GOOGLE SEARCH ADVERTISING

Team 60

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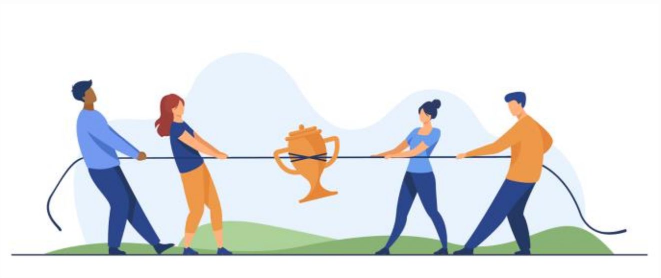
Executive Summary

DIAGNOSIS

Increased Rivalry



Google faces rising competition from Amazon and social media platforms as advertisers gain more options and switching costs decrease.

ANALYSIS

Rising Buyer Power

Google's search ad dominance is challenged by increasing competition, rising advertiser flexibility, and stricter data regulations.

RECOMMENDATION

Multichannel Integration

Google should simplify multichannel campaigns, develop a super app, offer exclusive partnerships, provide cross-platform analytics, and enhance price comparison features to stay competitive.

Porter's Five Forces Analysis for Google Search Advertisement

Threat of Entrants

1. **High Barrier of entry:** New entrants struggle to attract users, collect data, and build technology infrastructures to optimize and customize search results and ad targeting.
2. **Technology Infrastructure:** New entrants must have great capital investment to build extensive infrastructure, like servers, Internet center, and datasets. They also need to hire great talents who build machine learning models, AI, write algorithms to ensure the quality and effectiveness of targeted advertising.
3. **User base:** It's difficult for new entrants to convince advertisers that they have a great number of users and will generate enough traffic.

Supplier Power

Supplier Power is very **low** for Google. Google is highly **vertically integrated** and uses its in-house technology and infrastructures. It also has its own algorithms and models to conduct data analytics and user analysis.

Google's supplier can be its **employees**, including engineers, data scientists, and researchers. These people need to keep innovating and developing new technologies to help Google maintain its leadership in the industry.

Industry Rivalry

Overall, Google continues to dominate the search advertising industry, with a 51.9% share in US Search Ad Industry in 2024. But in recently years (starting from 2021), **Amazon** is becoming a big threat, and it has earned 24% market share in 2024. People search on Amazon with the intention to buy specific products, so retailers and e-commerce advertisers prefer Amazon over Google. Amazon also has first-hand data about customers' buying behavior, which is a great competitive advantage.

Microsoft captures 4.8% share of revenue in US Search Ad Industry in 2024 using its Bing search engine. And **Yelp** and **Yahoo** follows with a 1% market share.

Buyer Power

1. **High Switching Cost:** Most advertisers have optimized their ads based on Google's format and ecosystem, and their businesses may have relied heavily on the traffic brought by Google. Also, Google has gathered a lot of data and optimized its algorithms, so Google has become very reliable and efficient. Switching to another platform is very costly because advertisers need to redesign and adapt their ads and prepare for the loss of traffic before the new ads is optimized.
2. **Brand Loyalty:** Google has established itself as almost a default option for most users when they want to search. People are so used to Google that they tend to keep using it, almost like a routine. More importantly, Google has advanced analytic tools that is helpful for advertisers to enhance and optimize their ads.

Threat of Substitutes

1. **Substitutes** are alternative advertising channels, including traditional media (TV, newspaper, posters) and other digital advertising platforms like **social media** (Facebook, Instagram, LinkedIn, TikTok); Competitors like Amazon, Microsoft Bing Ads, and Yahoo also offer search advertising service.
2. **Complements** include the entire Google ecosystem. For example, YouTube is a great channel to show clips of video ads. Google Shopping is a reaction to Amazon that focuses on retailing and product-focus ads. Google Reviews is relied on by many consumers as a trustworthy source of review before they place orders.

Analytics and Its Impact on the Five Forces in Google Search Advertisement

Porter's Five Forces	Google's Use of Analytics	Impacts on the Forces	Impacts Illustrated by Example
Rivalry Among Competitors	▪ Google leverages **machine learning** to deliver **real-time, personalized** ads based on user behavior. ▪ Advanced data analytics ensure precise ad placements, boosting advertiser **ROI**.	▪ Google's vast data gives it a competitive edge over rivals like **Amazon** and **Microsoft Bing**. ▪ Google can offer superior ad performance at a **lower cost**, maintaining **market leadership**.	Amazon's product search ads challenge Google, but Google's ad targeting remains more **cost-effective** and **accurate**.
Threat of New Entrants	▪ High entry barriers due to Google's use of **AI**, **real-time bidding**, and **ad targeting** algorithms. ▪ New entrants need access to massive data sets and machine learning capabilities to compete.	▪ New players face **difficulty replicating** Google's scale, making it challenging to compete on cost and ad efficiency. ▪ Google's established infrastructure and economies of scale provide it with a significant **cost advantage**.	Google's infrastructure has taken years to develop, making it **nearly impossible for new entrants to compete** at similar levels.
Buyer Power	▪ Google provides advertisers with detailed reports on **user behavior**, **search trends**, and **conversions**. ▪ Automated bidding strategies allow advertisers to **maximize ad spend efficiency** in real-time.	▪ Google's analytics **increase buyer control** over ad campaigns, yet advertisers become highly reliant on its tools. ▪ **High switching costs** discourage advertisers from moving to other platforms due to Google's superior performance.	Google's **Smart Bidding** feature uses machine learning to optimize for conversions, making Google indispensable to advertisers.
Supplier Power	▪ Google's **vertical integration** minimizes reliance on external data providers and publishers. ▪ Advanced analytics allow Google to **optimize ad placements** across its vast publisher network.	▪ Google controls most of its infrastructure, **reducing the power of suppliers in the ad ecosystem**. ▪ Analytics ensure that ads are placed on the most cost-effective platforms, **limiting supplier leverage**.	Google's control over its ad network **means external suppliers have minimal influence** over ad placements.
Threat of Substitutes	▪ Google integrates ads across platforms like **YouTube**, **Google Shopping**, and **Google Maps**, creating a seamless multi-platform solution. ▪ Analytics ensure **consistent targeting** and personalized ad experiences across all services.	▪ Advertisers are **less likely to turn to traditional platforms** (TV, print) or social media (Facebook Ads) due to Google's superior targeting. ▪ Google's **cross-platform ad** offerings make it difficult for substitutes to provide the same personalized experience.	Traditional ads and social media platforms cannot match Google's personalized, data-driven approach to **cross-platform advertising**.

Google's Industry Overview

Political	Economic	Social	Technological	Environmental	Legal
• Increasing antitrust scrutiny, particularly from the U.S. and Europe • Introduction of Digital Services Taxes (DST) in countries like the UK and France targeting big tech companies	• Projected growth at a 13.3% CAGR from 2017 to 2028 • In 2023, the Americas lead with US$133.2 billion, and the U.S. is the top country with US$118.2 billion	• Search advertising is becoming more costly, with Cost-per-click (CPC) steadily rising as Click-through Rate (CTR) declines • Heightened privacy concerns, with consumers demanding more transparency regarding data usage	• Development of internet infrastructure and decreasing prices of internet-enabled devices • Mobile ad spending rose to 71% in 2023, while desktop's share consistently declined	• The pandemic has accelerated digital adoption • Advertisers are aligning campaigns with eco-conscious messaging due to rising consumer demand for sustainability	• Data privacy regulations have tightened globally, such as Europe's GDPR and the U.S.'s CCPA • Targets of antitrust and competition lawsuits globally due to monopolistic practices

Search Advertising Industry:

- **Digital expansion:** Accelerating digital transformation continues to drive strong industry growth.
- **Mobile-first shift:** The rise of mobile and voice search is fueling further growth in the sector.
- **Competitive pressure:** Increasing advertiser competition is pushing up CPC, contributing to market growth.
- **Privacy regulations:** Stricter data laws are shaping more ethical and sustainable growth strategies.
- **Sustainability focus:** Growing consumer demand for eco-conscious advertising is boosting industry momentum.

Resource and Capabilities Analysis for Google Search Advertisement

VALUE

AI & ML Capabilities: Google **AdRank** and **Smart Bidding** rely on machine learning to deliver value using optimized ad placements and conversions. This automation saves advertisers money by efficiently managing bid strategies, leading to better ROI.
Vast User Data: Google collects a huge amount of search and behavioral data across its platforms, enabling highly detailed intent-driven advertising. This increases predictability in the PPC model, boosting click-through rates and conversions—benefiting advertisers.
Cross-platform Integration: Integration with platforms like YouTube, Maps, and Google Shopping extends ad visibility across multiple channels, helping advertisers reach users throughout their purchase journey.
Customization and Responsiveness: Google's responsive search ads adapt to user queries in real time, boosting click-through rates.
Industry-specific solutions: Google offers tailored ad formats for industries like retail (Google Shopping), local services (Google Maps ads), and video ads (YouTube), providing customized advertising solutions for businesses.

RARITY

Market Share Power: Google commands **90%** of all global searches, effectively becoming the default for intent-driven ads. Competitors like Bing, Yahoo, and Amazon, although in the market, are only a fraction of Google's scale.
Proprietary AI Algorithms: Google uses advanced AI-powered algorithms like **RankBrain** and **BERT**, allowing them to better understand search intent and enable precise ad targeting, which competitors like Facebook or Instagram cannot match.
First-mover Advantage in AI-powered Advertising: Google was one of the first companies to integrate **AI and machine learning** into its ad platform. It pioneered automated bidding strategies, ad rank systems, and other AI tools that are still unmatched by most competitors.

INIMITABILITY

Sophisticated Search Infrastructure: Google's search infrastructure, refined over decades of research, is highly advanced and cost-prohibitive for rivals to replicate. The continuous refinement of algorithms like **AdRank** makes it even harder for competitors to catch up.
Path dependency and data scale: The longer Google operates, the more data it collects, improving its ad targeting. This creates a **path dependency** where Google's competitive advantage grows as it collects more data, making it harder for competitors to close the gap.
Strong partnerships with global publishers: Google's **Google Display Network** (GDN) is one of the largest ad networks globally, allowing advertisers to reach millions of websites and apps. These long-standing partnerships are difficult to replicate and strengthen Google's position.

NON-SUBSTITUTEABILIY

Comprehensive Data Analytics: Google's advanced data analytics tools, such as **Analytics and Attribution**, offer granular insights into user behavior that rivals like Facebook or Amazon struggle to match while maintaining compliance.
High Switching Costs: Google's control of search intent data, targeting algorithms, and cross-platform reach creates high switching costs for businesses.
Regulatory advantages in data privacy: Google's massive data collection efforts have led it to navigate numerous regulatory challenges, including GDPR compliance. While some platforms face increasing restrictions on data collection, Google's **established processes** give it a regulatory edge, reducing the risk of disruption from changing privacy laws.

MVPs

Vast Access to User Data	Global Market Dominance	Cross-Platform Integration	Advanced Analytics
Resources	**Capabilities**		

Positioning Analysis of Google Search Ads (vs. Social Media)

Google's Core Positioning in Search Ads

Intent-driven Advertising: Google leverages intent data by capturing users actively searching for information, making its ads highly relevant to people with strong purchase intent. This results in higher conversion rates compared to engagement-based ads on social media platforms.

