Advertising markets & submarkets

This is a very long resource and you will learn tonnes about markets & submarkets. We are analysing the digital advertising market and the many submarkets that there are. This is the level of detail that the real-world would require you to go into. This takes it from the realms of theory to valuable real-world (usable) knowledge. Take the time to get value out of this resource.

How do Search and Social platforms make money?

Google and Facebook are highly profitable companies with good balance sheets, little long-term debt and staggering income statements (statement of operations) for over a decade. Twitter has started becoming profitable as of recent. Snapchat and Pinterest have to still get there but are making good revenues.

Social and Search platforms

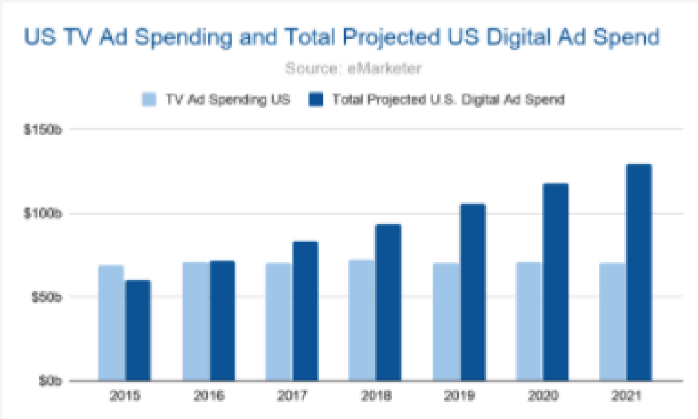
Search and Social, as I will call it in this study, are the biggest players in the digital ad industry. Compare the charts on the next page. The first chart shows that US digital advertising has exceeded TV ads a few years ago and remains on a growth trajectory while the latter is forecasted to decline slowly (or stay put).

You can also see how small the three smaller players (Twitter, Snap Inc, Pinterest) are by comparison. But you can interpret it also as great opportunities ahead due to the market size.

The macro view shows how Google's and Facebook's revenues compare to the GDP generated by entire industries in the US. This typically is the revenue of all players in that industry (with some exceptions, notably retail). I have chosen industries in a similar ballpark to Google+Facebook. There are some bigger ones which are not shown.

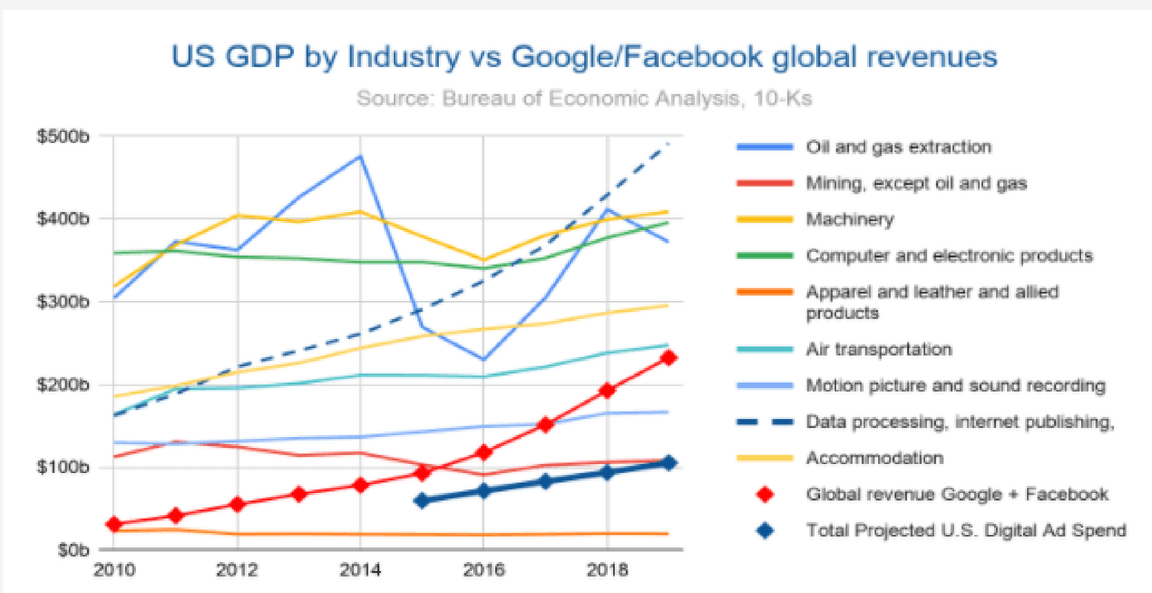
The thick line shows Google+Facebook's global revenue. Their global revenue is now on par with the US air transportation industry and at 62% of gas and oil exploration (a pretty big industry, right?). The dashed line shows the "software industry" which they are part of. You can see how they are a major contributor to its growth rates. This is not meant to be a perfect comparison.

The aim is to give us a feeling of what we are talking about. We will get into more revenue details later. But I wanted you to be aware of the macro view.

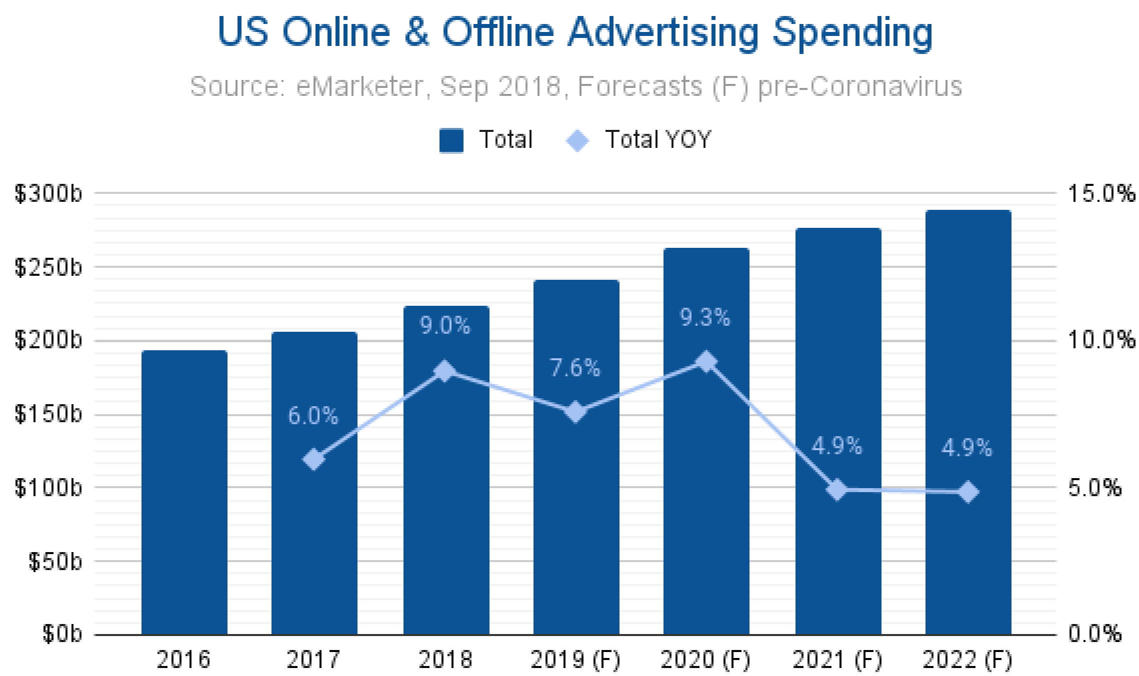


Digital advertising in the US has exceeded TV and is still on a growth trajectory while broadcast TV is not. Digital TV may increasingly incorporate digital ads tapping into existing digital ad infrastructure (which we will cover later).

Google is the largest player followed by Facebook. Alibaba and Amazon are big in the ecommerce ad vertical. Snapchat, Pinterest and Twitter are trying to gain market share.
Below you see how large Google and Facebook are in comparison to entire industries.

