Marketing Technology Data Proliferation Report

Vertical Industry Benchmarks | US Market | Q2, 2020

Executive Summary

The United States digital economy heavily leverages third-party data collection. The report below quantifies the overall scope of third-party data across the US digital economy, and examines its impact over thirty "verticals", or economic sectors. Our study includes insights material to both advertisers and publishers, examines the system's most material risks, and measures each vertical's future-ready capabilities for monetizing digital customer touchpoints through consented first-party datasets. We will monitor these trends across verticals on a quarterly basis, and provide specific recommendations to companies looking to improve marketing technology deployment, customer experience, and digital media efficiency at their own organization.

Marketing Technology & Third-Party Data

Virtually all marketing technology digital marketers and content publishers utilize comes from third-party providers. Most of these technologies collect user data on their customers' behalf, despite not having a direct relationship with the user. This practice is defined as "third-party data" collection.

Third-party data collection can occur in a variety of formats, but the most common remains the collection of a user's web browser and behavioral information, usually in the form of a "cookie" stored and retrieved by third parties at their discretion.

28

The average unique marketing technologies deployed on a US Company's URL
i.e. "company.com"

26

The average unique third-party datasets collected on a US Company's URL
i.e. "company.com"

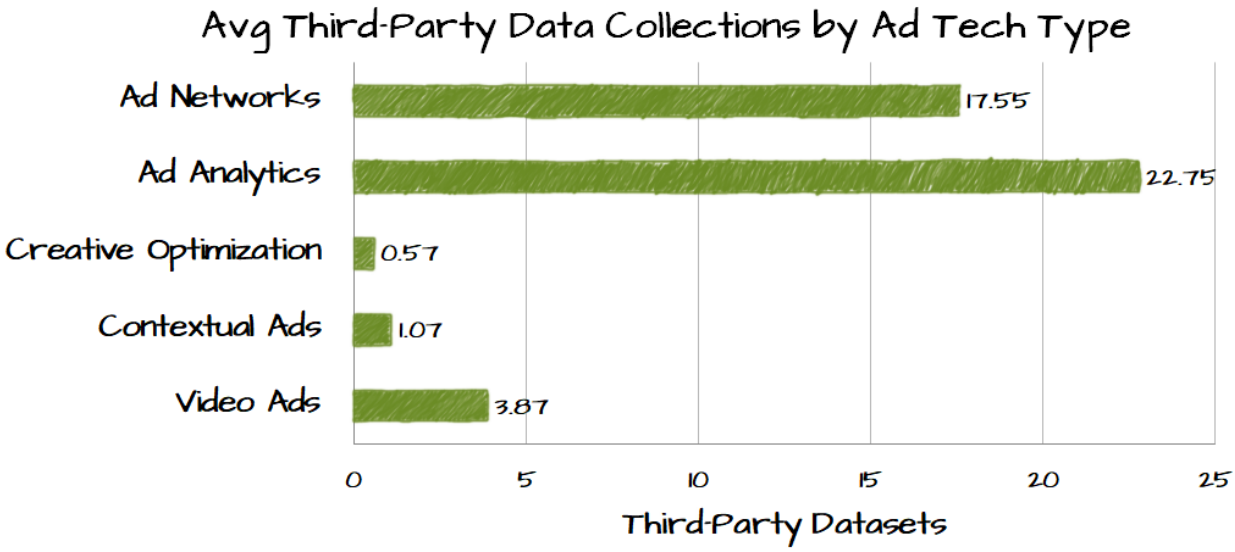
Consumers of online news publications, blogs, message boards, web-hosted video, or audio content are exposed to a cascading volume of these third-party data collection attempts. Many publishers make no effort to alert users to third-party data collection, nor do they attempt to solicit consent from users. The incentives for such behavior are simple: digital content monetization in the United States largely relies on ad impression revenues, and the overwhelming majority of these ads are targeted and served programmatically by ad networks, ad exchanges, and ad servers to users identified via third-party data collection techniques.

53 | 50

Average unique marketing technologies | Those that collect third-party data
US Media & Publications (i.e. "*example-news-site.com*")[1]

Third-Party Ad Targeting & Media Types

A major factor in third-party data proliferation is the fragmentation of technical features and functionalities across various digital platforms. Ad networks often specialize in one media format — say, audio or video advertising. Consumer demands for diverse media formats create an environment where advertisers and publishers monetize different media formats with different third parties: audio ad networks for audio content, video ad networks for video content, and display ad networks alongside articles. Advertisers run media strategies through multiple ad platforms, attempting to capture best-of-breed functionality across tactics. Below are vertical averages for third-party data collections, segmented by ad networks & functionality subsets:[2]



