

2020 eCOMMERCE 3RD PARTY TECHNOLOGY INDEX

3rd party Performance Impact Guide

CHANNED

WELCOME TO THE

2020 3rd Party Index

For the 3rd year in a row, YOTTAA has released the 3rd Party Performance Index, providing detailed data on the performance of 3rd party technologies across eCommerce sites. In a year like no other when eCommerce became the primary shopping channel for consumers, brands are under a great deal of pressure to provide shoppers an engaging, seamless, and fast digital experience. Historically, this has been accomplished by adding rich content, images, and technologies in order to provide the level of online shopping standard expected by consumers.

However, because of the seismic shift to digital this year, in our 2020 index we are getting more prescriptive with granular information on 3rd party technology impacts and data, including recommendations to help brands keep pace with an ever changing retail landscape.

Additionally, the YOTTAA platform, which optimizes the performance of eCommerce sites, is constantly improving and optimizing more and more sites, and collecting new and varied levels of data, much of which we are flagshipping in this report.

For example, no longer does 3rd party performance impact stop at the Performance Impact Ratings we have used in past indexes. 3rd party complexity, location, and how they enhance the digital shopping experience now weigh heavier than ever when determining if they are right for your site. As a result, this index proves to be an invaluable site performance tool for online retailers in 2020, as well as a one-stop listing of the top 3rd party eCommerce technologies across multiple categories.

The index is based on data pulled from YOTTAA's knowledge base of over 1,500 eCommerce sites. Because YOTTAA is used to accelerate so many sites, we have the unique visibility and insight into the performance of over 1,000 3rd parties. By deploying YOTTAA, brands are able to inventory all 3rd parties on their sites, benchmark individual 3rd party performance, and make optimizations based on knowledge captured from every page view. Through YOTTAA's site optimization capabilities, our customers can add any 3rd party to their site, regardless of their Performance Impact Rating (PIR) ranking, and still achieve exceptionally fast performance.

In this year's index, we analyzed and ranked 500 of the most commonly used 3rd parties — more than ever before — while providing new data to help brands understand the full impact 3rd parties can have on site performance.

The 3rd Party Challenge: Rich Features vs. Fast Performance

The pressures for retailers to move to digital have been intense over the past year. With store closures and people not wanting to leave their homes, brands that hadn't previously prioritized their digital experience took a huge hit. It's clear that optimizing the performance of digital channels is now a "must have" for retailers to succeed in this environment.

As consumers demand a richer and more personalized experience while shopping online, more and more eCommerce 3rd parties are being released to empower retailers to meet those demands. Leading brands understand that adding numerous 3rd parties, such as live chat, personalization, and customer reviews, is the only way to meet the online experience today's consumers expect. But a big part of that optimal experience is fast site performance.

Without optimizing for performance, adding too many 3rd parties can negatively impact page speed, conversion, and other shopping experience factors. Where the challenge occurs is when retailers approach their functionality strategy by setting load time budgets for their 3rd parties. The reality is, when it comes to site performance all 3rd parties are not equal: some load quickly, others load slowly. Those that are really rich in functionality are going to take even longer. The most important "budget" to set is total page load time, not the speed of individual 3rd parties. Don't get yourself caught in that trap.

The most effective approach to a speedy, engaging eCommerce experience is to use the right technologies for your site — not to set time budgets for them.

Performance issues are occurring on eCommerce sites because:



Brands are adding all types of digital elements to meet shopper expectations



Brands are not taking into consideration the complexity of individual 3rd parties



3rd parties account for 67% of load time



Brands are not optimizing and accelerating 3rd parties

How Did We Collect This Data?

The data in this report was collected from over 1,500 eCommerce sites using YOTTAA's digital experience optimization solutions. As part of the YOTTAA platform, our 3rd Party Knowledge Base is a comprehensive repository of 3rd party data that grows with every page view. Through this knowledge base, the YOTTAA platform has deep visibility into site performance data from over 1,000 3rd parties used by our customers. The YOTTAA platform also detects site performance violations of individual 3rd parties. These violations are used to create Performance Impact Ratings (PIR) for each 3rd party in the index. This index focuses on the performance of the top 500 most widely adopted 3rd parties.



Performance Impact Rating

A Performance Impact Rating (PIR) is a rating that indicates how an individual 3rd party affects page load times. The PIR is calculated by adding a 3rd party's performance violations and the delay page load violations together and then dividing by the number of page views of the site. This performance indicator demonstrates the impact that each 3rd party has on shopper experience and online conversions.

Performance Violations are individual errors that occur when a single 3rd party takes longer than 1 second to load.

Delay Page Load Violations are individual errors that occur when a single 3rd party extends the time it takes for a shopper to be able to interact with a site.

Year-Over-Year Updates

Since this is the third year we have published this index, YOTTAA is able to compare the performance of tracked 3rd parties year-over-year. Some 3rd parties that were labeled as top violators last year took feedback from our index and improved significantly. Some did not. Here are the results.

Most Improved

It takes hard work and effort for 3rd parties to improve by one level, i.e. from red to yellow or yellow to green. Typically this is done with an internal vendor roadmap focused on improving the performance impact their technology is having on their customers' sites.

2019

2020

🕨 🗸 Yellow to Green

<mark>8×8</mark> 8×8	8 Chat	Chat	0	Justuno	Fraud Detection
Ad	Itelligent	Ad Tech	HK	Karma	Customer Service
ale 🚯	exa	Analytics	k	Kenshoo	Marketing Tech
🤣 AN	IP Project	Ad Tech	in	LinkedIn	Social Media
Barilliance Bar	rilliance	Personalization	Q	Live Chat, Inc.	Chat
b Bin	ng Services	Marketing Tech	LOGGLY	Loggly	Log Management
bizrate insights Biz	zrate Insights	Marketing Tech	~	Merchant Advantage	Personalization
blueconic Blu	ueConic	Marketing Tech	***	mParticle	Customer Management
	oud IQ	Marketing Tech	solarwinds	Pingdom	Application Monitoring
cordiał Co	ordial	Analytics	P	PriceSpider	Customer Reviews
dstillery DS	stillery	Marketing Tech	Pivy	Privy	Cart Abandonment
📁 Dy	vnatrace	Application Monitoring	9	Prometheus	Analytics
K Eve	erest Tech	Analytics	SeeWhy	SAP SeeWhy	Cart Abandonment
Fan playr Fai	nPlayer	Personalization	*	Selectable Media	Ad Tech
f Fit	Predictor	Sizing Tech	\bigcirc	Sociomantic	Ad Tech
No Goo	ogle Analytics Classic	Analytics	Φ	Sojern	Marketing Tech
Ġ Go	oogle One Tap	Login Tech	V	Vimeo	Video
zeta Ign	nitionOne	Marketing Tech	Yieldify	Yieldify	Personalization

\times Red to Yellow

Adap.tv	AdapTv	Video		Mappedin	Maps
Ó	Adobe Tag Manager	Tag Management	MÝBUÝS	MyBuys (Magne+IC)	Personalization
amazon advertising	Amazon Advertising	Ad Tech	Che Signal	One Signal	SMS Marketing
٢	Blue Triangle	Analytics	ORACLE REPORTS	Oracle Responsys	Email Marketing
Ú	DataStream.io	Analytics	•2	Salesforce Live Agent	Chat
FORESEE	Foresee	Customer Experience	V	Shopper Approved	Customer Reviews
٨	Google Ads	Ad Tech	STY LIT ICS	Stylitics	User Generated Content
-	Google Analytics	Analytics	⊠ thrive	Thrive Commerce	Marketing Tech
0	LivePerson	Chat	zmags	ZMags	CMS
0	LivePerson	Chat	zmags	ZMags	CMS

Most Declined

Unfortunately, not all year-over-year results indicated an improvement in performance levels.





✓→ ∽ Green to Yellow

adform	Adform	Ad Tech	© Clarivate MarkMonitor"	Mark Monitor	Analytics
Ō	Algolia	Commerce Search	MERKLE,	Merkle Search	Marketing Tech
amazon pay	Amazon Pay	Payment Processing	Ĩ	Owl Carousel	Image Hosting
5	BackInStock	Inventory Management	0	PulsePoint	Personalization
BBB	Better Business Bureau	Security Certificate	Ç	QuadPay	Payment Processing
(CallRail	Customer Service	.	SignifyD	Fraud Protection
) IIIII IIIIII IIIIIIIIIIIIIIIIIIIII	Cartful Solutions	Personalization	ß	Snapchat	Social Media
11	Convert	A/B Testing	S	Stripe	Payment Processing
	Font Awesome	Font Management	Ť	Talkable	Marketing Tech
Formstack	FormStack	Marketing Tech	٥	TokenEx	Client-side Security
6	Gleam	Marketing Tech	7	Wistia	Video
HEAP	Неар	Analytics			

Standout Performer: Content Management Systems

Content Management Systems (CMS) work on the front-end of sites. These tools, such as Zmags, Amplience, and Adobe AEM, manage complex, front-end content such as banners, headers, and shoppable imagery, making it easier for brands to generate and launch high-impact content.

3rd parties that are serving up images do a lot of heavy lifting, and as a result, can impact page load speed. This is why many CMS 3rd parties have red or yellow PIRs. This year Zmags put in a massive effort to improve the page load time of its product, and have successfully upgraded from a red to yellow rating. What a great accomplishment in such a short time!

This Zmags success story is proof that there is always an opportunity to improve performance impact. If 3rd parties feel as though they have exhausted all options to speed up their applications, YOTTAA is here to help.

zmags

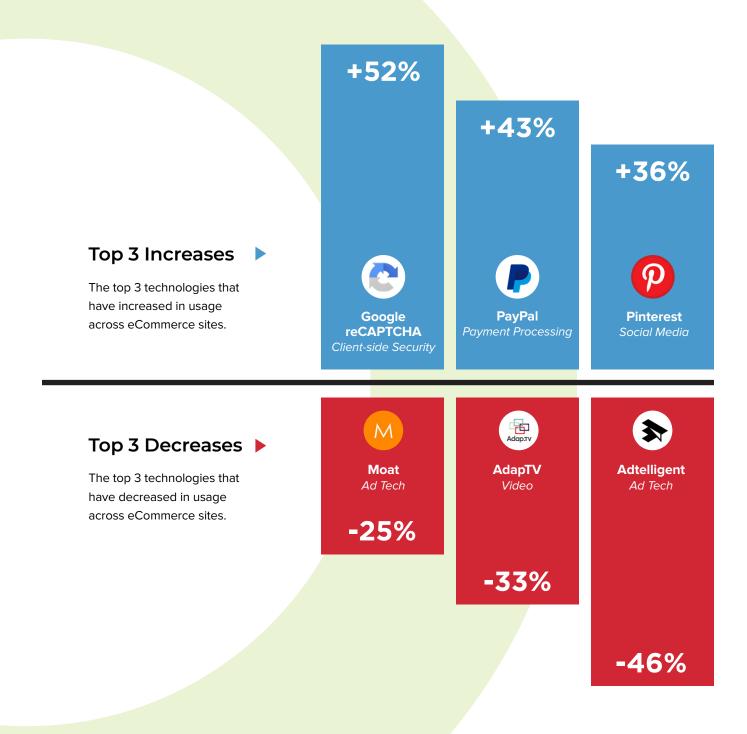
"As a solution revolutionizing how consumers experience digital commerce, we face significant and unique page weight challenges. Using the 3rd Party Index as a guide, we prioritized performance and worked with the YOTTAA team to optimize load speed on our interactive content. This has resulted in faster, more consistent loading time and an improved PIR score."



Cait Porte, SVP Customer Experience, Zmags

Top Usage Updates

Data from the 2020 Index shows that there are some 3rd parties that are being used more this year than last year, and some that are being used much less. Kudos to these 3rd parties for increasing usage and certainly sales — keep up the great work!

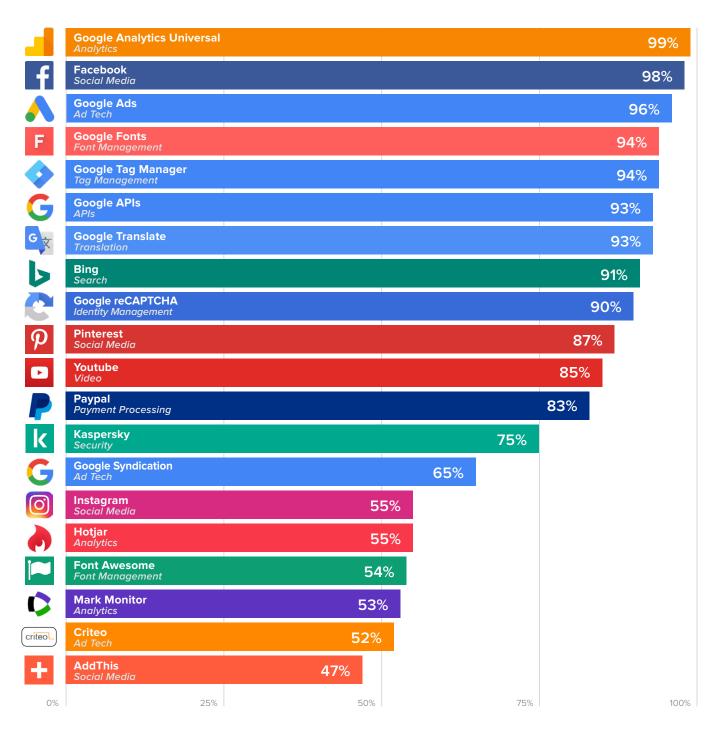


Top 20 3rd Parties Deployed by Retailers

YOTTAA measures the saturation and usage of individual 3rd parties across our entire client base. Below are the top 20 3rd parties used during our evaluation period. One result that stood out was that Google 3rd parties account for 8 of the 20 technologies used most by retailers. This number was high last year as well, indicating that retailers value the benefits of using Google technology.