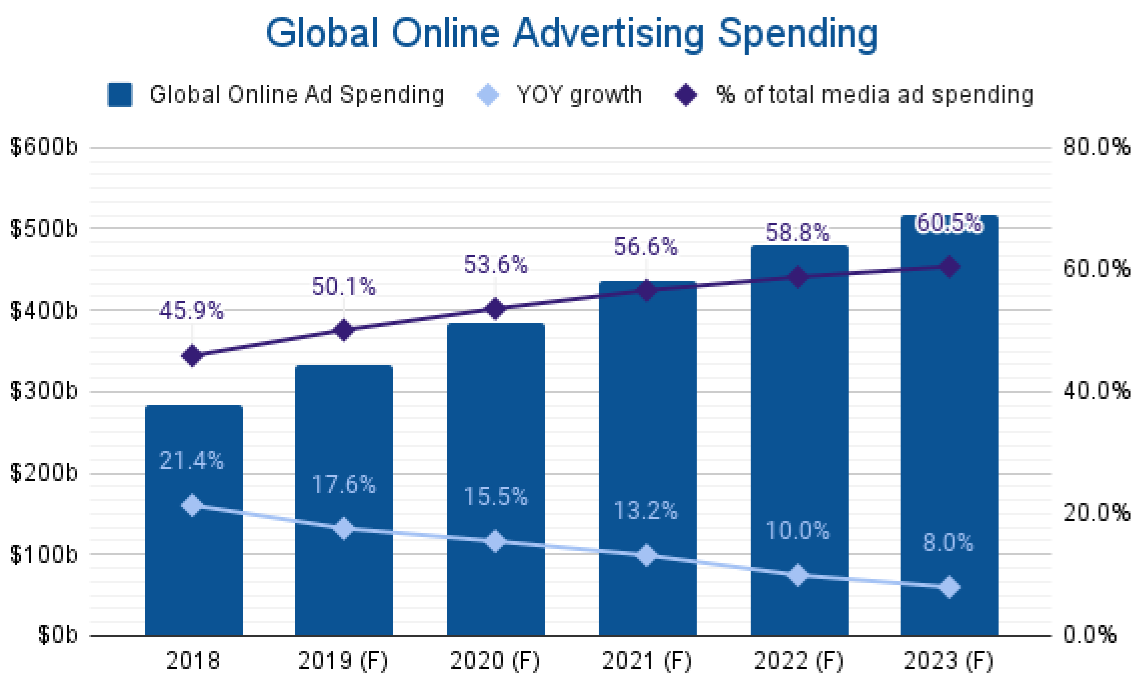


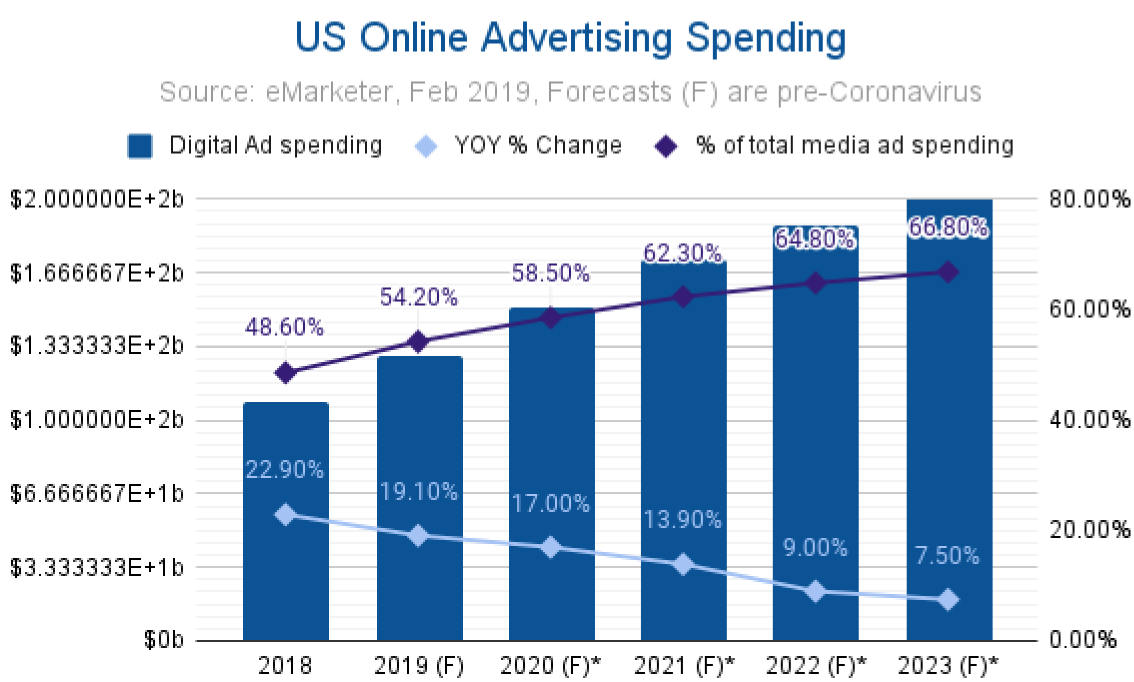
Market and monetisation overview



We see that the global advertising market (digital and non-digital) is growing at roughly 4% CAGR and forecasted to remain at this growth rate (pre-Corona). But digital is taking an increasingly larger share of this. The share has shifted away from advertising in traditional media.

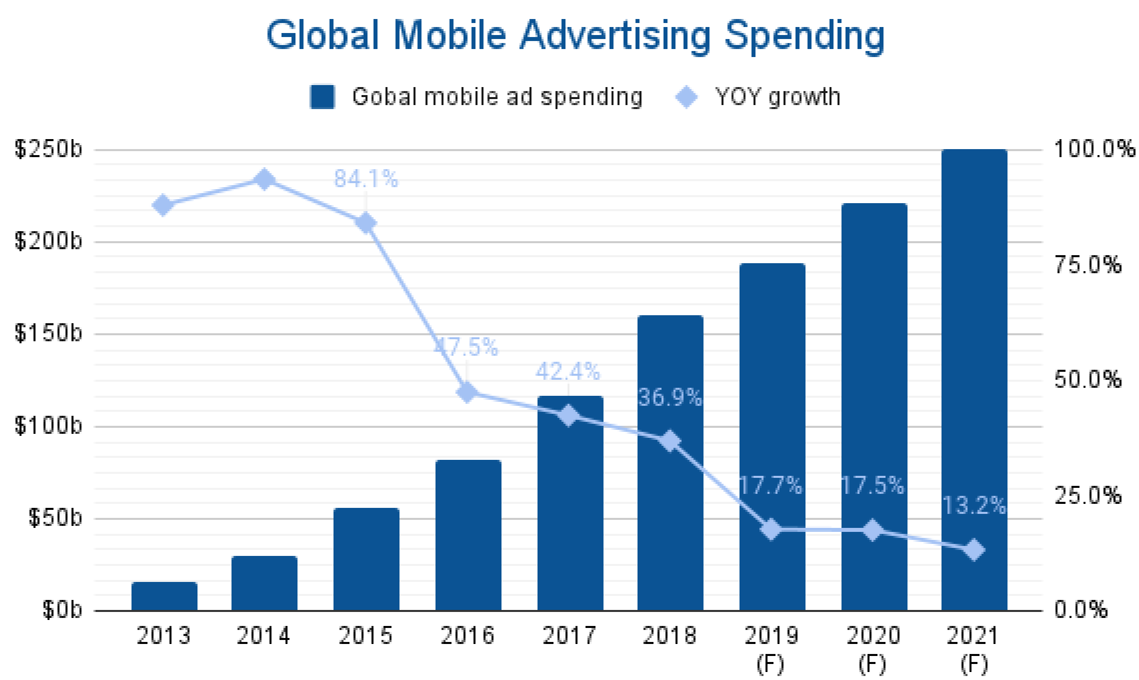
- For the US, TV has stagnated and is forecasted at an annual spending of [around $70b]() over the next few years, which means they are not forecasted to participate in any growth.
- Interestingly, digital (programmatic) TV ads are forecasted by PWC to [increase to $5.8b by 2023](). However, I would personally not be surprised if this grows faster, especially, in a push to more automation post-Corona
- "Newspapers and magazines together [accounted for more than one-third]() (34 percent) of U.S. ad spending in 2009 (and 50 percent back in the print-centric days of the early 1990s). This year, newspapers and magazines will get just 11 percent of the pie. That slice is only going to get smaller [...]"





You can see the shift is towards online/digital ad spending which in the US now accounts for more than 50% of all ad spending. Globally, the trend is similar. You can see the same chart as above for global online advertising in my previous resources (e.g. the Google case study).

The growth rates are still much higher than overall economic (GDP) growth. But one can see on the horizon a plateauing which is the key reason why you see Social and Search platforms embark on other revenue sources. Have a look at the revenue section in our Google where you see over $26b (~17%) of non-ad revenues, e.g. Cloud, Play Store commissions, YouTube subscriptions (non-ad revenues), etc.

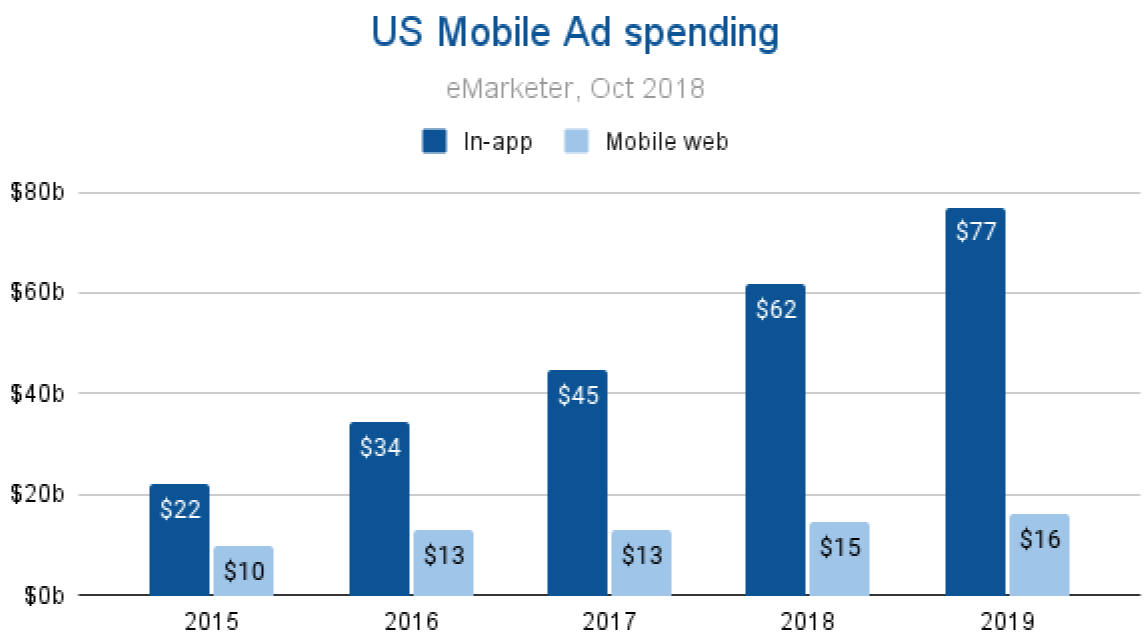


The distinction between online and “offline” advertising is relatively easy (well, nothing is really easy if you look into the details). But within the online ad world, you can then distinguish into various sub-markets and categories.

An important distinction is by device type. You see how mobile ad spending is growing much faster than online ads. This means of course that there is a market share increase for mobile ad spending.

Most Social and Search platforms participate in mobile and desktop. The exception is Snap Inc. who are focussing on mobile only. Therein, they are focussing on horizontal only but are offering tools to convert ad creatives from vertical to horizontal format.

It is an important decision for start-ups whether or not they will invest in a desktop platform. Many will not do so to avoid complexity. Those who still want to participate in the ad space may choose a path similar to Snapchat.



In the US, [mobile ads stood] at ~$77b (around 69% of all online ad spending) in 2019.