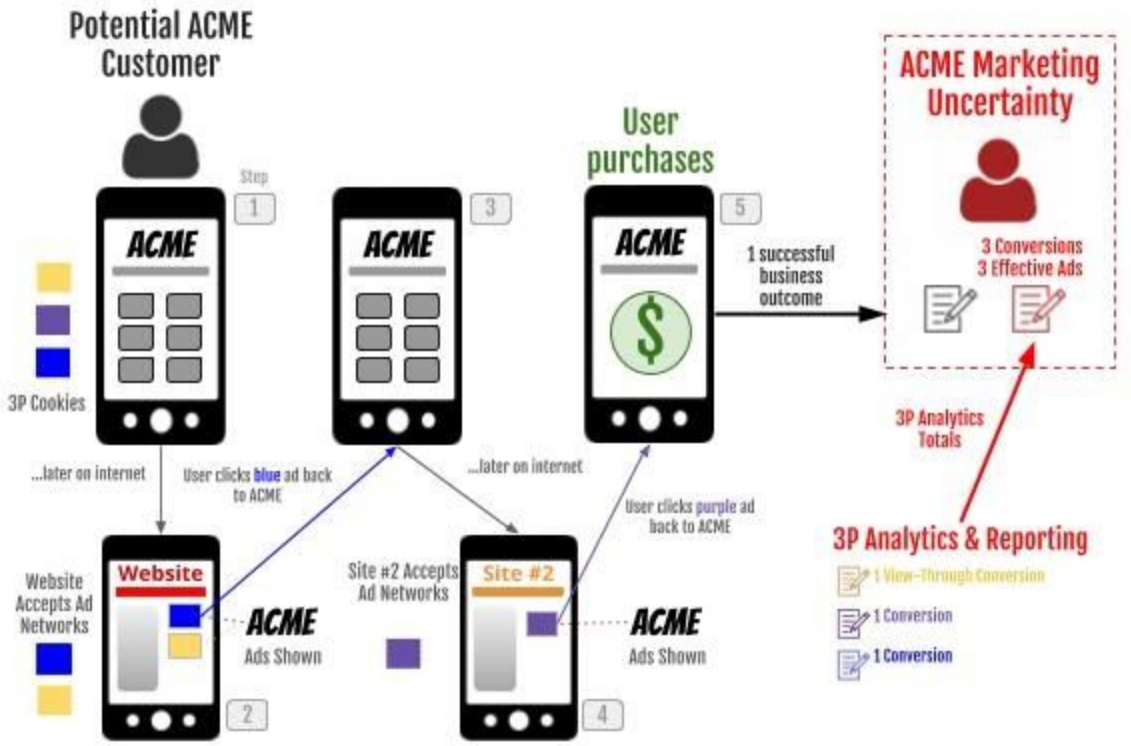
Ad Platform Analytics & Their Role In Third-Party Data Proliferation

The functionality driving the most third-party data collection across every industry is reporting and effectiveness measurement, or ad analytics. The average US digital marketer receives performance reporting from over *twenty-two ad platforms, data platforms, or third-party measurement services all at once.* Each of these reports are built on unique third-party datasets varying in scope, latency, granularity, transparency, and quality. Often,

[1] Includes data from the top 200+ Media & Publications websites by US Web Traffic.. Data collected in April, 2020

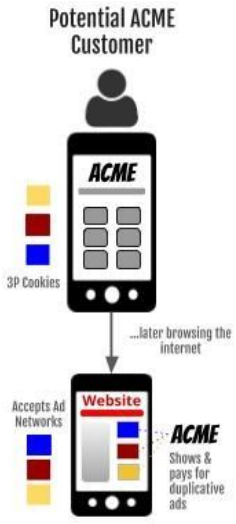
[2] Ad Networks metric includes Ad Exchanges. Ad Analytics includes all marketing platforms that report on advertising performance, either with media metrics or business result metrics.

these reports measure the same consumer interactions and transactions multiple times from varying media and marketing platform perspectives. This results in incredible complexity for marketing analysts, practitioners, and executives. Understanding advertising investment effectiveness, and where to invest future dollars is as challenging a decision now as it has ever been.



Pictured: Third-party ad analytics reporting overlap, measurement duplication and decisioning uncertainty

