Analytical Oracles

Isa Vazquez, Muhammad Ahmad, Victoria Huang, Sadia Yesmin, Shuvam Bhowmick, Ishrat Jahan

Agenda

- Location Analysis
- Audience Analysis
- Creative Analyst
- Inventory and Viewability

Location Analysis

Isabel Vazquez

Location Analysis ()

Identify which locations were the most cost effective

• Performance metrics (CPA

Looking at which state was high performing and low performing using CPA as a primary metric

Ohio and Alabama were the most cost effective!

While Kentucky and Mississippi were the least cost effective states!

Darker means more money spent per action!

CPA per State Brius Q +\$X ► \$1,313.99 \$1,431.3 United \$102.33 \$1,354.68 States 2.334.6\$1,449.87 \$1,464.28 Carolina \$1,531.53 \$708.02> \$2,045.72

\$1,073.28

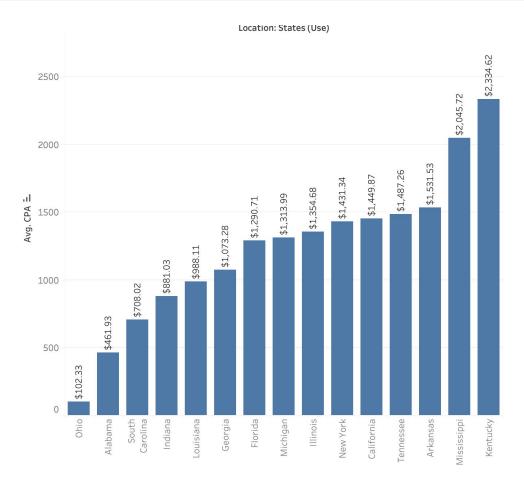
\$1,290.71

\$988.11

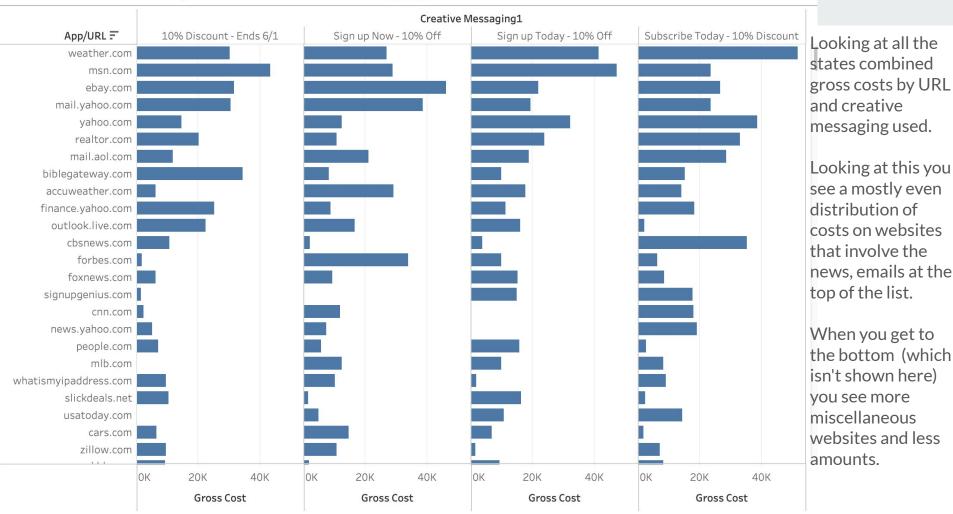
Top and Bottom Performing states based on CPA

Here we can see a bar chart of all the states in order from high performing cpa to low performing cpa!

Let's look at how money was spent on ads in the top 2 and bottom 2 performing states.