We also found that some notable 3rd parties that made this list last year have completely fallen off this year's chart.

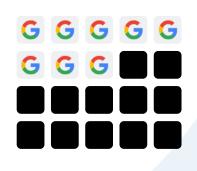
Here is the full list of the top 20 3rd parties used during our evaluation period:



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Top 20 Key Takeaways

Google 3rd parties account for 8/20 technologies used most by retailers.



These technologies fell off the Top 20 list this year:

➡	\$	Adtelligent
↓	Μ	Moat
↓	Adap.tv	AdapTV
↓	Y	Twitter
♦	adsafe	AdSafe

AdTech is falling in usage this year

This could be due to the drastic increase in eCommerce traffic, and brands not needing to rely on ad spend to acquire that traffic.

These technologies are newcomers to the Top 20 list this year:

♠	G	Google APIs
♠	k	Kaspersky
♠	Ø	Instagram
♠	¢	Mark Monitor
	+	AddThis



Goodbye Twitter. Hello Instagram!

Brands are leveraging Instagram heavily this year, replacing tweets with fun, shoppable imagery and videos.

Top 5 Offending Categories: Not All 3rd Parties are Created Equal

In the 2019 3rd Party Index, we broke down the list of technologies into 5 categories representing the top violating 3rd parties that impact site performance.

This year, we have some newcomers to the Top Offender list. Analytics, Video, and CMS are hitting heavier this time around, joining Marketing/Ad Tech and Personalization in impacting eCommerce sites the most. The common theme here: more complexity yields more negative performance impact:

Not all 3rd parties are created equal, and how they affect page load speed has to do with their complexity, and how much heavy lifting each one is doing. Consider how many server requests every 3rd party generates during each shopping session. Normally, eCommerce sites with 40+ 3rd parties require 300 calls to 100 servers to load a single page. That's a lot of work; but all those 3rd parties result in an engaging shopper experience.

It's important for brands to understand the different levels of 3rd party complexity in order to find the right balance. More complex 3rd parties are technologies that are usually doing the most robust and dynamic work on eCommerce sites, and while they can negatively impact page speed, they can also have a major positive impact on conversion rate and shopper engagement.

Personalization, Marketing/Ad Tech, and CMS are what we refer to as complex technologies when it comes to impacting page load time. But this does not make them bad. In fact, you could argue that these tools are even more necessary to engage shoppers. But the fact that these technologies are extremely robust requires them to do more work and raises the potential for them to slow down page load times.

Personalization, for example, is very complex: it's capturing information, it's running queries, it's changing content dynamically on the page. These are not simple tasks and require a ton of data to perform.

STANDOUT PERFORMER

PERSONALIZATION

ANALYTICS

VIDEO

CMS

MARKETING/AD TECH

R POWER REVIEWS

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"Providing User Generated Content and Customer Reviews for our clients is very complex from a technology standpoint. As a result, PowerReviews is committed to pushing the envelope in terms of our product innovation and this includes the speed it takes our application to load. Using the Performance Impact Rating as a guide to reaching optimal application speed performance, we have relied on Yottaa to validate our work focusing on delivering the fastest and smoothest customer experience possible."



Casey Murray, Director of Business Development & Partnerships, PowerReviews



TOP 5

OFFENDERS

3rd Party Deep Dive

New to the 3rd Party Index this year are key insights to 100 commonly used 3rd parties across our database. In the chart below, you'll find three new performance metrics that break down the data even more:



Average Performance Impact to Document Complete Time in milliseconds



How long it takes for the 3rd party to finish running in milliseconds



What percentage of an individual site the 3rd party is running on

	3rd Party	Category	Average Performance Impact (ms)	Finished Running (ms)	% of the site pages with this 3rd party
*	Klevu	Commerce Search	517	721	100%
	Pixlee	User Generated Content	497	884	99%
X	Stamped IO	Customer Reviews	517	1462	99%
commerce cloud	Salesforce CQuotient	Personalization	446	896	98%
(blac)	Code Blackbelt	Marketing Tech	358	818	98%
solarwinds	Pingdom	Application Monitoring	291	675	98%
TrustArc	Trust Arc	Privacy Tech	500	724	98%
**	UTag - Tealium	Tag Management	357	2431	97%
MERKLE	Merkle Search	Marketing Tech	280	533	96%
Cirie Signal	One Signal	SMS Marketing	498	672	95%
• (2) evergage	Evergage	Personalization	462	973	95%
√ accessiBe	accessiBe	Accessibility	221	270	94%
attentive [,]	Attentive	SMS Marketing	543	856	94%
BRIGHTEDGE	Brightedge	Marketing Tech	510	1286	94%
Google for Retail	Google for Retail	Marketing Tech	328	507	93%
4	Google Analytics Universal	Analytics	397	1086	91%
	Cheetah Digital	Marketing Tech	372	994	91%
٨	Google Ads	Ad Tech	432	1625	90%
Ø	Bluecore	Personalization	493	549	90%

CLICK HERE FOR THE FULL LIST ▶



Average Performance Impact in Milliseconds

The Average Performance Impact represents the typical amount of time the 3rd party runs before reaching Doc Complete, or the average performance impact on Doc Complete. Doc Complete is when the onLoad event fires in the browser. This typically means that all static content has loaded and the page is fully interactive. Historically, this has been a good measurement for site performance. Doc Complete times are the most impactful on conversion rate; the faster the Doc Complete time, the higher the conversion rate. When someone is talking about the load time of a site, they are most likely referring to Doc Complete. Let's take a look at the 3rd parties with the highest Average Performance Impact:

	3rd Party	Category	Average Performance Impact (ms)	Finished Running (ms)
\mathcal{Q}	ipify	IP Terminal	898	8245
Μ	Moat	Ad Tech	825	1355
Core metrics	IBM Core Metrics	Analytics	701	1784
neustar	NeuStar Ad Advisor	Ad Tech	576	923
crazyegg	Crazyegg	A/B Testing	573	981
attentive	Attentive	SMS Marketing	543	856
brightcove [.]	Brightcove	Video	519	2646
*	Klevu	Commerce Search	517	721
X	Stamped IO	Customer Reviews	517	1462

As you can see in this chart, ipify takes nearly 900 ms to load prior to Doc Complete. If you have ipify on your site and your page load time is 3 seconds, then up to 30% of that time is directly related to ipify loading.

With the Average Performance Impact comes great optimization opportunities. For example, if you were to optimize an individual 3rd party, how many seconds could you save? If you can shave off some milliseconds, then your site could reach Doc Complete faster.

Time to Finish Running in Milliseconds

When a 3rd party is finished running, it's measured by what's called Last Byte. This is when the 3rd party typically stops loading. Brightcove, for example, has an Average Performance Impact of 519 ms on Doc Complete, however it doesn't finish running until 2.646 seconds. So, Brightcove's total site performance impact can be over 3 seconds if this isn't optimized and sequenced correctly.

This is where the ability to change the loading order of 3rd parties becomes critical. By having a systematic way to proactively decide when individual 3rd parties load on specific pages, you can make sure the right technologies fire at the right time. For example, analytics solutions need to start running right away, or you won't get comprehensive data. But other 3rd party features, such as live chat, don't need to launch until after the shopper can engage with the site. No shopper navigates to a page and then immediately starts to use the chat function. Optimally sequencing the loading of all 3rd parties on your site ultimately shaves time off page load and gives shoppers a fast and smooth experience.



Percentage of the Site a 3rd Party is Running On

This number indicates the percentage a 3rd party is running across a single site. For example, a Payment Processing 3rd party should be a very low percentage, as it only belongs on the checkout page. An Analytics technology should have a high percentage, as it runs on many pages including product pages, homepage, or category pages. Let's dig into some of the findings:



✓ accessiBe

accessiBe is a technology that automates web accessibility for people with disabilities, and it's running on 94% of the pages on a site. This makes sense, as it's making the entire site more accessible.



G Pay

Google Pay, a payment processing 3rd party, is only running on 13% of the pages on a site. This makes sense, as it should only be running on checkout pages.



QuadPay, another payment processor, is running on 72% of pages on a site. This is a red flag! Payment technologies should only be running on checkout pages, and may cause a negative performance impact if too widely used throughout the site.

The reason why this stat is important is because if you have a 3rd party running across many pages of your site that should just be on a few pages, then that 3rd party is actually adding unnecessary page load times. This can hurt shopper experience and conversion.

This is where brands need to be selective and thoughtful. You don't need Ratings & Reviews on a category page. You do need it on PDP pages. And if it's on anything outside of PDP pages you are not only wasting your shoppers' time, you might be costing your brand conversions!



Risks of 3rd Parties on Checkout Pages

As mentioned in the last section, unnecessary 3rd parties running on too many pages can be a concern. But what can be even scarier? Too many unnecessary 3rd parties running on your checkout and login pages. And by "scary" we mean putting your shoppers' data at risk.

The industry saw this first-hand in June 2020, when accessories retailer Claire's suffered a major data breach. The breach occurred when an unauthorized 3rd party accessed customer account information, including the last four digits of credit card numbers, expiration dates, and associated billing addresses. While it's unclear how many customers were impacted by the breach, it has certainly shaken consumer trust.

This was proven in the recently released 2020 Retail Systems Research (RSR) Report, where 89% of surveyed consumers reported being concerned that 3rd party tech could steal their personal information. And rightfully so, as the graph below demonstrates a disturbing number of 3rd parties found on retailers' checkout and login pages:

eCommerce 3rd Party Security Concern

Average # of 3rd Parties on Mobile Devices



Retail Systems Research, September 2020

Only ESSENTIAL 3rd parties should have access to your checkout and login pages. On average, retailers have way too many.

10% of retailers had pop up login pages, which are even harder to secure.



Which Types of 3rd Parties Should NOT be on Checkout?

Below is a chart of 3rd party categories, and whether or not they are considered reasonable to have on the checkout page:

ΝΟ	Ad Tech	Malware	Personalization
	Commerce Search	Maps	Social Marketing
	Customer Reviews	Marketing Automation	Social Media
	Influencer Marketing	Marketing Tech	Video
YES	A/B Testing	Customer Service	Logos
	Accessibility	Development Testing	Mobification
	Analytics	Error Monitoring	Payment Processing
	APM	Font Management	Rum Analytics
	Chat	Identity Management	Security Badge
	Client-side Security	Image Hosting	Security Certificate
	CMS	Log Management	Tag Management

Checkout 3rd Party

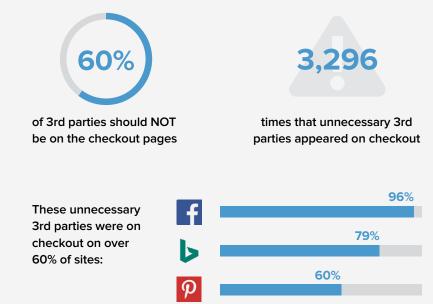
Percentage of sites that have that 3rd party on checkout

Breakdown

?

Whether or not the individual 3rd party makes sense to be on checkout

Let's look at some findings:



If you are one of the many sites to have one of these 3rd parties running on checkout, remove them immediately. Not only are you slowing down your site, but you are putting your customers' data at risk.

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
f	Facebook	Social Media	96%	NO
Ь	Bing	Search	79%	NO
P	Pinterest	Social Media	60%	NO
commerce cloud	Salesforce CQuotient	Personalization	34%	NO
b:	Bazaarvoice	Customer Reviews	32%	NO

CLICK HERE FOR THE FULL LIST 🕨

Controlling Where and When 3rd Parties are Running

Between potential site performance issues, data vulnerabilities, lost revenue, and negative headlines caused by 3rd parties, it's imperative for eCommerce brands to have visibility and control over all 3rd parties and services executing on their sites. Without this visibility, 3rd parties can be executing on a site with little or no knowledge across the brand. Don't be that brand.

With an eCommerce site governance technology, such as YOTTAA's SERVICE CTRL, not only do you gain full visibility to these 3rd parties and services, but you are able to add a layer of security to enhance your overall security posture. This, in turn, provides better customer experiences, and ensures compliance with internal and external policies, such as GDPR and CCPA.





3rd Party Performance Indicator Rating Index

The preceding PIR index listings highlighted the top performing 3rd parties, the top offenders, as well as year-over-year findings. Below is a listing of the top 3rd party technologies (listed in alphabetical order) used in the YOTTAA platform in September 2020.

