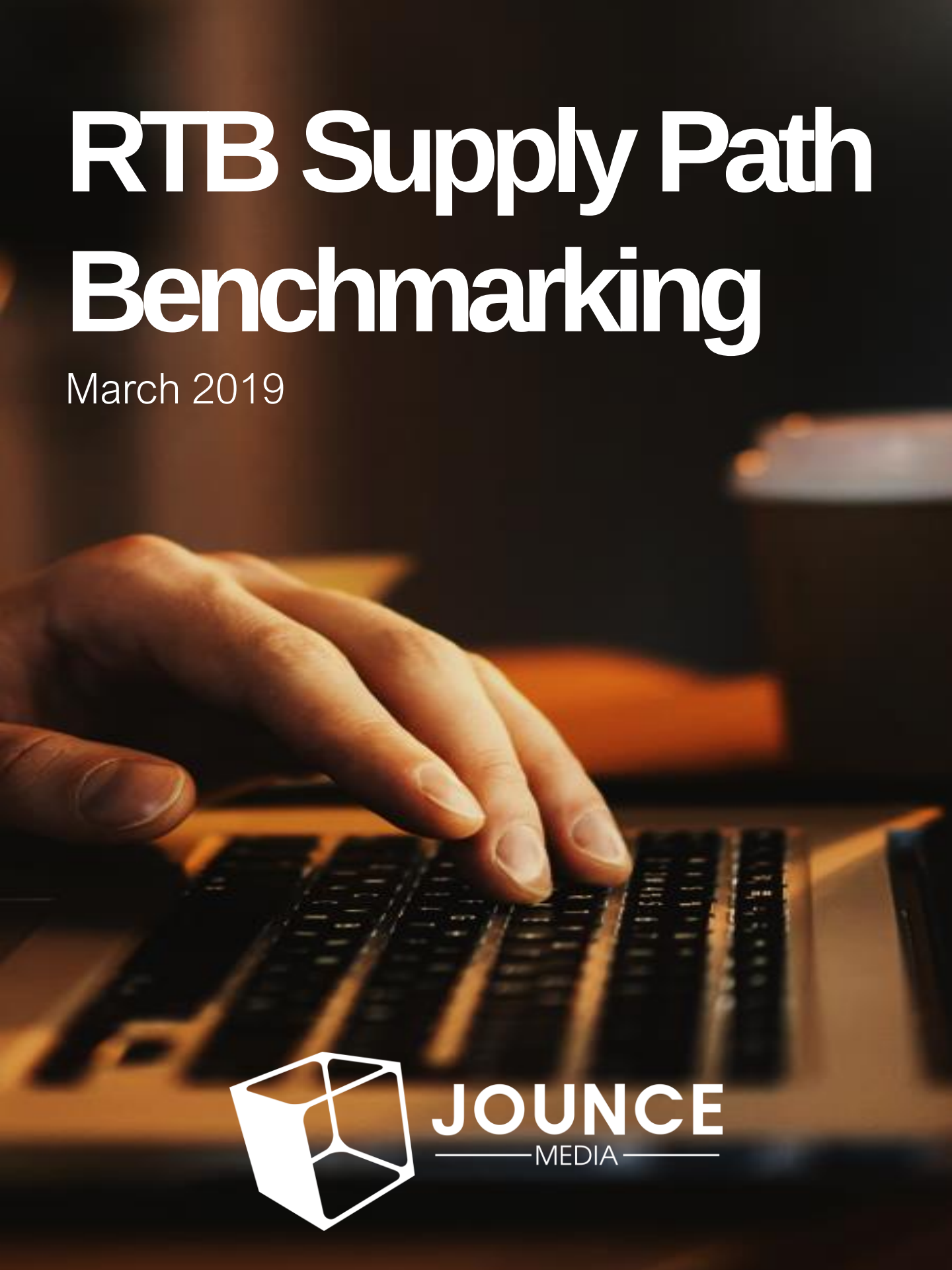
RTB Supply Path Benchmarking

March 2019



JOUNCE MEDIA

About this research

Jounce Media is an ad tech consultancy that partners with buyers and sellers to develop data-driven programmatic media strategies.

