system and then make lightning-fast bids on publisher inventory
DMPs	Package user data from publishers to allow advertisers (typically through DSPs) to target specific audience segments
Ad networks	These companies aggregate inventory from a variety of similar publishers to make it more scalable and attractive to advertisers

BIGGEST CHALLENGES

Fraud	The growth of ad tech puts an increasing number of companies between advertisers and publishers, and the complexity of the process has created new opportunities for fraud
Mobile targeting & attribution	Despite the increase in time spent on mobile, targeting and attribution capabilities (particularly in-app) still need to be developed to match advertiser expectations on the desktop or TV

Publisher Objectives

Publishers seek to earn revenue for the audiences they attract with their content, but only with advertising that doesn't compromise the user experience. While some publishers are heavily involved in the process of integrating, deploying and managing new ad platforms, others would prefer to allow a third-party partner (like an SSP) to manage the process for them. Programmatic advertising helps expose publishers' inventory to a wider variety of advertiser demand, and boosts the value of their audience by allowing targeting and segmentation.

WHO SUPPORTS THEM?

SSPs	Independent platforms that aggregate inventory from publishers around the world, funnel it into an automated system that exposes it to advertisers, with the goal of delivering the highest yield to the publisher
DMPs	These platforms package publisher audience data to make it more attractive (and accessible) to advertisers at scale
Ad networks	Help smaller publishers earn revenue by bundling their inventory to make it more scalable and attractive to advertisers

BIGGEST CHALLENGES

Demand fragmentation	As digital advertising explodes, the number of sources of advertiser demand – from agency trading desks, to ad networks, to e-commerce and social platforms also grows
Technical integration hurdles	On both mobile and desktop, integrating all of the various ad units and tools for transacting programmatically can be labor and resource-intensive – and too many integrations can cause an app or site to run slowly
Sub-par yield optimization	The fragmented advertising market also leads to increased manual effort and yield loss, if monetization is not done through a specialized provider

BRINGING IT ALL TOGETHER

Advertising technology companies exist to make this process of buying and selling digital inventory more lucrative (and efficient) for both publishers and advertisers.

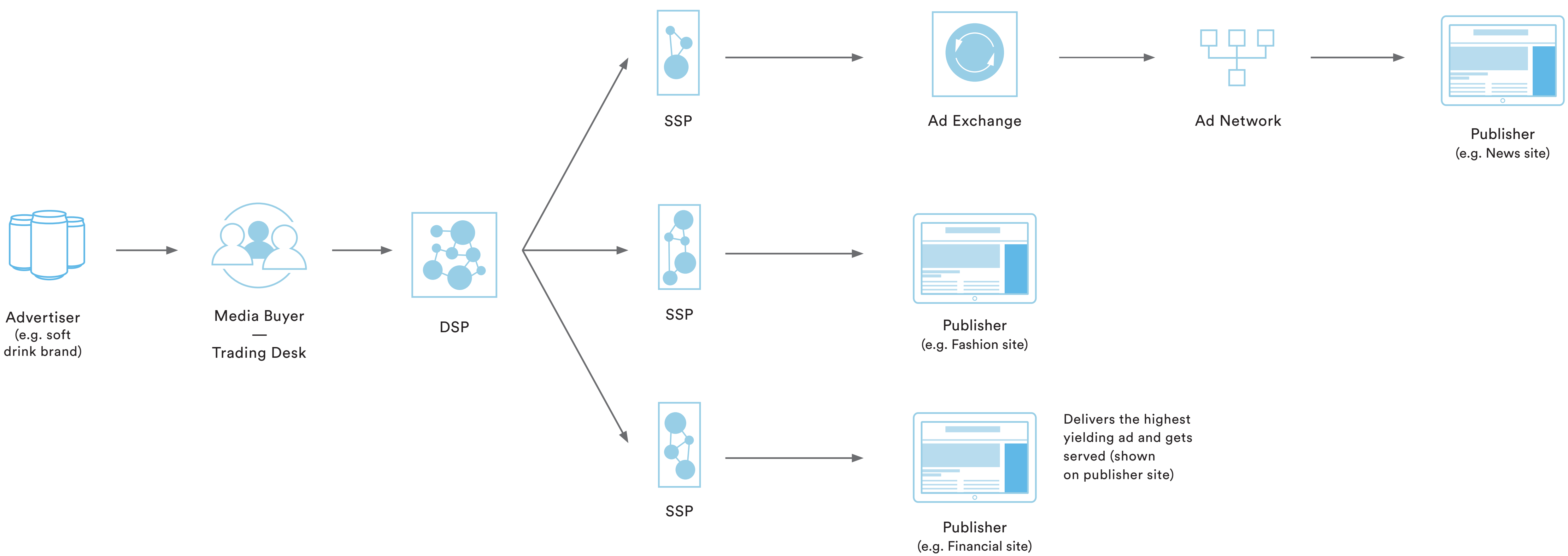
Automation can happen on both sides of the table, from buyer workflow tools that streamline the process of selecting and securing ad space across multiple websites and apps, to sell-side analytics that help publishers keep track of every impression delivered.