Stat: Google holds a dominant 92.1% share of the global search engine market, far surpassing competitors like Bing and Yahoo.

Cross-platform Integration: Google's ads are integrated across multiple platforms like YouTube, Google Maps, Gmail, and Google Shopping. This allows advertisers to reach users at different touchpoints, enhancing brand visibility throughout the consumer journey.

Example: A retail brand can target users with Google Shopping ads during a search, retarget them with display ads on YouTube, and show location-based ads on Google Maps.

Advanced AI-Driven Tools: Google's tools, like Smart Bidding and AdRank, use machine learning to optimize ad performance in real-time by adjusting bids and maximizing conversions based on user data. This automation helps advertisers reduce manual work while ensuring cost-effective ad campaigns.

Competition from Social Media Platforms

Engagement-driven Advertising: Social media platforms like Facebook, Instagram, and TikTok excel at driving engagement with visually interactive ad formats, such as videos, stories, and carousels. These formats encourage user interaction, boosting brand awareness and engagement.

Stat: Video ads on social media increase purchase intent by 34%, showing the effectiveness of engagement-based content.

Lower CPC on Social Media:

On platforms like Facebook and Instagram, advertisers benefit from lower cost-per-click (CPC), making them more accessible for smaller businesses or those focusing on brand awareness rather than direct conversions.

Stat: Facebook's average CPC ranges between $0.50 and $2.00, significantly lower than Google's, making it a cost-effective option for brands.

Comparative Metrics and Future Trends for Google Search Advertisement

Cost-Effectiveness & ROI Comparison

Google Search Ads: While Google's CPC is generally higher, it achieves better conversion rates due to intent-driven searches, leading to higher Return on Investment (ROI) for businesses focused on lead generation and direct sales.
Stat: Google's average conversion rate across industries is 3.75%, whereas Facebook's is around 1.90%.
Social Media Ads: Social platforms work well for raising brand awareness and engaging wider audiences. However, users on these platforms are often in browsing mode, resulting in lower conversion rates.
Stat: Social media ads tend to have conversion rates closer to 1.9%, making them less effective for direct response but still excellent for engagement.

Data Privacy and Regulation

Google's Data Privacy Edge: Google's compliance with standards like GDPR and its ability to target users based on search intent (instead of behavior) provide a strong advantage in terms of data privacy. This has allowed Google to maintain advertiser trust even as regulations become stricter.
Social Media Challenges: Platforms like Facebook and Instagram have faced multiple data privacy issues, particularly after events like the Cambridge Analytica scandal. Coupled with Apple's App Tracking Transparency (ATT), this has reduced their ability to deliver highly targeted ads.
Stat: Facebook experienced a $10 billion drop in ad revenue following the implementation of ATT.

Future Trends and Innovations

AI and Automation at Google: Google continues to invest in AI technologies like automated bidding and responsive search ads, ensuring it remains the leading platform for cost-effective, data-driven advertising campaigns.
Social Media's Focus on Video: Platforms like TikTok and Instagram are focusing heavily on short-form video content, particularly targeting younger audiences. Video ads are expected to keep growing, challenging YouTube for user engagement.
Stat: 65% of social media users prefer video content over other ad formats.

Google Search Ads: Diagnosis of Strategic Challenges

Market Position:
Google is the most popular search engine worldwide, having approximately **83% of the market share** of desktop search engines in 2024 (Statista, 2024).
Advertisers use Google's search ads to display themselves prominently in search results to gain visibility over competitors, and this feature contributed **56.9% of its total revenue** in 2023 (Oberlo).

Key Issue Identified:
Despite Google's success, we have identified a **prominent issue** in our industry analysis: Google is facing increasing **rivalry** in the broader digital advertising industry, particularly from **social media platforms** and **Amazon**, as well as the increasing **buyer power** of advertisers.

Competition in Digital Advertising:
Competitors are divided into three categories:
1. **Other Search Engines**
2. **E-commerce Search Engines (e.g., Amazon)**
3. **Social Media Platforms (e.g., Facebook, Instagram, TikTok)**

Amazon has emerged as a major competitor, leveraging its e-commerce platform for targeted product-based ads. Social media platforms provide advertisers with **precise ad targeting** based on **user behavior** and **social interactions**, allowing businesses to diversify their ad spend.

Increasing Buyer Power:
Advertisers' buyer power is increasing as **switching costs** decrease. Advertisers are no longer as reliant on Google, with more options available to spread their ad budgets across **multiple platforms**, reducing dependence on Google's ecosystem.

Industry Analysis Insights (Porter's 5 Forces):
In our Industry Analysis using the **Porter's Five Forces** framework, we identified:
High Buyer Power: Buyers can easily switch between platforms, especially those with large advertising budgets.
High Threat of Substitutes: Alternative channels such as **social media platforms** attract potential buyers with high web traffic.
High Industry Rivalry: Low barriers to entry for tech companies and the growth of **alternative advertising channels** increase competition.

Value-Chain Analysis of Google versus Amazon

Google's Dominance in the search advertising market is being challenged by **Amazon**.
From 2023 to 2024, Amazon's search ad revenue share increased from **22.5% to 24%**, while Google's share decreased from **53.9% to 51.9%**.

1. **Advertiser Requirements**
   Google: Low barrier, only a Google Ads account is required.
   Amazon: Stricter barriers, requiring **seller accounts** and **Brand Registry** for sponsored brands.

2. **Ad Cost**
   Google: No minimum bid or budget required.
   Amazon: Minimum ad spends required:
   Product Display Ads, Sponsored Brands – minimum **$100**.
   For non-sellers, Display Ads – minimum **$35,000**.

METRIC	AMAZON	GOOGLE	
Average CPC	$0.96	$2.69 (search ads)	$0.63 (display ads)
Average Conversion Rate	10%	3.75% (search ads)	0.77% (display ads)

3. **Tools & Analytics**
   Amazon: Focuses on **e-commerce metrics** like product sales, ad performance, and ROI.
   Google: Comprehensive insights through **Google Analytics** (traffic, user behaviors, cross-platform data).

4. **Ad Format & Placement**
   Amazon: Focuses on product-driven formats (Product Display Ads, Sponsored Brands), optimized for **conversion**.
   Google: Offers various ad formats (text, image, video, App, call-only ads) across different platforms.

Value-Chain Analysis of Google versus Amazon

5. **Audience Reach**
   Amazon: Ads are limited to its platform, effective for **e-commerce**.
   Google: Broader reach across **Gmail, Maps, YouTube**, making it ideal for a wider variety of advertisers.

6. **Ad Performance**
   Amazon: Average conversion rate of **10%**, CPC of **$0.96**.
   Google: Average conversion rate of **3.75%**, CPC of **$2.69**.

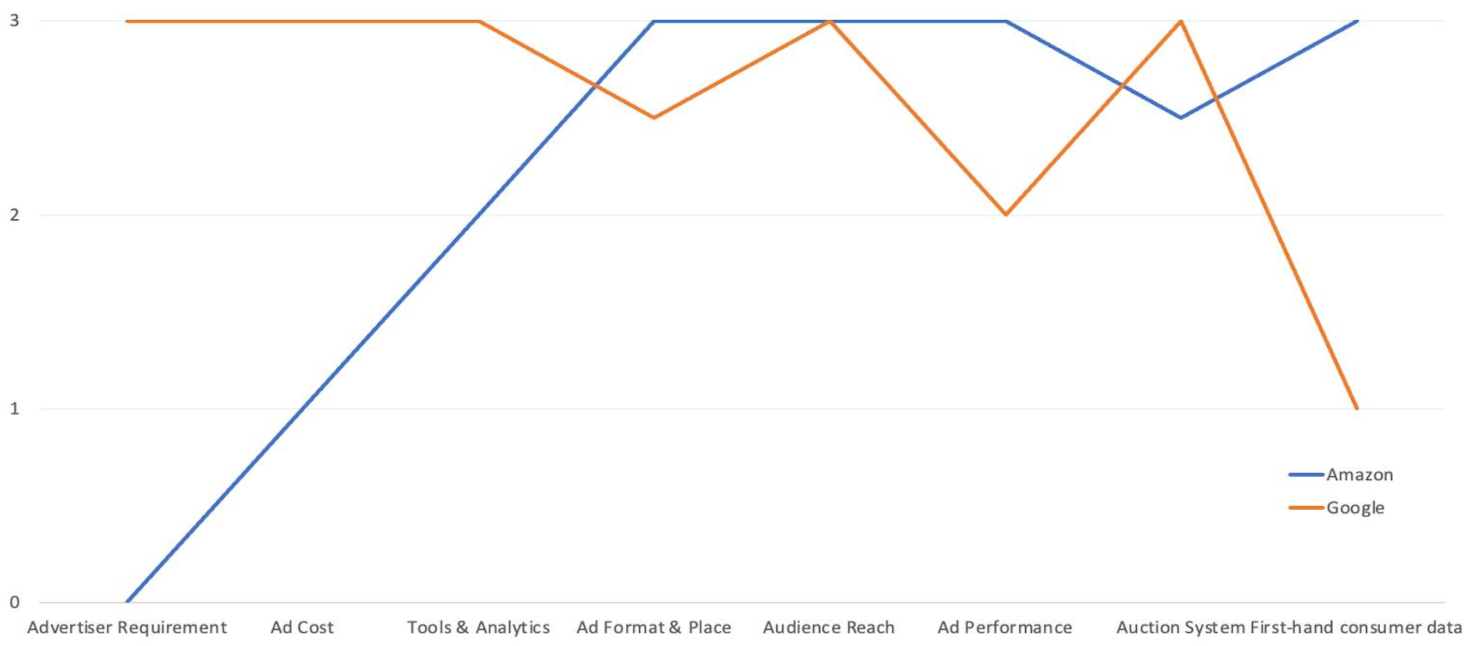


Fig: Search Advertisement Value Curve

7. **Auction System**
   Amazon: Simpler system, focused on **conversion rates**. Ads placed on search results and product pages.
   Google: More complex **AdRank** system that accounts for **bid amount, ad quality, and relevance**, adaptable for multiple objectives (brand awareness, traffic, conversions).

8. **First-hand Consumer Data**
   Amazon: Direct access to consumers' **shopping habits** and purchase history. Superior in **product-focused ads**.
   Google: Lacks detailed product-focused data but offers broader **user behavioral insights**.

Vulnerability to Multihoming of Google Search Advertisement

Intense Competition	Rise of Specialized Platforms	Buyer Power and Low Switching Costs	Data Privacy Regulations
▪ Platforms like Microsoft (Bing), Amazon, and Meta are intensifying competition in the digital advertising space. ▪ This growing competition encourages advertisers to diversify their ad spending across multiple platforms, increasing the likelihood of multihoming.	▪ The emergence of platforms focusing on niche industries (e.g., travel, e-commerce) or specific advertising formats (e.g., mobile ads through Apple Search Ads) attracts advertisers looking for more targeted audiences. ▪ These platforms can siphon ad spend away from Google's general ad network.	▪ Advertisers face low switching costs, giving them significant power to move between platforms easily. ▪ This flexibility enables advertisers to experiment with different platforms for better performance or value, making Google more vulnerable to multihoming.	▪ Stricter regulations, such as GDPR and CCPA, are forcing platforms to reassess their data collection and targeting practices. ▪ These changes could reduce the effectiveness of Google's personalized advertising and make alternative platforms more appealing.