Through the course of our work, we have the opportunity to build a deep understanding of the ways in which buyers and sellers transact through the RTB market. We maintain a database of all publicly disclosed publisher supply paths based on a combination of standardized ads.txt files and non-standard company-specific disclosures. We additionally perform always-on benchmarking of the compliance, integrity, economics, and access of the supply paths for the largest global publishers.

This monthly report summarizes our research findings.

Summary Findings

February 2019

As publishers and advertisers exit the early Q1 ramp period, we continue to see evidence of an inefficiently priced programmatic market with increasing supply path fragmentation.

This month, we expanded our always-on monitoring to 48 publishers, and we continue to see high variance and volatility in supply path performance across our full data set. A few highlights from our February 2019 benchmarking exercises:

- **Across the 5,000+ publishers whose ads.txt files we crawl, most RTB ad exchanges experienced a net increase in adoption, suggesting continued publisher moves to create auction duplication.**
- **We now monitor supply paths from 48 publishers. The average publisher that we monitor accepts open auction bids through 18.4 different supply paths, up from 15.7 in January.**
- **Among the publishers that we monitor, more than half have one supply path that achieves 3x the win rate of that publisher's average supply path for a $2.00 CPM open auction bid.**

We have also begun to explore the presence of duplicate auctions for mobile app environments and have determined that the market is not yet prepared for in-app supply path optimization. In our view, the opportunity for supply path optimization is at least as relevant for app inventory as it is for web inventory yet there is near-zero adoption of the app-ads.txt program. Until app inventory has a widely adopted system for publishers to declare authorized supply paths, buyers cannot implement data-driven supply path optimization.

Comings & Goings

Ads.txt file updates

Across the 5,000+ ads.txt files that we crawl, we commonly see publishers declaring the addition of new header bidding partners. And less commonly, we see publishers removing header bidding partners. The table below summarizes these changes during the month of February.

RTB Exchange	Added Publishers	Lost Publishers	Net Change
YieldMo	450	3	447
Improve Digital	123	21	102
Rhythm One	112	10	102
AdForm	118	17	101
Synacor	92	26	66
33 Across	72	17	55
Freewheel	88	38	50
GumGum	67	19	48
Teads	56	14	42
Pulsepoint	51	14	37
Taboola	55	19	36
Beachfront	49	15	34
Conversant	50	16	34
Unruly	56	23	33
Sharethrough	43	11	32
Triple Lift	37	6	31
DistrictM	49	21	28
Outbrain	39	13	26
UnderTone	55	30	25
Index Exchange	32	9	23
Pubmatic	31	10	21
Telaria	37	16	21
Connatix	33	16	17
Oath	27	10	17
RockYou	23	6	17
Smart Ad Server	36	20	16
Comet (Cox Digital)	36	21	15
bRealTime	39	26	13
Exponential	22	9	13
Rubicon Project	20	7	13
Sovrn	31	21	10
AppNexus	20	12	8
Experian	11	4	7
TrustX	8	1	7
OpenX	16	11	5
Kargo	11	7	4
Yume	14	10	4
Smart Clip	18	15	3
Google	2		2
LiveIntent	6	4	2
AdsWizz	2	1	1
BidSwitch	8	8	0
AdYouLike	12	13	-1
AerServ	9	10	-1
Quantcast	7	8	-1
RevContent	19	21	-2
MobFox	8	12	-4
Nativo	15	20	-5
SpotX	31	38	-7
Smaato	22	31	-9

Monitored Publishers

Always-on open auction bid tests

We now actively monitor RTB banner supply paths for 48 publishers. For each of the publishers listed below, we continuously submit $2.00 CPM open auction bids into all available supply paths, and we monitor the performance characteristics of those auctions. In total, our database contains data on 1,087 distinct supply paths.