But when the conversation turns to "ad tech," the focus is typically on programmatic deals – or ad campaigns that have been targeted and purchased via algorithms and trading platforms.

Programmatic deals include an element of competition, as at any given time multiple buyers are bidding on the same set of users (or impressions) on a given site. Publishers benefit from the competition because algorithms can also help select the highest bidder in real-time.

At the other end, there are always multiple sites or apps that may fulfill an advertiser's need for a specific audience. Programmatic deals give advertisers a combination of scale, reach and precision targeting, also with potential to reach their target user at the perfect time. Here's what that looks like in action:

Example 1
Programmatic deal (where the competition happens)



UNDERSTANDING RTB

When advertising discussions shift to "programmatic" – typically people are talking about the process of real-time bidding (or RTB). Although the technology behind "ad tech" extends far beyond just RTB, the process of giving advertisers the option of bidding on inventory in "real-time" has been the biggest driver of growth over the past five years.

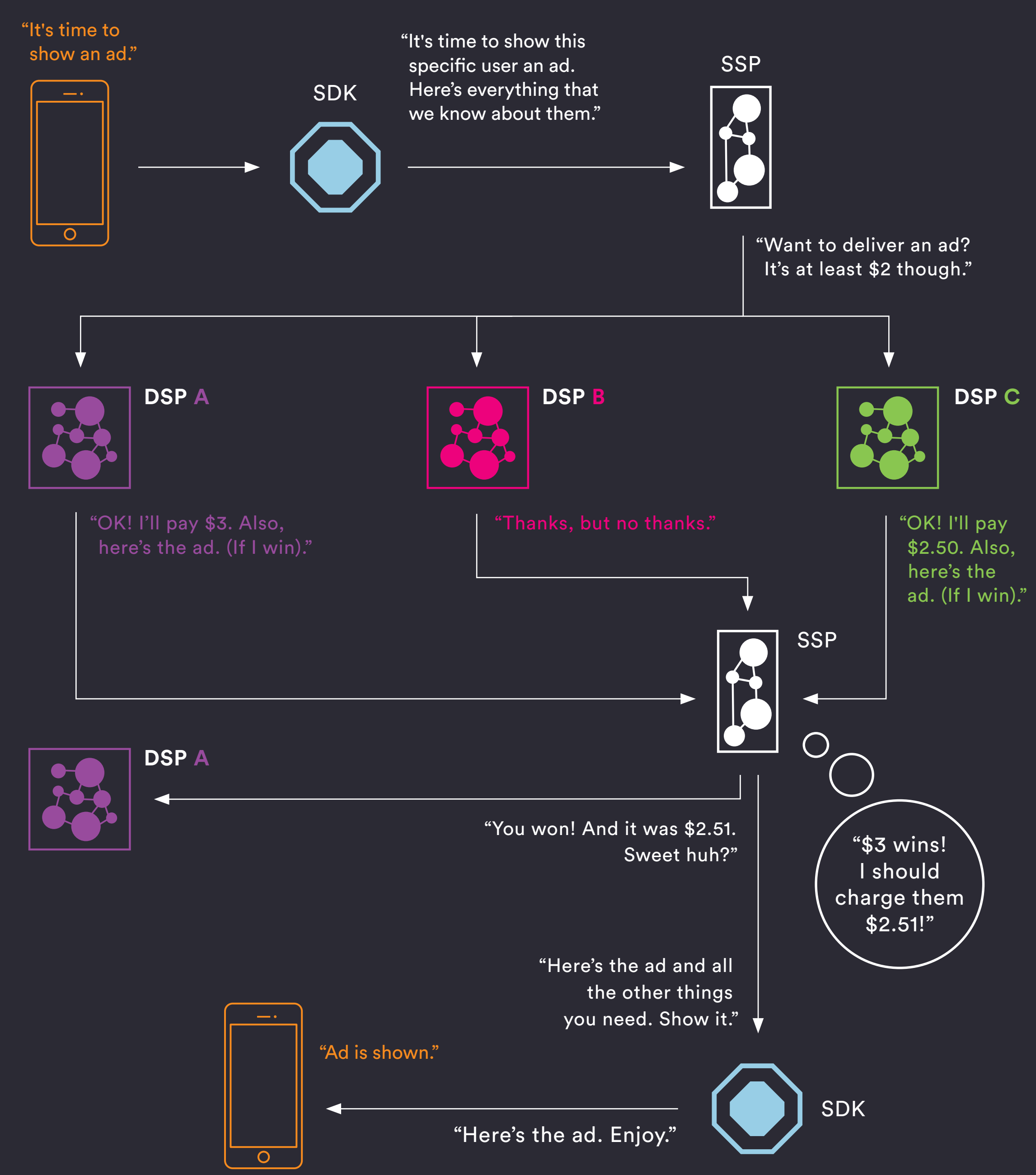
What RTB means at a high level, is that at any given moment, multiple advertisers can bid on a single impression.