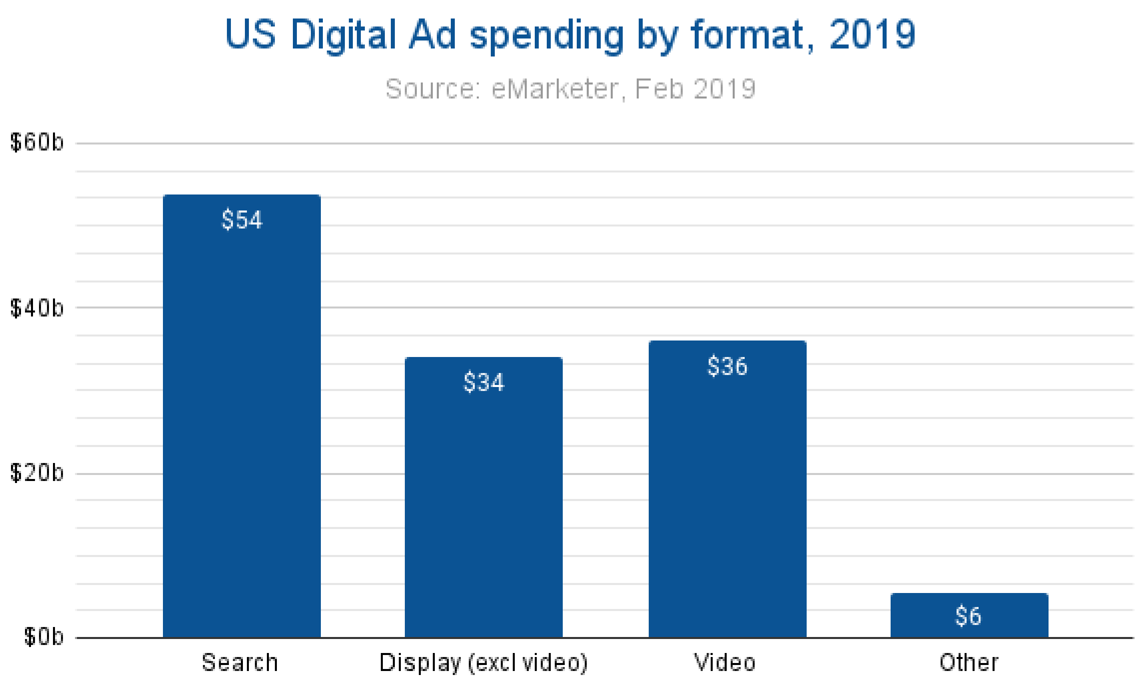
The majority of ad spending and most of the growth is in the app segment, meaning ads displayed on apps, including social media apps but also 3rd party apps. The latter can include display ads in news apps, video ads in games, banner ads in free versions of apps to give a few examples.

Ad formats

The three big ad formats are:

- Search
- Display
- Video

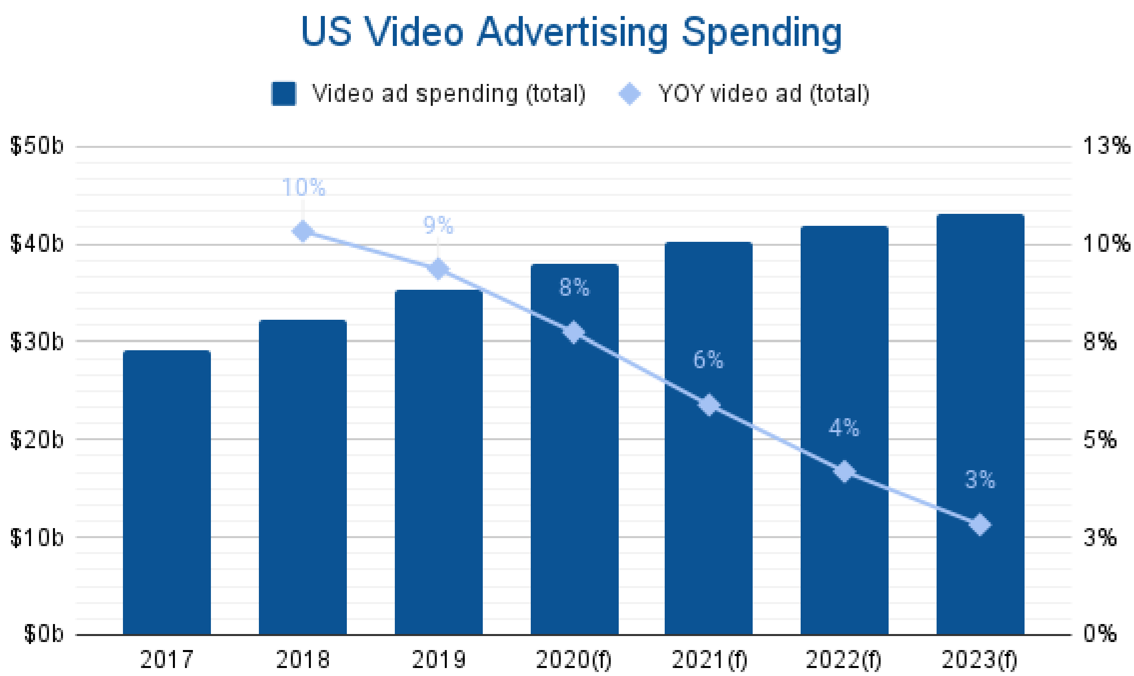
There are different ways of categorising. Some include video within display. But video has certainly conquered enough market share to be split out. Within display, there are again different formats, notably image, rich-media, etc.



“Other” includes all sorts of ad types, such as classifieds, messaging, email, lead generation. “Display (ex video)” includes images and rich media as the biggest ones among other types.

Video has exceeded the forecast from only a few years earlier by a long margin. E.g., an eMarketer Feb 2015 forecast saw it at $14.8b for 2019. A re-forecast in Feb 2019 saw this at $36b, some 250% higher (hey, they only charge you about $6,000 per typical report where “forecasts” are the key value proposition).

Video Ads



US Video Advertising Spending
Video ad spending (total)
YOY video ad (total)
$50b
$40b
$30b
$20b
$10b
$0b
13%
10%
8%
5%
3%
0%
10%
9%
8%
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2017
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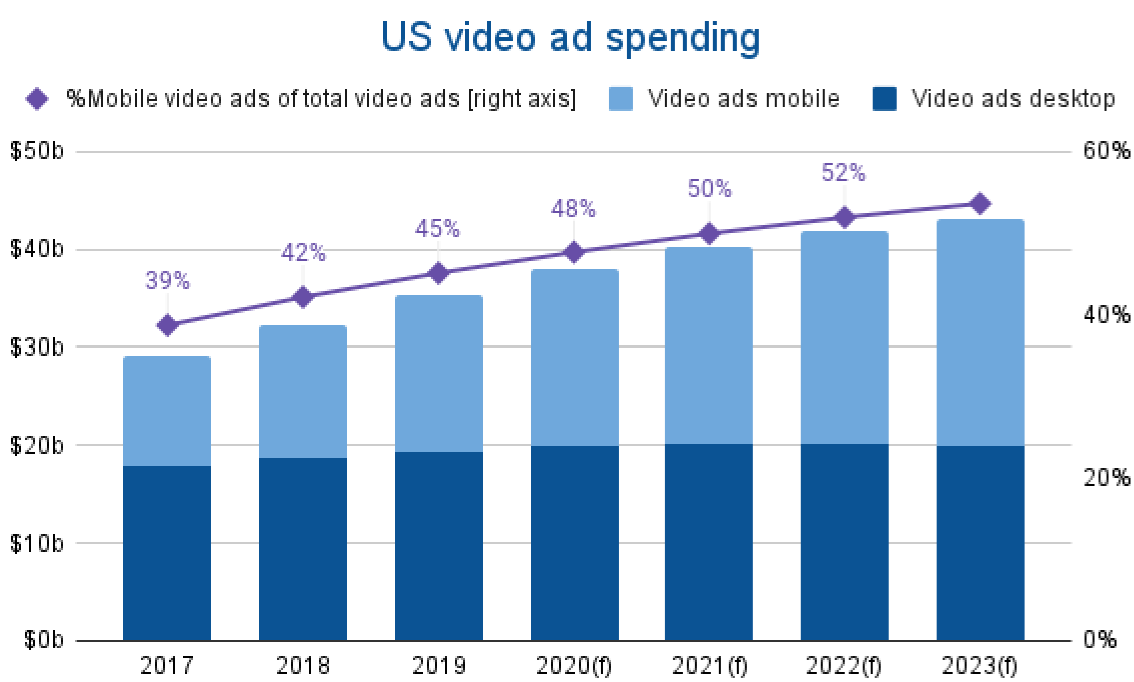
2022(f)
2023(f)



US video ad spending
%Mobile video ads of total video ads [right axis]
Video ads mobile
Video ads desktop
$50b
$40b
$30b
$20b
$10b
$0b
60%
40%
20%
0%
39%
42%
45%
48%
50%
52%
2017
2018
2019
2020(f)
2021(f)
2022(f)
2023(f)

Video ad spending is also growing faster than the average ad industry. Among this, video ad spending is clocking in double-digit growth which is forecasted to prevail until 2021 (before Coronavirus).

As part of the shift to mobile, it happens that video ads also move further to mobile phones. The platforms we looked at all offer video ad formats (in some cases it is called rich media when it's not embedded in a player).

And there are all sorts of different approaches on how to embed video ads.

Here some thoughts on which digital properties allow for the most native way to embed video ads:

- Pinterest has many autoplay (and autoloop) ad videos. Given they are embedded among pins (mainly images), they should not be considered native. And they certainly impact the customer experience negatively (esp auto looping ones). But they (likely) attract a higher price point, thus revenues. I anticipate - like most platforms - Pinterest will prioritise customer experience higher as they grow. A typical observation among platforms
- It is very important to test the impacts of video ads on customer experience
- Take Snapchat: On their Discover digital property, videos don't autoplay
- And as mentioned, Stories (first invented by Snapchat and successfully copied by Facebook) are a great digital property for video ads. I would think this is the most-native digital property for embedding video ads
- Then there are video ads which are embedded within live streams or other video content. In this case, there are revenue-sharing agreements with the content creators (booked under traffic/content acquisition costs)

One could think that embedding video ads within video content is the most native form of doing this. But that is not necessarily the case.