Live Since October 2018

THE WALL STREET JOURNAL. · food network · The Washington Post · CNN · REUTERS · USA TODAY · HUFFPOST · WIRED · The New York Times · ESPN

Live Since November 2018

BUSINESS INSIDER · Forbes · NEW YORK POST · YAHOO! · CNBC · msn

Live Since December 2018

howstuffworks · FORTUNE · MarketWatch · AccuWeather · FOURSQUARE · xfinity · The Weather Channel · FOX NEWS channel · Zillow · allrecipes · TIME · VARIETY · People · ebay

Live Since January 2019

myfitnesspal · 22 WORDS · Thesaurus.com · YAHOO! MAIL

Live Since February 2019

Aol Mail · Autotrader · Kelley Blue Book · Outlook · Quizlet · INVESTOPEDIA · Daily Mail · cnet · CBS · TV GUIDE · the spruce · ThoughtCo. · the balance

Dormant Partnerships

Authorized supply paths without open auction activity

For each of our 48 monitored publishers, we compare the list of authorized vendors from the ads.txt file against the bid opportunities processed by our always-on monitoring tests. Across nearly every publisher, we find that many authorized vendors do not transact open auction inventory. These dormant paths may be active monetization partners for each publisher, but they do not appear to accept $2.00 CPM open auction bids.

	AppNexus		Google		Index Exchange		Oath		OpenX		PubMatic		Rubicon		sovrn	
	Listed	Active	Listed	Active	Listed	Active	Listed	Active	Listed	Active	Listed	Active	Listed	Active	Listed	Active
accuweather.com	14	5	16	4	12	3	9	3	17	5	17	4	12	4	3	1
allrecipes.com	6	2	13	3	8	3	4	1	12	6	8	3	9	2	2	1
autotrader.com	1	1	2	2	1	1	1	0	2	2	2	1				
businessinsider.com	2	1	9	6	5	2			5	2			9	4		
cbs.com	10	4	7	3	11	3	9	2	12	3	1	1	7	4		
cnbc.com	8	0	17	1	9	1	3	0	3	0	5	2	7	0		
cnet.com	13	2	10	2	11	3	13	1	19	3	4	1	10	3		