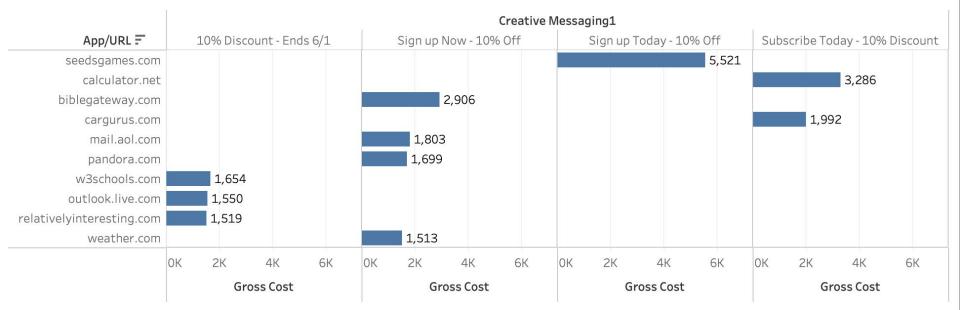


All states Gross Cost by URL and Creative Messaging



Top 2 performing states. With low Cost per Action #1 Ohio & #2 Alabama

Ohio & Alabama gross costs by URL and messaging

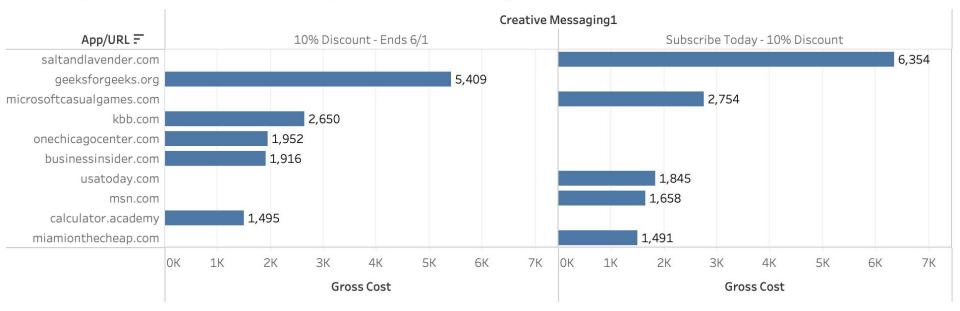


Here we see some mostly even distribution. We see websites about weather, emails, calculator. Note that the most expensive is seedgames.com a website on games.

Also note at the messaging, all uses" 10% " and all mention time/date to put pressure to get this deal before time runs out.

Bottom 2 performing states with high cost per action Kentucky & Mississippi

Kentucky & Mississippi Gross Cost per URL and messages



Looking at the graph, you see a difference in theme of websites. Miami on the cheap, and saltandlavander.com a website on cooking and recipes. This list of URLs are more about leisure and less essential. With higher costs.

I wanted to look at the spending habits of the top and bottom performing states.

Audience Analysis

Victoria Huang & Sadia Yesmin



Insights

- Top 10 performing audiences based on Goal CPA and CTR
- Most cost effective audience is travel and tourism interest in Africa

Audience with interest in autos and vehicles are worth testing in future strategies with the top CTR and low CPA

Audience Persona

Suburban Family Planners

- **Demographics:** Households with 2 adults
- Interests: Family-oriented activities, home improvement, local community events
- Behavioral Traits:
 - Tend to research and buy products and services that cater to families
 - Focused on long-term financial security and planning
- Key Motivators: Cost-effective solutions for family needs and convenience

Vehicles Enthusiasts

- **Demographics:** Adults inclined to buy vehicles
- Interests: Car maintenance, and accessories
- Behavioral Traits:
 - Regularly look up information on new car models and maintenance advice Likely to follow car brands and engage in automotive events
 - Prioritize high performance, quality, and brand reputation
- Key Motivators: Latest technology, performance upgrades, and brand loyalty programs

Audience Persona

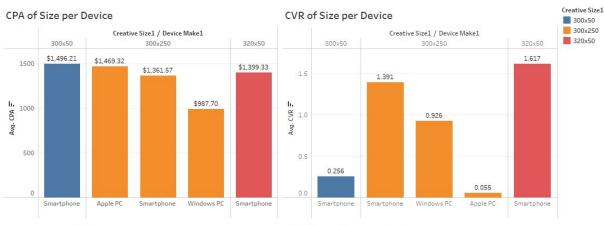
Online Shoppers with High Financial Engagement

- **Demographics:** Adults with significant online shopping behavior and high financial engagement
- Interests: Online shopping, luxury goods, credit and lending services
- Behavioral Traits:
 - Regularly shop online across various platforms and categories
 - Likely to seek and utilize credit options for major purchases
 - Interested in financial products and services that offer benefits like cashback, rewards, and low interest rates
- Key Motivators: Value convenience and a wide range of choices and exclusive deals

Creative Analyst

Muhammad Ahmad

Creative Sizes and Devices



Percent Viewability

50

I. suoiss 40

ont Viewable

Avg. Percent

Creative Size1 / Device Make1 Creative Size1 / Device Make1 300x250 320x50 320x50 300x50 300x50 300x250 48.275 48.084 47.767 3.146 46.851 46.401 2.379 Avg. CVR View F 1.308 0.518 0.259 Smartphone Apple PC Smartphone Windows PC Smartphone Smartphone Windows PC Smartphone Apple PC Smartphone

CVR View of Size per Device

<u>Insights</u>

- Smartphone best size is 320x50 by a considerable margin in terms of conversations so more adverts should follow this size
- The Device that performs the best under 300x250 is Windows PC due to the fact that it has the lowest CPA and highest CVR based on confirmed viewed metrics.