Recommendations for Google Search Advertisement

01

Unified Advertising Platform:
Google should offer a centralized advertising suite across multiple formats (search, display, audio, video), simplifying multichannel campaigns and reducing the need for advertisers to multihome.

02

Super App Development:
Google can expand its services into a "super app" model, integrating travel, shopping, and services in one place, much like WeChat, to become a central hub for daily consumer needs.

03

Exclusive Partnerships and Features:
To avoid disintermediation, Google should offer exclusive deals, deep vendor partnerships, and unique features that keep users engaged within its ecosystem.

04

Cross-Platform Analytics for Advertisers:
Create a unified analytics dashboard for advertisers, allowing them to track cross-platform performance, including ROI, sales, and click-through rates, improving campaign management.

05

Price Comparison and Promo Features:
Offer automatic promo codes, price tracking, and cross-platform comparisons to attract deal-seeking shoppers, positioning Google Shopping as more competitive than Amazon.

Potential Downside Risks

1. Potential Decrease in Profit Margins for Merchants

Challenge:

Shoppers may become **price-sensitive** due to tools like historical price trends and cross-channel price comparisons, causing merchants to drop prices to compete. This **impacts profit margins** for advertisers.

Mitigation:

Google can offer **personalized deals** using **user profile analysis**.

Dynamic pricing: Show different pricing based on buyer's **willingness to pay** to help merchants capture more value.

2. Increase of Cost for Advertisers

Challenge:

Adding more features in Google Shopping adds value for users but increases costs for advertisers.

Google's average CPC is **$2.69**, significantly higher than Amazon’s **$0.96**.

Mitigation:

Mitigate advertiser concerns by ensuring **high-quality outcomes** and **premium value** in ad performance.

3. Impact of Invalid Clicks

Challenge:

Fraudulent clicks can inflate costs for advertisers and potentially lead to lawsuits or refunds, impacting Google’s profitability.

Mitigation:

Implement more rigorous **fraud detection systems** to ensure advertisers get genuine clicks.

EXHIBITS

Exhibit 1: Search Results for Sneakers on Different Platforms

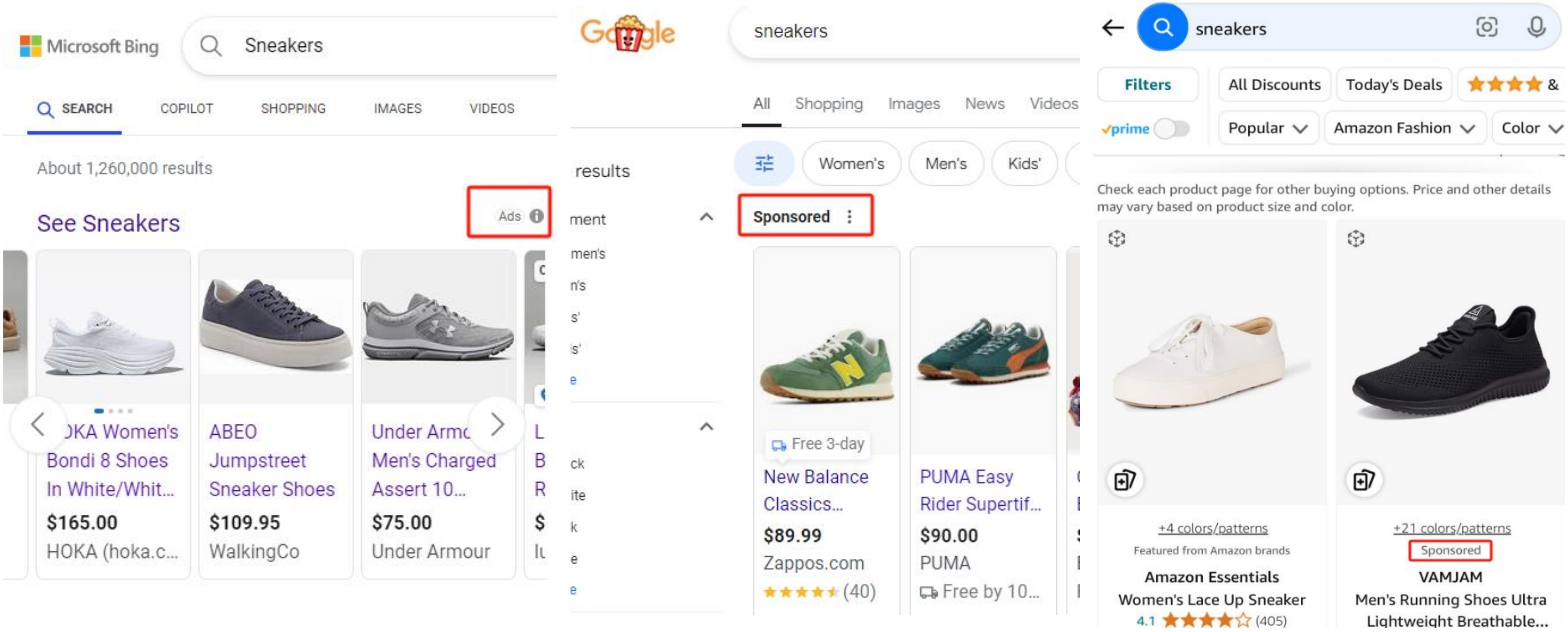


Exhibit 2: Most Used Search Engines by Brand in the U.S. as of Dec ‘23

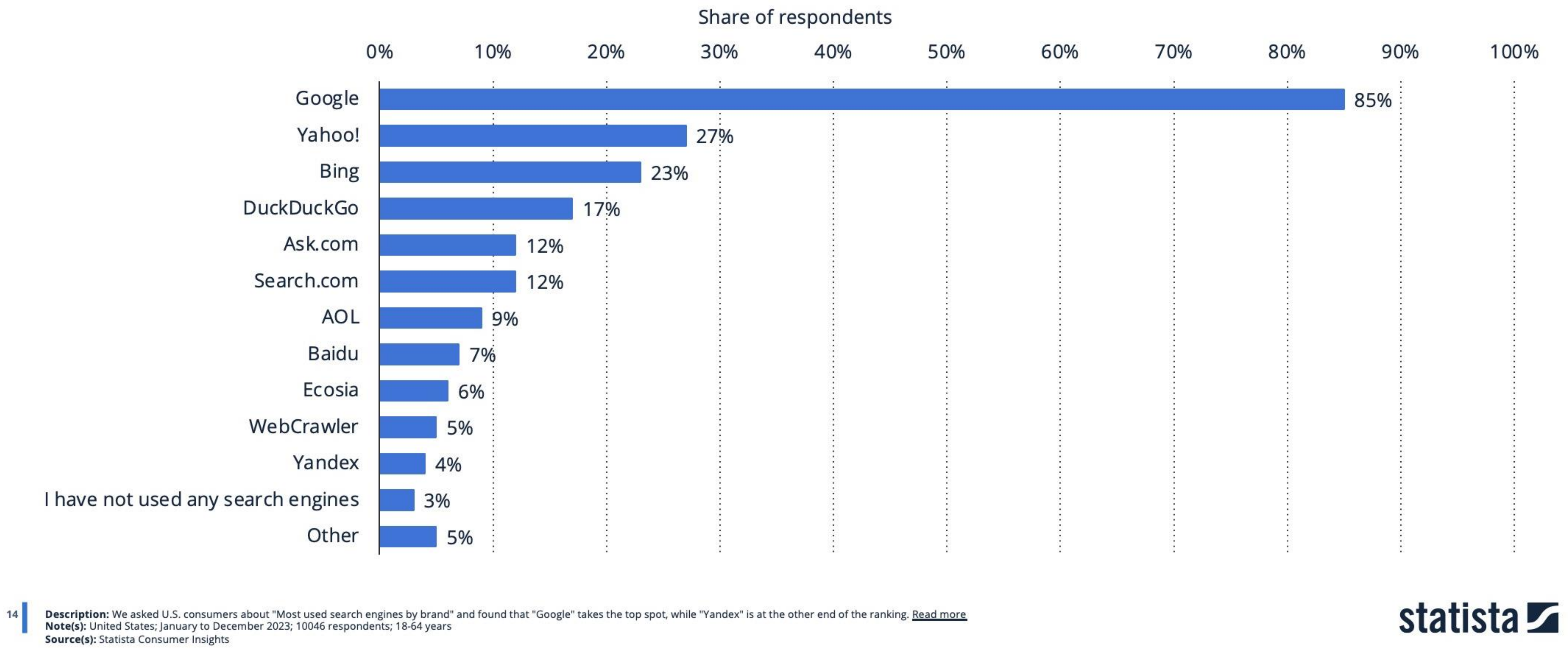


Exhibit 3a: Competitor Analysis for Google Search Advertisement

Dimensions	Google Search Advertisement	Amazon Search Ads (Major Competitor)	Microsoft Bing Ads (Secondary Competitor)
Strategy – How is the firm competing?	Google dominates through massive user traffic and data. Its AdRank system ensures the highest ROI for advertisers, leveraging vast amounts of data.	Amazon targets product searches by mastering e-commerce dominance and first-party consumer buying behavior information.	Microsoft Bing Ads offers a lower-cost alternative to Google through an integrated platform for Microsoft users.
Objectives – What are the firm's current goals, is it meeting those goals, how will those goals likely change?	Google is looking to stay at the top of the search market while working out an ad personalization and targeting use of machine learning and AI.	Amazon wants to increase market share for product-related searches; it will keep up the aggressive fight against Google for advertisers' dollars in the category of e-commerce.	Microsoft is eyeing an increased market share with the improvement of AI-powered search features in Bing to attract more advertising.
Assumptions – What assumptions does the firm hold about the industry and itself?	It also assumes that its scale and technological lead in data analysis would continue to give it an edge in the market.	Amazon also assumes that searches for e-commerce products will increase, where advertisers target sales instead of creating awareness. It assumes that an affordable integrated solution with other Microsoft services will continue to lure smaller advertisers.	Microsoft assumes that providing a cost-effective and integrated solution with other Microsoft services will continue attracting smaller advertisers.
Resources and Capabilities – What are the firm's key strengths and weaknesses?	The huge database of users, intense AI, machine learning, and vast resources of data are the **strengths** for Google. **Weakness**: Pacing competition for the product-based search.	Its **strengths** are dominance in e-commerce and deep data on consumer behavior. **Weakness** of this company is no dominance in general search.	**Strength** for Microsoft includes the consolidation of Microsoft services, cost efficiency. **Weakness**: Smaller user base and weaker brand recognition compared to the two competitors, Google and Amazon.