cnn.com	9	4	11	5	4	3	4	1	5	3	5	2	5	3		
dailymail.co.uk	36	5	45	5	18	4	23	2	28	5	26	3	20	7	5	2
ebay.com	3	2	4	2	5	3	4	0	3	2	5	3	5	3		
espn.com	17	3	19	8	11	2	2	1	5	0	3	1	10	4	1	0
foodnetwork.com	5	3	8	4	5	5	2	3	6	5	5	3	5	6		
forbes.com	4	2	3	2	1	1			2	2	2	2	2	2		
fortune.com	6	2	13	2	8	3	4	1	12	3	8	3	9	3	2	1
foursquare.com	1	0	1	1	1	0			1	0			1	0		
foxnews.com	2	1	2	2	1	1	1	0	2	1	1	1	2	1		
howstuffworks.com	20	2	20	1	8	2	21	1	22	2	30	4	16	2	5	1
huffingtonpost.com	22	0	35	1	11	1	164	5	12	3	28	6	14	1	1	0
investopedia.com	4	2	2	1	3	2	1	0	7	2	6	2	2	2	1	1
kbb.com	1	1	2	1	1	1	1	1	2	2	2	2				
marketwatch.com	4	1	10	0	4	3	9	1	1	1	1	0	5	2		
msn.com	55	1	102	7	22	1	38	0	17	1	29	1	32	3	5	1
myfitnesspal.com	3	0	6	1	3	1	1	1	13	4	3	1	4	3	1	0
nypost.com	13	1	11	2	9	4	9	2	9	3	6	2	10	3		
nytimes.com	1	1	2	1	2	2			3	3			2	2		
people.com	6	2	13	2	8	3	4	1	12	4	8	3	9	3	2	1
quizlet.com	14	2	10	1	4	1	4	0	17	3	18	3	6	0	4	1
reuters.com	14	5	13	3	7	2	8	1	15	5	8	2	11	5	2	1
thebalance.com	4	2	2	1	3	2	1	0	7	2	6	2	2	2	1	1
thesaurus.com	13	7	10	3	9	5	5	3	18	7	16	6	10	7	8	4
thespruce.com	4	2	2	1	3	2	1	1	7	2	6	2	2	2	1	1
thoughtco.com	4	2	2	1	3	2	1	1	7	2	6	2	2	2	1	1
time.com	6	4	13	3	8	3	4	3	12	6	8	4	9	5	2	2
tripadvisor.com			1	0	1	0			1	0						
tvguide.com	13	3	9	3	11	3	10	1	14	3	1	1	9	3		
twentytwowords.com	19	2	29	1	9	2	24	1	26	3	17	1	14	3	3	1
usatoday.com	27	3	19	2	14	4	20	3	17	5	9	4	18	5	3	0
variety.com	21	5	13	3	12	6	11	3	17	7	9	3	11	8	4	2
washingtonpost.com	1	1	3	1	3	3	2	2	3	2	1	1	1	1		
weather.com	6	1	7	3	4	2	4	1	3	3	7	2	4	2		
wired.com	3	2	7	2	3	2	3	2	5	2	2	0	3	2	1	0
wsj.com	4	1	10	1	4	2	9	1	1	1	1	0	5	2		
xfinity.com	23	6	22	7	10	4	19	5	30	7	15	3	13	6	5	3
yahoo.com	22	0	35	6	11	4	164	55	12	4	28	7	14	5	1	0
zillow.com	4	1	4	1	2	2	1	0	3	2	2	2	1	1		