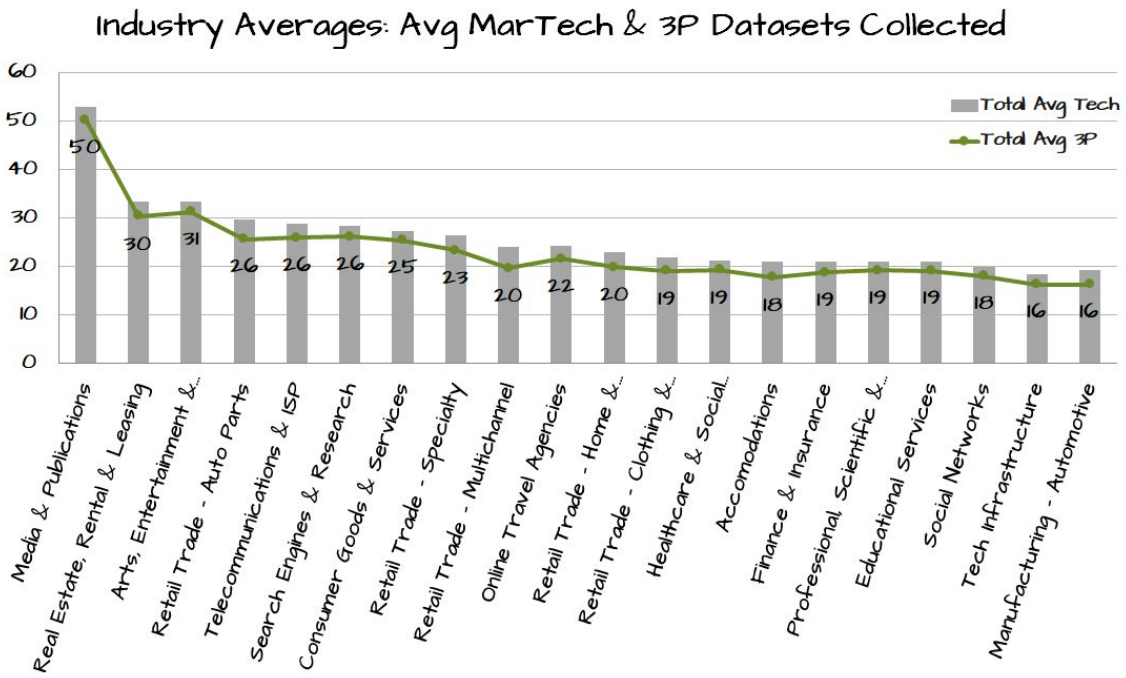
Complexity & Waste Across Industries



Complex systems benefit from redundancies. In a digital marketing context, if your acquisition strategy relies on audience targeting through five unique tech platforms, your customer pipeline doesn't shut down if one of those technologies goes out of business. The benefits of complexity are marginal, however, and redundancies have significant costs and introduce substantial media waste potential. In addition, each marketing technology point solution requires an owner or practitioner, a contract, shared data security protocols, an installation, fees, operational costs, and governance for effective use. These added costs must be paid back in reduced operational costs or increased working media dollar effectiveness. **Pictured:** common media waste generated by overlapping third-party data

After an inflection point, incremental marketing technology adoption adds far more complexity costs than benefits, and every next redundancy adds risk and

fragility to the entire marketing strategy and operation. Looking at unique marketing technology in-market across sectors, we see that virtually every one has far exceeded this inflection point.

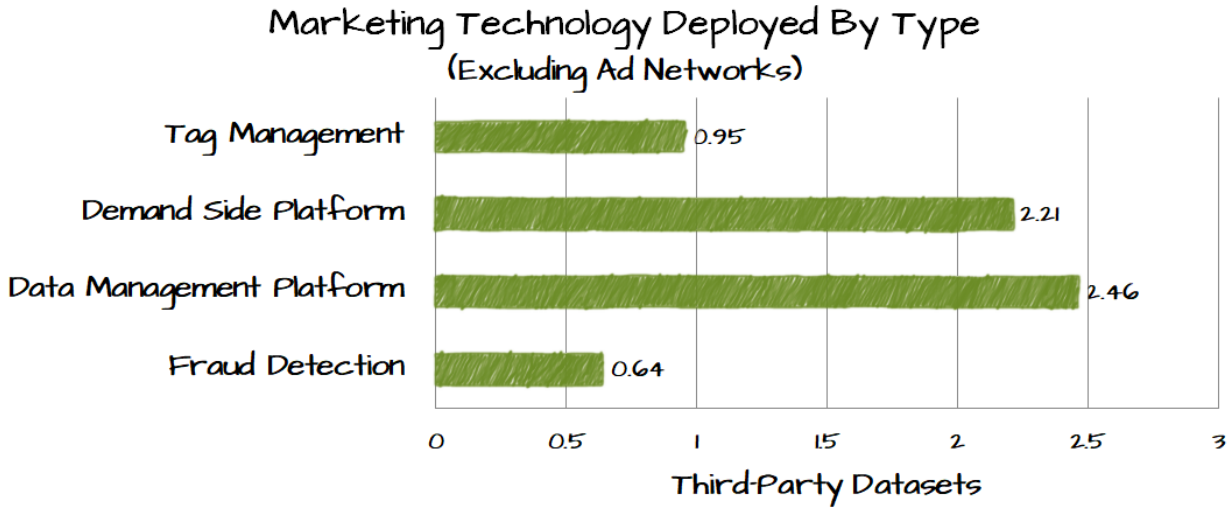


- The vertical most awash in marketing technology is **Media & Publications.** This is due to the pressures pervasive when monetizing user attention. These companies serve abundant ad impression volume alongside content generated increasingly for the purposes of creating as many pageviews as possible. Few publishers retain, reward, and monetize long-lasting customer relationships as this industry optimized everything to the next available eyeball.
- Amongst advertisers, the most over-subscribed are Telecommunications, Real Estate, and Arts & Entertainment. These industries not only oversubscribe to third-party partnerships in an attempt to land valuable customers through their digital assets; they lead the trend of advertisers subsidizing digital infrastructure costs with ad impression revenues. In short, they've become publishers as well.
- A few durable industries have yet to succumb to marketing technology overrun. Manufacturing, Mining, and Construction companies remain limited in their use. Two potential reasons exist. First, the enterprise customer model requires enterprise-level relationships. Second, a dearth of consumer interest makes publisher models irrelevant to these industries.
- Finally, *average* is not particularly encouraging. Typical verticals share visitor data to over nineteen third parties. These represent nineteen opportunities for a third party to inadvertently misuse users' data.