Exhibit 3b: SWOT Analysis for Google Search Advertisement

strengths

- **Dominant Market Share:** Google's leading position in search provides unmatched access to user data for targeted ads.
- **Advanced Ad Platform:** Tools like Google Ads, AdSense, and AI-powered Performance Max offer robust, targeted advertising options, driving advertiser ROI.
- **Innovation:** Constant updates in ad formats, including AI integration, improve relevance and user engagement.
- **Mobile Search Leadership:** Google's dominance in mobile search strengthens its mobile ad presence

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weaknesses

- **Reliance on Ad Revenue:** Heavy dependence on advertising makes Google vulnerable to shifts in market behavior and monetization trends.
- **Privacy & Regulations:** Increasing privacy concerns and stricter data regulations could limit data-driven ad targeting.
- **Rising Competition:** Amazon, Meta, and Microsoft are strong competitors in the digital ad space, challenging Google's dominance.

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- **Emerging Markets:** Expanding internet and mobile usage in developing regions offers growth potential.
- **Voice Search Ads:** Increasing voice search usage presents a new channel for advertising innovations.
- **AI-Driven Ads:** AI advancements can further improve ad targeting and personalization, boosting advertiser effectiveness.

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opportunities

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- **Ad Blocking:** Increased use of ad blockers and user fatigue towards ads can reduce reach and impact.
- **Antitrust Actions:** Ongoing legal challenges and antitrust scrutiny pose risks to Google's ad business model.
- **Shifting User Behavior:** Changes in platform preferences and the rise of alternative search engines or social platforms could affect ad revenue.

threats

Exhibit 3c: Strength of Network Effects for Google Search Advertisement

Same-Side Network Effects	Cross-Side Network Effects
• **Users:** Indirect benefits like better content quality and search results as more users generate data (e.g., searches, reviews). Larger user bases provide more data for Google to improve its algorithms and personalize user experiences. • **Advertisers:** More advertisers competing for keywords can raise ad prices, benefiting Google but challenging smaller advertisers.Potential for shared data insights and industry standards through advertiser collaboration.	• **Users to Advertisers:** More users make Google more valuable to advertisers seeking to target specific demographics. • **Advertisers to Users:** Increased ad revenue allows Google to invest in better products and user experiences, attracting more users. • **Partnerships/Acquisitions**: Expanding into new sectors (e.g., partnerships with Volvo, Twitter, acquisitions like Fitbit) increases data and enhances offerings, benefiting both users and advertisers.

Exhibit 4a: Environmental Analysis for Google Search Advertisement

Demographic Trends:

1. **Increasing Mobile Internet Usage:** A Changing Landscape of Demographics because, nowadays, the mobile internet accessible public has grown, and this has made the importance of mobile-based ad formats far more potent. Optimize Ads for Mobile as users shift to spending more and more time on mobile, advertisers must find a way of ensuring that their ads are mobile optimized to bag a larger audience.
2. **Personalized Experiences in Advertising:** Millennials, along with Gen Z, especially display an affinity towards ads that speak in their language. Advertisers must, therefore, construct tailored ad experiences to grab the attention of these consumer groups.
3. **Growing Focus on Data Privacy:** he focus on data privacy is sharply on the rise, mostly for the aging folks. The increasing push for transparency from advertisers has brought about the scrutiny of how consumer data is used. Businesses are feeling the squeeze to give both administrators and users greater power over their data.

Socio-Cultural Influences:

1. **Shift to Online Shopping:** With e-commerce, search engine ads are increasingly being used for product-related searches as technology facilitates various dimensions of online shopping. Consumers are now conditioned to see ads show up next to their search results in lockstep with their shopping preferences and behavior.
2. **Awareness of Data Privacy Issues:** More frequently high-profile data breaches occur, the more wary users are about what happens to their personal information. This change in the way customers feel about this issue has forced companies like Google to focus more on transparency and how they treat personal data.
3. **Increased Digital Literacy:** As knowledge of online tools and advertising expands among consumers, so does the bar on quality/irrelevancy of their advertisements. Tech-savvy people hate irrelevant and intrusive ads, so more skilled ways of providing content will simply be a necessary nuisance for advertisers to give users information.

Technological Developments:

1. **Machine Learning and AI:** Google's investment in AI technologies, known by its RankBrain system, has greatly improved how they can display ads based on intent. Such information has in turn helped to make search ads more relevant, and also to show their performance — which lets marketers deliver more accurate messages.
2. **Voice Search Integration:** Google Ads formats are evolving to better serve the needs of voice-activated queries, which have become increasingly more pervasive as voice search continues to surge. The way ads are set up is also reflecting this trend, keeping in mind people who will be searching through voice searches for their queries.
3. **Automation in Ad Bidding:** AI-driven automated bidding systems will optimize campaigns in real-time, dynamically adjusting bids based on user behavior and competition. This customization will help you to enhance performance but make sure to control costs.

Exhibit 4b: Environmental Analysis for Google Search Advertisement

Macroeconomic Impacts:

1. **Global Economic Slowdown:** Economic downturns inevitably affect advertisers' budgets, often leading businesses to scale back on their marketing expenditures. However, search ads typically remain a cost-effective choice due to their relatively low cost and precision targeting, especially when compared to traditional media channels.
2. **Increased Advertising Budgets Post-Pandemic:** The pandemic has dramatically accelerated the shift towards online consumption. As a result, businesses are likely to increase their investments in search advertising to capture the growing digital audience and further tap into online market opportunities.

Political-Legal Pressures:

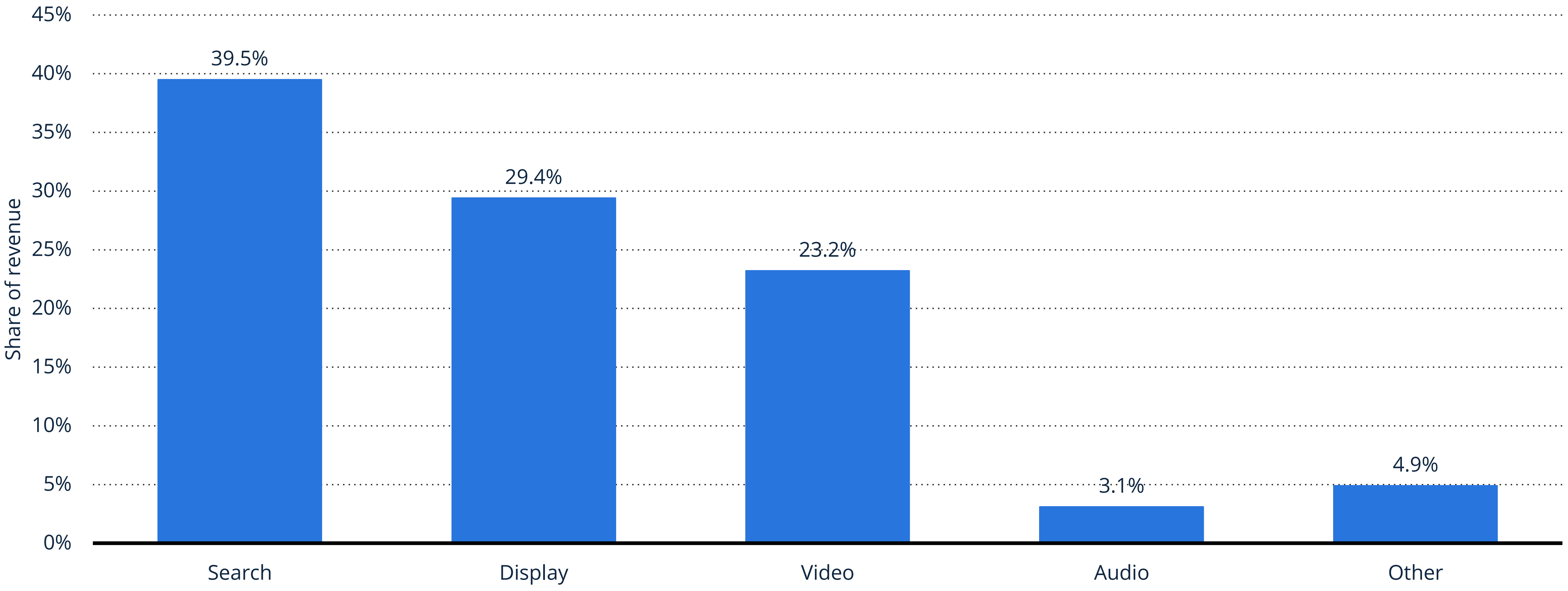
1. **Data Protection Laws (GDPR and CCPA):** Legislation such as the EU's General Data Protection Regulation (GDPR) and California's Consumer Privacy Act (CCPA) has compelled companies like Google to be more transparent about how they use consumer data. These regulations give users greater control over their personal information, while also limiting the ability of advertisers to track consumers across different websites.
2. **Antitrust Investigations:** Google has faced several antitrust investigations over its dominance in the search advertising market. These legal challenges may lead to changes in how the company operates and could potentially alter the services it offers to advertisers in the future.
3. **Environmental Regulations:** There is growing pressure for tech companies, including Google, to reduce their environmental impact. This has implications for how Google manages and powers its data centers, which are essential to supporting its vast advertising infrastructure.

Global Trade Issues:

1. **Cross-border Data Policies:** As global regulations around cross-border data transfer become more stringent, Google must ensure compliance with varying laws in different regions. This can affect the scalability and flexibility of international ad campaigns, posing a challenge for global advertisers.
2. **Currency Fluctuations:**
   As Google operates on a global scale, fluctuations in currency values can influence the costs advertisers incur and the return on investment (ROI) they achieve, particularly for international campaigns running across multiple regions.

Exhibit 5: Breakdown of Online Advertising Revenue in The United States in 2023, by format

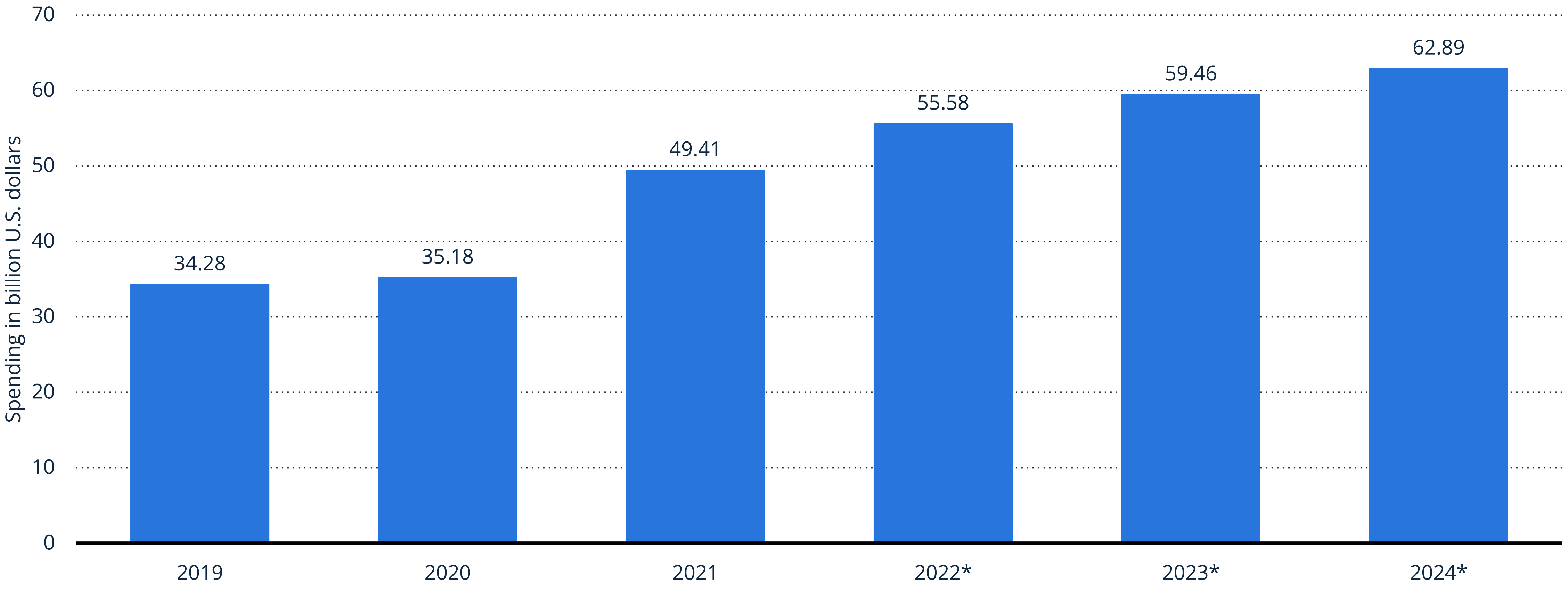
Breakdown of U.S. online ad revenue 2023, by format