All authorized paths accept open auction bids

Some authorized paths accept open auction bids

No authorized paths accept open auction bids

Not listed on publisher ads.txt file

Emerging Paths

New paths accepting open auction bids

We also commonly see publishers enabling new supply paths to transact open auction demand. The table below reflects the dates on which new supply paths began clearing open auction bids in the month of February.

Publisher	Vendor	Ads.txt Seller ID	Date Activated for Open Auction Bids
cnn.com	Oath	11628	2/22/2019
espn.com	Rhythm One	2592118790	2/15/2019
foodnetwork.com	AppNexus	1908	2/13/2019
howstuffworks.com	GumGum	12154	2/16/2019
msn.com	Sovrn	239073	2/12/2019
nypost.com	Triple Lift	2827	2/5/2019
usatoday.com	Pubmatic	156813	2/21/2019
xfinity.com	Pubmatic	156078	2/12/2019
xfinity.com	Pubmatic	157660	2/13/2019
xfinity.com	Oath	10529	2/13/2019
xfinity.com	AppNexus	7541	2/15/2019
zillow.com	Triple Lift	4466	2/6/2019

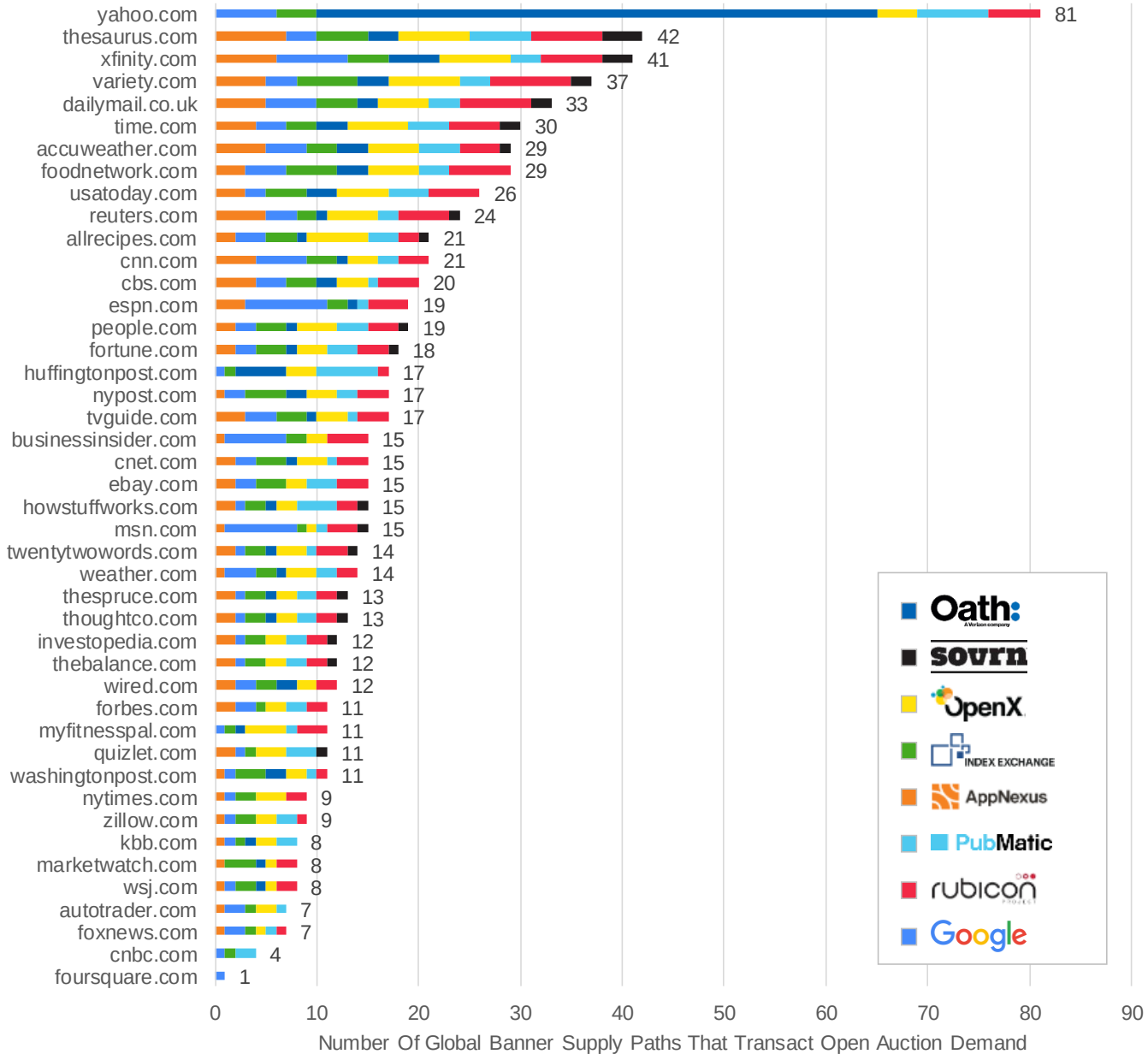
Less commonly, we see publishers disabling open auction activity through some supply paths. The list below represents paths that accepted $2.00 CPM open auction bids in January, but not in February. These integrations may very well still be active, but they no longer accept our test campaign's open auction bids.

Publisher	Vendor	Ads.txt Seller ID	Date Deactivated for Open Auction Bids
foodnetwork.com	GumGum	11645	1/10/2019
time.com	AppNexus	10239	1/26/2019
variety.com	Oath	4596	1/14/2019
variety.com	Pubmatic	156559	1/29/2019
wsj.com	Oath	11067	1/31/2019