What immediate action can you take? Ask yourself the following:
How many different marketing technology platforms does my company use?
How does that compare with our vertical benchmark?

Further Complexity — A Poor Solve For Complexity

Ad networks and publishers aren't solely responsible for third-party data overrun. Specialty technologies, designed to aggregate tech complexity and simplify media buying, play a substantial role. Each class of complexity management technology comes with its own set of third-party data requirements and collections. The chart below measures complexity management technology deployment in-market across all companies.



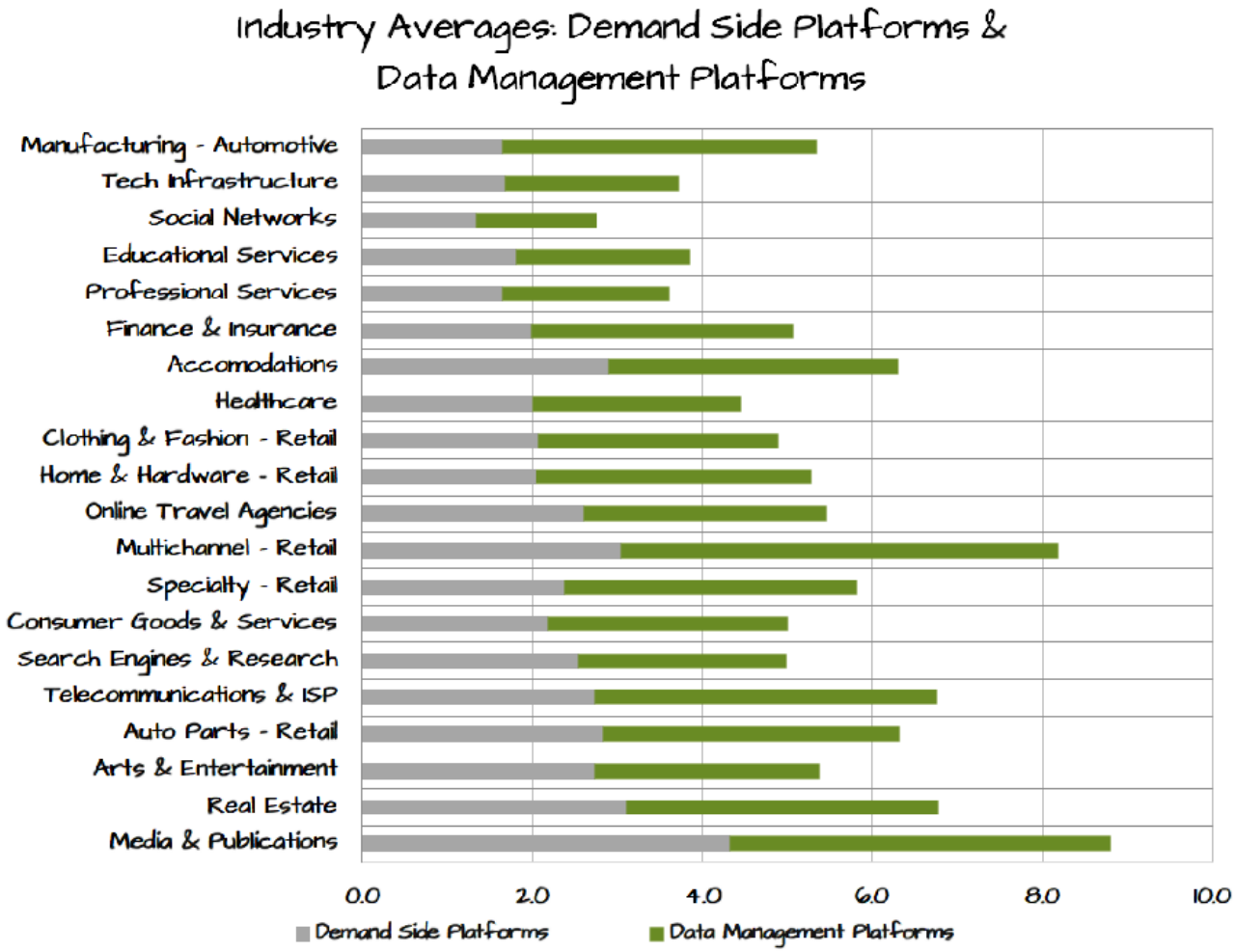
- Tag Management platforms reduce the need to place each distinct platform tracking element directly onto your website's source code. By deploying "containers," these platforms allow you to easily connect and manage your digital marketing platform's tagging requirements without ongoing development.[3]
- Demand Side Platforms are tools for marketers to target and purchase digital media inventory across multiple publishers, ad networks and ad exchanges, all from a single operating interface and measurement protocol.[4]
- Data Management Platforms are tools for marketers that collect audience information from one or more data sources, platforms, or partners and join those datasets into targetable, unified audiences across various ad networks, publishers, or exchanges without duplicative audience reach.
- Fraud Detection platforms analyze marketing-driven web traffic and detect anomalous or nefarious behavior patterns to identify potential click fraud or advertising spam.