Take, for example, the moment in a mobile game where the player watches an ad in-between levels. At that moment, the ad provider powering monetization in the app (typically an SSP) runs an auction with all of the advertisers interested in that player. The advertisers make their bid, the SSP chooses the highest, and then the ad gets "served" to the player.

Both publishers and advertisers can set parameters for RTB – minimum prices and maximum bids, for example – as well as prioritize specific deals and inventory. This split-second process is illustrated in the chart to the left – albeit simplified.

Example 2

How real-time bidding (RTB) works



O&O vs. Independent Ad Tech Platforms

Understanding the ad tech landscape also requires looking at how the various companies relate to one another. One of the primary factors to consider is whether an ad tech provider "owns and operates" a large proportion of the audience within their ecosystem, or whether they're "independent."

O&O: Owned and operated (O&O) ad tech companies are massive hybrids like Facebook, Google, Twitter, Yahoo/AOL/Verizon. They have formidable technology budgets, with billions of impressions available from their users across devices and countries.

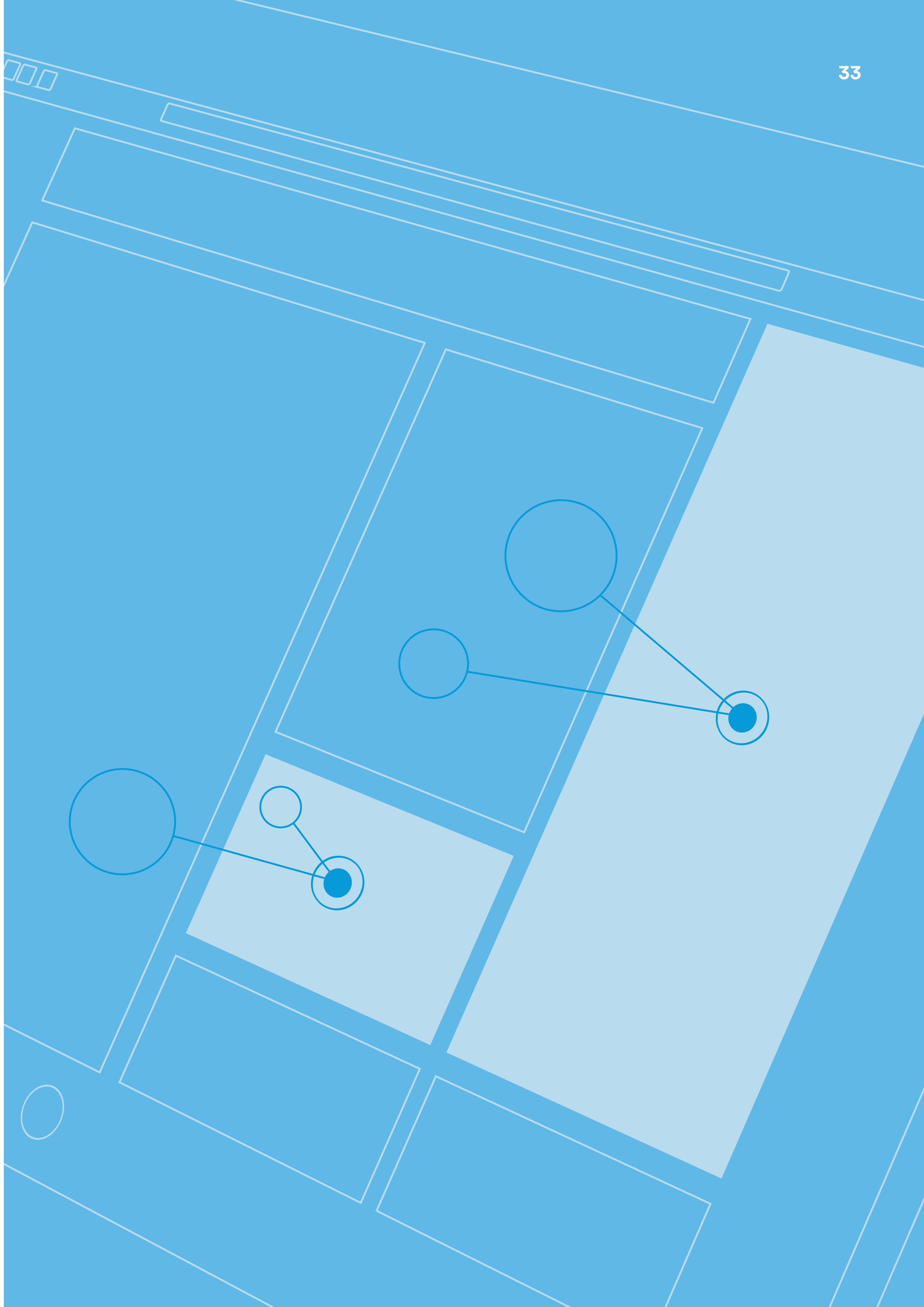
These audiences are what make O&O platforms attractive to advertisers, because they have access to user data (such as Facebook users' interests and other behavior) that third-party platforms can't get.