There are different forms of video ad placement with pros and cons.

- Pre-roll: video ads prior to the premium video, often non-skippable for at least a few seconds, typically around 6secs. They are often seen as the most recallable video ad placement. Much less interruptive than mid-roll
- Mid-roll: video ads during premium content (one downside is that these are typically seen as the most interruptive ones)
- Post-roll: video ads at the end of the premium content (less interruptive, easy to skip and typically lower recall and purchase intention)

Ideally, platforms would only use pre-roll ads but that would considerably limit the available ad spaces. Prices would increase but overall revenues would certainly suffer. Hence, we are likely to still “enjoy” mid-roll.

Some studies try to benchmark the various options on the competing dimensions. Here are two examples that touch on this (one from YuMe, one from AppNexus, before renamed to Xandr).

I would recommend taking these with considerable caution. Any platform needs to check these and other factors (such as the impact on engagement, measured in session duration, number of visits/day, etc) to make sure that they don't adversely impact important engagement factors.

Hence these tests need to include:

1. Customer experience
2. Value for advertisers (marketing ROI)
3. Platform engagement metrics

There are different pricing methods, typically cost per view (CPM/CPV) and cost per completed view (CPCV) but also other ones.

Video ad Statistics

I'm not a great fan of randomly picked [stats] but here are some that drive home the massive success that video and video ads have claimed:

- *"More than 4 billion video views take place on Facebook every day.*
- *500 million viewers watch 100 million hours of video content on Facebook daily.*
- *65% of all Facebook video views come from mobile users.*
- *85% of Facebook users watch videos with the sound off.*
- *Native videos get 478% more shares on Facebook than videos from other sources do.*
- *Facebook captured 24.5% of all video ad spending in the US in 2018.*
- *47% of the total campaign value of a Facebook video ad is created in under three seconds.*
- *The cost of Facebook video ads is 10% of the cost of carousel or single image ads."*

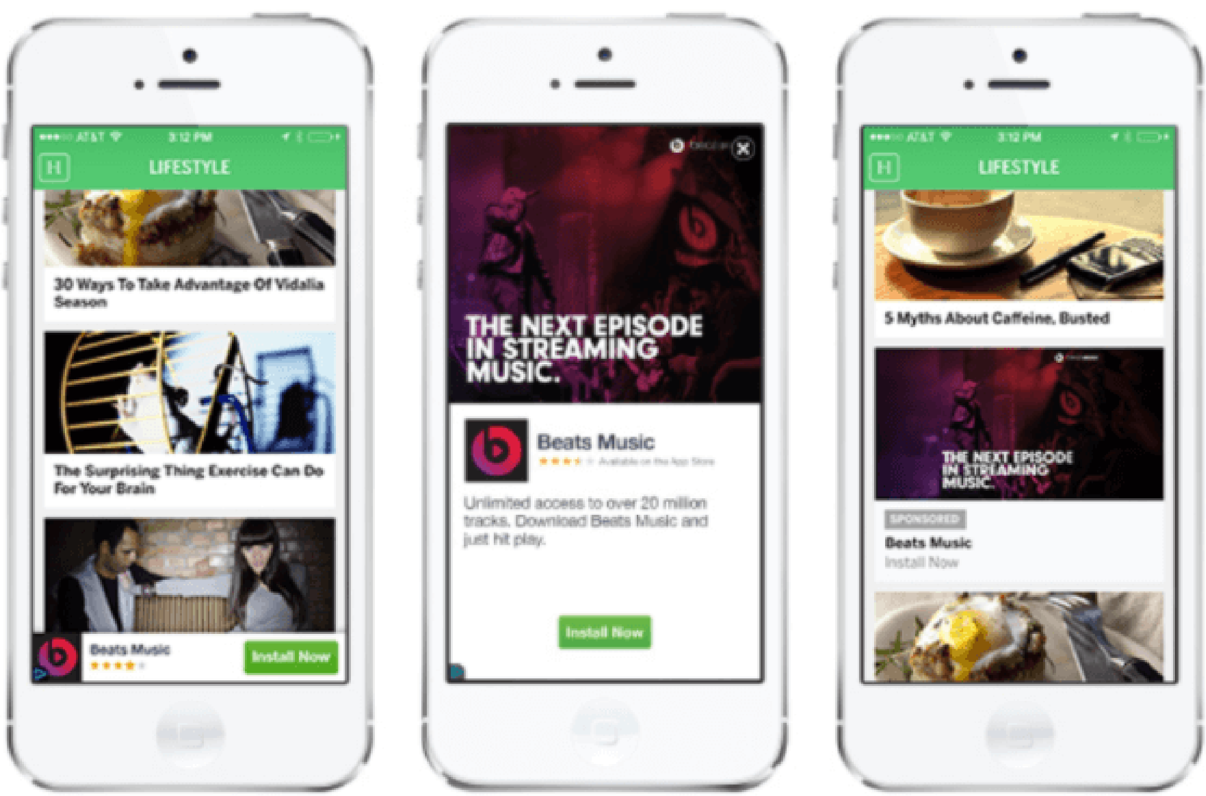
It is not easy to make video ads appear native. All video ads will be perceived as interruptive to varying extent. Video CTRs vary between 0.15% and 0.45% depending on device, length and a few other factors. When embedded within movies, they stick out like a sore thumb. But within short Stories, they appear more native because the Stories in themselves are short updates where the poster and the topic changes every 30 seconds or so.

Display ads

Display ads can come in all sorts and shapes. But I want to talk more about the distinction between native and non-native.

"Native" ads typically translate to better Click Through Rates (CTR) which can lead to better results and return on investment for advertisers. They can also lead to more efficiency (e.g. in terms of revenue per screen space) for the platform. This could be used to keep ad loads low(er) which is better for the customer experience.

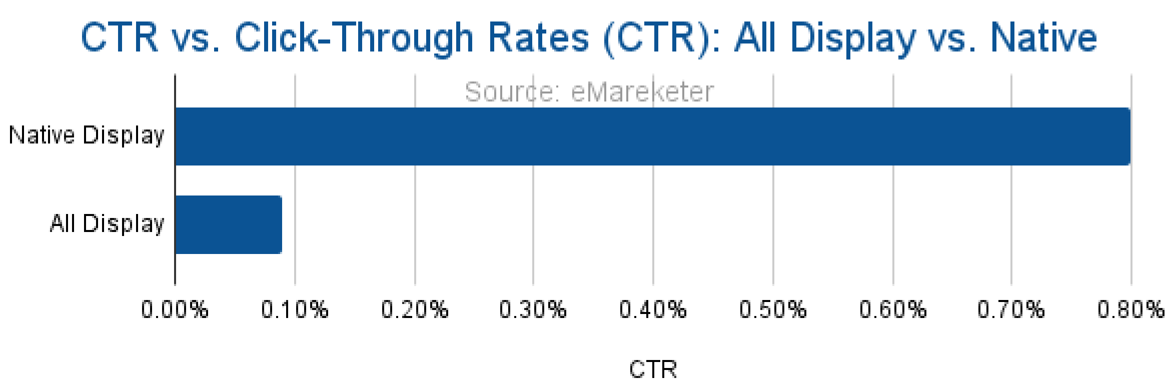
The word "native" is a bit ambiguous. Here is a strict definition. However, I am referring to it similar to the Wikipedia defi "Native advertising is a type of advertising that matches the form and function of the platform upon which it appears." And here is how Facebook distinguishes between them.



Banner Interstitial Native

Look at it commonsensically, the more it fits the form and function of the platform / digital property, the higher the likelihood to achieve your marketing objectives “all else being equal” (sorry, I don’t like to use the “ceteris paribus” figleaf but I think it’s ok to mention in this context).

The below refers to display ads (see page 24 in [the AppNexus report](#)). By [this account](#), display ads included in the content feed would be considered native, whereas ads in the sidebar would be considered non-native display ads. On Facebook, prices vary for ads shown in the News Feed to those shown on the right hand sidebar (on their desktop website).



Digital properties

I know I keep on repeating this point. But if ads are your key revenue source, make sure that you have some chance to insert ads natively into your digital assets and properties before you pour in a lot of resources into developing them (or be clear that they are for other purposes than monetisation).

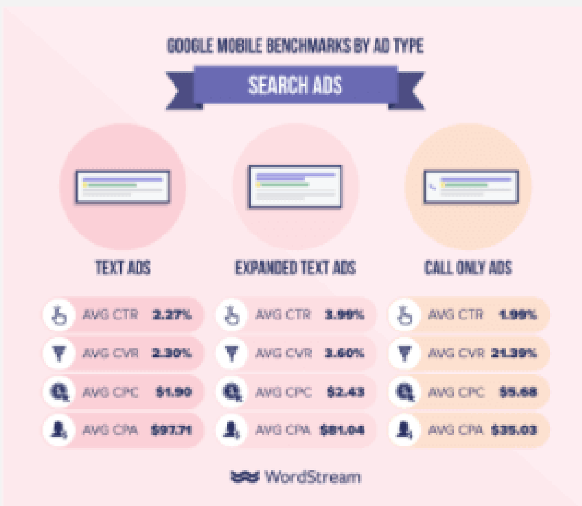
I can absolutely see why capital-poor Snap Inc keeps on investing into Spectacles as a platform for AR/VR based value propositions. They will be an amazing source of ads (image for starters that you will get “product info” - yes, ads - onto your glasses as you approach respective shops). Google and Facebook, of course, pour big money into this as well (but they can afford it).

Google Mobile Benchmarks – by Ad Type

Wordstream have analysed "mobile ads in over 20,000 of our US-based client accounts and benchmarked average click through rate (CTR), average cost per click (CPC), average conversion rate (CVR), and average cost per action (CPA) for the ad types on mobile."

But my focus is not on the actual numbers of benchmarks but rather on the fact that innovators should be aware of these methods. As mentioned previously, these are only metrics from an advertisers' perspective. A holistic approach needs to include customer and the platform metrics into the analysis.