Creative Sizes and Messaging

49.42

49.12

47.49

60

45.29

Avg. Percent Viewable Impressions -

Sign up Now - 10% Off

10% Discount - Ends 6/1

Sign up Today - 10% Off

Subscribe Today - 10% Dis

CPA of Size per Message Creative Siz Creative Messaging 1 =				CVR of	CVR of Size per Message				Creative Messaging1 10% Discount - Ends Sign up Now - 10% O
				Creative Si					
300x50	Sign up Now - 10% Off	\$417.16		300x50	Sign up Today - 10% Off	0.680			Sign up Today - 10%
	Sign up Today - 10% Off	\$1	,240.29		Subscribe Today - 10% Dis				Subscribe Today - 1
	10% Discount - Ends 6/1		\$1,714.67		Sign up Now - 10% Off	0.107			
	Subscribe Today - 10% Dis		\$2,062.	33	10% Discount - Ends 6/1	0.082			
300x250	10% Discount - Ends 6/1	\$1,008	8.78	300x250	Subscribe Today - 10% Dis		1.92	9	
	Sign up Now - 10% Off	\$1	,244.58		10% Discount - Ends 6/1		1.213		
	Sign up Today - 10% Off		\$1,372.73		Sign up Today - 10% Off	0.437			
	Subscribe Today - 10% Dis		\$1,495.92		Sign up Now - 10% Off	0.410			
320x50	Sign up Today - 10% Off	\$1,1	10.10	320×50	Sign up Today - 10% Off			2.705	
	Subscribe Today - 10% Dis	\$1,340.10 \$1,414.05			Sign up Now - 10% Off	ff 1.7		5	
	10% Discount - Ends 6/1				10% Discount - Ends 6/1	6/1	1.278		
	Sign up Now - 10% Off		\$1,756.54		Subscribe Today - 10% Dis		31		
	0		.500 2000 250 CPA L	0		0.0 0.5 1.0	1.5 2.0 Avg. CVR =	2.5 3.0	
Percent View				CVR Vi	ew of Size per Me	ssage			
Creative Si	z Creative Messaging1 루			Creative Si	iz Creative Messaging1 📻				
300×50	Sign up Now - 10% Off		58.5	0 300×50	Sign up Today - 10% Off	1.135			
	10% Discount - Ends 6/1		49.88	1	Subscribe Today - 10% Dis	0.415			
	Sign up Today - 10% Off		44.61	1	Sign up Now - 10% Off	0.191			
	Subscribe Today - 10% Dis.		40.78	1	10% Discount - Ends 6/1	0.176			
300x250	Sign up Now - 10% Off		51.01	300x250	10% Discount - Ends 6/1		2.470		
	10% Discount - Ends 6/1		48.57		Subscribe Today - 10% Dis		8		
	Sign up Today - 10% Off		46.30		Sign up Today - 10% Off	1.142			
	Subscribe Today - 10% Dis		45.27	1	Sign up Now - 10% Off	0.947			

10% Discount - Ends 6/1

Sign up Today - 10% Off

Sign up Now - 10% Off

Subscribe Today - 10% Dis.

4.180

3.631

3.199

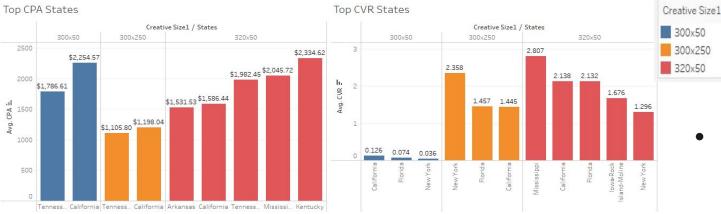
1.983

Avg. CVR View -

Insights:

- Best message for 300x50 is "Sign up today- 10% off"
- Best Message for 300x250 is "10% Discount- ends 6/1"
- Best Message for 320x50 is "Sign up today- 10% off"
- 300x50 and 320x50 having the same best message was likely to the being on the same device and mostly likely have similar audiences.

Creative Size and Location



Bottom CVR States

Bottom CPA States



Insights:

- States with major cities generally had a higher cost but also and better conversations than cheaper states.
- The best decisions moving forward is to find a middle ground a good example of this Ohio and Alabama which was on the lower end of cost but had higher conversations.

Inventory and Viewability

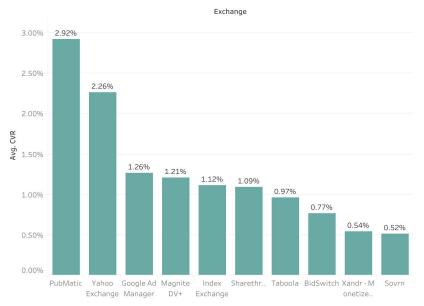
Shuvam Bhowmick

Inventory Analysis - Comparing CPA with CVR of Exchanges

Exchange CPA



Exchange CVR





Inventory Analysis - Top performing websites

Top Performing Publishers



- The left bar chart represents the top 10 highest performing publishers based on CPA
- Right chart indicates respective CVRs of each publisher

Thank You Questions?