Independent: Independent platforms like Fyber, Rubicon Project and The Trade Desk offer an alternative to the O&O approach. With the ability to either build or acquire new technology, as well as deep publisher and advertiser relationships, independent platforms don't rely on pre-existing scale to be successful. (Nor do they bear the financial burden of generating monetizable content).

Because independent platforms exist to serve publishers (or advertisers) first, their products are agnostic, aiming to deliver the best experience and financial benefit for their respective constituents. The choice, transparency and flexibility they offer are what make them a compelling alternative to the O&O market environment.

A significant opportunity: The O&O ad tech platforms command a considerable percentage of the overall ad market, but there's still substantial opportunity for independent companies. For example, the worldwide net digital display ad revenue is forecast to top $106bn in 2017. While the large internet corporations and consumer platforms will account for 65% of that total, independent providers are projected to generate 35% – or at least $37bn.[11]

Sources
[11] eMarketer



C H A P T E R

4 Trends to watch

Now that you have some context about why ad tech matters, who the players are, and some of the technical aspects of a successful programmatic campaign, we turn forward for a glimpse at the trends that will define growth in advertising technology over the next few years.

GROWTH IN VIDEO AD FORMATS – FOCUS ON AD QUALITY

Video is dominating: The fastest growing digital ad units today are video, especially in the mobile environment. With users consuming more and more video on their smart devices, the format provides marketers with an effective way to engage with audiences and publishers and to seamlessly integrate their ads.

One counter to ad-blocking: Opt-in ad formats like Fyber's Rewarded Video product give users a choice as to which marketing messages they see, while reminding them of the value-exchange inherent in the free publishing model. Currently implemented by mobile game developers as a whole, we expect adoption by publishers to increase further over the next 18-24 months.

Adoption in developing countries: We also expect increased adoption of opt-in formats by mobile developers in emerging markets. Lack of credit card penetration and a general aversion to paying for mobile content makes opt-in and rewarded ad formats an attractive monetization option.

Ziv Elul
Chief Executive Officer

"Video might be the last area in ad tech where you have more demand than supply. That means that prices are up and, as a result, publishers work hard to generate video content that translates to more quality video inventory. In mobile we now see the rise of video ad units such as interstitial, native and vertical video that, unlike the pre/mid/post-roll units, are not dependent on video content.

Video is considered premium inventory and most publishers still prefer to sell it directly. However, programmatic video is gaining traction, especially through private marketplaces and preferred deal environments that maintain a sense of exclusivity and control. As the shift from buying real-estate to buying audiences continues, publishers and supply side players are expected to complement scale with segmenting and packaging their audiences in a way that makes sense to advertisers."

CONTINUED CONSOLIDATION

Aggregation for scale and diversity of technology: Scale is how independent players will compete with companies like Google and Facebook, so expect to see more deals that aggregate billions of users for advertisers.

A few specialized players will thrive: Expect to see new startups emerge that power native advertising, specialized creative for verticals like communication, and even mobile-specific products like messenger apps, emoji, etc.

Less VC investment & tougher public markets: As we've seen, the IPO market for advertising has slowed down, and we expect this trend to continue as the players that have entered the public markets need to prove their value.