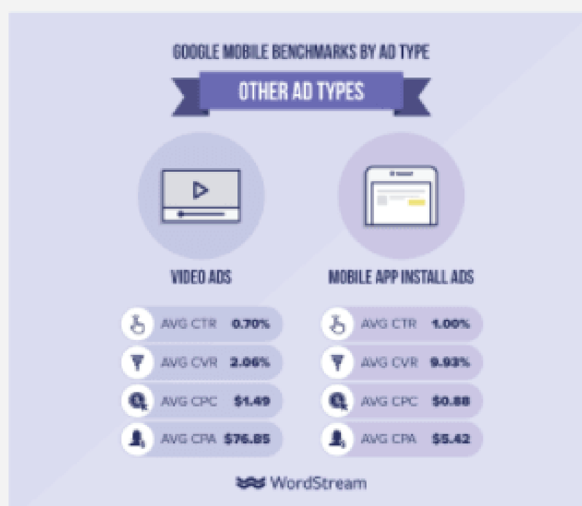
Google Mobile Search Ads



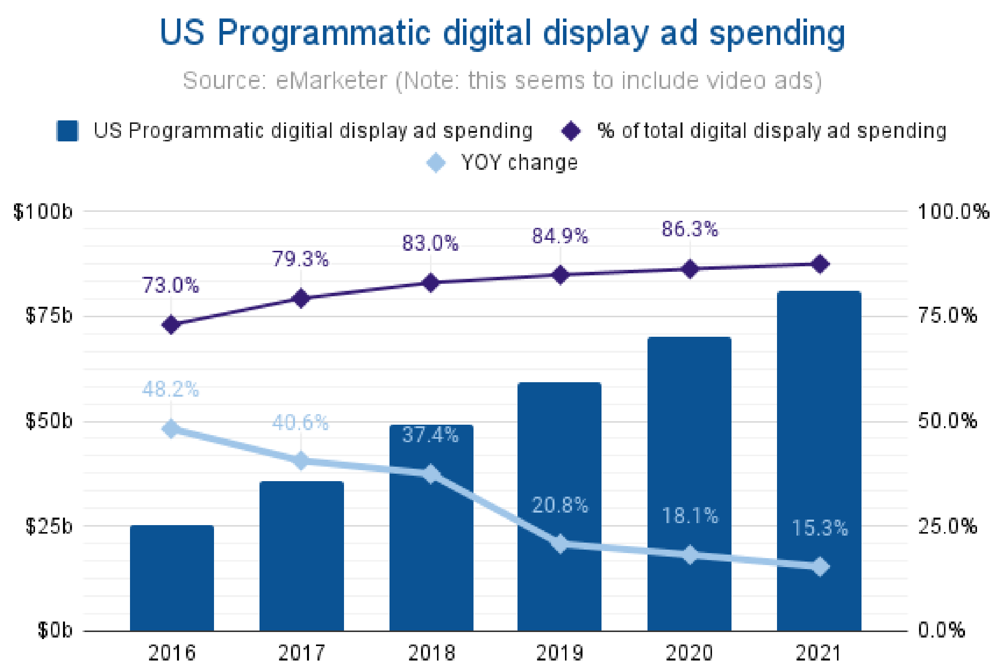
Google Mobile Display Ads

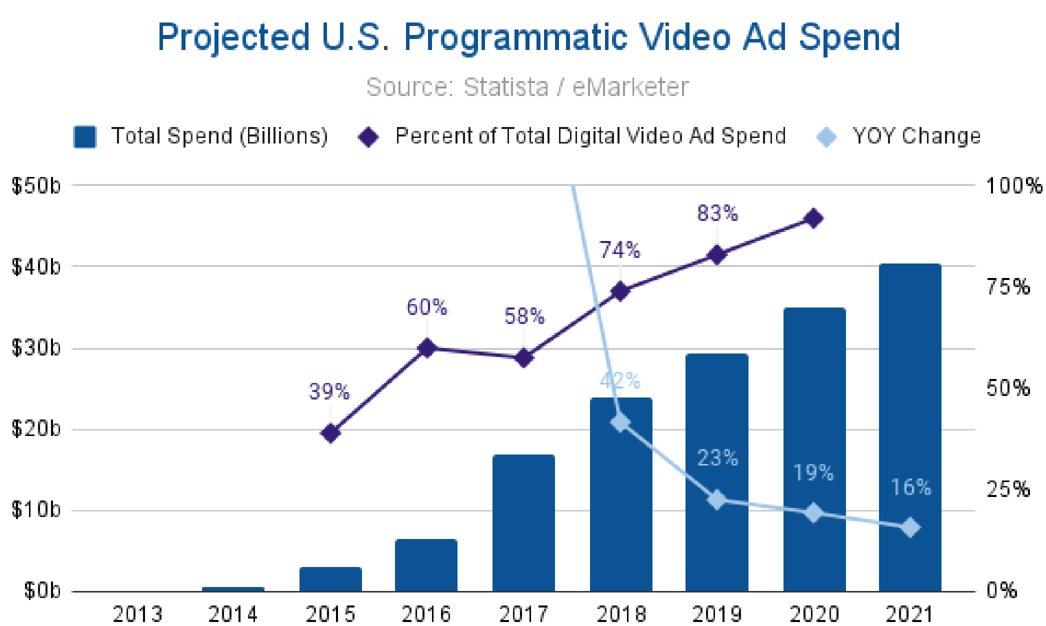
Google Mobile Shopping Ads

Other Mobile Ad Types



Programmatic





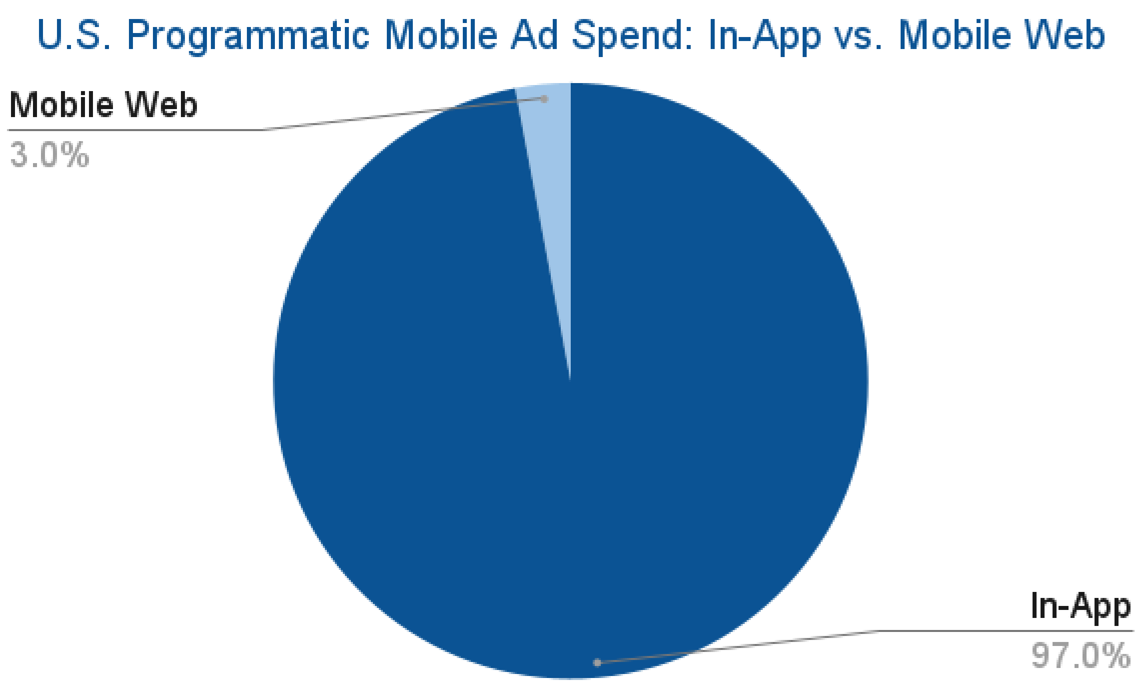
When advertisers use the platform’s business tools, it will mostly end up as a programmatic ad. A majority of ads on Search and Social platforms are therefore programmatic. But there are exceptions.

Large accounts can have particular requirements and the platforms have sales / support teams for these kinds of things. Take Sponsored Lenses on Snapchat where there is a manual (multi-week) process involved.

A lot of this happens within the walls of the platform and is not subject to the privacy concerns that I have shared (though they are still subject to other privacy concerns but just not to the concern of sharing user data with hundreds of unknown entities).

3rd party display ads

Coming back to the placement of ads in the participating advertising spaces of 3rd party providers, this is how it looks. If you ask me, I believe that you may find that the various types of digital TV will be seen on this chart over the next 5 years. By one forecast, that market will be $5.8b in 2023. I assume that it will be 2x-8x of that figure, if not by 2023, then by 2025. (I also think that the TV ad space will not dwindle as is predicted - but what do I know?)



Programmatic = automation = lower cost

It is not surprising that programmatic succeeds as it eliminates a middleman, thus makes advertising cheaper due to a higher degree of automation.

Since the advent of programmatic display over a decade ago, the adtech industry has seen enormous growth, with programmatic now representing the primary method of buying digital media in the U.S, according to eMarketer. In fact, eMarketer estimates US advertisers will spend nearly $60 billion on programmatic display by the end of 2019. By 2021, nearly 88%, or $81.00 billion, of all U.S. digital display ad dollars will transact programmatically, says the research firm.