Description: In 2023, roughly 40 percent of online ad revenue in the United States was generated through search advertising. Slightly less a third of the revenue came from digital static display ads that year. Read more
Note(s): United States; 2023
Source(s): IAB (U.S.); PwC; VideoWeek

Exhibit 6: Net Search Advertising Revenue of Google in The United States from 2019 to 2024 (in Billion U.S. Dollars)

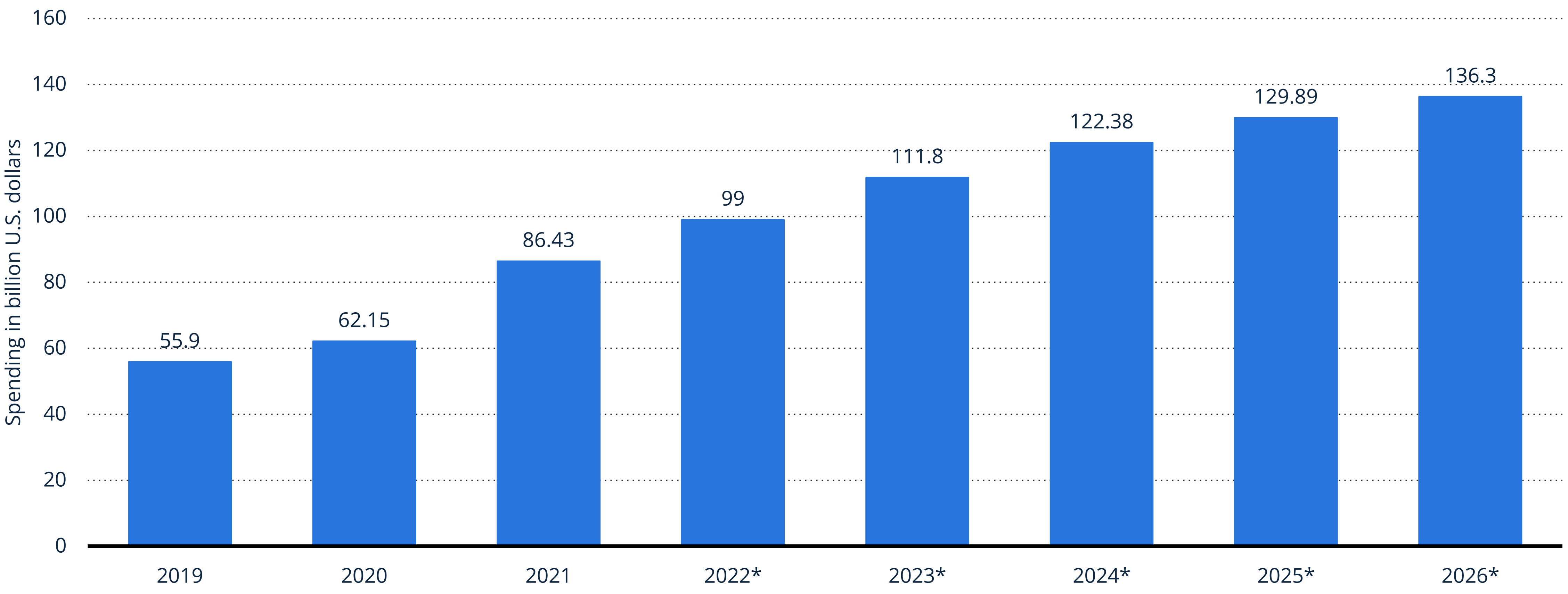
Google search ad revenue in the U.S. 2019-2024



Description: In 2021, Google's net search advertising revenue stood at 49.4 billion U.S. dollars. In 2022, the amount was expected to increase by 12.5 percent to reach 55.6 billion. In that year, search ad revenue was forecast to account for roughly 79 percent of Google's total revenue. Read more
Note(s): United States; 2019 to 2021; * Forecast. Read more
Source(s): eMarketer; Insider Intelligence

Exhibit 7: Search Advertising Spending in The United States from 2019 to 2026 (in Billion U.S. Dollars)

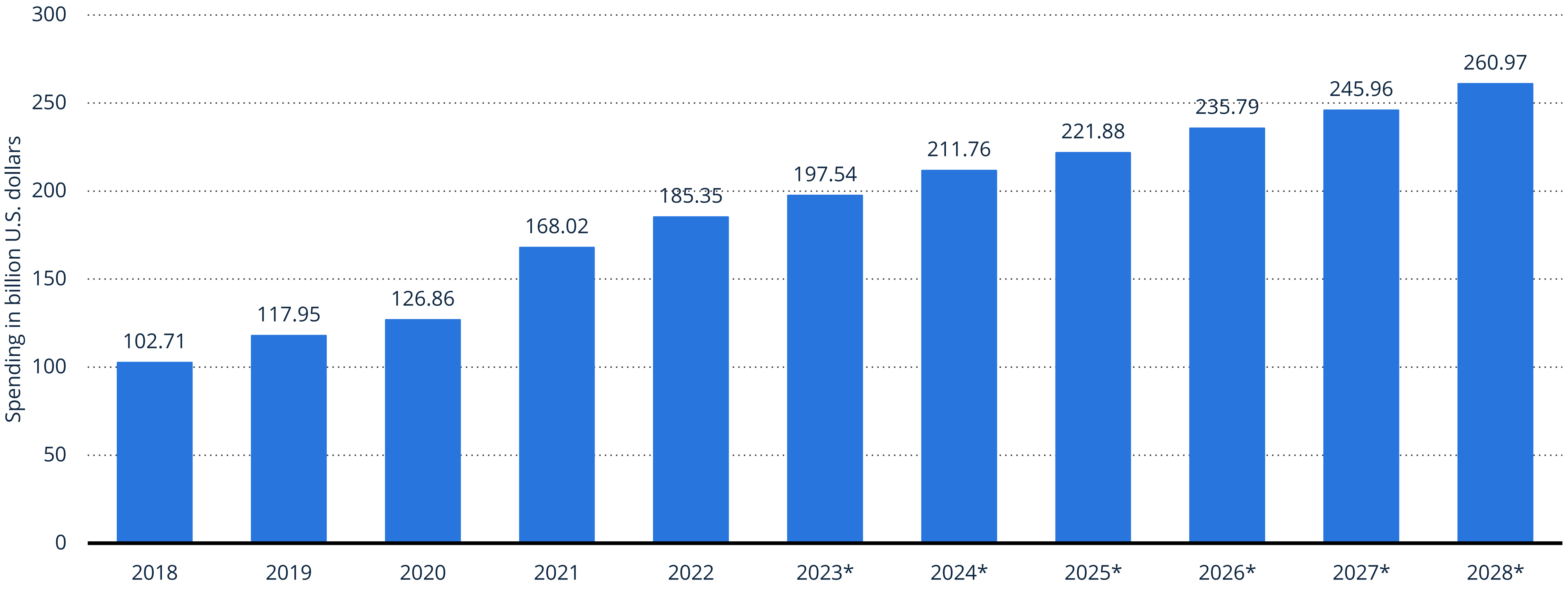
Search advertising spending in the U.S. 2019-2026



Description: In 2021, search advertising spending in the United States stood at 86.43 billion U.S. dollars. In 2022, it is expected to increase by 14.5 percent and reach 99 billion. By 2026, it is projected to grow to over 136 billion. Read more
Note(s): United States; 2019 to 2021; * Forecast. Read more
Source(s): eMarketer; Insider Intelligence; MediaPost

Exhibit 8: Search Advertising Spending Worldwide from 2018 to 2028 (in Billion U.S. Dollars)

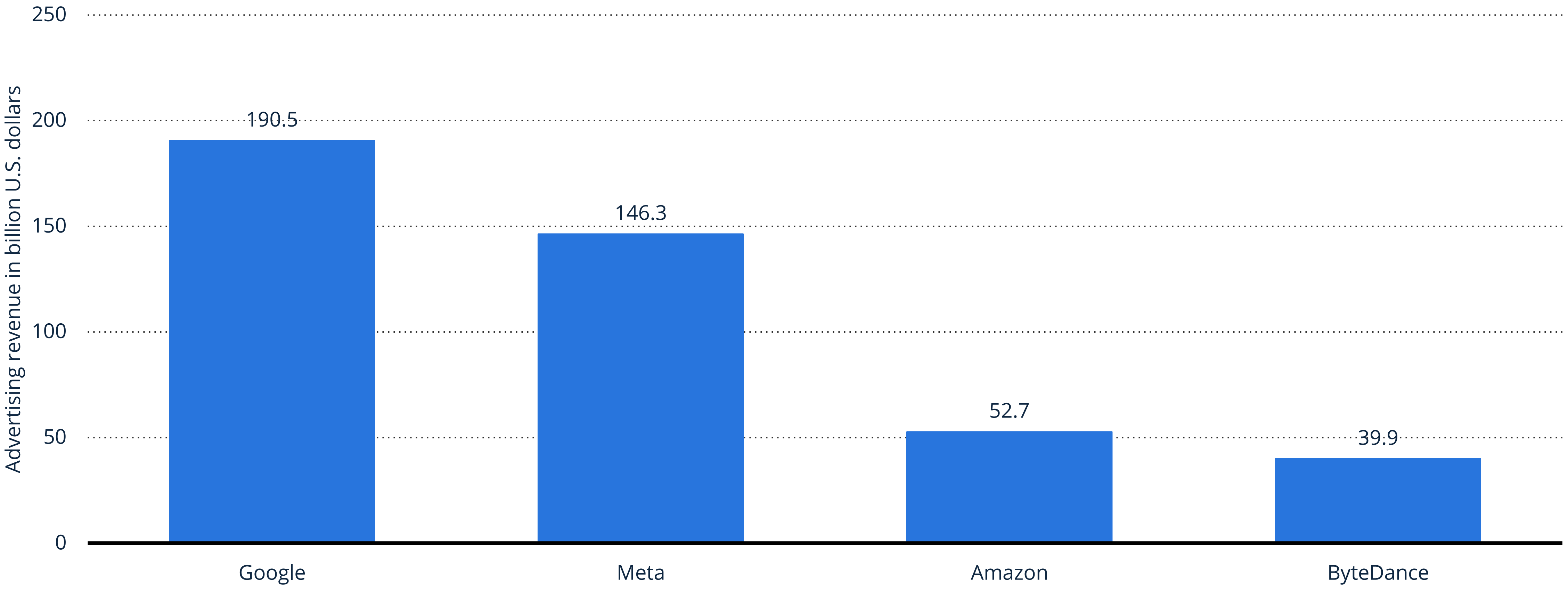
Search ad spend worldwide 2018-2028



Description: In 2022, search advertising spending amounted to 185.35 billion U.S. dollars worldwide. The expenditure was forecast to increase by approximately six percent annually until 2028, reaching close to 261 billion U.S. dollars. Read more
Note(s): Worldwide; 2018 to 2022; * Forecast. Read more
Source(s): Brands Vietnam; GroupM