*	Represents a consistent negative impact on performance	inco	oresents an onsistent negative formance impact	-	sents little performance t	
	3rd Party		Category		PIR	% of Sites
33 across	33Across		Ad Tech		 Image: A start of the start of	2%
	4-tell		Personalization		×	1%
4Cite	4Cite		Marketing Tech		~	7 %
3 ⁸⁰ PARTY	50million.club		Security			28%
<mark>8×8</mark>	8x8 Chat		Chat			1%
	A3Cloud		Ad Tech			4%
AB Tasty	AB Tasty		A/B Testing		~	3%
√ accessiBe	accessiBe		Accessibility			12 %
acoustic	Acoustic Campaign		Marketing Automation		~	1%
acoustic	Acoustic Experience Analytics		Analytics			2%
acuity®	AcuityAds		Ad Tech			3%
adacado [.]	Adacado		Ad Tech			4%
Adap.tv	AdapTv		Video		~	5%
	Adara		Marketing Tech			1%
. Handresson	Addshoppers		Marketing Tech			3%
+	AddThis		Social Media		~	47 %
+	AddToAny		Social Media		 Image: A start of the start of	2%
adform	Adform		Ad Tech		~	7%
ADMAN'	ADman Media		Marketing Tech		 Image: A set of the set of the	2%

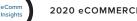


Com sigh

	3rd Party	Category	PIR	% of Sites
	Adobe Analytics	Analytics	<u>~</u>	14%
	Adobe Analytics Beacon	Analytics	<u>~</u>	5%
	Adobe Dynamic Media	Image Hosting	8	24%
	Adobe Fonts	Font Management	<u>~</u>	38%
0	Adobe Marketing Cloud	Marketing Tech	<u>~</u>	39%
Ô	Adobe Tag Manager	Tag Management	<u>~</u>	26%
	Adobe Test and Target	A/B Testing	<u>~</u>	16%
2 AdRoll	Adroll	Marketing Tech	<u>~</u>	12%
*	Adtelligent	Ad Tech		9%
affirm	Affirm	Payment Processing	<u>~</u>	9%
afterpay ₆ >	AfterPay	Payment Processing		20%
🕢 AgileOne	AgileOne	Identity Management	<u>~</u>	2%
aimtell	Aimtell	Notification Tech		2%
(Akamai	Akamai mPulse	Analytics		7%
(Akamai	Akamai Stats	Analytics	<u>~</u>	15%
8	Alexa	Analytics		2%
Ô	Algolia	Commerce Search	<u>~</u>	5%
amazonadvertising	Amazon Advertising	Ad Tech	<u>~</u>	19%
Login with amazon	Amazon Login	Identity Management		2%
amazon pay	Amazon Pay	Payment Processing	<u>~</u>	34%
PARTY	American List Councel	Analytics		6%
AMOBEE	Amobee	Marketing Tech	<u>~</u>	10%
9	AMP Project	Ad Tech		4%
✤Amplience	Amplience	CMS	×	6%
Amplitude	Amplitude	Analytics		15%
O APPDYNAMICS	AppDynamics	Application Monitoring	<u>~</u>	3%
\bigcirc	AppMate Wishlist King	Wish List	<u>~</u>	2%
arm treasure data	Arm Treasure Data	Customer Analytics		2%
attentive [*]	Attentive	SMS Marketing	<u>~</u>	24%
Attraqt	Attraqt	Personalization	<u>~</u>	2%



	3rd Party	Category	PIR	% of Sites
•	AudioEye	Accessibility		3%
	Auryc	Visual Intelligence	~	2%
Δ	AvantLink	Marketing Tech	<u>~</u>	2%
\bigcirc	Avochato	SMS Marketing	~	1%
5	BackInStock	Inventory Management	~	15%
Barilliance	Barilliance	Personalization	\checkmark	1%
b:	Bazaarvoice	Customer Reviews	×	44%
4	Beeketing	Marketing Automation	 Image: A start of the start of	3%
⟨≣⟩	Beeswax	Ad Tech	~	9%
BBB	Better Business Bureau	Security Certificate	~	2%
BID SWITCH	BidSwitch	Ad Tech	×	5%
0	Bidtellect	Ad Tech	×	4%
6	Bing	Search	~	91%
6	Bing Services	Marketing Tech	~	23%
8	BirdEye	Customer Reviews	~	1%
bizrate Insights	Bizrate Insights	Marketing Tech	 Image: A start of the start of	16%
6	Bloomreach	Ad Tech	~	6%
	Blue Triangle	Analytics	~	7%
blueconic	BlueConic	Marketing Tech	 Image: A start of the start of	1%
ø	Bluecore	Personalization	~	11%
b	Bold Commerce	Software Development	\checkmark	13%
bold 360	Bold360	Chat	<u>~</u>	5%
4	Bolt	Payment Processing	~	1%
	Borderfree	Fulfilment	~	6%
Wunderkind Formatly BouncaX	Bounce Exchange	Marketing Tech	×	19%
Braintree ^ PayPol Server	Braintree	Payment Processing	~	11%
æ	Branch.io	Marketing Tech	~	2%
BRANDing BRAND.com	Branding Brand	Mobile Marketing Tech	×	2%
BrandLock	BrandLock	Client-side Security		1%
0	Brandwatch	Marketing Tech		1%



	3rd Party	Category	PIR	% of Sites
9	Bread	Payment Processing	 Image: A start of the start of	1%
brightcove	Brightcove	Video	~	10%
BRIGHTEDGE	Brightedge	Marketing Tech	~	6%
	Bronto	Email Marketing	~	15%
bugsnag	Bugsnag	Error Monitoring	 Image: A set of the set of the	52 %
ø	BuyerGenomics	Marketing Tech	 Image: A start of the start of	1%
Q	CallRail	Customer Service	~	2%
CANADA POSTES POST CANADA	Canada Post	Direct Mail	~	1%
380 PARTY	Carro	Influencer Marketing	 Image: A start of the start of	5%
) The second se	Cartful Solutions	Personalization	~	2%
	CartKit	Marketing Tech	~	2%
Casale MEDIA.	Casale Media	Ad Tech	×	6%
C	Celebros	Commerce Search	~	1%
centro	Centro	Marketing Tech	~	4%
\bigcirc	Certona	Personalization	~	13%
channelodvisor	ChannelAdvisor	Marketing Tech		8%
CHASE 🔿 ~ Paymentech	Chase Merchant Services	Payment Processing	~	1%
$\mathbf{\mathfrak{s}}$	Chatra	Chat	 Image: A set of the set of the	3%
	Cheetah Digital	Marketing Tech	~	7 %
\bigcirc	Choozle	Marketing Tech	 Image: A set of the set of the	1%
Clicktale [®]	Clicktale	Analytics	×	5%
CloudiQ	Cloud IQ	Marketing Tech	 Image: A start of the start of	1%
	Cloudinary	Image Hosting	×	21%
cloudsponge	Cloudsponge	Social Marketing	 Image: A start of the start of	3%
(act)	Code Blackbelt	Marketing Tech	~	7%
>	CommerceHub	Inventory Management	~	3%
Q	Comodo	Security Badge		2%
ଦ୍ୟୋଧ୍ୟକ୍ଷ	Conjured	Web Development	~	1%
connexity	Connexity	Marketing Tech	~	3%
٢	Content Square	Analytics	~	8%

	3rd Party	Category	PIR	% of Sites
C °	Conversant	Marketing Tech	~	28%
V/	Convert	A/B Testing	~	2%
Cookiebot	CookieBot	Privacy Tech	~	3%
cordiał	Cordial	Analytics	 Image: A start of the start of	4%
\bigcirc	Coupon Cabin	Coupon Tech		24%
COUPON FOLLOW	Coupon Follow	Coupon Tech		7 %
Ç	Crazyegg	A/B Testing	~	18%
criteol.	Criteo	Ad Tech	~	52 %
\succ	Cross Sell	Personalization		1 %
	Curalate	Marketing Tech	~	16%
כחו+סוט	Custora	Marketing Tech	~	3%
R	CyberAgent AI Tech Studio	Ad Tech		3%
DH	Dash Hudson	Marketing Tech	×	4%
Data Plus Math	Data Plus Math	Ad Tech	~	1%
DATADOG	Datadog	Application Monitoring	~	1%
Ċ	DataStream.io	Analytics	~	3%
Roku	dataxu - now Roku	Marketing Tech		6%
datonitos	Datonics	Ad Tech		2%
"D	Decibel Insight	Analytics	~	2%
\$	DialogTech	Marketing Tech	~	2%
0	Digicert	Security	~	4%
D	Disqus	Customer Service	~	5%
D	District M	Ad Tech	 Image: A set of the set of the	1%
DV	DoubleVerify	Ad Tech	~	2%
DR∮FT	Drift	Chat	\checkmark	1%
dstillery	Dstillery	Marketing Tech	 Image: A start of the start of	2%
	DynAdmic	Marketing Tech	 Image: A start of the start of	1%
÷	Dynamic Yield	Personalization	~	15%
	Dynatrace	Application Monitoring		3%
Eckoh	Eckoh Web Chat	Chat Security	 Image: A start of the start of	1%

	3rd Party	Category	PIR	% of Sites
eGain	eGain	Customer Service		3%
4	Emarsys	Personalization	~	4%
310 PARTY	Emojiis	Image Hosting	~	2%
=M×	EMX Digital	Marketing Tech	~	2%
ENSÏGHTEN	Ensighten	Tag Management	~	6%
في	EqualWeb	Accessibility	 Image: A start of the start of	5%
	Everest Tech	Analytics	 Image: A start of the start of	25%
2	Evergage	Personalization	×	9%
exelate A Meter Congany	Exelator	Ad Tech	<u>~</u>	3%
e ^x	Exponential	Ad Tech	 Image: A set of the set of the	2%
(ଡି)	Extole	Marketing Tech	~	5%
-	Eyeota	Marketing Tech	 Image: A start of the start of	3%
f	Facebook	Social Media	~	98%
f	Facebook Business	Ad Tech		3%
FANCOM	FAN Communications	Marketing Tech	~	6%
Fan playr	FanPlayer	Personalization		1%
(C)	Findify	Personalization	~	2%
f	Fit Predictor	Sizing Tech	 Image: A start of the start of	1%
Five	Five9	Chat	~	1%
",,	Flash Talking	Ad Tech	~	6%
flipp_	Flipp	Ad Tech	 Image: A start of the start of	1%
8	Flow	Project Management	~	3%
FOMO	Fomo	Marketing Tech	 Image: A start of the start of	2%
	Font Awesome	Font Management	~	54%
&	Fonts by Hoefler & Co	Font Management	 Image: A start of the start of	6%
fonts.com	Fonts.com	Font Management	~	20%
FORE	Foresee	Customer Experience	~	4%
F	FormStack	Marketing Tech	~	4%
Ì	Forter	Client-side Security	~	8%
fortysix/5	FourSixty	Social Marketing	~	9%



	3rd Party	Category	PIR	% of Sites
	FreeWheel	Ad Tech	~	2%
K	Fresh Relevance	Personalization	 Image: A start of the start of	3%
	Freshworks Freshchat	Chat	~	4%
friendbuy	FriendBuy	Marketing Tech	~	3%
FUELX	FuelX	Ad Tech	 Image: A start of the start of	3%
fs	Fullstory	Personalization	<u>~</u>	11%
Б	GeoTrust	Security Certificate	 Image: A start of the start of	2%
	Ghostery	Tag Management	<u>~</u>	8%
0	GitHub	Software Development	 Image: A start of the start of	8%
•	Gladly	Customer Service	 Image: A start of the start of	2%
-	Gleam	Marketing Tech	~	3%
Global <mark>©</mark>	Global-e	Localized Checkout	~	3%
GlobalSign	Globalsign	Security Certificate	×	2%
٨	Google Ads	Ad Tech	~	96%
()	Google AMP	Web Development	\checkmark	2%
~	Google Analytics Classic	Analytics		45%
	Google Analytics Universal	Analytics	~	99%
Google APIs	Google APIs	APIs	~	93%
G	Google Customer Reviews	Customer Reviews	\checkmark	12%
F	Google Fonts	Font Management	~	94%
Google for Retail	Google for Retail	Marketing Tech	 Image: A start of the start of	6%
Q	Google Maps	Maps	~	22%
G	Google One Tap	Login Tech	\checkmark	1%
G	Google Pay	Payment Processing		29%
Ĉ	Google reCAPTCHA	Client-side Security	\checkmark	90%
G	Google Syndication	Ad Tech	~	65%
	Google Tag Manager	Tag Management	~	94%
GX	Google Translate	Translation	~	93%
G	Google Video	Video	×	2%
Google Fonts	Google Web Font Loader	Font Management	 Image: A start of the start of	2%

	3rd Party	Category	PIR	% of Sites
Ð	Gorgias	Customer Service	~	5%
8	Granify	Machine Learning	~	1%
U	Gravatar	Avatar Tech	~	18%
GROOVINADS	GroovinAds	Ad Tech	 Image: A start of the start of	1%
6	GroupBy	Marketing Tech	~	2%
gumgum ^a	GumGum	Marketing Tech	×	2%
۲	Hawksearch	Commerce Search	~	1%
//HL	Headliner Labs	Marketing Automation	~	2%
HEAP	Неар	Analytics	~	3%
hiconversion	HiConversion	Personalization	~	3%
h.	Hivewyre	Ad Tech	~	4%
honey	Honey	Marketing Tech		44%
ð	Hotjar	Analytics	~	55%
\leq	Hull.io	Marketing Tech		1%
	Human Presence	Identity Management		1%
Core metrics	IBM Core Metrics	Analytics	×	4%
Ô	lcon Finder	Image Hosting		3%
£	IDVision	Client-side Security	×	1%
Ignite	Ignite Chute	User Generated Content		1%
zeta	IgnitionOne - Now Zeta Global	Marketing Tech		7%
IX	ImgIX	Image Hosting	×	8%
impact	Impact	Marketing Tech	~	17 %
۲	Improve Digital	Ad Tech		1%
	Innovid	Video	×	2%
Powerfront [*]	INSIDE	Chat	~	6%
Insider	Insider	Marketing Tech	~	5%
Q inspectlet	Inspectlet	A/B Testing	~	4%
Ø	Instagram	Social Media	~	55%
	Instana	Application Monitoring	~	5%
search.	InstantSearch+	Commerce Search	~	5%