Duopoly's growing share. By the end of 2019, the combined ad revenues of Facebook and Google's media in the U.S. will account for more than half of advertisers' total budgets for programmatic display, eMarketer predicts. That portion will increase in 2020, with Facebook and Google accounting for nearly 63% of ad spend next year." Marketingland

Business tools

All of this ties back to the in-depth case studies on the platforms that I have covered. See the respective sections called “Business tools”. It covers how the platforms achieve this automation, specifically by allowing to define:

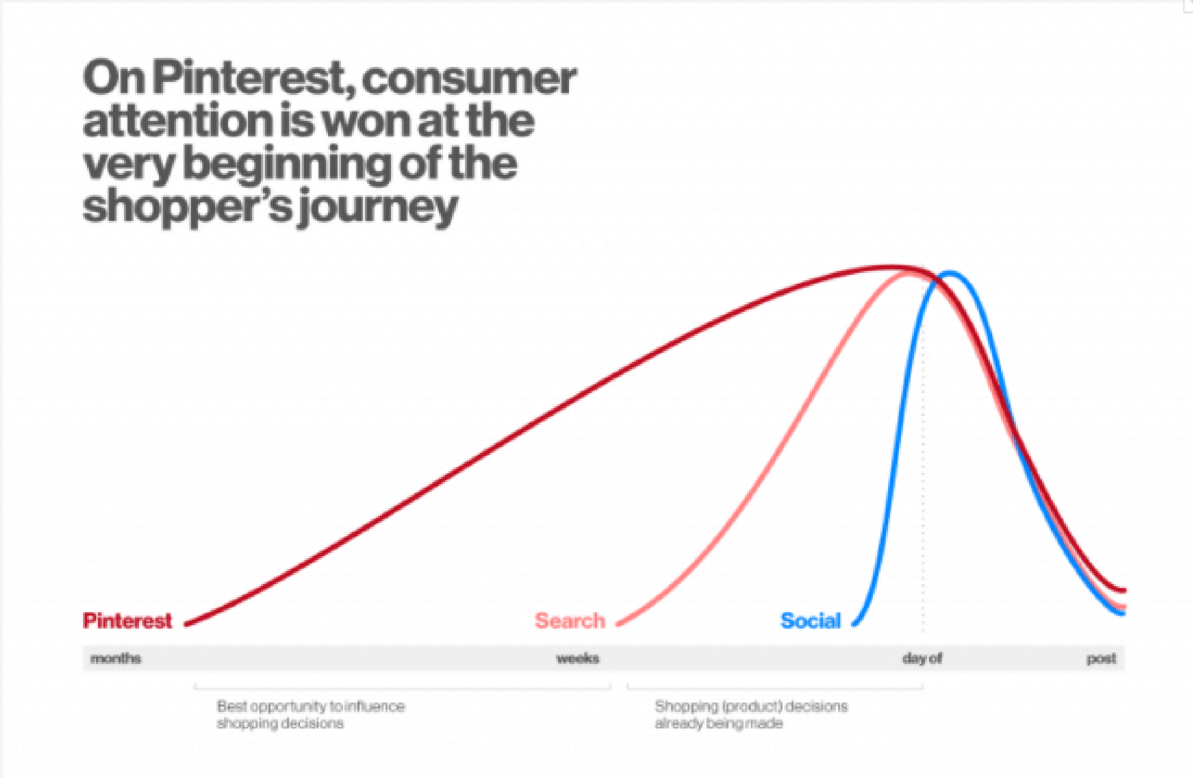
- Marketing objectives (covered next)
- Ad formats / creative types (discussed in this chapter)
- Ad placements (discussed in this chapter and in digital properties)
- Targeting & Measurement (discussed throughout this study)

Marketing objectives

Another important value proposition to advertisers is to support them across various stages of the customer journey. Most platforms will aim to do this across “all” phases, others may aim to support selected phases better than all others:

- Awareness (top-of-funnel)
- Consideration (mid-funnel)
- Conversion (end-of-funnel)

Supporting the phases of the funnel (example Pinterest)



Source: Hootsuite

"On Pinterest, businesses of all sizes and from many industries can achieve a diverse set of goals, from building brand awareness, to increasing online traffic, to driving sales. Our platform isn't limited to just advertisers with "top-of-funnel" goals or to those just seeking conversions. The natural progression of Pinners' discovery journey—from inspiration, to planning, to action—takes them down the full purchasing funnel, and advertisers can provide value to them every step of the way." Pinterest, IPO filing

The illustration shows Hootsuite's view on how Pinterest compares to Search and Social in their positioning on the customer journey (which corresponds to the marketing funnel).

Note that nowadays the customer's journey is seen as far more complex than the decades-old simple funnel model.

Different platforms compare differently on this dimension. If you look at the Business Tools section across our platforms, you will see that they have a great focus on mid-funnel.

All funnel phases have their place and value. But the most immediate return on ad investment can come from end-of-funnel ads. And there we meet a heavy-weight.

Amazon

The obvious thought now is that there are specialised businesses who will compete in this space using their digital and real assets. For the general ecommerce space, this is Amazon. Now that they have entered the advertising market, they are surely a force to be reckoned with.

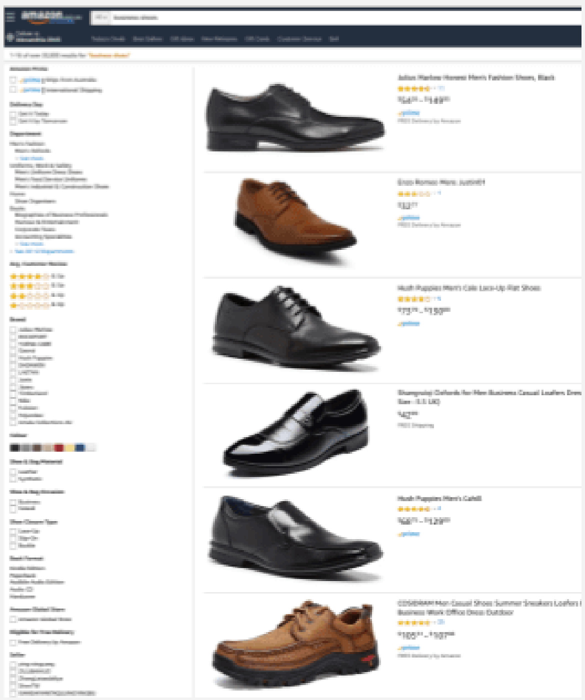
Social and Search platforms will need to find ways to compete especially in the end-of-funnel phase with Amazon. It then comes back to the digital properties. But here, we are also clear that it will require detailed product (description and inventory) data to provide a good value proposition to the (potential) customer, i.e. the user, and the business/advertiser.

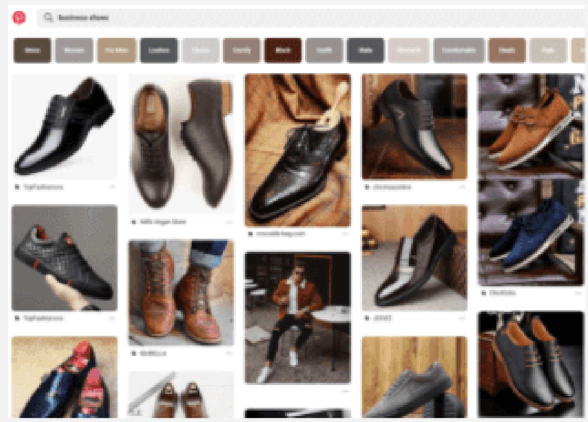
Here is a brief comparison of Pinterest product exploration options with Amazon and Google Shopping.

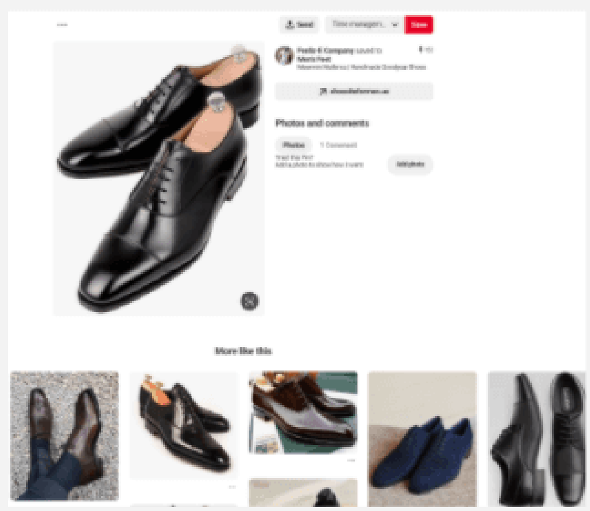
Digital properties supporting marketing objectives

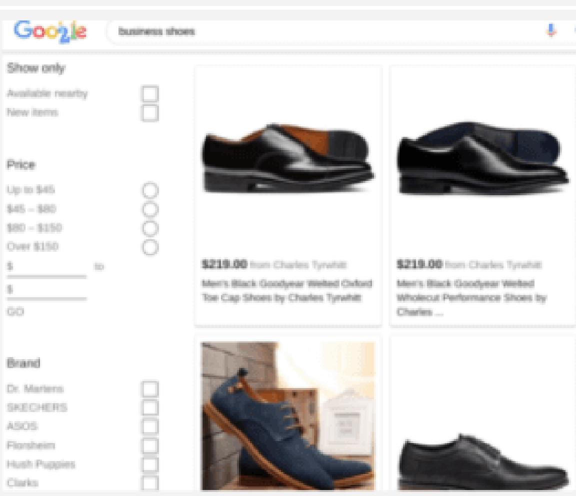
On the right, you see Amazon. Note all the filter options that it offers for a simple product like a shoe, let alone what it offers for more complex products like electronics (think laptop or mobile phone). Google Shopping has simpler option filters.

Pinterest (right hand side) also has some filters mainly based on image recognition. And they are building ecommerce and inventory APIs. However, there are intrinsic concerns of data consistency because the products are not sold through their platform.