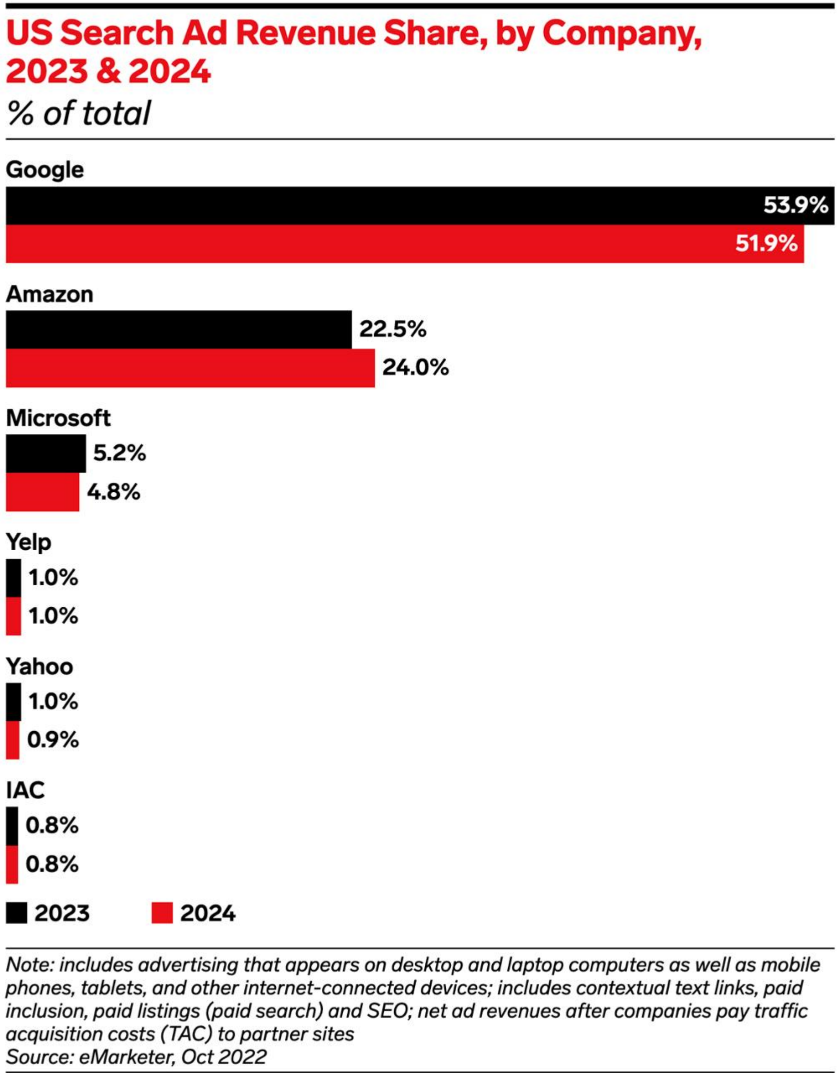
Exhibit 9: Advertising Revenue of Major Digital Ad-selling Companies Worldwide in 2024 (in Billion U.S. Dollars)

Ad revenue of major digital ad sellers worldwide 2024



Description: In 2024, Google was forecast to generate 190.5 billion U.S. dollars in global online advertising revenue, securing the tech giant's top spot among leading digital ad sellers worldwide. This was followed by Meta with an ad revenue of 146.3 billion U.S. dollars, while Amazon clinched bronze with a revenue of 52.7 billion. Read more
Note(s): Worldwide; as of September 6, 2023; forecast
Source(s): Various sources (VIADS); WARC

Exhibit 9a: Advertising Revenue of Major Digital Ad-selling Companies Worldwide in 2024 (in Billion U.S. Dollars)



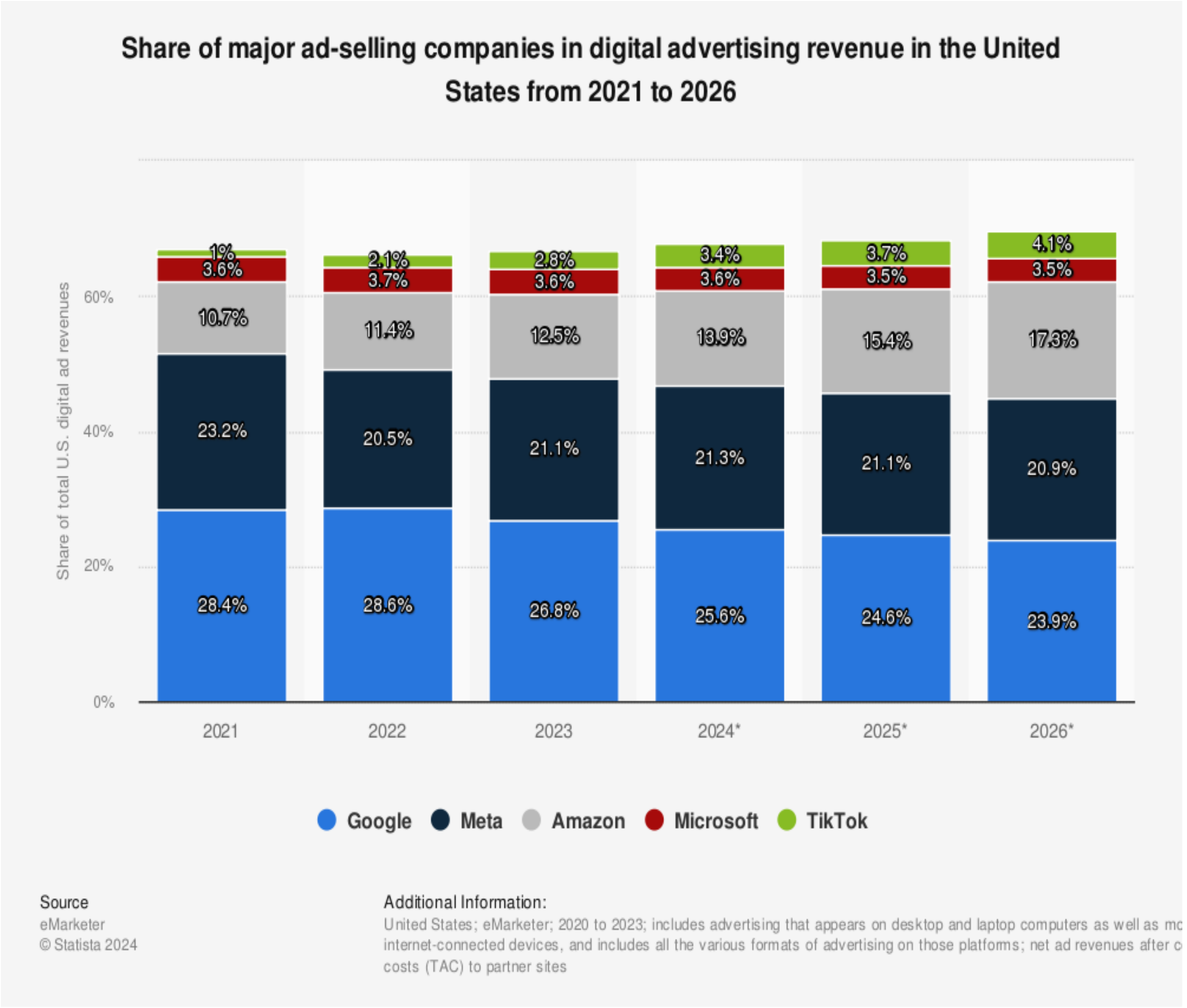
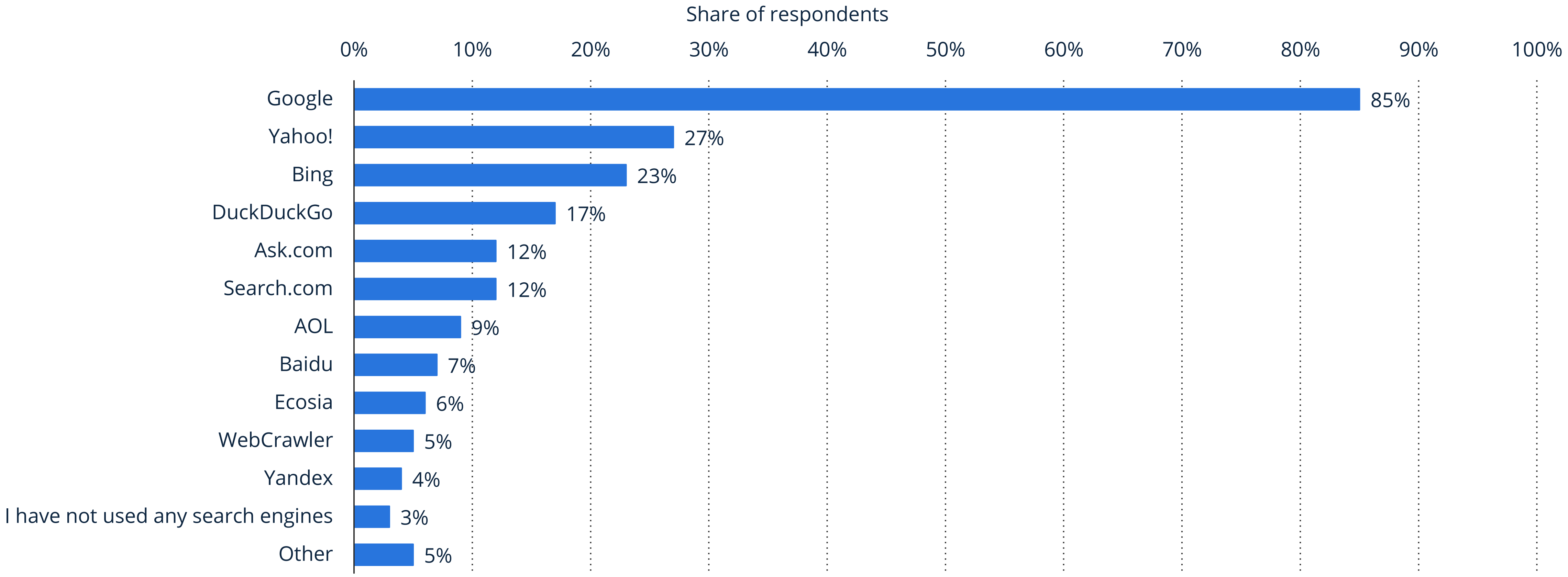