These technologies add more than six additional third-party data collection requests per website in our study. Though they serve unique purposes, each functions best when deployed as the sole platform for its respective function. For example, a Data Management Platform cannot connect disparate audience data into a single unified audience if some of your media executions run through a separate platform. When not utilized as intended, these complexity management tools offer limited benefits to marketers. They struggle to improve

[3] *MarketingLand*. "What is Tag Management & Why Should You Care?" Bratt, L. Erik. August 21, 2014. https://marketingland.com/tag-management-care-95113

[4] Wikipedia. "Demand-side platform." June 24, 2020. https://en.wikipedia.org/wiki/Demand-side_platform

media performance or efficiency, and allow data waste and user experience issues to persist. The chart below indicates how many active Data Management Platforms and Demand Side Platforms the average company currently utilizes within each vertical industry. *The ideal execution deploys up to one Data Management Platform and one Demand Side Platform.*



Externalities & Additional Economic Waste

Disconnected third-party data strategies needlessly increase ad exposures and media costs, reduce return-on-investment and deliver poor consumer experiences. It also slows the Internet down.

Tags and tracking tools require code and communications to servers and content management systems. These have real costs on page load performance, creating bandwidth constraints on WiFi, high-speed cable, or mobile Internet connections. Site speed reduces a website's search engine ranking, because search engines aren't incentivized to direct users to slow websites. In fact, Google announced changes to its ranking algorithm to specifically account for mobile site speed back in 2018.[5] Poor site speed also substantially increases users'

[5] *Google Developers*. "Speed is now a landing page factor for Google Search and Ads." Osman, Addi &

chances of abandoning the page load, reducing economic benefits to both the user and the advertiser. Google's consumer research found that 40% of consumers will leave a page that fails to load in under three seconds.[6]

Further Complications: External Pressures Incentivizing Complexity

Two additional factors compound marketing technology platform fragmentation and complexity. First, massive digital companies erect "walled gardens" around digital content and consumer touchpoints they own and operate. By prohibiting other technologies from accessing content within these walled gardens, advertisers must choose between ignoring customer opportunities within those walls or adopting demand-side technologies owned by these Internet giants in order to access them. Because of immense consumer activity within these walled gardens — two examples being Google search and Facebook's social platform — advertisers often choose to invest in multiple third-party ad platforms and audience targeting strategies to capture as much of the addressable consumer opportunity as possible.

Second, fragmentation of the marketing technology ecosystem means advertisers must choose from thousands of ad technology solutions, with little means to understand or verify how they actually work. This phenomenon drives the "black box" idiom that affects the reputation of the entire marketing technology industry.

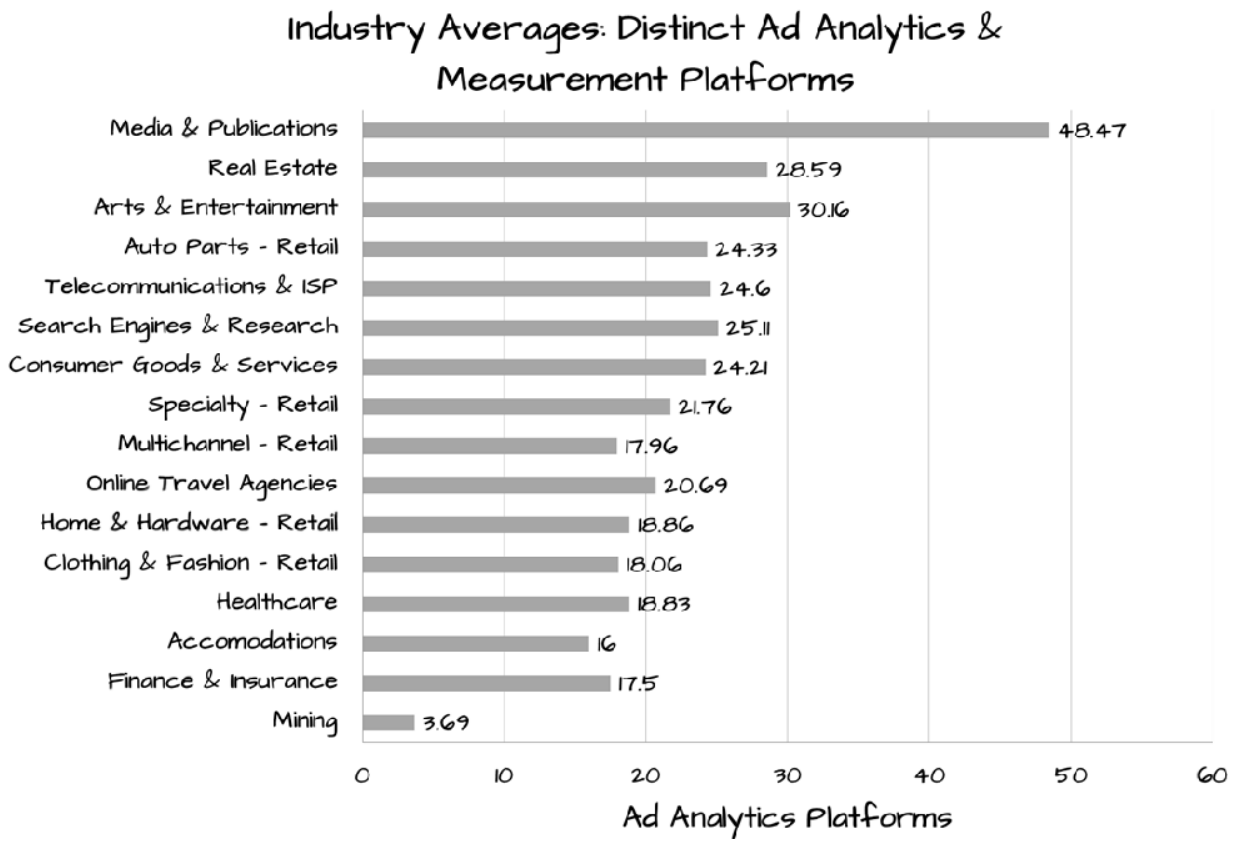
What immediate action can you take? Ask yourself the following:
Does my company utilize complexity management technology?
Does my company's objectives require tag management, data management, or demand-side platforms?
Do we utilize a single solution for each, or do we have redundant deployments?