Integral Ad Science Ad Tech Image: Science Ad Tech Image: Science Ad Tech Image: Science	ites
InvocaMarketing TechImage: Constraint of the second	,
Image: Second	6
▶iSpot.tvAd Tech●53▶iZootoNotification Tech●23JivoxJivoxPersonalization●53▶JudgeMeCustomer Reviews●93●JustunoMarketing Tech●111♥JW PlayerVideo●123▶KarmaDevelopment Testing●133▶KarteAnalytics●133▶KasperskySecurity●133▶KlarnaPayment Processing●133▶KlaviyoEmail Marketing●443♦KlicklyAd Tech●333♥KustomerCustomer Service●333♥LaunchDarklyDevelopment Testing●143●NotificationNotification143●NotificationNotification143●NotificationNotification143●NotificationNotification143●NotificationNotification●●NotificationNotification●143●NotificationNotification●143●Notification●143●Notification●143●Notification●143●Notification●143●Notification●143●Notification●143●Notifi)
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JivoxJivoxPersonalizationImage: State Sta)
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KarteAnalytics55KKasperskySecurity3KKenshooMarketing Tech3KKlarnaPayment Processing55KKlaviyoEmail Marketing40KKlevuCommerce Search45KlicklyAd Tech35KustomerCustomer Service35KLaunchDarklyDevelopment Testing45	>
KasperskySecurity75KKenshooMarketing Tech13KKlarnaPayment Processing15KKlaviyoEmail Marketing40KKlevuCommerce Search49KlicklyAd Tech33KKustomerCustomer Service33KLaunchDarklyDevelopment Testing19	
IKenshooMarketing TechIKKlarnaPayment ProcessingIKKlaviyoEmail MarketingIKKlevuCommerce SearchIKKlicklyAd TechIKustomerCustomer ServiceIKLaunchDarklyDevelopment TestingI	>
K.KlarnaPayment Processing15Image: StartingImage: Starting	6
Klaviyo Email Marketing 40 Klevu Commerce Search 40 Klickly Ad Tech 33 Kustomer Customer Service 33 LaunchDarkly Development Testing 19	6
Klevu Commerce Search 49 Klickly Ad Tech 39 Kustomer Customer Service 39 LaunchDarkly Development Testing 19	6
Klickly Ad Tech 32 State Kustomer Customer Service 33 State LaunchDarkly Development Testing 34	6
Image: State of the state o)
LaunchDarkly Development Testing)
)
LEVEL LevelAccess Accessibility 29)
LimeSpot LimeSpot Personalization 39	,
V Linc Global Customer Experience	,
in LinkedIn Social Media 916	6
LinkedIn Marketing Solutions Marketing Tech 10	6
* Listrak Marketing Tech - 18	6
Live Chat, Inc. Chat	,
LiveClicker Email Marketing - 39	,
Email Marketing	,
Chat - 13	6



	3rd Party	Category	PIR	% of Sites
	LiveRamp	Identity Management	~	16%
LOGGLY	Loggly	Log Management		16%
0	LoginRadius	Identity Management	~	1%
×	Loop Commerce	Gift Giving	~	2%
00	Loox	Customer Reviews	~	5%
\bigcirc	Lotame	Analytics	~	4%
Q2	LoyaltyLion	Loyalty Platform	\checkmark	5%
Ö	Lucky Orange - Settings	Marketing Tech	~	11%
Lytics	Lytics	Identity Management	~	4%
Hagis Testion	Magic Toolbox Magic Zoom Plus	Image Hosting	~	1%
E	Mailchimp	Marketing Tech	~	14%
${}^{\bigcirc}$	Mapbox	Maps	 Image: A set of the set of the	6%
Ň	Mappedin	Maps	~	1%
© Clarivate MarkMonitor	Mark Monitor	Analytics	~	53%
	Marketo	Marketing Automation	~	9%
masterpass.	Masterpass	Payment Processing	~	1%
\bigcirc	Material Design Icons	Image Hosting	 Image: A set of the set of the	3%
	Mavrck	Influencer Marketing	~	2%
MM	Maxmind	Security	 Image: A start of the start of	2%
U	McAfee SECURE	Client-side Security	~	8%
Μ	Measured	Analytics	~	2%
Ň	Medallia	Customer Experience	~	8%
media.net	Media.net	Ad Tech	~	16%
MediaMath	MediaMath	Ad Tech	~	8%
MEDIAWALLAH	MediaWallah	Identity Management	 Image: A start of the start of	1%
^	Merchant Advantage	Personalization	~	1%
88	Meredith	Marketing Tech	~	1%
MERKLE	Merkle Search	Marketing Tech	~	4%
\sim	MicroAd	Ad Tech	~	5%
•	MixPanel	Analytics		14%



	3rd Party	Category	PIR	% of Sites
Μ	Moat	Ad Tech	×	26%
4	Mobify	Mobification	~	1%
М	Modern Impact	Ad Tech		1%
	Monetate	Personalization	×	14%
E	Moovweb	Mobification	~	1%
(Mouseflow	Analytics	~	4%
M	Moveable Ink	Personalization	<u>~</u>	17%
<u>gomoxie</u>	Moxie	Chat	<u>~</u>	5%
***	mParticle	Customer Management	 Image: A start of the start of	1%
3ªD PARTY	MpEasyLink	SEO Marketing	<u>~</u>	5%
MŸBUŸS	MyBuys (Magne+IC)	Personalization	<u>~</u>	3%
m	MyRegistry.com	Wish list	~	2%
2	NaviStone	Direct Mail	<u>~</u>	2%
Needle	Needle	Chat	 Image: A start of the start of	1%
-	Netlify	Project Management		3%
neustar	NeuStar Ad Advisor	Ad Tech	×	23%
0	New Relic	Application Monitoring	<u>~</u>	25%
Nexstar	Nexstar Digital	Ad Tech	 Image: A set of the set of the	1%
nextopia	Nextopia	Commerce Search	~	3%
inContact	NICE inContact	Customer Service	<u>~</u>	1%
ø	NinthDecimal	Marketing Tech		1%
Ø	Norton	Security Certificate		3%
ଯ	Nosto	Personalization	~	11%
NUANCE	Nuance	Artificial Intelligence		1%
17.00 19.00	Okendo	Customer Reviews		3%
(7)	Oktopost	Social Marketing	~	2%
Olapic	Olapic	User Generated Content		4%
Olark	Olark	Chat	 Image: A start of the start of	2%
CMEGATHEME	Omega Theme	CMS		5%
Citie Signal	One Signal	SMS Marketing	~	7%

	3rd Party	Category	PIR	% of Sites
ОТ	OneTrust	Security Certificate	~	31%
COYALA	Ooyala	Video		2%
ా	OpenX	Ad Tech	×	6%
S	Optimizely	A/B Testing	~	11%
::)	Optimonk	Marketing Tech	 Image: A start of the start of	3%
9	Optimove	Customer Management	 Image: A start of the start of	2%
blue kai Oracle	Oracle BlueKai	Personalization	×	10%
DATA CLOUD	Oracle Data Cloud	Ad Tech	 Image: A set of the set of the	3%
ORACLE" elaqua	Oracle Eloqua	Marketing Tech	~	5%
masymiser'	Oracle Maxymiser	A/B Testing	~	2%
RESPONSYS	Oracle Responsys	Email Marketing	~	9%
	Oracle Service Cloud	Customer Service	×	9%
ordergr <mark>æv</mark> e	OrderGroove	Subscription Management	~	3%
Sutbrain	Outbrain	Ad Tech	~	13%
Ŷ	Owl Carousel	Image Hosting	~	2%
Q	OwnerlQ	Ad Tech	~	5%
	Oxi Social Login	Identity Management		3%
P	Paypal	Payment Processing	~	83%
Q	PCA Predict	Client-side Security	 Image: A start of the start of	6%
P	Pebble Post	Direct Mail	~	8%
0	Pepperjam	Marketing Tech		13%
solarwinds	Pingdom	Application Monitoring		9%
P	Pinterest	Social Media	~	87 %
8	Pixlee	User Generated Content	~	4%
•	Placed	Attribution	~	2%
<u>I</u>	Podsights	Ad tech		4%
111	Polyfill.io	Programing Tech		17 %
🚔 postie	Postie	Direct Mail		3%
R	Power Reviews	Customer Reviews	~	17%
EDWER AVE	Powerlinks	Ad Tech	 Image: A start of the start of	1%



	3rd Party	Category	PIR	% of Sites
Ŷ	Powr.io	Marketing Tech	 Image: A start of the start of	7%
酌	Precognitive	Fraud Prevention	~	1%
P	PriceSpider	Customer Reviews	~	9%
0	Prismic	CMS	×	1%
Phily	Privy	Cart Abandonment		13%
9	Prometheus Intelligence Technology	Analytics		1%
Ptengine	Ptengine	Analytics		2%
ρ	Publitas	Marketing Tech		5%
PubMatic	Pubmatic	Ad Tech	×	4%
\odot	PulsePoint	Personalization	~	3%
C O	Push Owl	Notification Tech	~	7%
al	Qikify	Web Development		7%
G	QuadPay	Payment Processing	~	3%
**	Qualtrics	Analytics	~	8%
Quantcast	Quantcast	Marketing Tech	~	21%
Q	Quantum Metric	Analytics	~	10%
Q	Qubit	Personalization	~	2%
L J	Queue-it	Waiting Room	~	1%
Q	Quora	Question & Answer	~	3%
R	Radial	Order Management	~	2%
R <mark>8</mark>	Radius8	Marketing Tech	~	3%
Rakuten Marketing	Rakuten Marketing	Ad Tech	~	29%
towerd@ta	Rapleaf - Towerdata	Email Marketing	~	40%
\bigcirc	Recart	Social Marketing	 Image: A start of the start of	2%
*	Refersion	Affiliate Marketing	 Image: A start of the start of	6%
ж	Reflektion	Personalization	~	10%
Rp	Replenium	Inventory Management	~	1%
	Reseller Ratings	Customer Reviews		2%
re§onate	Resonate	Ad Tech	~	2%
X	RevTrax	Marketing Tech		1%

	3rd Party	Category	PIR	% of Sites
(3)	RhythmOne	Ad Tech		4%
{ rr} }	Rich Relevance	Personalization	~	3%
(foe ci	Rise.ai	Customer Experience		3%
K	Riskified	Fraud Detection	<u>~</u>	5%
- 1	RockerBox	Marketing Automation		2%
	Rollbar	Error Monitoring	<u>~</u>	9%
₹	Roomvo	Augmented Reality	<u>~</u>	1%
rubicon	Rubicon Project	Ad Tech	×	5%
3 ⁸⁰ PARTY	Run	Ad Tech	<u>~</u>	3%
SAIL	SailThru	Personalization	<u>~</u>	3%
っ	SaleCycle	Cart Abandonment		6%
salesforce	Salesforce - Email Studio	Email Marketing		3%
salesforce	Salesforce Audience Studio	Ad Tech	×	33%
commerce cloud	Salesforce CQuotient	Personalization	<u>~</u>	31%
salesforce	SalesForce IGoDigital	Recommendations	<u>~</u>	11 %
	Salesforce Live Agent	Chat	<u>~</u>	16%
salesforce pardot	Salesforce Pardot	Marketing Tech		2%
SAP	SAP Customer Data Cloud	Identity Management		4%
SeeWhy	SAP SeeWhy	Cart Abandonment	\checkmark	2%
4	Scarab Research	Personalization	<u>~</u>	6%
	Scorecard Research	Ad Tech	×	19%
:=	Searchanise	Commerce Search	<u>~</u>	7%
5	SearchSpring	Commerce Search	<u>~</u>	4%
۸	Secret Sauce Partners	Fit Technology	<u>~</u>	1%
Ċ	Segment	Analytics	<u>~</u>	23%
۶	Selectable Media	Ad Tech		1%
sellpoints	Sellpoints	Ad Tech	\checkmark	1%
C	Semasio	Personalization	~	1%
ŝ	Sentry	Development Testing	<u>~</u>	22%
22	SessionCam	Analytics	<u>~</u>	7%

	3rd Party	Category	PIR	% of Sites
Ð	Shareaholic	Social Media	 Image: A start of the start of	1%
\bigcirc	ShareASale	Marketing Tech		9%
<	Sharethis	Social Media		29 %
6	ShareThrough	Ad Tech	~	2%
$\langle \rangle$	Shopgate	Inventory Management	~	1%
V	Shopper Approved	Customer Reviews	~	2%
S	Shoprunner	Global Shipping	~	6%
8	Sidecar	Personalization	~	5%
SIGNAL	Signal	Tag Management	~	7%
1 0	SignifyD	Fraud Protection	~	10%
Sizmek	Sizmek	Ad Tech	~	6%
	SkimLinks	SEO Marketing		5%
\$	SLI Search	Commerce Search	~	3%
Slyce	Slyce	Search	~	1%
	Smart Wishlist	Wish list	~	1%
smart.	SmartAdServer	Ad Tech	×	2%
	Smarter Remarketer	Ad Tech	~	7%
ទ្	Snap Engage	Chat		2%
ß	Snapchat	Social Media	~	34%
Δ	Social Annex	Ad Tech	~	2%
\bigcirc	Sociomantic	Ad Tech		3%
\diamond	Sojern	Marketing Tech		6%
SOUTE //Commerce	Sovrn Commerce	Affiliate Marketing		6%
CD	Speed Curve	Analytics		1%
X	spotxchange.com	Ad Tech	×	2%
X	SpringServe	Ad Tech		2%
>>	Sprinklr	Social Marketing		7%
×	Stamped IO	Customer Reviews	~	9%
5	Steelhouse	Ad Tech	~	14%
Q	StoreMapper	Maps	 Image: A start of the start of	3%