Exhibit 10: Most Used Search Engines by Brand in The U.S. As Of December 2023

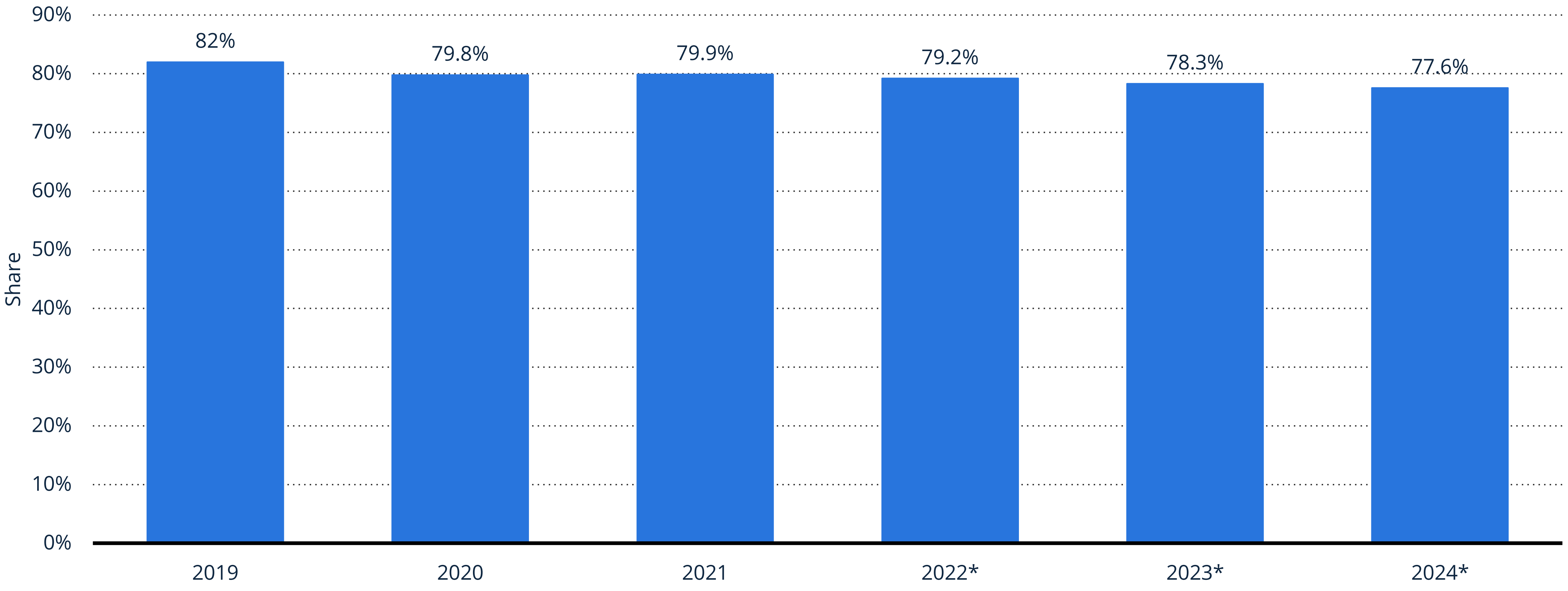
Most used search engines by brand in the U.S. 2023



Description: We asked U.S. consumers about "Most used search engines by brand" and found that "Google" takes the top spot, while "Yandex" is at the other end of the ranking. Read more
Note(s): United States; January to December 2023; 10046 respondents; 18-64 years
Source(s): Statista Consumer Insights

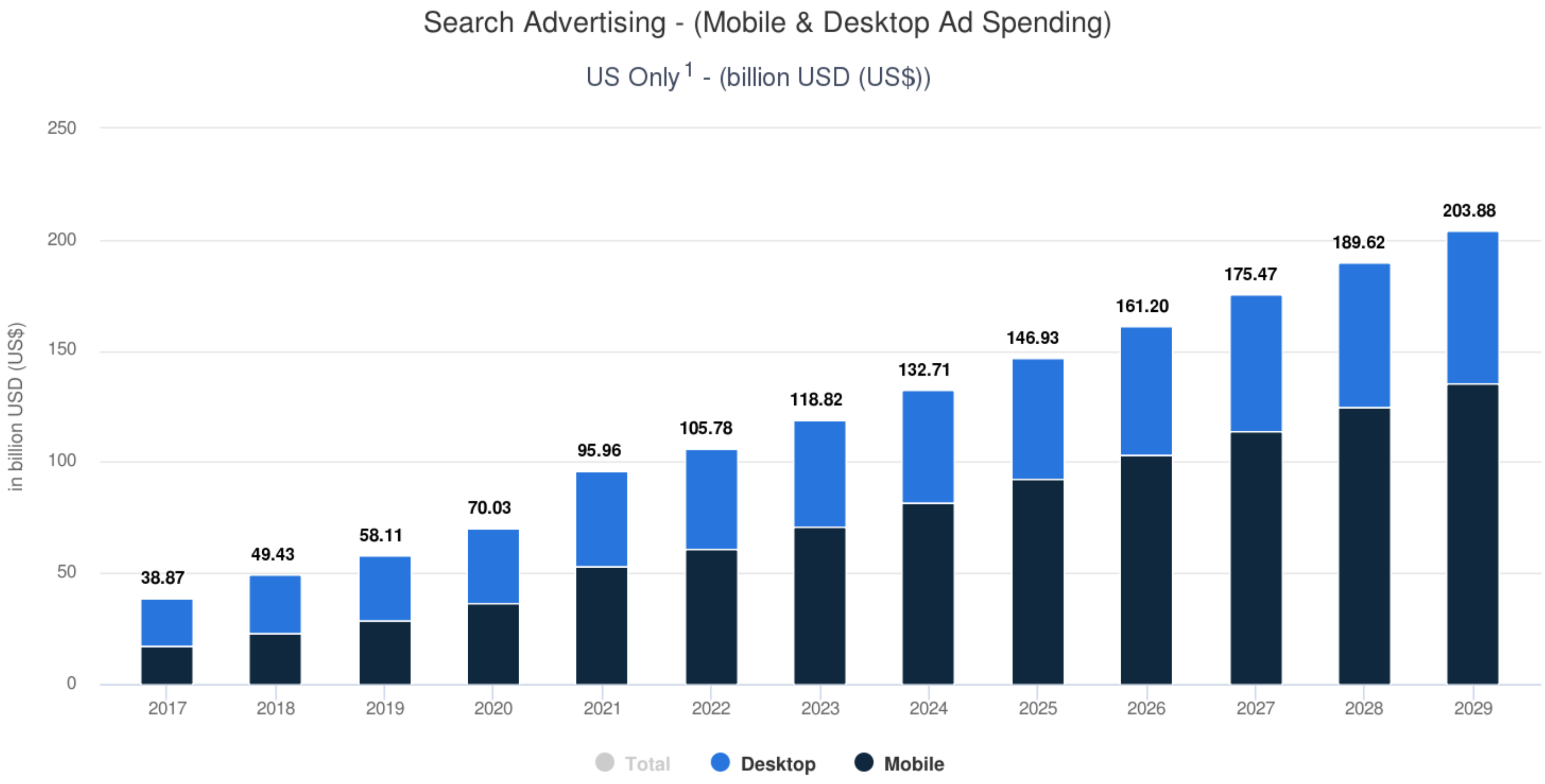
Exhibit 11: Share of Search in Google's Advertising Revenue in The United States from 2019 to 2024

Share of search in Google's ad revenue in the U.S. 2019-2024



Description: In 2021, search accounted for 79.9 percent of Google's advertising revenue in the United States. In the following years, the share is expected to start dropping. In 2024, it is projected to stand at 77.6 percent. Read more
Note(s): United States; 2019 to 2021; * Forecast. Read more
Source(s): eMarketer; Insider Intelligence

Exhibit 12: Mobile vs Desktop Ad Spending



¹Regions summed up:
US Only: United States

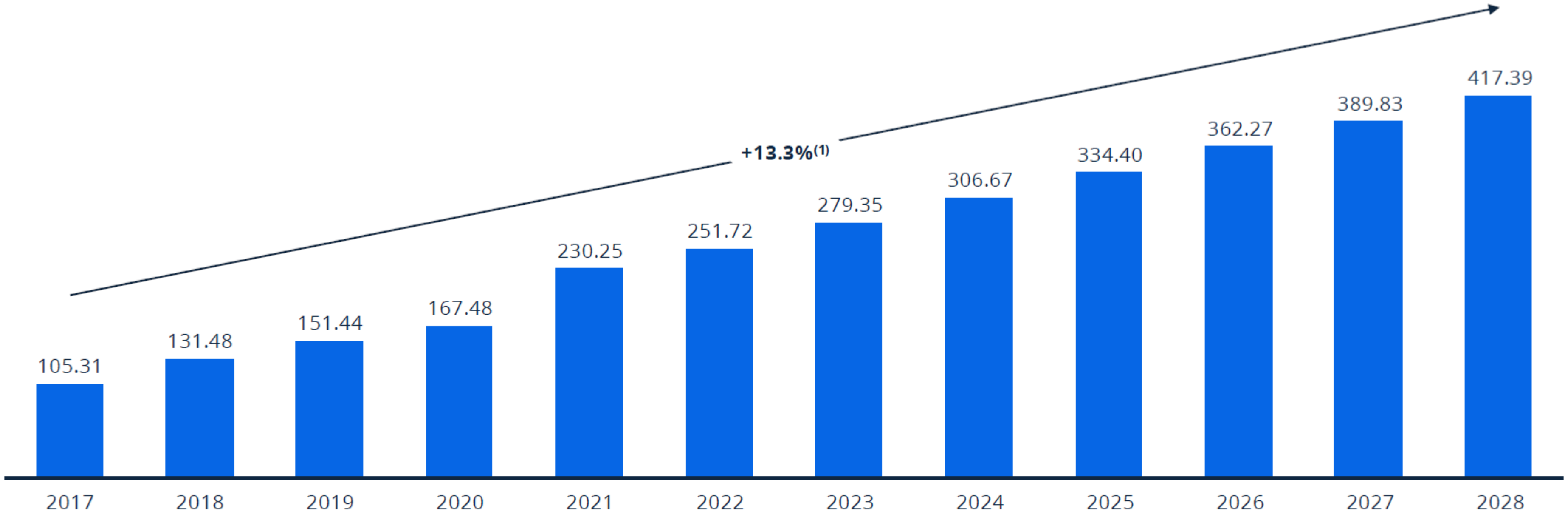
Source: Statista Market Insights

Exhibit 13: Search Advertising Ad Spending

Search Advertising ad spending is estimated to increase at a CAGR(1) of 13.3% from 2017 to 2028