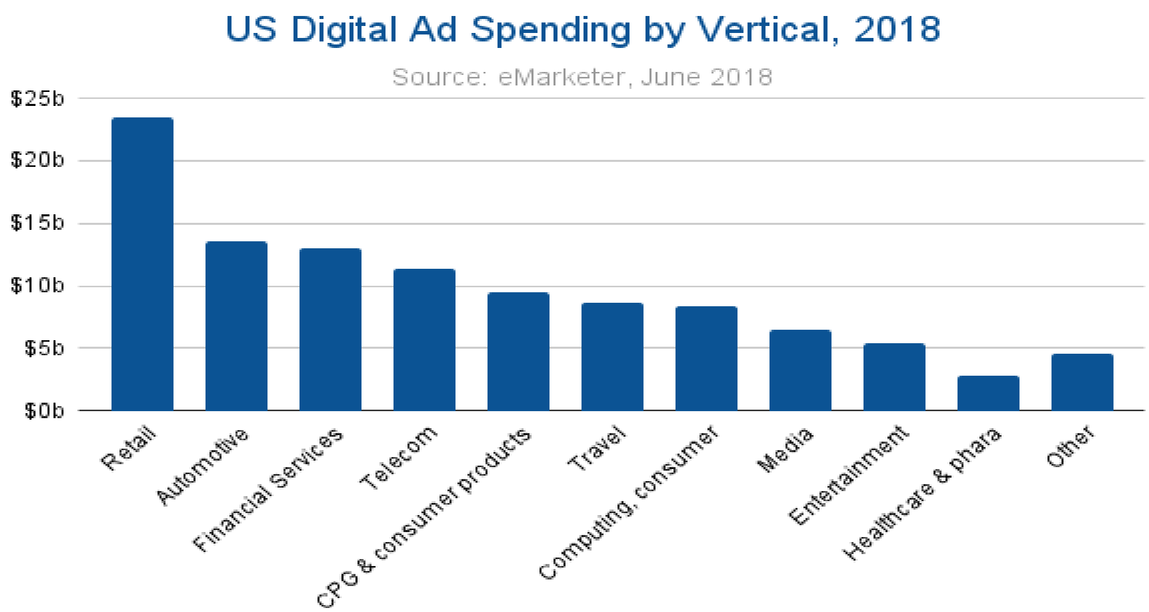






Verticals

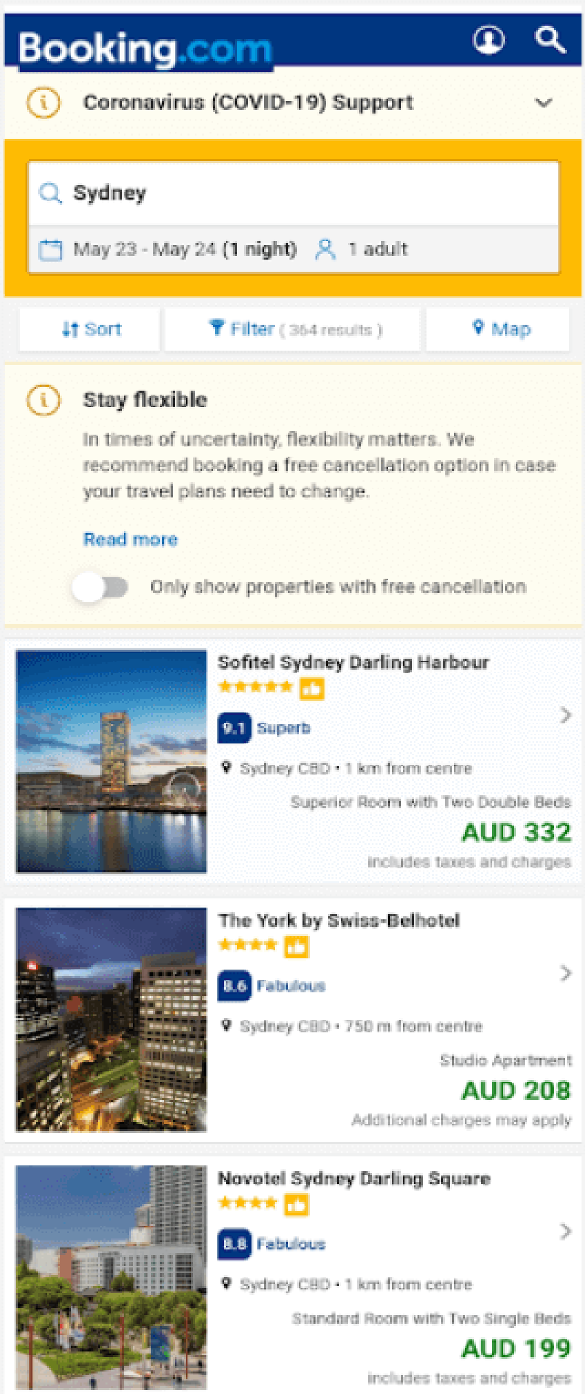
And then there is the opportunity to focus the platform on a number of verticals. It can be a way to find an initial niche to expand from or long-term positioning. In the latter case, the opportunity is to build the underlying data infrastructure as well as super-optimised digital properties.

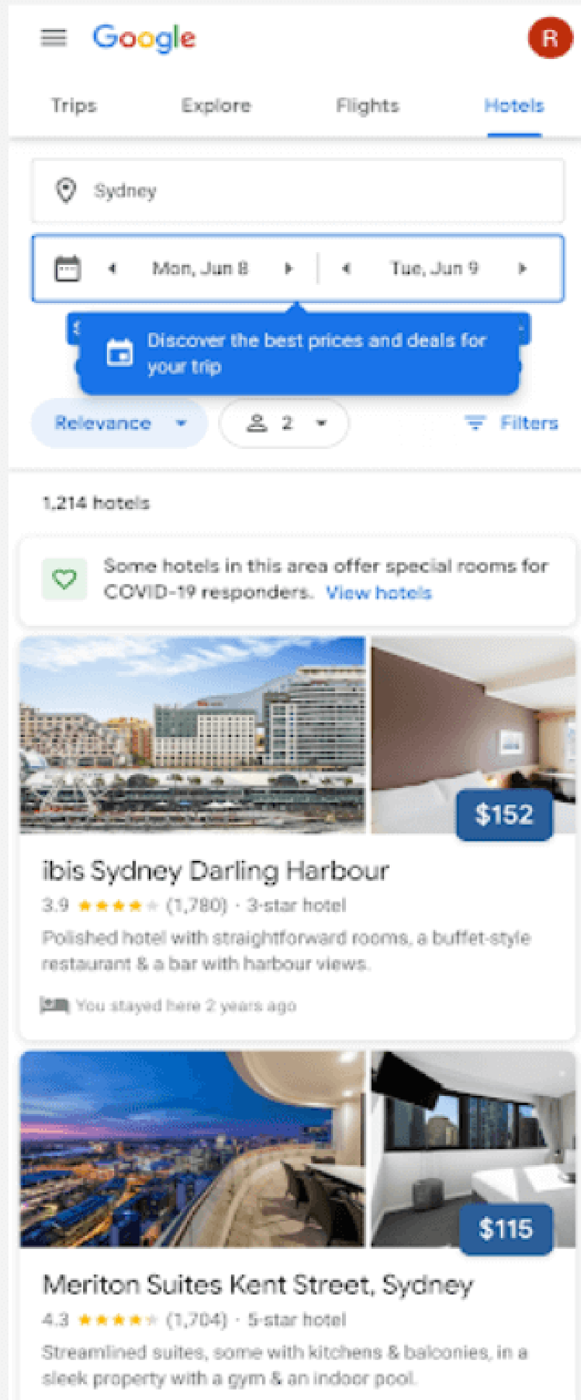


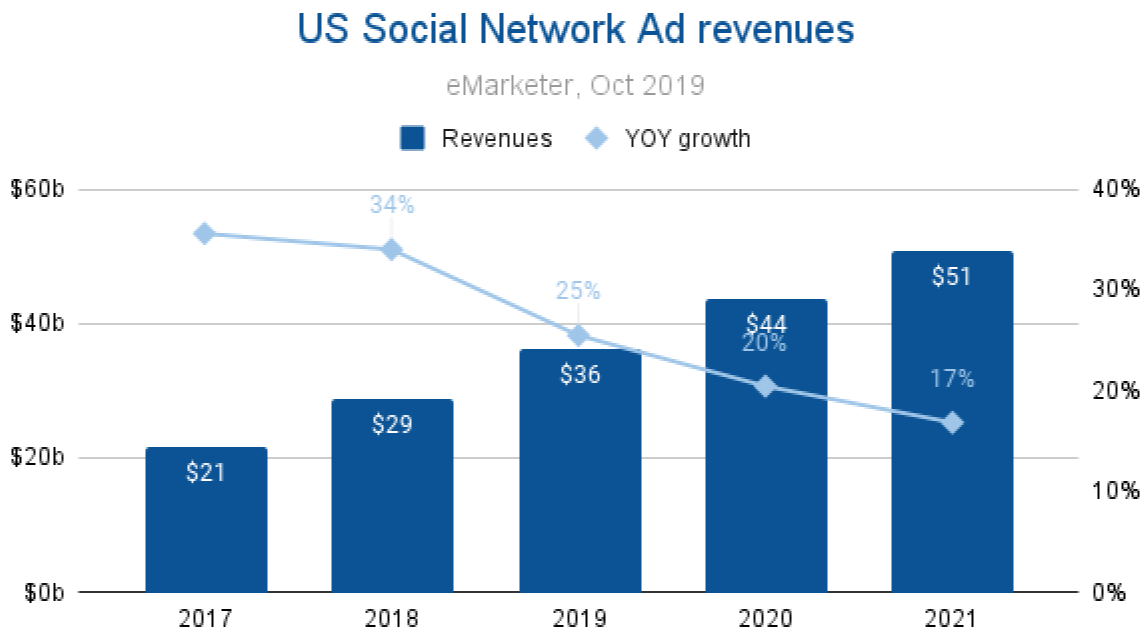
Pinterest - targeted opportunities by vertical(s) and source (IPO doc)	Opp size
Consumer packaged goods ("CPG") and retail - digital	**$64b**
Travel, technology (including computing, consumer electronics and telecom), automotive, media & entertainment and financial services - digital	**$114b**
US digital advertising (total)	**$166b** ['22, F]
Shift from offline (esp print, direct mail, TV, radio) to online - global	**$378b** [current]
Search advertising	**$118b→$169b** ['18] ['22, F]

Vertical Search Engines

Booking.com is a "vertical search engine" (Google terminology) specialised on the travel vertical. Their entire business model is focussed on this but Google has closed the gap.