Auction Duplication

Number of active supply paths

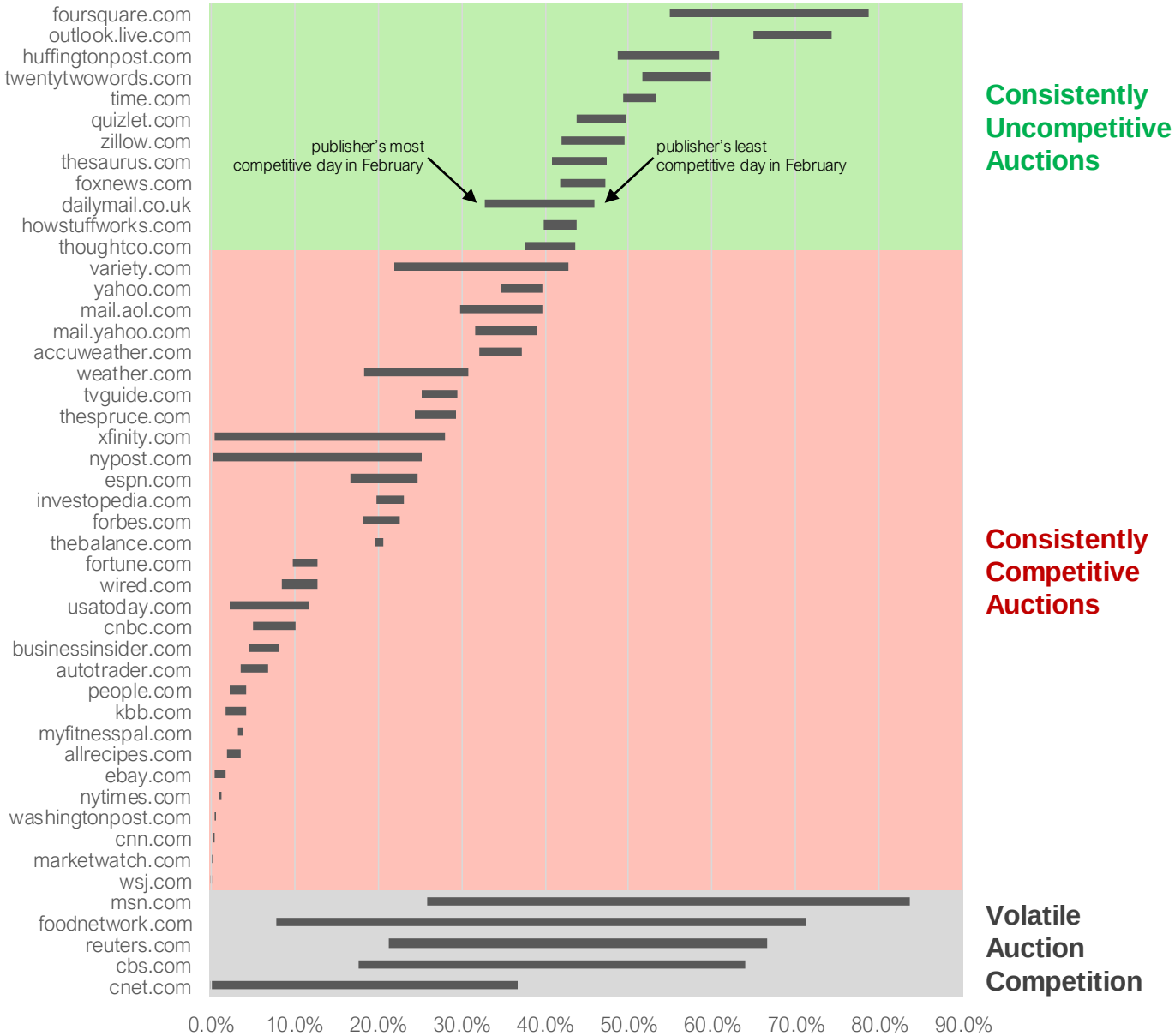
Most publisher expose their banner inventory through more than 15 supply paths that accept open auction demand. The chart below quantifies auction duplication for each of our monitored publishers.