Market Size: Global

Search Advertising market: Advertising spending forecast in billion US$

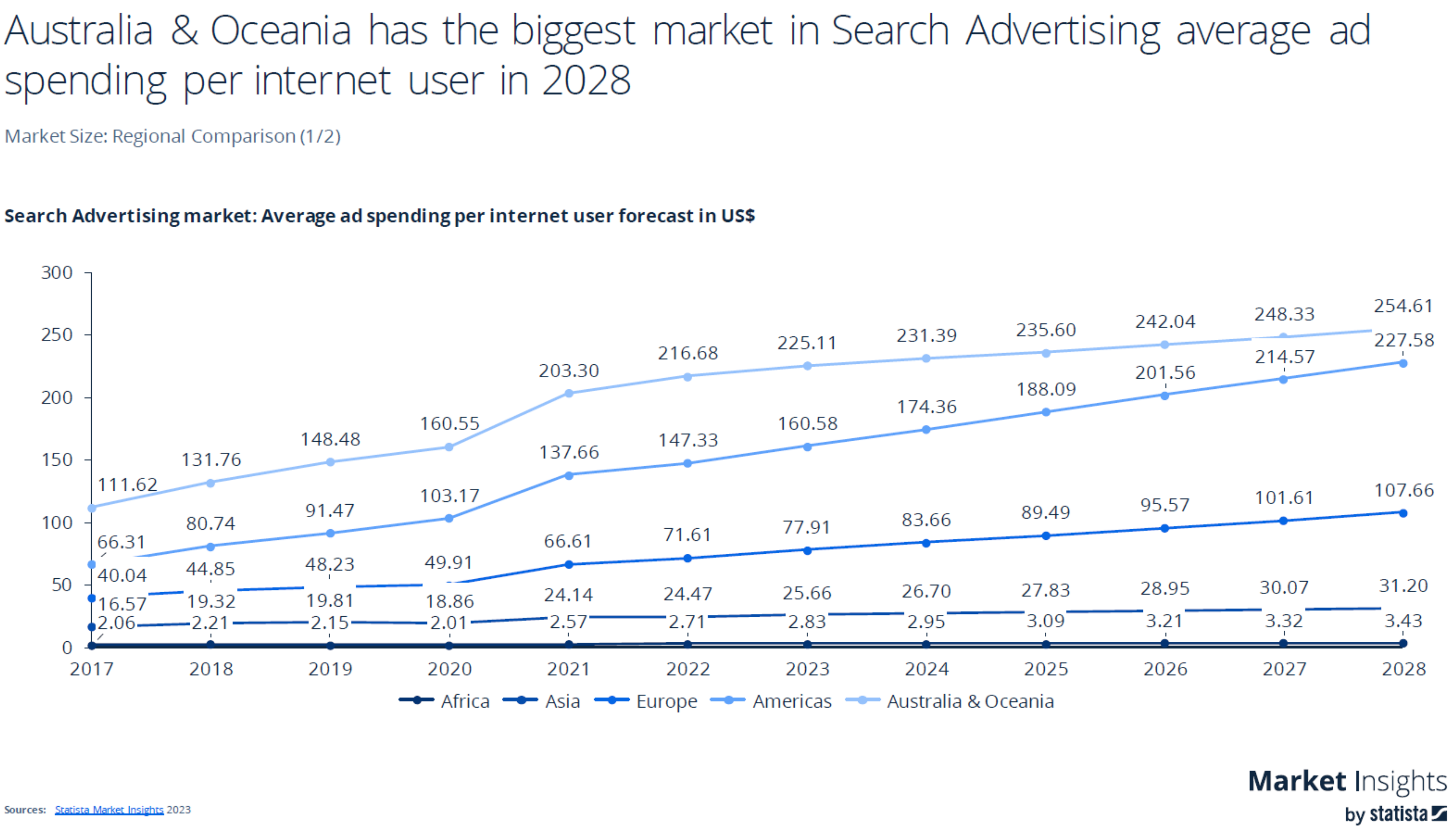


10 **Notes:** (1) CAGR: Compound Annual Growth Rate

Sources: Statista Market Insights 2023

Market Insights by statista

Exhibit 14: Ad Spending across Globe



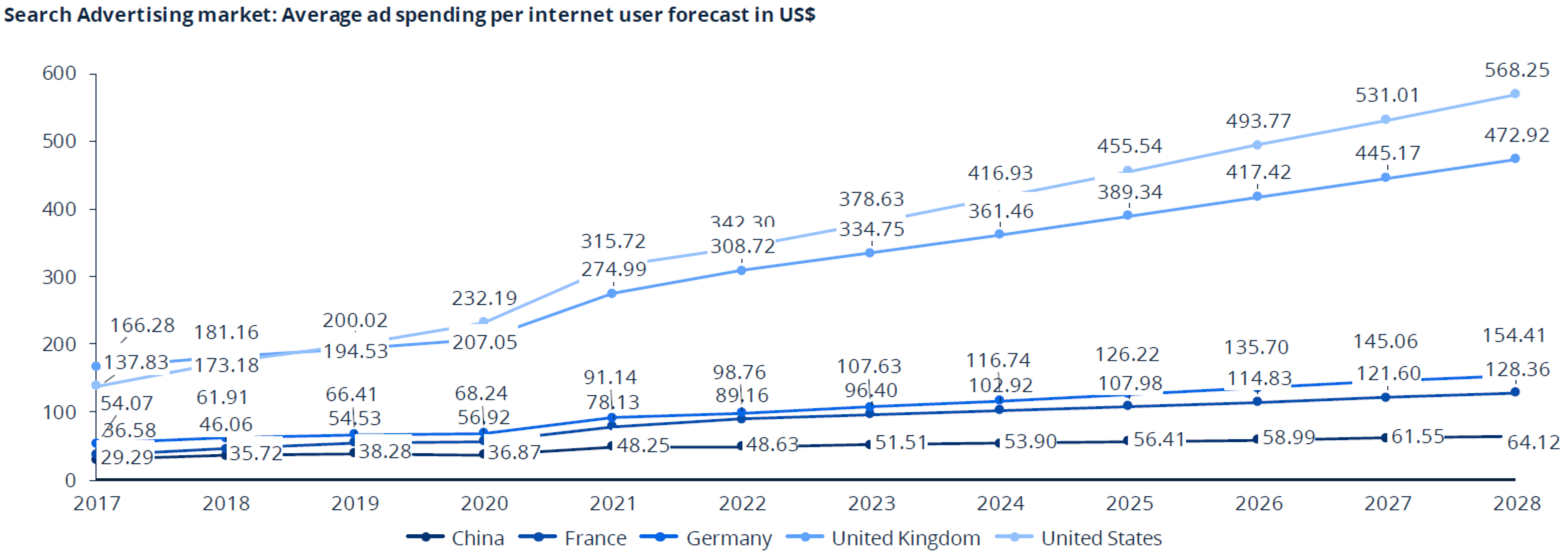
14

Sources: Statista Market Insights 2023

Exhibit 15: United States vs Other Countries

With average ad spending per internet user of US$378.6, the United States is the biggest market among selected countries in 2023

Market Size: Regional Comparison (2/2)



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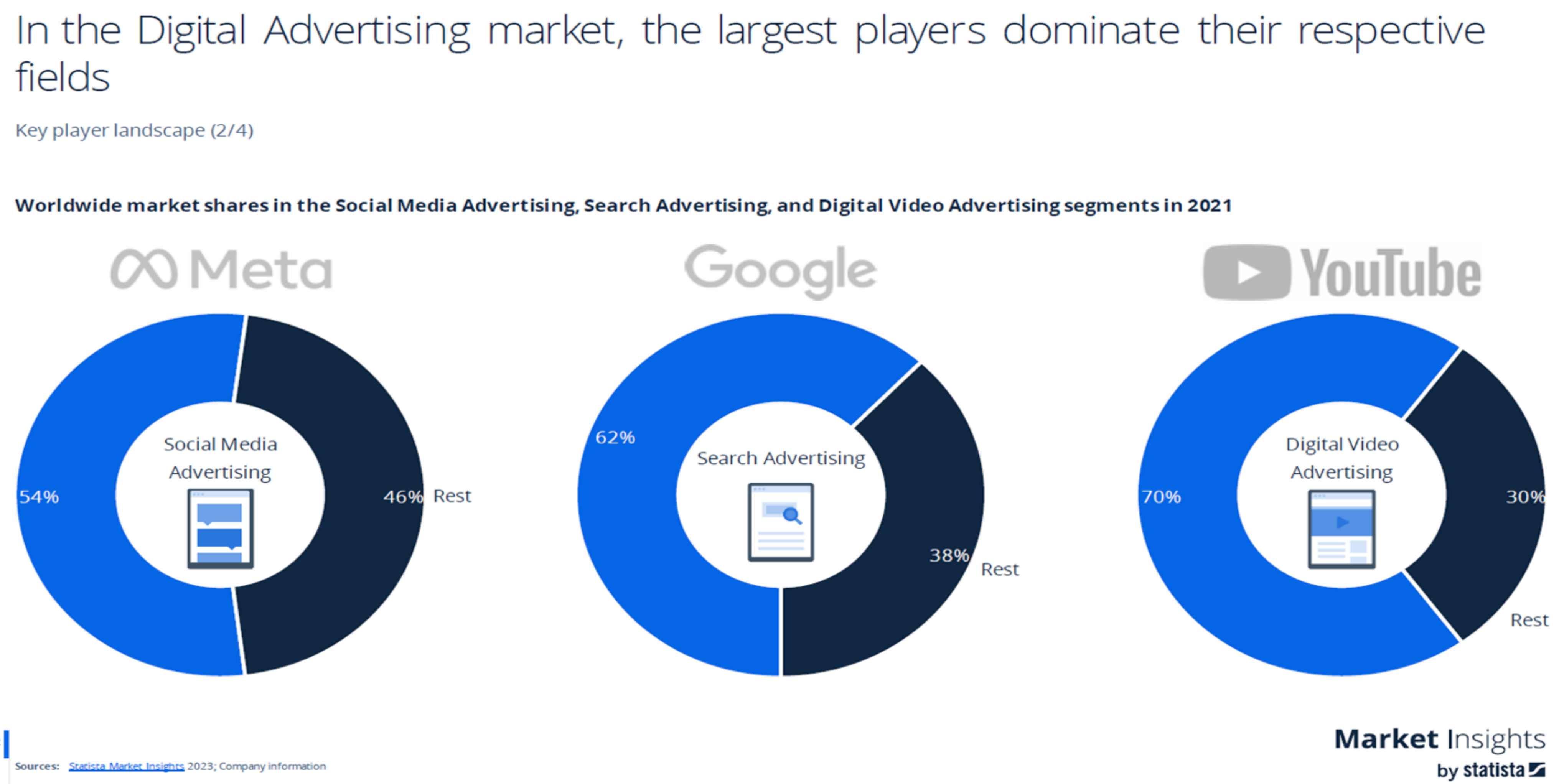
Sources: Statista Market Insights 2023

Market Insights by statista

Exhibit 16: Players in Digital Advertising



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