US Social Network Ad revenues
eMarketer, Oct 2019
Revenues
YOY growth
$60b
$40b
$20b
$0b
40%
30%
20%
10%
0%
34%
25%
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17%
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$51
2017
2018
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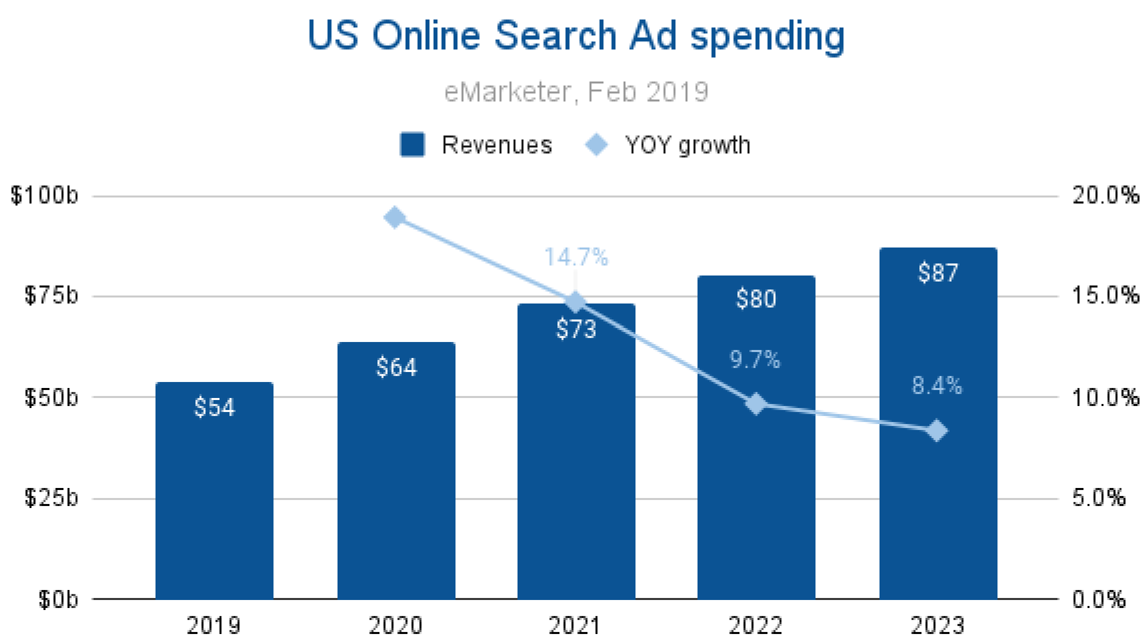
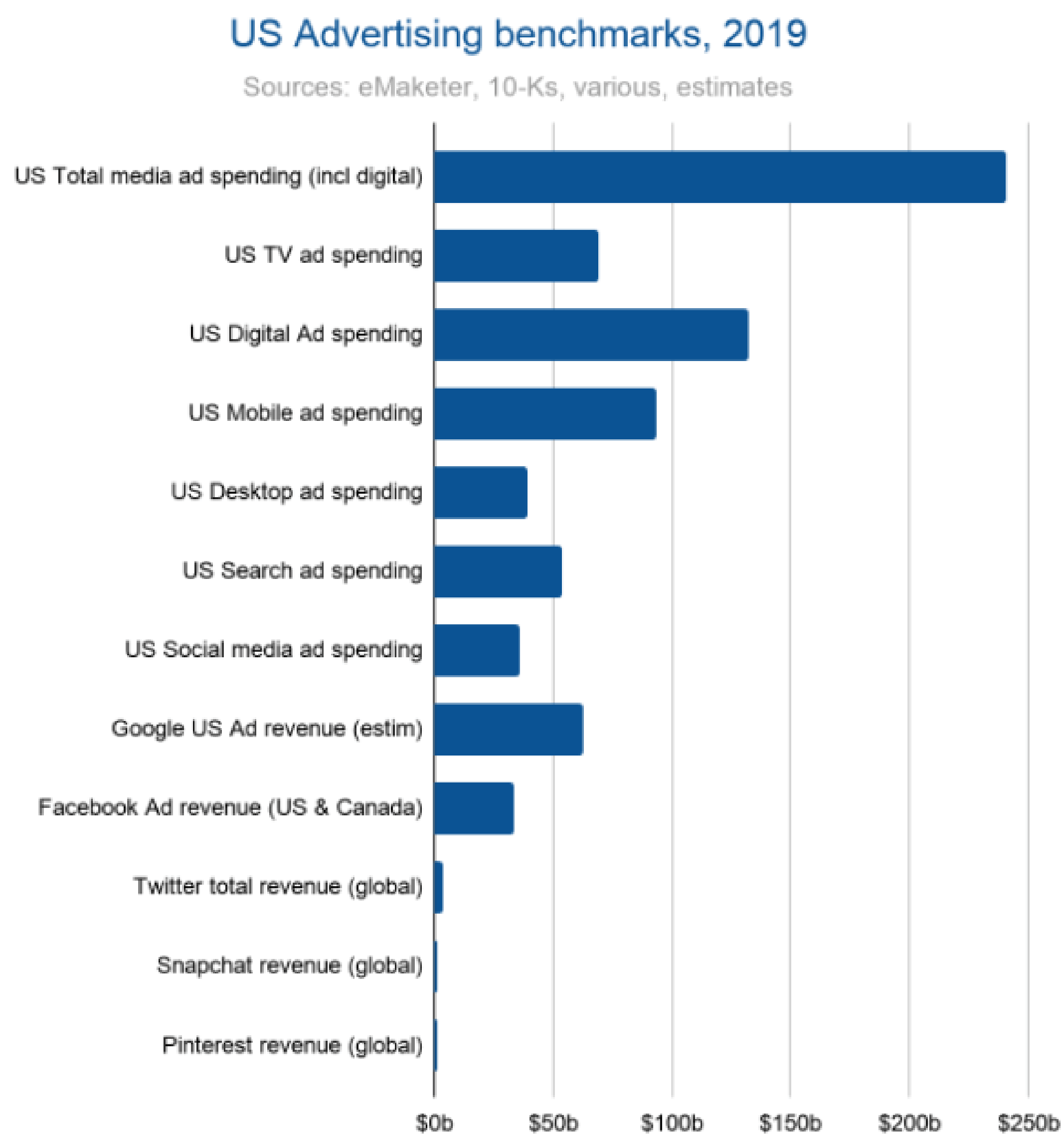
2020
2021

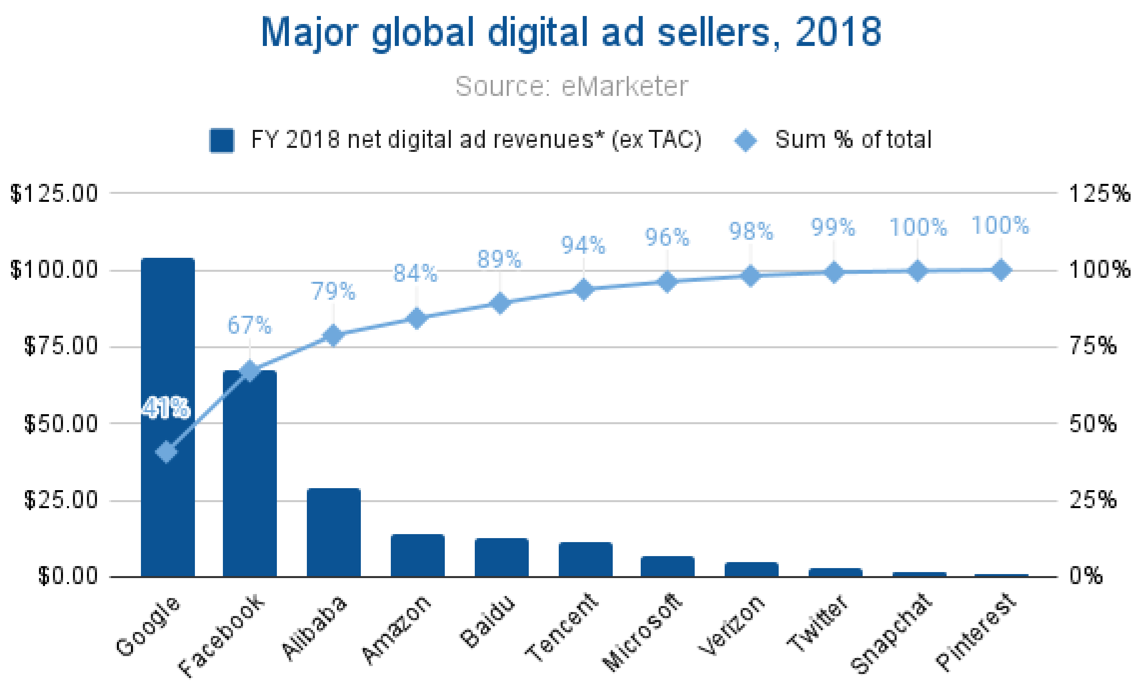

US Online Search Ad spending
eMarketer, Feb 2019
Revenues
YOY growth
$100b
$75b
$50b
$25b
$0b
20.0%
15.0%
10.0%
5.0%
0.0%
14.7%
9.7%
8.4%
$54
$64
$73
$80
$87
2019
2020
2021
2022
2023

Ad market benchmarks

Here is a comparison of selected data to give you a feel for the respective market sizes and how the US ad revenue of our platforms compare. These numbers are notional and the US market only (exception are the revenues of the smaller platforms where I have used the global revenue).



Market share



I am repeating this chart now that we have gained a better feeling for the numbers. These now include global ad revenues for the financial year 2018 (i.e. excludes non-advertising revenues). It probably shows best the difference between the big players and the “small” players (which also have hundreds of millions of users).

I hope you have enjoyed the vast real-world knowledge shared in this resource. We have seen in great detail what it means to divide markets into submarkets. Moreover we have learned how the big players very concretely develop their apps to generate revenues from specifically targeted submarkets in online advertising. We have moved from a more broad and fuzzy economic viewpoint on markets to a very specific financial definition of submarkets. This gave us a crystal clear understanding of how the development efforts of these companies address revenue opportunity in selected submarkets.