	3rd Party	Category	PIR	% of Sites
S	Stripe	Payment Processing	~	7%
STY LIT ICS	Stylitics	User Generated Content	~	5%
3ª0 PARTY	subwayblaze	Security	 Image: A start of the start of	48%
	Swell Rewards	Loyalty Platform	 Image: A start of the start of	9%
Svmantec.	Symantec	Security Badge	<u>~</u>	6%
<u>@</u>	Taboola	Ad Tech	~	17%
2	Tailwind App	Social Media		14%
Ť	Talkable	Marketing Tech	~	6%
tangiblee	Tangiblee	Customer Management	~	1%
ТАРАВ	Tapad	Identity Management		14%
Teads	Teads	Ad Tech	<u>~</u>	9%
ወ	The Trade Desk	Ad Tech	~	38%
⊠thrive	Thrive Commerce	Marketing Tech	~	2%
6	TokenEx	Client-side Security	~	1%
{ []}	TrackJS	Development Testing		2%
Ł	TransUnion	Identity Management	<u>~</u>	33%
Т	TrueFit	Fit Technology	<u>~</u>	12%
T	Trust Arc	Privacy Tech	×	4%
	Trust Wave	Security Badge	~	2%
*	TrustPilot	Customer Reviews		5%
	Tubemogul	Ad Tech		2%
Ŧ	Turnto	Customer Reviews	<u>~</u>	8%
Þ	TVPage	User Generated Content	~	1%
y	Twitter	Social Media	~	43%
	Unbxd	Commerce Search	~	4%
C	Upsellit	Marketing Tech		9%
1	UsableNet	Accessibility	~	3%
\bigotimes	UserReplay	Analytics	×	1%
*	UTag - Tealium	Tag Management	×	26%
Ve	Ve Interactive	Marketing Tech		2%

	3rd Party	Category	PIR	% of Sites
\checkmark	VerifyPass	Identity Management		1%
V	Verisign	Security Badge		2%
verizon [,] media	Verizon Media	Ad Tech	×	4%
$(\mathbf{u}_{1})^{\mathbf{u}_{1}}$	VideoAmp	Ad Tech		1%
\bigcirc	VideoJS	Video		10%
V	Vimeo	Video	 Image: A start of the start of	34%
VISA everywhere you want to be	Visa Checkout	Payment Processing	×	4%
	Visual Website Optimizer	A/B Testing	~	8%
	Vizury	Marketing Tech	~	1%
WEBCOLLAGE	WebCollage	Ad Tech	×	5%
weborama	Weborama	Marketing Tech	 Image: A start of the start of	1%
WEGLOT	Weglot	Language	~	3%
>	Wistia	Video	~	4%
WOOBOX	WooBox	Marketing Tech	 Image: A start of the start of	2%
	Xandr	Ad Tech	~	27 %
X	Xaxis	Marketing Tech	~	1%
Tauloot.	Yahoo Analytics	Analytics	~	38%
Yandex	Yandex	Personalization	~	45%
<u>Yieldify</u>	Yieldify	Personalization		3%
VIEL	YieldOne	Ad Tech	~	1%
YOT	Yotpo	Customer Reviews	~	36%
	Youtube	Video	~	85%
zendesk	Zendesk	Chat		18%
$\boldsymbol{\Delta}$	Zeotap	Customer Analytics	~	1%
zmags	ZMags	CMS	~	7%
Ø	Zonos	Global Shipping	~	1%
zendesk	Zopim / Zendesk	Chat		6%



3rd Party Data Deep Dive

	3rd Party	Category	Average Performance Impact (ms)	Finished Running (ms)	% of the site pages with this 3rd party
√ accessiBe	accessiBe	Accessibility	221	270	94%
	Adobe Analytics	Analytics	333	444	51%
	Adobe Dynamic Media	Image Hosting	355	15219	58%
	Adobe Fonts	Font Management	351	518	44%
0	Adobe Marketing Cloud	Marketing Tech	404	560	38%
\bigcirc	Adobe Tag Manager	Tag Management	356	2372	52%
afterpay⊲>	AfterPay	Payment Processing	435	549	33%
amazon pay	Amazon Pay	Payment Processing	321	396	22%
*Amplience	Amplience	CMS	452	3575	76%
attentive	Attentive	SMS Marketing	543	856	94%
b:	Bazaarvoice	Customer Reviews	370	4266	32%
Ь	Bing	Search	310	495	86%
6	Bloomreach	Ad Tech	433	632	53%
(Bluecore	Personalization	493	549	90%
b	Bold Commerce	Software Development	458	598	72%
Braintree (PeyPolises	Braintree	Payment Processing	385	1881	12%
brightcove.	Brightcove	Video	519	2646	21%
BRIGHTEDGE	Brightedge	Marketing Tech	510	1286	94%
	Bronto	Email Marketing	465	1425	84%
	Certona	Personalization	476	548	25%
	Cheetah Digital	Marketing Tech	372	994	91%
(black)	Code Blackbelt	Marketing Tech	358	818	98%
crazyegg	Crazyegg	A/B Testing	573	981	11%
criteol.	Criteo	Ad Tech	489	696	64%
digicert	Digicert	Security	241	245	31%
÷	Dynamic Yield	Personalization	405	4630	69%

	3rd Party	Category	Average Performance Impact (ms)	Finished Running (ms)	% of the site pages with this 3rd party
	Everest Tech	Analytics	300	561	12 %
worse +℃ evergage	Evergage	Personalization	462	973	95%
0	Extole	Marketing Tech	330	377	88%
f	Facebook	Social Media	438	1403	81%
	Font Awesome	Font Management	363	464	21%
fonts.com	Fonts.com	Font Management	369	581	26%
1	Forter	Client-side Security	374	2979	89%
fortysix/5	FourSixty	Social Marketing	267	1124	34%
Global <mark>©</mark>	Global-e	Localized Checkout	420	1343	26%
٨	Google Ads	Ad Tech	432	1625	90%
	Google Analytics Universal	Analytics	397	1086	91%
Google APIs	Google APIs	APIs	281	729	27%
G	Google Customer Reviews	Customer Reviews	150	198	76%
F	Google Fonts	Font Management	400	556	69%
Google for Retail	Google for Retail	Marketing Tech	328	507	93%
G	Google Pay	Payment Processing	244	399	13%
e	Google reCAPTCHA	Client-side Security	322	1444	12 %
•	Google Tag Manager	Tag Management	369	734	76%
ð	Hotjar	Analytics	328	796	52%
Core metrics	IBM Core Metrics	Analytics	701	1784	12 %
\bigcirc	ipify	IP Terminal	898	8245	11%
k	Kenshoo	Marketing Tech	472	798	64%
K.	Klarna	Payment Processing	457	1515	38%
\diamond	Klaviyo	Email Marketing	385	1886	84%
^	Klevu	Commerce Search	517	721	100%
*	Listrak	Marketing Tech	352	1140	45%
Q	Live Chat, Inc.	Chat	211	800	10%
0	LivePerson	Chat	435	1990	47%
© Clarivate MarkMonitor	Mark Monitor	Analytics	404	590	38%

	3rd Party	Category	Average Performance Impact (ms)	Finished Running (ms)	% of the site pages with this 3rd party
U	McAfee SECURE	Client-side Security	493	1174	86%
media.net	Media.net	Ad Tech	410	1750	50%
MERKLE	Merkle Search	Marketing Tech	280	533	96%
Μ	Moat	Ad Tech	825	1355	60%
	Monetate	Personalization	375	1497	86%
neustar	NeuStar Ad Advisor	Ad Tech	576	923	75%
nextopia	Nextopia	Commerce Search	296	565	64%
Ø	Norton	Security Certificate	339	435	73%
ଯ	Nosto	Personalization	334	5371	83%
Olapic	Olapic	User Generated Content	380	2144	27%
One Signal	One Signal	SMS Marketing	498	672	95%
ОТ	OneTrust	Security Certificate	329	749	70%
S	Optimizely	A/B Testing	398	743	31%
ordergrœve	OrderGroove	Subscription Management	314	813	47 %
P	Paypal	Payment Processing	380	1310	14%
solarwinds	Pingdom	Application Monitoring	291	675	98%
P	Pinterest	Social Media	432	1110	40%
*	Pixlee	User Generated Content	497	884	99%
R	Power Reviews	Customer Reviews	347	1332	28%
Ç	QuadPay	Payment Processing	423	707	72 %
commerce cloud	Salesforce CQuotient	Personalization	446	896	98%
salesforce	SalesForce IGoDigital	Recommendations	415	604	77%
and the second s	Salesforce Live Agent	Chat	401	2417	40%
2	SearchSpring	Commerce Search	499	1404	45%
77	SessionCam	Analytics	347	1356	87%
S	Shoprunner	Global Shipping	570	1208	31%
SIGNAL	Signal	Tag Management	320	711	24%
.	SignifyD	Fraud Protection	425	1127	84%
X	Stamped IO	Customer Reviews	517	1462	99%

	3rd Party	Category	Average Performance Impact (ms)	Finished Running (ms)	% of the site pages with this 3rd party
5	Steelhouse	Ad Tech	403	1329	79 %
S T Y L I T I C S	Stylitics	User Generated Content	242	1672	24%
<u>00</u>	Taboola	Ad Tech	421	14368	46%
T ¹	Talkable	Marketing Tech	383	583	74%
TrustArc	Trust Arc	Privacy Tech	500	724	98%
TF	Turnto	Customer Reviews	422	1282	80%
y	Twitter	Social Media	280	706	39%
	UTag - Tealium	Tag Management	357	2431	97 %
\bigcirc	VideoJS	Video	507	707	21%
	Visual Website Optimizer	A/B Testing	354	740	39%
	Xandr	Ad Tech	427	734	60%
XOL.	Yotpo	Customer Reviews	402	3420	36%
	Youtube	Video	376	411	20%
zendesk	Zendesk	Chat	354	368	78%
zmags	ZMags	CMS	449	3409	23%

Checkout 3rd Party Breakdown

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
33 across	33Across	Ad Tech	1%	NO
4TELL	4-tell	Personalization	1%	NO
4Cite	4Cite	Marketing Tech	9%	NO
3 RD PARTY	50million.club	Security	1%	NO
	A3Cloud	Ad Tech	2%	NO
AB Tasty	AB Tasty	A/B Testing	3%	YES
√ accessiBe	accessiBe	Accessibility	9%	YES
acoustic	Acoustic Campaign	Marketing Automation	1%	NO
acoustic	Acoustic Experience Analytics	Analytics	1%	NO
acuity®	AcuityAds	Ad Tech	1%	NO
adacado [.]	Adacado	Ad Tech	3%	NO
	Adara	Marketing Tech	1%	NO
an the second se	Addshoppers	Marketing Tech	3%	NO
+	AddThis	Social Media	13%	NO
•	AddToAny	Social Media	1%	NO
adform	Adform	Ad Tech	1%	NO
ADMAN'	ADman Media	Marketing Tech	1%	NO
1	Adobe Analytics	Analytics	17%	YES
	Adobe Analytics Beacon	Analytics	9%	YES
	Adobe Dynamic Media	Image Hosting	15%	YES
	Adobe Fonts	Font Management	29%	YES
Ø	Adobe Marketing Cloud	Marketing Tech	30%	NO
Ó	Adobe Tag Manager	Tag Management	17%	YES
	Adobe Test and Target	A/B Testing	1%	YES
2 AdRoll	Adroll	Marketing Tech	8%	NO

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
affirm	Affirm	Payment Processing	10%	YES
afterpay _C >	AfterPay	Payment Processing	13%	YES
AgileOne	AgileOne	Identity Management	2%	YES
aimtell	Aimtell	Notification Tech	1%	NO
(Akamai	Akamai mPulse	Analytics	2%	YES
(Akamai	Akamai Stats	Analytics	13%	YES
8	Alexa	Analytics	2%	YES
Ō	Algolia	Commerce Search	4%	NO
amazonadvertising	Amazon Advertising	Ad Tech	13%	NO
amazon pay	Amazon Pay	Payment Processing	16%	YES
3 ND PARTY	American List Councel	Analytics	4%	YES
AMOBEE	Amobee	Marketing Tech	6%	NO
9	AMP Project	Ad Tech	1%	NO
≸Amplience	Amplience	CMS	4%	YES
Amplitude	Amplitude	Analytics	16%	YES
APPDYNAMICS part of Osco	AppDynamics	Application Monitoring	2%	YES
	AppMate Wishlist King	Wish List	1%	YES
attentive	Attentive	SMS Marketing	26%	NO
Attraqt	Attraqt	Personalization	1%	YES
•	AudioEye	Accessibility	3%	YES
	Auryc	Visual Intelligence	1%	NO
Δ	AvantLink	Marketing Tech	3%	NO
\bigcirc	Avochato	SMS Marketing	1%	YES
5	BackInStock	Inventory Management	8%	YES
Barilliance	Barilliance	Personalization	1%	NO
b:	Bazaarvoice	Customer Reviews	32%	NO
⟨ ≡ ⟩	Beeswax	Ad Tech	1%	NO
BBB	Better Business Bureau	Security Certificate	2%	YES