Performance Management & Optimization Impact

We are in the age of information overload, but the struggle to discern truth and insight remains as difficult as ever. Few examples illustrate this issue more clearly than examining the average advertising analytics & reporting available per company, summarized by industry:

Grigorik, Ilya. September 23, 2019. https://developers.google.com/web/updates/2018/07/search-ads-speed

[6] *Think With Google*: "Why marketers should care about mobile page speed." https://www.thinkwithgoogle.com/marketing-resources/experience-design/mobile-page-speed-load-time



The *least* subscribed vertical in the entire US economy, Mining, measures the performance of their digital advertisements in *3.69* places. Two critical problems arise for every business subscribed to such Ad Analytics multiplicity. First, the sheer time and effort required to reconcile information coming from dozens of sources simultaneously strains marketing analysts' and practitioners' time, requires special expertise to deploy quick heuristics when evaluating data points, and demands analysts coerce reports into coherent business performance description and strategic insight.

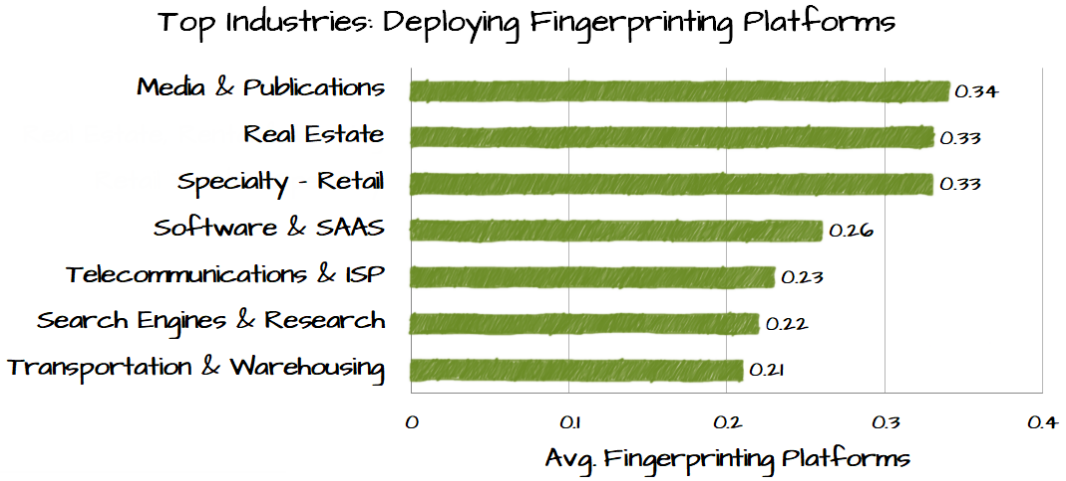
Second, the preponderance of conflicting reports undermines analysts' credibility at executive levels of an organization. *"Why aren't you using all the analytics we are paying for?"* is an exceptionally difficult question to answer up the business ladder, especially when executives are incentivized to see value in past platform purchases and rarely have the domain expertise required to know one datapoint or platform from another.

What immediate action can you take? Ask yourself the following:
How many different reports does my team need to read in order to measure marketing performance?
How much time do we spend reconciling differences between reports?
Can we explain why our various reporting platforms disagree, and how is this impacting decisions?

