

Case study: MSBA2



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Outline

BACKGROUND

PROBLEM STATEMENT

DATA ANALYSIS

CONCLUSION

AIRFRANCE 



Case study background



- Location of the main airport
- “SkyTeam global alliance” with Netherlands airline
- Rationalization & Flexibility airline
- Goal to reach large customer segments in multiple countries including the US

Problem statement

- Increase ROA Conversions
 - Identify specific SEO/SEM keywords of Air France
 - Expand business in the US
 - Select the best campaign & publisher
-



Useful Variables From The Data Frame:



PUBLISHER NAME

- Google, MSN, Yahoo, Kayak - which one has best?

IMPRESSION

- # of times an ad was seen - how many people saw the ads

CLICKS

- see how many people click, Find the relationship

KEYWORDS



NET REVENUE

- Amount - Total Cost

COST PER BOOKING

- Total Cost / Total Volume of Booking

ROA AND AVG ROA

- Total Cost / Net Revenue



PROBABILITY OF BOOKINGS

- Engine click thru % * Trans con. %

Pivot Table - Publisher Total

	Publisher Name	sum total bookings	sum net revenue	sum click charge	sum ROA	sum probs of booking
1	Google - Global	797	808603.1	120946.71	1843.3377	0.17933428
2	Google - US	1549	1391423.9	353640.60	2530.4340	1.56859262
3	MSN - Global	129	133363.9	12160.36	1054.2694	0.12422366
4	MSN - US	140	165451.3	16098.49	115.7256	0.05350553
5	Overture - Global	372	365788.8	64295.86	2480.0165	0.04768058
6	Overture - US	289	205457.2	141976.07	803.8793	0.04285333
7	Yahoo - US	662	836091.1	46197.82	6570.1028	1.05489061

Pivot Table - Publisher Average

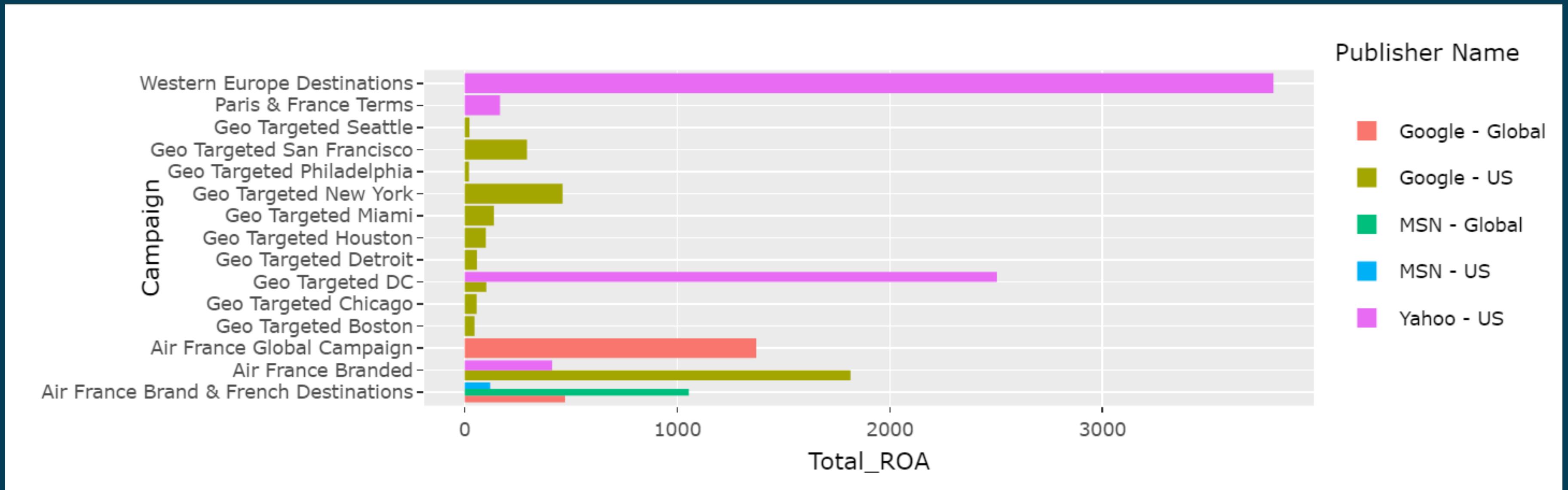
	Publisher Name	avg_ROA	avg_cost/click	avg_net_revenue
1	Google - Global	4.690427	2.2249594	2057.5142
2	Google - US	1.222432	2.3850934	672.1854
3	MSN - Global	10.649186	2.1529982	1347.1100
4	MSN - US	1.180873	2.8674701	1688.2787
5	Overture - Global	4.484659	0.8047588	661.4626
6	Overture - US	1.216156	0.7639206	310.8278
7	Yahoo - US	10.346619	1.9988757	1316.6789

Campaign Results:



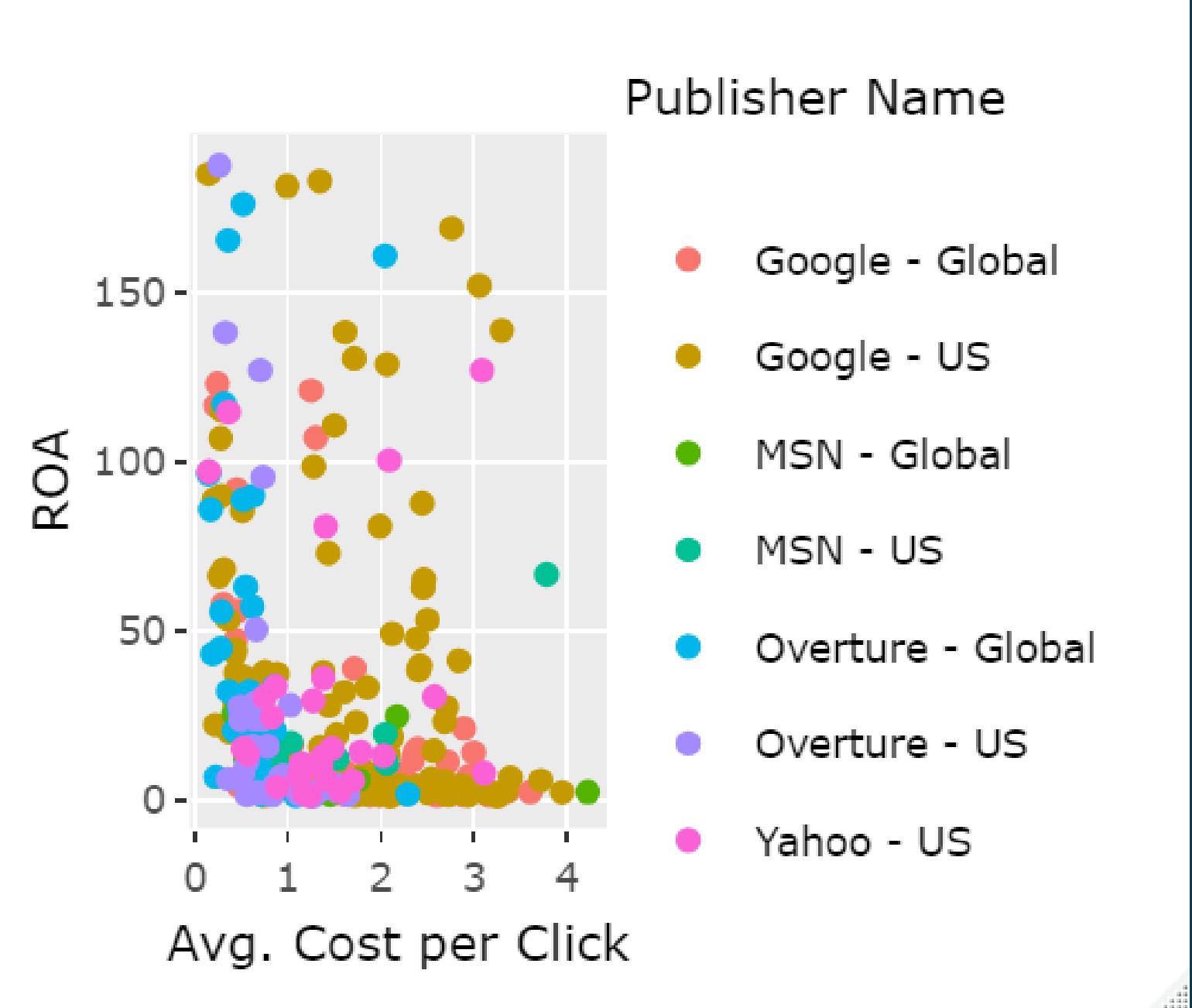
	Campaign	Publisher Name	Revenue	Count_Match_Type	Cost	Total_ROA
45	Western Europe Destinations	Yahoo - US	12693.0375	108	2330.7125	3804.670614
44	Geo Targeted DC	Yahoo - US	1423.8500	29	467.4000	2503.921568
43	Unassigned	Overture - Global	365788.8379	553	64295.8621	2480.016536
42	Air France Branded	Google - US	1403478.5880	40	114363.8620	1814.994419
41	Air France Global Campaign	Google - Global	405922.5002	282	62059.4498	1371.624538
40	Air France Brand & French Destinations	MSN - Global	133363.8876	99	12160.3624	1054.269392
39	Unassigned	Overture - US	205457.1755	661	141976.0745	803.879270
38	Air France Brand & French Destinations	Google - Global	402680.5878	111	58887.2622	471.713177
37	Geo Targeted New York	Google - US	26003.4875	234	7925.9625	460.181741
36	Air France Branded	Yahoo - US	803314.4878	33	28713.9622	411.076227
35	Geo Targeted San Francisco	Google - US	2506.4875	83	1315.9625	292.619980
34	Paris & France Terms	Yahoo - US	17212.6500	63	6810.0500	165.728019
33	Geo Targeted Miami	Google - US	226.2250	33	243.8250	137.153846
32	Air France Brand & French Destinations	MSN - US	165582.8876	94	15966.9124	119.725596
31	Geo Targeted DC	Google - US	2496.5875	118	803.9625	101.528136
30	Geo Targeted Houston	Google - US	5391.4000	88	1673.8000	99.003057