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
BID SWITCH	BidSwitch	Ad Tech	3%	NO
6	Bidtellect	Ad Tech	3%	NO
Ь	Bing	Search	79 %	NO
bizrate insights	Bizrate Insights	Marketing Tech	15%	NO
6	Bloomreach	Ad Tech	5%	NO
()	Blue Triangle	Analytics	3%	YES
blueconic	BlueConic	Marketing Tech	1%	NO
()	Bluecore	Personalization	13%	NO
Ь	Bold Commerce	Software Development	3%	YES
bold 360	Bold360	Chat	5%	YES
4	Bolt	Payment Processing	1%	YES
	Borderfree	Fulfilment	6%	YES
Braintree "PoyPolSonta	Braintree	Payment Processing	8%	YES
	Branch.io	Marketing Tech	2%	NO
BRANDing BRAND com	Branding Brand	Mobile Marketing Tech	1%	NO
BrandLock	BrandLock	Client-side Security	1%	YES
0	Brandwatch	Marketing Tech	1%	NO
9	Bread	Payment Processing	1%	YES
\s_€	Brightcove	Video	3%	NO
BRIGHTEDGE	Brightedge	Marketing Tech	5%	NO
	Bronto	Email Marketing	13%	NO
bugsnag	Bugsnag	Error Monitoring	20%	NO
ø	BuyerGenomics	Marketing Tech	1%	NO
Q	CallRail	Customer Service	1%	YES
PARTY	Carro	Influencer Marketing	2%	NO
)	Cartful Solutions	Personalization	2%	YES
	CartKit	Marketing Tech	1%	NO
Casale MEDIA.	Casale Media	Ad Tech	2%	NO

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
C	Celebros	Commerce Search	1%	NO
centro	Centro	Marketing Tech	3%	NO
	Certona	Personalization	13%	NO
themelichies	ChannelAdvisor	Marketing Tech	4%	YES
and the second s	Cheetah Digital	Marketing Tech	6%	NO
Clicktale [®]	Clicktale	Analytics	2%	YES
Cloud IQ	Cloud IQ	Marketing Tech	1%	YES
	Cloudinary	Image Hosting	6%	YES
cloudsponge	Cloudsponge	Social Marketing	1%	NO
(ac)	Code Blackbelt	Marketing Tech	1%	NO
>	CommerceHub	Inventory Management	1%	YES
Сомодо	Comodo	Security Badge	1%	YES
ଦ୍ୟୋମ୍ୟ	Conjured	Web Development	1%	YES
٢	Content Square	Analytics	10%	YES
C °	Conversant	Marketing Tech	20%	NO
VÍ	Convert	A/B Testing	2%	YES
Cookiebot	CookieBot	Privacy Tech	1%	NO
cordiał	Cordial	Analytics	1%	NO
\bigcirc	Coupon Cabin	Coupon Tech	6%	YES
COUPON FOLLOW	Coupon Follow	Coupon Tech	1%	YES
(COLORA	Crazyegg	A/B Testing	9%	YES
criteol.	Criteo	Ad Tech	40%	YES
×	Cross Sell	Personalization	1%	NO
	Curalate	Marketing Tech	15%	NO
custora	Custora	Marketing Tech	3%	NO
DH	Dash Hudson	Marketing Tech	2%	NO
DATADOG	Datadog	Application Monitoring	1%	YES
Ú	DataStream.io	Analytics	3%	NO



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DestilleryMarketing Tech1%NOPorsonalization16%NODynamic YieldPersonalization16%NODynatraceApplication Monitoring3%YESeGaineGainCustomer Service2%YESEmarsysPersonalization1%NOEmojisImage Hosting2%YESEmojisEnojisTag Management4%YESEqualWebAccessibility1%YESEverest TechAnalytics16%YESEveragePersonalization3%NOEverageEveragitAd Tech1%NOEvelatorAd Tech1%NOEvelatorSocial Media96%NOEvelatorSocial Media96%NOEvelatorAd Tech1%NOEvelatorAd Tech1%NOEvelatorSocial Media2%NOEvelatorAd Tech1%NOEvelatorAd Tech1%NOEvelatorAd Tech1%NOEvelatorAd Tech1%NOEvelatorFacebookSocial Media2%NOEvelatorAd Tech1%NOEvelatorFacebookSocial Media2%NOEvelatorFacebookSocial Media5%NOEvelatorFacebookSocial Media5%NOEvelatorFacebookSocial Media5%NO	DV	DoubleVerify	Ad Tech	1%	NO
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EqualWebAccessibility1%YESImage: EqualWebAnalytics16%YESImage: EvergagePersonalization3%NOImage: ExelatorAd Tech1%NOImage: ExponentialAd Tech2%NOImage: ExponentialAd Tech2%NOImage: ExponentialAd Tech9%NOImage: ExponentialAd Tech9%NOImage: ExponentialAd Tech9%NOImage: ExponentialMarketing Tech4%NOImage: ExponentialSocial Media96%NOImage: ExponentialAd Tech1%NOImage: ExponentialAd Tech1%NOImage: ExponentialAd Tech1%NOImage: ExponentialPersonalization1%NOImage: ExponentialPersonalization1%NOImage: ExponentialPersonalization1%NOImage: ExponentialPersonalization1%NOImage: ExponentialPersonalization1%NOImage: ExponentialPersonalization1%YESImage: ExponentialPersonalization5%NOImage: ExponentialPersonalization5%NO	3ª0 PARTY	Emojiis	Image Hosting	2%	YES
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NoSevergagePersonalizationS%NONoAd Tech1%NONoAd Tech2%NONoAd Tech2%NONoMarketing Tech4%NONoSocial Media96%NOImage: Severation of the severation of th	في	EqualWeb	Accessibility	1%	YES
KelatorAd Tech1%NOColorExponentialAd Tech2%NOColorExtoleMarketing Tech4%NOColorEyeotaMarketing Tech1%NOColorFacebookSocial Media96%NOColorFacebook BusinessAd Tech1%NOColorFanPlayerPersonalization1%NOFindifyFindifyPersonalization2%NOFindifyFinelChat1%YESFinelFinelSocial Media5%NO		Everest Tech	Analytics	16%	YES
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FacebookSocial Media96%NOFacebook BusinessAd Tech1%NOFanPlayerPersonalization1%NOFindifyFindifyPersonalization2%NOFrive?Five?Chat1%YESfindifyAd Tech5%NO	()	Extole	Marketing Tech	4%	NO
Facebook BusinessAd Tech1%NOFanPlayerPersonalization1%NOFindifyFindifyPersonalization2%NOFrivenFivenChat1%YESfindifyBash TalkingAd Tech5%NO		Eyeota	Marketing Tech	1%	NO
FanPlayerPersonalization1%NOImage: SindifyFindifyPersonalization2%NOFixelFixelChat1%YESImage: SindifyFlash TalkingAd Tech5%NO	f	Facebook	Social Media	96%	NO
Image: Single stateFindifyPersonalization2%NOFive9Five9Chat1%YESImage: Single stateAd Tech5%NO	f	Facebook Business	Ad Tech	1%	NO
Five9 Chat 1% YES Image: Stress of the stres of the stress of the stress of the stress of the stress	Fan playr	FanPlayer	Personalization	1%	NO
Flash Talking Ad Tech 5% NO	Ŷ	Findify	Personalization	2%	NO
	Five	Five9	Chat	1%	YES
Flow Project Management 3% YES	"77	Flash Talking	Ad Tech	5%	NO
	8	Flow	Project Management	3%	YES

1	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
FOMO	Fomo	Marketing Tech	1%	NO
	Font Awesome	Font Management	45%	YES
&	Fonts by Hoefler & Co	Font Management	3%	YES
fonts.com	Fonts.com	Font Management	14%	YES
FORE	Foresee	Customer Experience	3%	YES
[] I	FormStack	Marketing Tech	1%	NO
<i>ो</i>	Forter	Client-side Security	9%	YES
fortysix/5 Big ideas for small businesses	FourSixty	Social Marketing	5%	NO
	FreeWheel	Ad Tech	1%	NO
ا 🌖	Fresh Relevance	Personalization	3%	NO
🥥 ו	Freshworks Freshchat	Chat	2%	YES
🥥 I	Freshworks Freshdesk	Chat	1%	YES
friendbuy	FriendBuy	Marketing Tech	5%	NO
FUELX	FuelX	Ad Tech	3%	NO
fs	Fullstory	Personalization	7%	NO
6	GeoTrust	Security Certificate	1%	YES
Q (Ghostery	Tag Management	2%	YES
0	GitHub	Software Development	1%	NO
•	Gladly	Customer Service	9%	YES
6 (Gleam	Marketing Tech	1%	NO
Global 🔗 🛛 🕯	Global-e	Localized Checkout	4%	YES
GlobalSign	Globalsign	Security Certificate	2%	YES
^ (Google Ads	Ad Tech	100%	YES
() (Google AMP	Web Development	3%	YES
<u>~</u> (Google Analytics Classic	Analytics	11%	YES
	Google Analytics Universal	Analytics	98%	YES
Google APIs	Google APIs	APIs	31%	NO
G	Google Customer Reviews	Customer Reviews	8%	NO

Coogle FontsFont Management86%Coogle for RetailMarketing Tech3%Image: Coogle MapsMaps26%Image: Coogle One TapLogin Tech1%Image: Coogle PayPayment Processing11%Image: Coogle reCAPTCHAClient-side Security29%	YES NO NO NO YES YES YES NO YES YES
Image: Constraint of the securityImage: Constraint of the security	NO NO YES YES NO
Google One Tap Login Tech 1% Google Pay Payment Processing 11% Google reCAPTCHA Client-side Security 29%	NO YES YES NO
G Google Pay Payment Processing 11% C Google reCAPTCHA Client-side Security 29%	YES YES NO
Client-side Security 29%	YES
	NO
G Google Syndication Ad Tech 31%	VEC
Soogle Tag Manager Tag Management 100%	YES
Given Google Translate Translation 33%	YES
Geogle Web Font Loader Font Management 12%	YES
Gorgias Customer Service 5%	YES
Image: Second systemMachine Learning1%	YES
Oravatar Avatar Tech 4%	NO
GROOVINADS GroovinAds Ad Tech 1%	NO
GroupBy Marketing Tech 1%	NO
GumGum Marketing Tech 1%	NO
Hawksearch Commerce Search 1%	NO
//HL Headliner Labs Marketing Automation 2%	NO
Heap Heap 5%	YES
HiConversion HiConversion Personalization 2%	NO
h. Hivewyre Ad Tech 4%	NO
honey Honey Marketing Tech 29%	NO
Hotjar Analytics 34%	YES
Hull.io Marketing Tech 1%	NO
Human Presence Identity Management 1%	YES
IBM Core Metrics Analytics 4%	YES
Icon FinderImage Hosting1%	YES
IDVisionClient-side Security1%	YES



	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
Ignite	Ignite Chute	User Generated Content	1%	NO
IX	ImgIX	Image Hosting	5%	YES
impact	Impact	Marketing Tech	14%	NO
	Innovid	Video	1%	NO
Powerfront ⁻	INSIDE	Chat	2%	YES
Q inspectlet	Inspectlet	A/B Testing	2%	NO
Ø	Instagram	Social Media	17%	NO
instant	InstantSearch+	Commerce Search	4%	NO
IAS	Integral Ad Science	Ad Tech	1%	NO
	Intercom	Chat	1%	YES
Q	Invoca	Marketing Tech	2%	NO
\bigcirc	ipify	IP Terminal	4%	YES
	iSpot.tv	Ad Tech	1%	NO
Jivox	Jivox	Personalization	2%	NO
J	JudgeMe	Customer Reviews	1%	NO
0	Justuno	Marketing Tech	7%	NO
Ŵ	JW Player	Video	1%	NO
KARTE	Karte	Analytics	1%	YES
Ic	Kaspersky	Security	27%	NO
k	Kenshoo	Marketing Tech	9%	NO
К.	Klarna	Payment Processing	8%	YES
~	Klaviyo	Email Marketing	18%	YES
*	Klevu	Commerce Search	3%	NO
Ð	Klickly	Ad Tech	2%	YES
Ű	Kustomer	Customer Service	3%	NO
	LevelAccess	Accessibility	1%	NO
LimeSpot	LimeSpot	Personalization	2%	NO
8	Linc Global	Customer Experience	4%	NO