Additional Concerns Impacting Account-Based Marketers

Business-to-business firms have unique challenges when it comes to digital marketing strategy. The chief issue revolves around needing to reach prospective businesses — or "accounts" — as opposed to consumers. Typically reliable methods of reaching prospective customers in their most relevant moments struggle to disintermediate typical consumers from actual business decision-makers in the market for an enterprise solution. This complex dilemma has sparked an entire account-based marketing analytics technology ecosystem. Incentives exist for this ecosystem to test the spirit and letter of the law when it comes to user privacy and data compliance. Many of these solutions triangulate metadata to predict the likelihood of a user being an account decision maker.

If these capabilities sound a bit creepy, it's because they are. The broad term for this category of data collection and targeting is called "fingerprinting." Fingerprinting is a complex, encrypted record of potentially hundreds of innocuous browser settings that on their own aren't notable, but together produce sophisticated, probabilistic identity signals that can be used to predict identity.[7] Fingerprinting violates the premise and spirit of personal data privacy regulations and initiatives. It does not respect user choice, nor represent privacy-first data practice. Even if you disagree with the premise that fingerprinting violates privacy regulations or ethical boundaries, web browsing giants Google, Firefox, and Apple actively campaign against fingerprinting and deploy technology updates intended to curtail its effectiveness. Google states fingerprinting subverts user choice.[8] Firefox 72 actively blocks third-party data requests from those known to participate in fingerprinting.[9] Safari's ITP methodology proactively blocks third-party fingerprinting requests.[10] The following visual shows top industry adopters of capabilities we classify as "fingerprinting."



[7] *Ad Exchanger.* "Everything you need to know about fingerprinting after the Chrome crackdown." March 10, 2019. https://www.adexchanger.com/privacy/everything-you-need-to-know-about-fingerprinting-after-the-chrome-crackdown/

[8] *The Keyword. "Building a more private web." April 22, 2019.* https://www.blog.google/products/chrome/building-a-more-private-web

[9] *Moz://a.* "Firefox 72 blocks third-party fingerprinting resources." January 7, 2020. https://blog.mozilla.org/security/2020/01/07/firefox-72-fingerprinting

[10] *Safari Privacy Overview*. November, 2019. https://www.apple.com/safari/docs/Safari_White_Paper_Nov_2019.pdf

Industries Most Future-Ready: First-Party Data Capable

Third-Party data collection isn't a prerequisite for successful digital marketing, customer acquisition, or content monetization. Established technologies deliver the four functions required for successful personalized digital marketing, all while retaining user privacy and consent:

- Alert users to a first-party data collection request, honoring request consent or refusal
- Capture a user's anonymized web identity
- Store consented anonymized identity and behavior data in a first-party data environment[11]
- Connect to platforms with inventory availability and first-party audience onboarding[12] capabilities

Adopting this first-party data strategy has immediate benefits for the digital marketer:

- Reduced third-party data collection and tag management overhead
- Reduced analytics & reporting duplication
- Increased web page load speeds and improved business reporting consistency
- Fewer contracts, fees, and management rates
- Better compliance with privacy regulations
- Improved alignment with leading web browsers

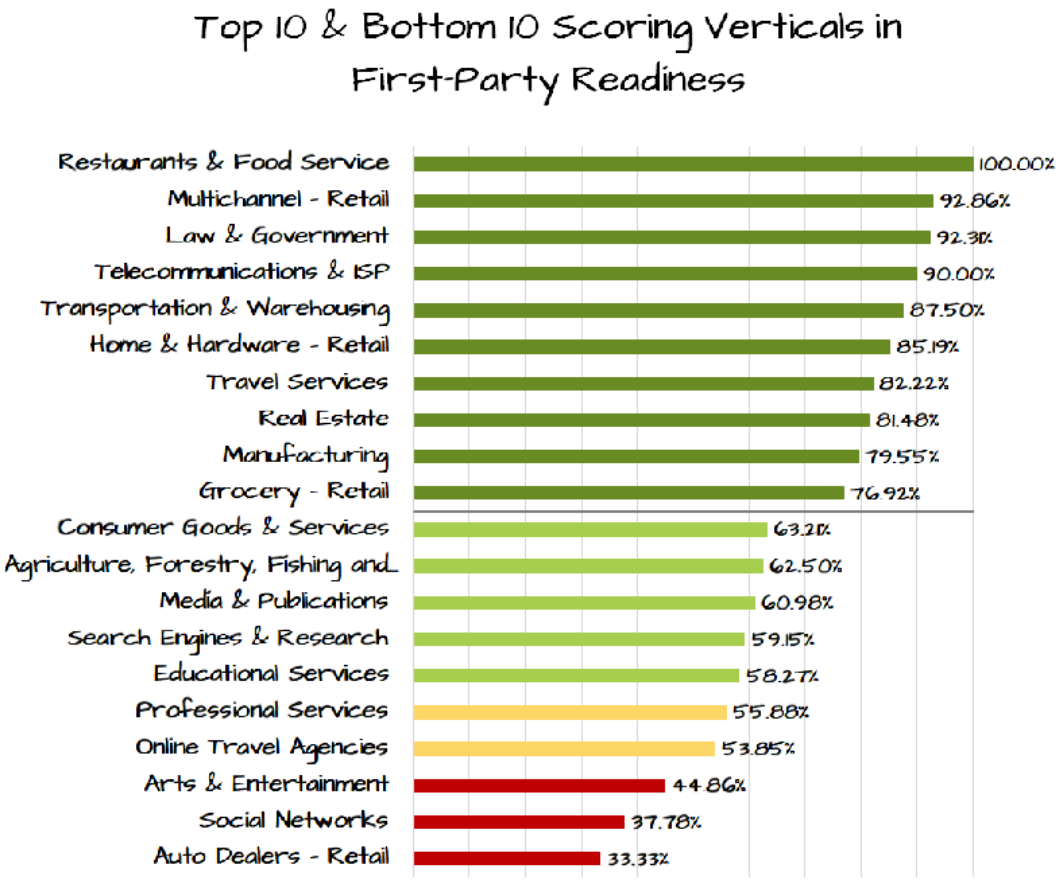
These benefits have material stakes. For just one company, they represent millions of dollars in revenues retained alongside fees and fines saved. For almost every vertical, this adds up to a multi-billion dollar opportunity.