Bar chart



Campaign vs ROA

Scatter plots

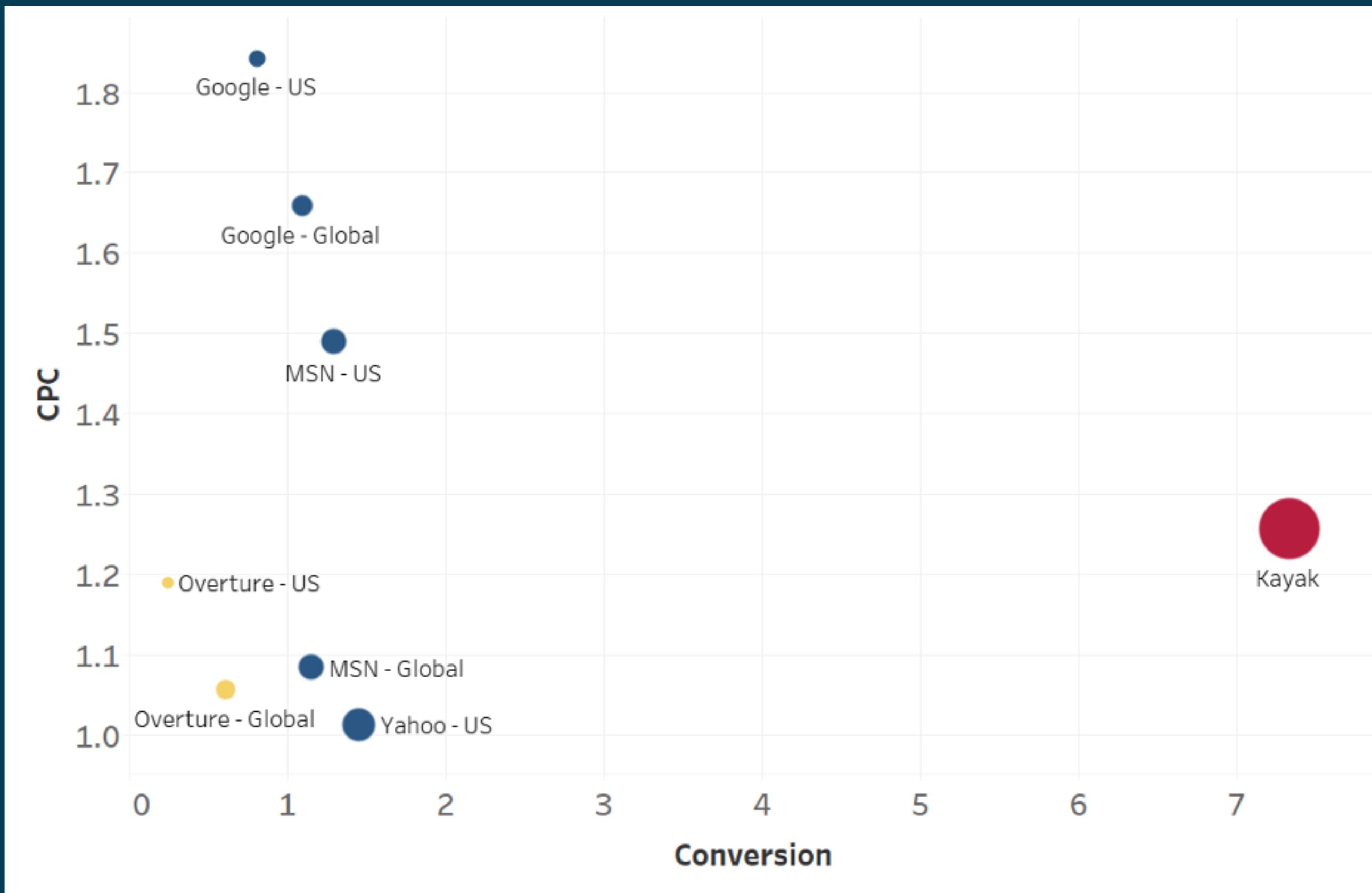


Cost Per Click vs ROA



Avg cost per click vs Probability booking

Potential partnership: Kayak



CONCLUSION

Google US - best publisher

- Highest NetRevenue(\$1,391,841)
- Highest Campaign Revenue (\$1,403,478)
- Contain keyword with Air France brand related
- The highest number of bookings (1550)
- Careful with highest Average Cost Per Click



THANK YOU

Sources:

- <https://www.wordstream.com/blog/ws/2014/03/17/what-is-a-good-conversion-rate#:~:text=Across%20industries%2C%20the%20average%20landing,rates%20of%2011.45%25%20or%20higher.>
- <https://www.wordstream.com/click-through-rate#:~:text=The%20average%20CTR%20in%20AdWords,%25%2B%20on%20the%20display%20network.>
- <https://freshsparks.com/digital-marketing-success/>

Appendix: Additional plots