InterdinSocial Media5%NOInkedin Marketing SolutionsMarketing Tech1%NOInterdin Marketing SolutionsMarketing Tech9%NOInterdin Marketing CechEmail Marketing Tech9%NOInterdin LiveClickerEmail Marketing3%NOInterdin MarketingChat9%YESInterdin Marketing1%YESInterdin Marketing1%YESInterdin Marketing1%YESInterdin Marketing1%YESInterdin Marketing2%YESInterdin Marketing Cech6%NOInterdin Marketing Tech3%NOInterdin Marketing Solution1%YESInterdin Marketing Tech3%NOInterdin Marketing Marketing Tech3%NOInterdin Marketing Automation2%YESInterdin Marketing Marketing Marketing Marketing2%NOInterdin Marketing Marketing Marketing2%NOInterdin Marketing Marketing2%NOInterdin Marketing Marketing Marketing2%NOInterdin Marketing Marketing Marketing2%NOInterdin Marketing Marketing Marketing2%NO <th></th> <th>3rd Party</th> <th>Category</th> <th>% of sites with this 3rd party on checkout</th> <th>Should be on Checkout Pages? (Y/N)</th>		3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
Name InstructionHanketing TechHaHaNOImage InstructionListrakMarketing Tech9%NOImage InstructionEmail Marketing2%NOImage InstructionEmail Marketing8%NOImage InstructionLiveClickerEmail Marketing8%NOImage InstructionLiveIntentEmail Marketing8%NOImage InstructionLivePersonChat9%YESImage InstructionLog SympthLog Management5%YESImage InstructionLog SympthLog Management9%YESImage InstructionLog SympthLog SympthNOYESImage InstructionLog Sympth1%YESImage InstructionLog SympthNOImage SympthNOImage InstructionLucky Orange - SettingsMarketing Tech6%NOImage Image 	in	LinkedIn	Social Media	5%	NO
LiveClickerEmail Marketing2%NONoEmail Marketing8%NONoChat9%YESNoChat9%YESNoIdentify Management5%YESNoLogQiyLog Management9%YESNoContorGift Giving2%YESNoLoameAnalytics1%YESNoLougy LogyLogManagement9%YESNoLogathyLionLoyalty Platform2%NONoLucky Orange - SettingsMarketing Tech6%NONoLucky Orange - SettingsImage Hosting1%YESMajic Toolbox Magic Zoom PlusImage Hosting1%NONoMapboxMarketing Tech3%NONoMarketing Tech3%NONONoMapboxMarketing Automation2%NONoMapboxMaps1%NONoImage Hosting1%YESMarketina Design IconsImage Hosting2%NOMarketina Design IconsImage Hosting2%NOMarketina Design IconsImage Hosting1%NOMarketina Design IconsImage Hosting1%NOMarketina Design IconsImage Hosting2%NOMarketina Design IconsImage Hosting2%NOMarketina Design IconsImage Hosting1%YESMarketina Design IconsImage Hosting<	Linked in Marketing Solutions	LinkedIn Marketing Solutions	Marketing Tech	1%	NO
IveIntent Email Marketing 8% NO IvePerson Chat 9% YES IveRamp Identify Management 5% YES IveOrv Loggly Log Management 9% YES IveOrv Logo Commerce Gift Giving 2% YES IveOrv Logo Commerce Gift Giving 2% YES IveOrv LoyaltyLion LoyaltyPlatform 2% NO IveSite LoyaltyLion LoyaltyPlatform 6% NO IveSite LoyaltyLion Identify Management 6% NO IveSite Marketing Tech 6% NO IveSite Magic Toolbox Magic Zoom Plus Image Hosting 1% NO IveSite Malchimp Marketing Tech 3% NO IveSite Malpedin Maps 1% NO IveSite Marketing Automation 2% NO IveSite Marketing Automation 2% NO Ive Marketing Automation 2% NO Ive Marketing	*	Listrak	Marketing Tech	9%	NO
NoteChat9%YESIdentity Management5%YESIdentity Management5%YESIdentity LogglyLog Management9%YESIdentity LogglyLog Management9%YESIdentity Management9%YESIdentity Management9%YESIdentity Management1%YESIdentity Platform2%NOIdentity Platform2%NOIdentity Management1%NOIdentity Management1%NOIdentity Management1%NOIdentity Management1%NOIdentity Management1%NOImage Hosting1%NOImage Hosting1%NOImage Hosting1%NOImage Marketing Tech3%NOImage Marketing Tech3%NOImage Marketing Automation2%NOImage Marketing Automation2%NOImage Marketing Automation2%NOImage Marketing Automation2%NOImage Hosting2%YESImage Hosting2%YESImage Hosting2%NOImage Hosting2%NOImage Hosting2%NOImage Hosting2%NOImage Hosting2%NOImage Hosting2%NOImage Hosting2%NOImage Hosting2%NOImage Hosting2%<	Liveclicker	LiveClicker	Email Marketing	2%	NO
Identity Management5%YESIcockyLoglyLog Management9%YESIcockyLop CommerceGift Giving2%YESIcockyLotameAnalytics1%YESIcocky Orange - SettingsMarketing Tech6%NOIcocky Orange - SettingsIdentity Management1%NOIcocky Orange - SettingsMarketing Tech3%NOIcocky MapboxMaps1%NOInfluencer Marketing1%Icocky MarketoMarketing Automation2%NOInfluencer Marketing2%NOIcocky Material Design IconsInfluencer Marketing2%NOInfluencer Marketing2%NOIcock Macrie SECUREClient-side Security6%YESInfluencer Marketing1%YESIcock MedalliaCustomer Experience8%YESInfluencerMarketing1%NOIcock MarkelingCustomer Experience8%YESInfluencerMarketing1%NOIcock MarkelingCustomer Experience8%YESInfluencer<		LiveIntent	Email Marketing	8%	NO
LogglyLog Management9%YESImageLog CommerceGift Giving2%YESImageLotameAnalytics1%YESImageLoyaltyLionLoyaltyPlatform2%NOImageLucky Orange - SettingsMarketing Tech6%NOImageLucky Orange - SettingsIdentity Management1%NOImageMarketing Tech6%NOImage Hosting1%YESImageMalchimpMarketing Tech3%NOImage Hosting1%NOImageMapboxMaps1%NONOImage Hosting1%NOImageMapboxMaps1%NOImage Hosting1%NOImage HostingNOImageMarketonMarketing Automation2%NOImage Hosting2%NOImage Hosting1%YESImageMarketoMarketing Automation2%NOImage Hosting2%NOImage Hosting2%NOImageMarketoImage Hosting2%NOImage Hosting2%NOImage Hosting2%NOImageMarketonImage Hosting2%YESNOImage Hosting2%NOImage HostingNOImage HostingNOImage HostingNOImage HostingNOImage HostingNOImage HostingNOImage HostingNOImage HostingNOImage HostingNOImage HostingN	0	LivePerson	Chat	9%	YES
SolutionGift Giving2%YESSolutionAnalytics1%YESLoyaltyLionLoyalty Platform2%NOSolutionLoyalty Platform2%NOLucky Orange - SettingsMarketing Tech6%NOMagic Toolbox Magic Zoom PlusIndentity Management1%YESMagic Toolbox Magic Zoom PlusImage Hosting1%YESMagic Toolbox Magic Zoom PlusImage Hosting1%NOSolutionMarketing Tech3%NOSolutionMaps1%NOMapboxMaps1%NONappedinMaps1%NOMarketoMarketing Automation2%NOMarketoMarketing Automation2%NOMarketoInfluencer Marketing2%NONoSecurity1%NONoSecurity6%YESMaxmindSecurity6%YESMasuredAnalytics1%YESMedalliaCustomer Experience8%YESMedialliaCustomer Experience8%YES		LiveRamp	Identity Management	5%	YES
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Iccky Orange - SettingsMarketing Tech6%NOImage LostingLyticsIdentity Management1%NOImage Hosting1%YESNOImage LostingMarketing Tech3%NOImage Masting Tech3%NONOImage Masting Tech3%NONOImage Masting Tech3%NONOImage Masting Tech3%NONOImage Masting Tech3%NONOImage Masting TechMaps1%NOImage Masting TechMays1%NOImage Mark MonitorAnalytics21%YESImage Hosting2%NONOImage Hosting2%YESNOImage Hosting2%NONOImage Hosting2%NONOImage Hosting2%NONOImage Hosting2%NONOImage Hosting2%NONOImage Hosting2%NONOImage Hosting2%NONOImage Hosting2%NONOImage HostingSecurity1%NOImage HostingSecurity1%NOImage HostingSecurity6%YESImage HostingClient-side Security6%YESImage HostingClient-side Security6%YESImage HostingClient-side Security8%YESImage HostingClient-side Securit	\bigcirc	Lotame	Analytics	1%	YES
Indentity Management1%NOImage LyticsMagic Toolbox Magic Zoom PlusImage Hosting1%YESImage MotionMarketing Tech3%NOImage MapboxMaps1%NOImage MotionMaps1%NOImage MotionMaps1%NOImage MotionMaps1%NOImage MotionMaps1%NOImage MotionMarketoManketing Automation2%NOImage HostingMasterpassPayment Processing1%YESImage Hosting2%NOImage Hosting2%NOImage HostingSecurity1%NOImage HostingNOImage HostingClient-side Security6%YESNOImage HostingClient-side Security6%YESImage Hosting1%Image HostingClient-side Security6%YESImage HostingYESImage HostingClient-side Security6%YESImage HostingYESImage HostingClient-side Security6%YESImage HostingYESImage HostingCustomer Experience8%YESImage HostingYESImage HostingMedalliaCustomer Experience8%YESImage HostingMotion2%MotionYESImage HostingMotion1%YESImage HostingMotionImage HostingMotionMotionMotionMotionYES <th></th> <th>LoyaltyLion</th> <th>Loyalty Platform</th> <th>2%</th> <th>NO</th>		LoyaltyLion	Loyalty Platform	2%	NO
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Image: Second	Lytics	Lytics	Identity Management	1%	NO
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NappedinMaps1%NOMark MonitorAnalytics21%YESMarketoMarketing Automation2%NOMasterpassPayment Processing1%YESMaterial Design IconsImage Hosting2%NOMavrckInfluencer Marketing2%NOMaxmindSecurity6%YESMedaliaClient-side Security6%YESMedaliaCustomer Experience8%YESMedia.netAd Tech8%NO	E	Mailchimp	Marketing Tech	3%	NO
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MarketoMarketing Automation2%NOMasterpassPayment Processing1%YESMaterial Design IconsImage Hosting2%YESMavrckInfluencer Marketing2%NOMaxmindSecurity1%NOMastere SECUREClient-side Security6%YESMedalliaCustomer Experience8%YESMedia.netAd Tech8%NO	Ň	Mappedin	Maps	1%	NO
MasterpassPayment Processing1%YESMaterial Design IconsImage Hosting2%YESMavrckInfluencer Marketing2%NOMaxmindSecurity1%NOMaxfee SECUREClient-side Security6%YESMeasuredAnalytics1%YESMedalliaCustomer Experience8%YESMedia.netAd Tech8%NO	Clarivate MarkMonitor	Mark Monitor	Analytics	21%	YES
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MavrckInfluencer Marketing2%NOMaxmindSecurity1%NOMcAfee SECUREClient-side Security6%YESMeasuredAnalytics1%YESMedalliaCustomer Experience8%YESMedia.netAd Tech8%NO	masterpass	Masterpass	Payment Processing	1%	YES
Maxmind Security 1% NO McAfee SECURE Client-side Security 6% YES Measured Analytics 1% YES Medallia Customer Experience 8% YES Media.net Ad Tech 8% NO	\bigcirc	Material Design Icons	Image Hosting	2%	YES
McAfee SECURE Client-side Security 6% YES Measured Analytics 1% YES Medallia Customer Experience 8% YES Media.net Ad Tech 8% NO		Mavrck	Influencer Marketing	2%	NO
Measured Analytics 1% YES Medallia Customer Experience 8% YES medianet Media.net Ad Tech 8% NO	MM	Maxmind	Security	1%	NO
Medallia Customer Experience 8% YES medianet Media.net Ad Tech 8% NO	U	McAfee SECURE	Client-side Security	6%	YES
Media.net Ad Tech 8% NO	Μ	Measured	Analytics	1%	YES
	Ň	Medallia	Customer Experience	8%	YES
MediaMath MediaMath Ad Tech 3% NO	media_net	Media.net	Ad Tech	8%	NO
	MedlaMath	MediaMath	Ad Tech	3%	NO



	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
~~	Merchant Advantage	Personalization	1%	YES
MERKLE	Merkle Search	Marketing Tech	5%	NO
\sim	MicroAd	Ad Tech	1%	NO
•	MixPanel	Analytics	4%	YES
M	Moat	Ad Tech	1%	NO
4	Mobify	Mobification	1%	YES
м	Modern Impact	Ad Tech	1%	NO
	Monetate	Personalization	14%	NO
=	Moovweb	Mobification	2%	YES
(Mouseflow	Analytics	4%	NO
M	Moveable Ink	Personalization	10%	NO
<u>gomoxie</u>	Moxie	Chat	1%	YES
	mParticle	Customer Management	1%	YES
3 ⁸⁰ PARTY	MpEasyLink	SEO Marketing	1%	NO
MŸBUŸS	MyBuys (Magne+IC)	Personalization	2%	NO
m	MyRegistry.com	Wish list	1%	NO
2	NaviStone	Direct Mail	2%	NO
Needle	Needle	Chat	1%	NO
neustar	NeuStar Ad Advisor	Ad Tech	13%	NO
0	New Relic	Application Monitoring	19%	YES
nextopia	Nextopia	Commerce Search	2%	NO
inContact	NICE inContact	Customer Service	1%	YES
Ø	Norton	Security Certificate	2%	YES
ଯ	Nosto	Personalization	6%	NO
	Nuance	Artificial Intelligence	1%	NO
	Okendo	Customer Reviews	1%	NO
Olapic	Olapic	User Generated Content	4%	NO
Olark	Olark	Chat	1%	YES



	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
CMEGATHEME	Omega Theme	CMS	1%	YES
Crie Signal	One Signal	SMS Marketing	3%	NO
ОТ	OneTrust	Security Certificate	22%	YES
COYALA	Ooyala	Video	1%	NO
ి	OpenX	Ad Tech	3%	NO
<i>®</i>	Optimizely	A/B Testing	7%	YES
	Optimonk	Marketing Tech	1%	NO
•	Optimove	Customer Management	2%	NO
blue kai Oracle	Oracle BlueKai	Personalization	5%	NO
	Oracle Data Cloud	Ad Tech	2%	NO
ORACLE' elqua	Oracle Eloqua	Marketing Tech	1%	NO
masymiser CRACLE	Oracle Maxymiser	A/B Testing	1%	YES
RESPONSYS	Oracle Responsys	Email Marketing	6%	NO
	Oracle Service Cloud	Customer Service	4%	YES
ordergræve	OrderGroove	Subscription Management	3%	NO
©utbrain	Outbrain	Ad Tech	9%	NO
V	Owl Carousel	Image Hosting	2%	YES
Q	OwnerlQ	Ad Tech	4%	NO
	Oxi Social Login	Identity Management	2%	YES
-	Paypal	Payment Processing	48%	YES
Q	PCA Predict	Client-side Security	4%	YES
P	Pebble Post	Direct Mail	9%	NO
0	Pepperjam	Marketing Tech	9%	NO
solarwinds	Pingdom	Application Monitoring	9%	YES
P	Pinterest	Social Media	60%	NO
8	Pixlee	User Generated Content	4%	NO
	Placed	Attribution	1%	NO
Ľ	Podsights	Ad tech	4%	YES