Auction Competition

Achievable win rates in the open auction

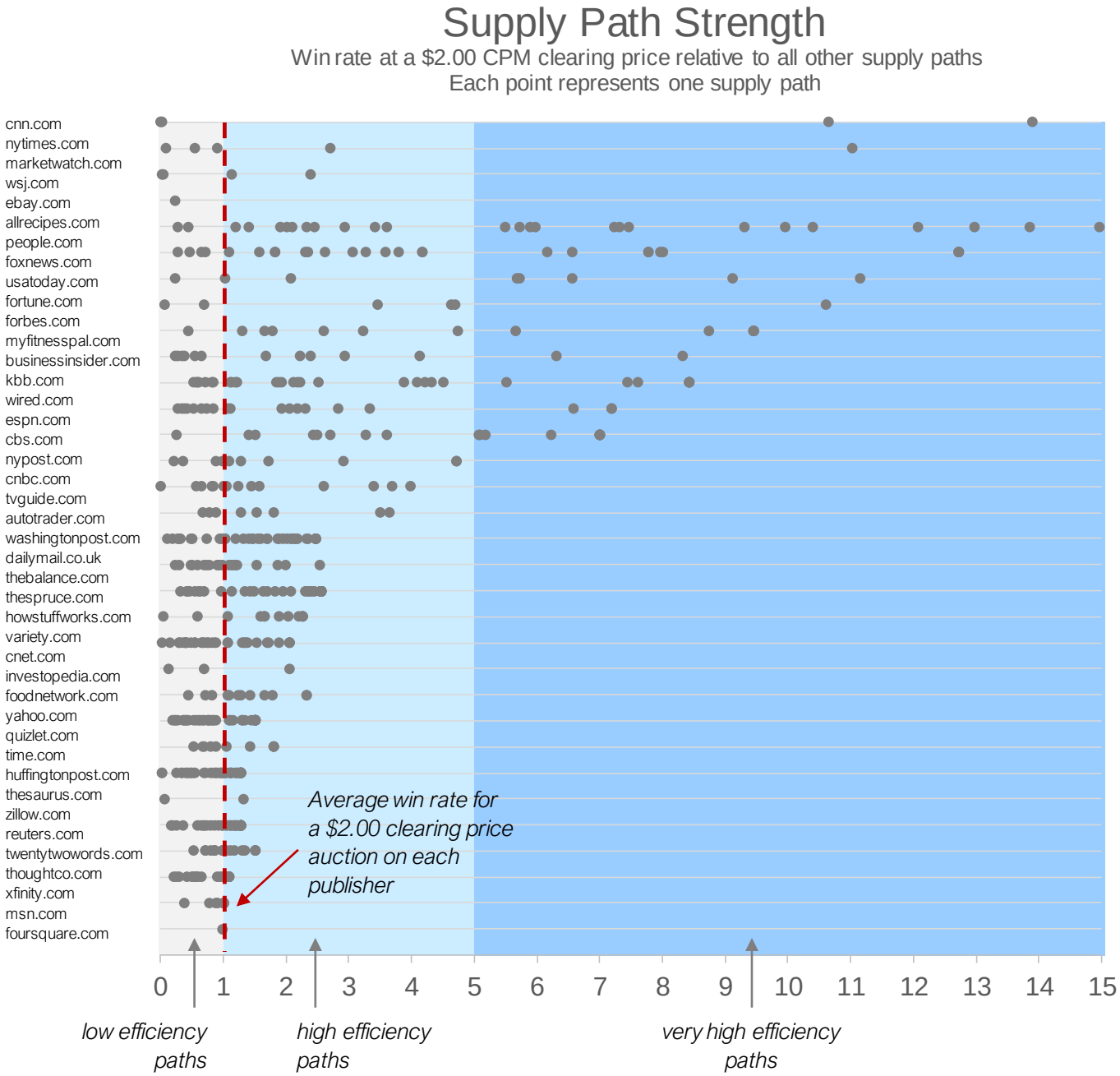
For the average publisher in our data set, 24% of impressions can be purchased at a $2.00 CPM clearing price through the open auction. But this win rate is highly variable. The chart below benchmarks the highest and lowest daily win rate for each publisher's open auction during the month of February.



Supply Path Efficiency

Win rate variance

For each publisher that we monitor, we benchmark the win rate of $2.00 CPM open auction bids for each available supply path. The chart below represents the relative range of open auction win rates for each publisher's supply paths.



Research Priorities

March 2019 focus areas

As we look ahead to our March research plan, we will continue to monitor supply paths at greater scale. We will also be working closely with buyers and sellers to address the following high priority questions:

For Buyers

- Can marketers maintain full access to publisher inventory when only bidding through a single supply path?
- Is disabling reselling a viable shortcut to supply path optimization? Are there other 'quick win' shortcuts to supply path optimization?
- Are inefficiencies isolated to web-based banner ads, or are pricing dislocations present across all screens and ad formats?
- Are efficient paths consistent across DSPs, or do different bidding platforms produce different optimal paths to supply?

For Sellers

- What are the primary drivers of optimal supply paths? Which of these can the publisher control, and which can the exchange control?
- Does disabling weak supply paths improve publisher yield by forcing all demand to transact through strong paths?
- Do exchanges need to compete on price? Can exchanges raise fees without affecting their share of a publisher's filled impressions?

We will be investigating all of these topics and will share our findings in future research reports. We also welcome feedback from our clients on additional or alternative areas that our research should pursue.

© 2019 Jounce Media, LLC All Rights Reserved
jouncemedia.com