Crid Yu
Chief Operating Officer

"As consolidation of the ad tech market continues we see two strong themes driving innovation and M&A activity: the creation of a comprehensive unified product offering, and the provision of access to a global user base at scale. The deep-stack offering and aggregation of all relevant programmatic demand sources is crucial to publishers evaluating which partners to work with. It allows for optimized monetization through one platform, efficiently connecting the different layers of the value chain. The critical scale of integrated publishers and user reach is also key for advertisers looking to engage with their audiences worldwide."

FOCUS ON ALL THINGS DATA

Better mobile targeting: Despite the astronomical growth in mobile advertising, the lack of parity between the level of audience insights that advertisers get on desktop vs. mobile is still hindering some spend. Expect to see improvements in mobile targeting over the next one to two years.

Improved measurement & attribution: Beyond simple audience targeting, there is an increased focus on measuring how well campaigns have performed, and making sure that impressions served are actual users (vs. bots).

Erwin Plomp
Chief Business Officer Fyber RTB

"The online marketing industry continues to move more and more towards programmatic trading. Nowadays even in radio and television the buzzword is real-time bidding (RTB). The advantages of RTB are clear: more transparency, more flexibility for inventory owners, more value for each and every impression, and less administration involved in the buying process. It goes without saying that there are challenges ahead. Suspicious traffic is an issue that needs to be addressed. Topics such as Header Bidding and other advanced programmatic buying mechanisms are also transforming the market. Certain players argue in favor of the benefits of Header Bidding while others claim it is too slow, inefficient and unnecessary. We believe that the unknown direction of the market presents many opportunities over the coming years, something we are well positioned to capitalise on."

5 Glossary

So what is a DSP? What's an Ad Server? And how, exactly, do advertisers and publishers calculate eCPMs?
This glossary offers simple definitions of the most common terms and acronyms used when describing advertising technology products and services.

Ad Exchange	Platform for selling and buying online advertising inventories, facilitating the buying process between demand (advertisers, media agencies, ad networks) and supply (app developer, publisher)
Ad Impression	Ad request is filled and an ad is delivered to the user, generating an ad impression
Ad Network	Connects advertisers to web sites that want to host advertisements, aggregate ad space supply from publishers and match it with advertiser demand
Ad Request	Whenever a user in an application reaches a point where an ad could be shown, the app developer makes a so-called ad request, containing information about the placement and the user that will see the ad. The developer's SSP then sends this ad request to integrated ad networks and other demand partners that will then respond with one or more ads to show. If an ad is shown or "served" afterwards, the ad request is considered "filled"
Ad Serving	Technology used to place ads in apps; Lets publishers sell, manage and deliver their ad inventory to demand sources
DMP	(Data management platform) A warehouse used to store and analyze data generated from ad campaigns, ad impressions etc.; Used by publishers, ad exchanges, ad networks etc. for the use of ad targeting
DSP	(Demand-side platform) Allows buyers of digital advertising to manage their campaigns and run them automatically on multiple ad exchanges through one interface
eCPM	(Effective cost per mille); amount of revenue a developer receives for 1,000 impressions; calculated based on the amount of ad revenue divided by the number of impressions times 1,000. The value is used to compare performance of different ad formats, ad campaigns, providers etc.
Freemium apps	App can be installed and used free of charge, user charged for premium content and additional functionality on a voluntary basis
Inventory	Advertising inventory is the amount of ad space a publisher has available to sell to an advertiser. Digital publishers sell inventory according to a variety of criteria, including per impression (i.e. CPMs) or predetermined actions such as video view (i.e. CPV or cost-per-view) or clicks (i.e. CPC or cost-per-click)
MAU	Monthly active user
Mediation	Access to a large number of demand sources. An SSP's mediation platform offers app developers integration, management and optimization of ad networks through one single integration
Programmatic buying	The use of software to buy and sell digital advertising, allowing buyers and sellers to use complex delivery rules, targeting and optimization algorithms to serve the right ad for every request
Real-time bidding (RTB)	Subcategory of programmatic buying; Practice of buying and selling of ad space in real time, on a per-impression basis
SDK	Software development kit; An SDK is a library of code that can be added to a software project to make certain functionalities available to the developer of that software project
SSP	(Supply side platform) A supply side platform is a software solution app developers can use to manage and optimize their monetization strategies. SSPs tap into many sources of advertising demand and give developers tools to manage these demand sources centrally
Trading Desk	Ad tech platform, geared towards advertisers and agencies, facilitating the buying of digital advertising, often through programmatic buying