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
	Polyfill.io	Programing Tech	10%	NO
📥 postie	Postie	Direct Mail	2%	NO
R	Power Reviews	Customer Reviews	13%	NO
Ŷ	Powr.io	Marketing Tech	3%	YES
酌	Precognitive	Fraud Prevention	1%	YES
B	PriceSpider	Customer Reviews	4%	YES
	Prismic	CMS	1%	YES
Prog	Privy	Cart Abandonment	7 %	YES
	Prometheus Intelligence Technology	Analytics	1%	YES
ρ	Publitas	Marketing Tech	1%	NO
PubMatic	Pubmatic	Ad Tech	1%	NO
Ø	PulsePoint	Personalization	1%	YES
CO	Push Owl	Notification Tech	5%	NO
G	QuadPay	Payment Processing	2%	YES
••	Qualtrics	Analytics	8%	YES
Quantcast	Quantcast	Marketing Tech	9%	NO
Ģ	Quantum Metric	Analytics	6%	YES
Q	Qubit	Personalization	3%	NO
Q	Quora	Question & Answer	1%	NO
R	Radial	Order Management	1%	YES
R <mark>8</mark>	Radius8	Marketing Tech	1%	YES
©Rakuten Marketing	Rakuten Marketing	Ad Tech	22%	NO
towerd@ta	Rapleaf - Towerdata	Email Marketing	20%	NO
\bigcirc	Recart	Social Marketing	1%	NO
*	Refersion	Affiliate Marketing	5%	NO
Ж	Reflektion	Personalization	7%	NO
Rp	Replenium	Inventory Management	1%	YES
	Reseller Ratings	Customer Reviews	1%	NO

resouteResonateAd Tech2%NOXRevTraxMarketing Tech1%NOXRhythmOneAd Tech1%NOXRick RelevancePersonalization3%YESXRise.alCustomer Experience3%YESXRiskifiedFraud Detection6%YESXRockerBoxMarketing Automation2%NOXRollbarError Monitoring7%YESVDCOTRubicon ProjectAd Tech1%NOXSallThruPersonalization3%NOXSaleCycleCart Abandonment2%NOXSaleSforce - Email StudioAd Tech1%NOXSaleSforce Isal StudioAd Tech1%NOXSaleSforce IsoDigitalRecommendations1%NOXSalesforce PardotMarketing Tech1%NOXSalesforce PardotCart Abandonment4%YESXSacerAbaniseCommerce Search3%NOXSacerAniseCommerce Search3%NOXSacerAspringCommerce Search<		3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
Image: NetworkAd Tech%NOImage: Nich RelevancePersonalization3%NOImage: Nich RelevanceCustomer Experience3%YESImage: Nich RelevanceFraud Detection6%YESImage: Nich RelevanceFraud Detection6%YESImage: Nich RelevanceMarketing Automation2%NOImage: Nich RelevanceMarketing Automation2%NOImage: Nich RelevanceAd Tech2%NOImage: Nich RelevanceAd Tech1%NOImage: Nich RelevanceCart Abandonment2%YESImage: Nich RelevanceSaleSforce - Email StudioAd Tech1%NOImage: Nich RelevanceChat9%YESNOImage: Nich RelevanceSaleSforce PardotMarketing Tech1%NOImage: Nich RelevanceCart Abandonment4%YESNOImage: Nich RelevancePersonalization7%YESNOImage: Nich RelevanceCommerce Search3%NOImagee: Nich RelevanceImage: Nich Relevanc	resonate	Resonate	Ad Tech	2%	NO
Rich RelevancePersonalization3%NOImage: Rise.alCustomer Experience3%YESImage: RiskRiedFraud Detection6%YESImage: RiskRiedRackerBoxMarketing Automation2%NOImage: RockerBoxMarketing Automation2%NOImage: RockerBoxImage: RockerBoxAd Tech2%NOImage: RockerBoxNOImage: RunAd Tech1%NOImage: RockerBoxNOImage: SaleSforce - Email StudioCart Abandonment2%YESImage: Salesforce - Email StudioEmail Marketing1%NOImage: Salesforce - Email StudioAd Tech1%NOImage: Salesforce - Email StudioAd Tech1%NOImage: Salesforce - Email StudioAd Tech1%NOImage: Salesforce - Email StudioRecommendations1%NOImage: Salesforce - EloDigitalRecommendations1%NOImage: Salesforce - EloDigitalRecommendations1%NOImage: Salesforce PardotMarketing Tech1%NOImage: Salesforce PardotCart Abandonment4%YESImage: Salesforce PardotCart Abandonment1%NOImage: Salesforce PardotCommerce Search3%NOImage: Salesforce PardotCommerce Search3%NOImage: SalesforingCommerce Search3%NOImage: SalesforingCommerce Search3%NOImage: Salesforing<	×	RevTrax	Marketing Tech	1%	NO
NoteNoteNoteNoteRiskifiedFraud Detection6%YESRockerBoxMarketing Automation2%NoteRollbarError Monitoring7%YESRubicon ProjectAd Tech2%NoteNoteSaliThruPersonalization3%NoteSaleStorce - Email StudioCart Abandonment2%YESSalesforce - Email StudioAd Tech1%NoteSalesforce - Email StudioKareting Tech1%NoteSalesforce - Email StudioIdentity Management4%YESSalesforce - Email StudioIdentity Management4%YESSalesforce PardotMarketing Tech1%NoteSalesforce PardotIdentity Management4%YESSalesforce ResearchAd Tech1%NoteSecret Sauce PartnersCommerce Search3%	(?)	RhythmOne	Ad Tech	1%	NO
KiskifiedFraud Detection6%YESRockerBoxMarketing Automation2%NOMarketing Automation2%NORollbarError Monitoring7%YESRubicon ProjectAd Tech2%NORunAd Tech1%NOSallThruPersonalization3%NOSaleCycleCart Abandonment2%YESSalesforce - Email StudioAd Tech1%NOSalesforce - Email StudioKecommendations11%NOSalesforce - Email StudioKeromendations11%NOSalesforce - Email StudioKeromendations1%NOSalesforce - Email Studio	{ rr} }	Rich Relevance	Personalization	3%	NO
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Segment Analytics 5% NO Sentry Development Testing 4% YES	8	SearchSpring	Commerce Search	4%	YES
Sentry Development Testing 4% YES	۸	Secret Sauce Partners	Fit Technology	1%	YES
	Ċ.	Segment	Analytics	5%	NO
SessionCam Analytics 6% YES	<i>الله</i>	Sentry	Development Testing	4%	YES
	***	SessionCam	Analytics	6%	YES

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
\bigcirc	ShareASale	Marketing Tech	1%	NO
<	Sharethis	Social Media	10%	NO
6	ShareThrough	Ad Tech	1%	NO
Y	Shopper Approved	Customer Reviews	2%	NO
3	Shoprunner	Global Shipping	5%	NO
8	Sidecar	Personalization	3%	NO
SIGNAL	Signal	Tag Management	4%	YES
•1	SignifyD	Fraud Protection	13%	YES
Sizmek	Sizmek	Ad Tech	1%	NO
	SkimLinks	SEO Marketing	3%	YES
\$	SLI Search	Commerce Search	2%	NO
۲	Smart Wishlist	Wish list	1%	YES
smart.	SmartAdServer	Ad Tech	1%	NO
	Smarter Remarketer	Ad Tech	3%	NO
B	Snap Engage	Chat	1%	YES
<mark>&</mark>	Snapchat	Social Media	26%	NO
Δ	Social Annex	Ad Tech	2%	NO
\bigcirc	Sociomantic	Ad Tech	2%	NO
$\mathbf{\Phi}$	Sojern	Marketing Tech	1%	NO
SOUTE //Commerce	Sovrn Commerce	Affiliate Marketing	1%	YES
X	spotxchange.com	Ad Tech	1%	NO
M	SpringServe	Ad Tech	1%	NO
>/-	Sprinklr	Social Marketing	2%	NO
X	Stamped IO	Customer Reviews	4%	NO
S	Steelhouse	Ad Tech	14%	NO
	StoreMapper	Maps	1%	YES
S	Stripe	Payment Processing	3%	YES
STY LIT ICS	Stylitics	User Generated Content	6%	YES

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
PARTY	subwayblaze	Security	9%	NO
	Swell Rewards	Loyalty Platform	10%	NO
Svmantec.	Symantec	Security Badge	4%	YES
<u>00</u>	Taboola	Ad Tech	7%	NO
2	Tailwind App	Social Media	4%	NO
Ť	Talkable	Marketing Tech	8%	NO
tangiblee	Tangiblee	Customer Management	2%	NO
ТАРАВ	Tapad	Identity Management	5%	NO
Teads	Teads	Ad Tech	5%	NO
Q	The Trade Desk	Ad Tech	29%	NO
Mthrive	Thrive Commerce	Marketing Tech	2%	NO
ô	TokenEx	Client-side Security	1%	YES
{]	TrackJS	Development Testing	4%	YES
Ł	TransUnion	Identity Management	11%	YES
	TrueFit	Fit Technology	12 %	YES
F	Trust Arc	Privacy Tech	4%	YES
	Trust Wave	Security Badge	1%	YES
*	TrustPilot	Customer Reviews	2%	NO
	Tubemogul	Ad Tech	1%	NO
Ť	Turnto	Customer Reviews	9%	NO
	TVPage	User Generated Content	1%	NO
У	Twitter	Social Media	23%	NO
٠	Unbxd	Commerce Search	3%	NO
C	Upsellit	Marketing Tech	2%	NO
1	UsableNet	Accessibility	4%	YES
\bigotimes	UserReplay	Analytics	1%	YES
*	UTag - Tealium	Tag Management	23%	YES
Ve	Ve Interactive	Marketing Tech	2%	YES

2020 eCOMMERCE 3RD PARTY TECHNOLOGY INDEX

	3rd Party	Category	% of sites with this 3rd party on checkout	Should be on Checkout Pages? (Y/N)
\checkmark	VerifyPass	Identity Management	1%	NO
verizon [,] media	Verizon Media	Ad Tech	2%	NO
\bigcirc	VideoJS	Video	3%	NO
V	Vimeo	Video	14%	NO
VISA everywhere you want to be	Visa Checkout	Payment Processing	2%	YES
	Visual Website Optimizer	A/B Testing	5%	YES
	Vizury	Marketing Tech	1%	NO
WEBCOLLAGE	WebCollage	Ad Tech	1%	NO
$\mathbf{>}$	Wistia	Video	3%	NO
	Xandr	Ad Tech	18%	NO
Toutoo!	Yahoo Analytics	Analytics	22%	NO
Yandex	Yandex	Personalization	5%	NO
Yieldify	Yieldify	Personalization	1%	YES
YOT	Yotpo	Customer Reviews	27%	NO
	Youtube	Video	29%	NO
zendesk	Zendesk	Chat	15%	YES
zmags	ZMags	CMS	5%	YES
Ø	Zonos	Global Shipping	1%	NO



Conclusion

In a time where online shopping has become a necessity rather than a convenience, retailers have been forced to focus on digital. As a result, 3rd parties have never been so important in helping brands build incredibly functional and dynamic shopping experiences. These experiences have made it easier for consumers to transition to online shopping; something that doesn't always come naturally. While 3rd parties are necessary in today's new economy, it is critical that brands know whether these technologies will help or hinder their online experience by understanding exactly where they are running on their sites, when they are experiencing issues, and how they are impacting site performance.

As the cause of over 67% of eCommerce site latency, 3rd party technologies can have a serious impact on both conversion and shopper experience. The 2020 eCommerce 3rd Party Technology Index provides brands with a single source of truth on how these 3rd parties are affecting site performance.

What Can You Do?

You don't have to live with the negative performance impact of 3rd party technologies. You can have a fast performing site that also contains rich and engaging 3rd party features.

Thousands of brand sites today rely on YOTTAA to speed up their eCommerce sites. YOTTAA's acceleration solutions, which were purpose-built to improve the performance of sophisticated eCommerce sites, optimize the sequencing and loading of 3rd party technologies (regardless of their index rating), so shoppers experience fast loading pages on every visit. The end result is an eCommerce website with higher conversions and more engaging shopping experiences.

YOTTAA's acceleration solutions can speed up any and all 3rd parties on your site. This way, you get the freedom to choose whichever technologies fit your needs without sacrificing site speed.



Improve Performance

Guarantee consistently fast page load times across your entire site.



Analyze and Control 3rd Parties

Identify and improve the load times of all 3rd parties on your site.



Measure Speed Impact on Conversion

Gain knowledge of the best conversion speeds for your site and how you compare to the industry.



Control When and Where Services Execute

Use information governance and content security policy to keep your site secure, especially on checkout and login pages.



Increase and Manage Traffic

Gain visibility into your traffic including violations and peak traffic alerts, and visitor insight.

Secure eCommerce Sites

Mitigate threats with WAF 3-7 security and control to limit performance impacts from malicious traffic and scripts.



Deploy Quick and Flexible Acceleration Solutions

Augment your existing eCommerce technologies through flexible deployment options.

YOTTAA

If you have built a website that includes many of the 3rd party technologies listed in this report, then you are already ahead of the game. But don't accept slower page load times as the forced "reality" of innovation... implement a fast, consistent, and scalable site. Contact YOTTAA today to conduct a free trial of our eCommerce acceleration solutions, and find out how you can deliver an exceptionally fast eCommerce site, increased online conversions, and the best shopper experience possible.