Industry Leaders: First-Party Readiness

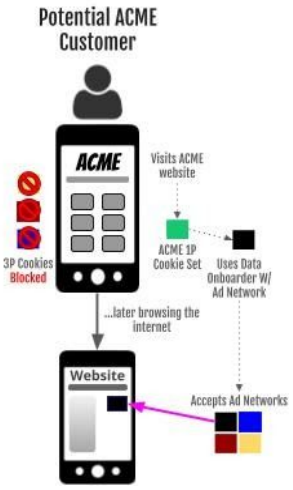
We measure "First-Party Readiness" as a calculation of a company's current adoption of the established technologies that accomplish the four functions above: capture consented first-party audience data & execute media and marketing campaigns strategically targeted to these audiences through advertising platforms capable of onboarding first-party audience information. Below are the top ten verticals in terms of First-Party Readiness, followed by the bottom ten.

[11] This is known as "First-Party Data."

[12] "Data onboarding is the process of transferring offline data to an online environment for marketing needs." *Wikipedia.* "Data Onboarding." April 14, 2020. https://en.wikipedia.org/wiki/Data_onboarding



First-Party Readiness %[13]



The most future-ready industries are also some of the most oversubscribed to the third-party ecosystem. Examples include Multichannel Retail and Telecommunications. Reasons for this dynamic are unclear, but one cannot rule out coincidence: many of the technologies that enable future-ready marketing strategy come from the very same companies that sell products dependent on third-party data collection.

What immediate action can you take? Ask yourself the following:
Does our website alert users to data collection, and honor consent refusal?
Do you store anonymized behavior data in a secure first-party environment?
Are we utilizing first-party audience onboarding and media buying capabilities?
Pictured: Future-ready first-party audience execution

[13] "Readiness" is registered for any company currently deploying 1P data collection, typically through asset or website analytics deployment, alongside first party audience onboarding & ad serving capabilities through one or more third-party marketing technology suites. Readiness % is measured as the total number of companies in the industry deemed "1P ready" over the entire sample of companies measured from within that industry.

Closing: Taking Action

The US digital economy must adapt. Both marketers and publishers need to move away from monetization models incentivized to collect and disseminate user behavior data without discretion or consent. Companies that commit to a cohesive, secure, transparent, and direct user data collection process will spend less money across media and technology, while reaching more customers with the right message at the right time. Companies resistant to marketing technology evolution will require more media spend than ever, with decaying media and marketing effectiveness.

- **As a user, you should take proactive steps** to ensure that your web browsing behavior remains shared only with companies you have consented. Visit the Digital Advertising Alliance's *WebChoices* tool at https://optout.aboutads.info to see which companies collect your behavior data, and opt out if desired.

- **Assess the marketing technology stack at your own organization**. *Does your digital marketing investment rely heavily on third-party audience targeting strategies through multiple vendors?* Bonsai's Data Risk Assessment answers these questions for you quickly. Our report and guided walk-through identifies the scale of your technology overlaps and calculates the scale of your potential media waste.

- **Begin your journey to a more effective and efficient marketing technology strategy.** With your Data Risk Assessment as the roadmap, our fully managed Mar-Tech Audit & Architecture services will guide your teams through our proven approach that crystalizes the tech, data, and team connections your digital business strategy needs to succeed, while eliminating tech complexity, costs, and redundancies you can do without.

For detailed breakdowns of every vertical & metric we measure in our Marketing Technology Proliferation Report, subscribe to our research. To learn how your organization can improve marketing outcomes and deleverage your strategy from unnecessary third-party technologies and data risks, contact Bonsai Data Solutions.