

# Recruiting Advertising Strategy

*Homework 2*

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Team 71

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## Previous Marketing Campaign Analysis

Question #1	Answers
What were the time frames for each marketing campaign?	The time frames are listed in Table 1.
How much was spent on each campaign?	The amount spent is listed in Table 1.
What was the effectiveness of previous campaigns?	<p>The ultimate effectiveness of the campaigns is measured in the number of students enrolled, and the cost per enrollment.</p> <p>The whitman.syr.edu campaign was the most effective, enrolling more than all other campaigns combined, with a Cost per Person <math>\frac{1}{4}</math> as much as the runner-up, the iMBA campaign.</p> <p>The Delta campaign was the least effective, with zero recorded enrollments, the Cost per Person cannot be calculated.</p>

Campaign	Start	End	Cost	CPC	Sessions	Bounce Rate	Pages per Session	Students Enrolled	Cost Per Person
whitman.syr.edu	2/25/2011	8/25/2011	\$ 37,699.45	\$ 4.03	7079	78.39	1.83	50	\$ 753.99
MBA Marketing - iMBA	2/1/2012	10/27/2012	\$ 80,975.89	\$ 13.84	2625	89.22	1.14	24	\$ 3,374.00
MBA Marketing - Full-time	10/25/2012	7/2/2013	\$ 71,666.87	\$ 16.50	4285	82.5	1.27	15	\$ 4,777.79
Delta	9/29/2013	11/14/2013	\$ 10,000.00	\$ 434.78	23	43.48	2.65	0	\$ -

Table 1 – Previous Campaign Data

## Cost Forecast

2. Create a prediction of cost per click and a prediction of advertising cost per student for Google Ads for next year. Use either the prediction technique or Excel's forecast option. Do not include Delta. If using the forecast option, assume the years below. Note: the plots were created with 3 years' worth of data and forecasted out 9 years (2013 – 2022). This is likely extrapolation, and the 2022 value is tenuous at best.

Forecast summary:

	2013	2022
Cost per Click	\$16.50	\$75.81
Cost per Student	\$4,778	\$23,428

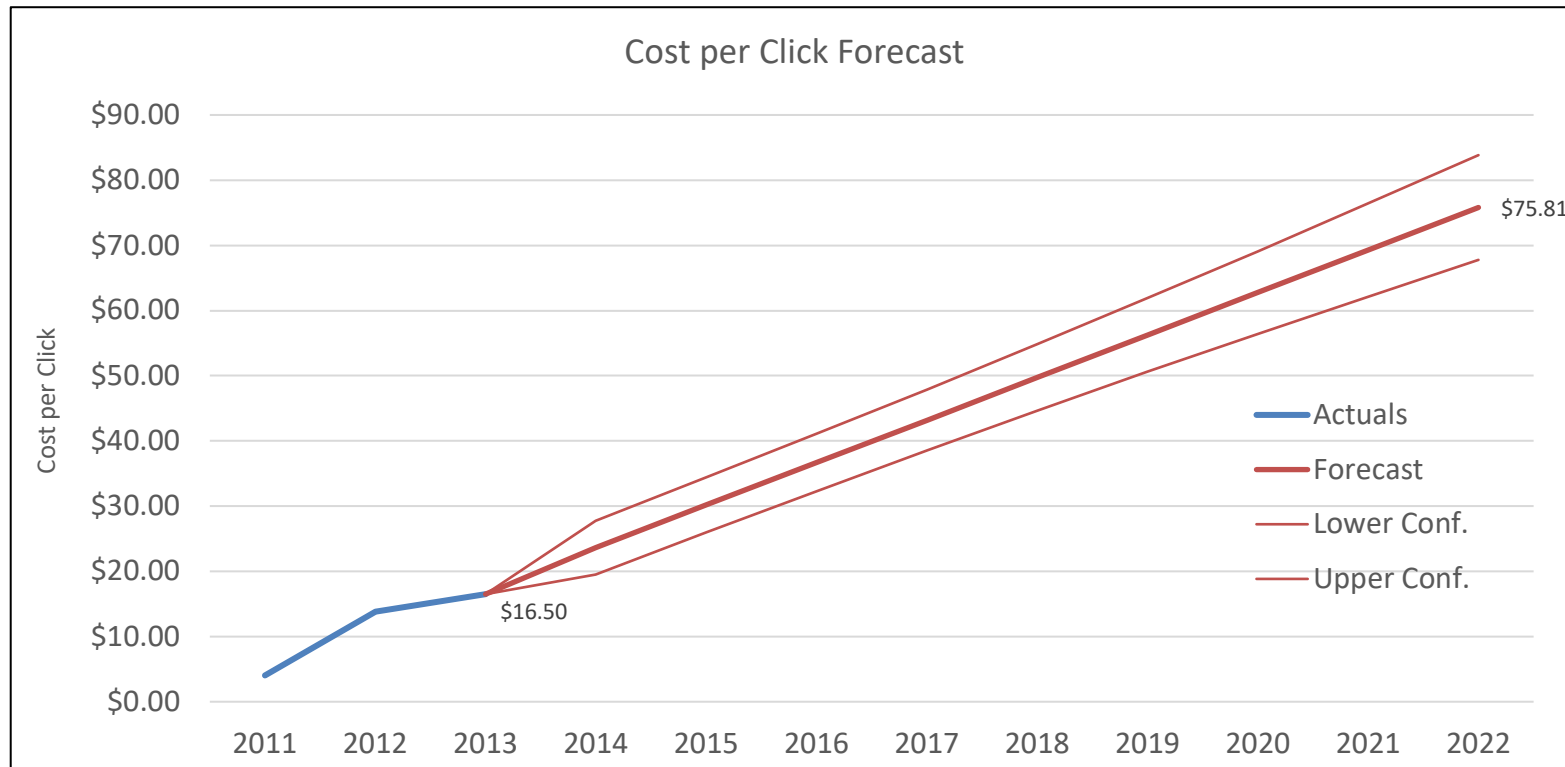


Chart 1 – Forecast of Cost per Click

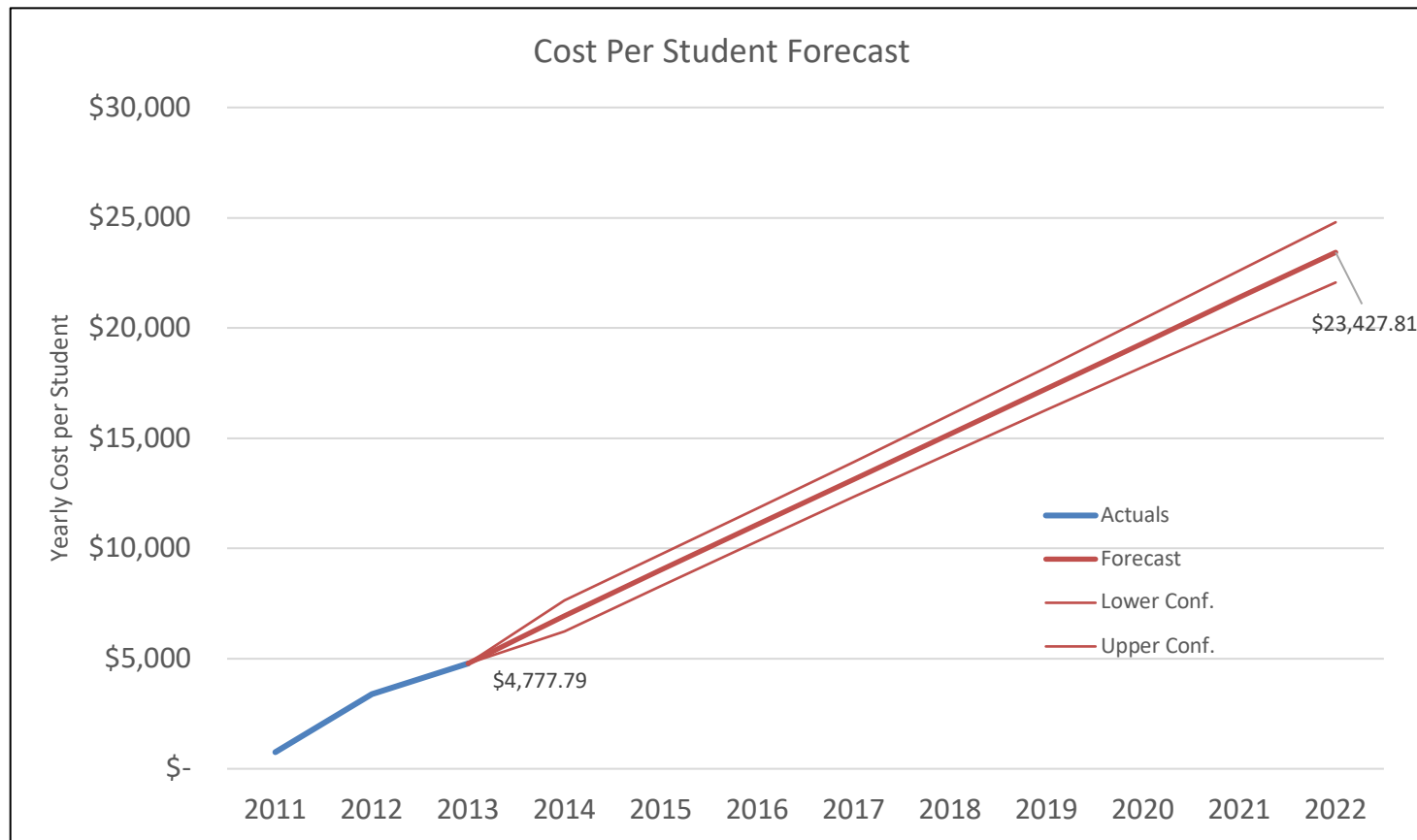


Chart 2 – Forecast of Cost per Student

## Future Campaign Decisions

3a. In which geographic region, states, or cities would you advertise? Why?

- We would advertise at a metropolitan level and specifically Elmira (Corning) NY. See picture 1.
- With a low Bounce Rate of 33.81% and a high Average Session Duration of 221 we would achieve a high return on our investment by Elmira (Corning) NY.
- We scored each region by averaging the rank in relevant categories. High durations and low bounce rates improved the average rank score.
- You can see the results in picture 1 in the 5<sup>th</sup> and 6<sup>th</sup> column, Rank Bounce Rate and Rank Duration.
- In addition to this analysis, we checked to see the Percentage New Session was reasonable. For Elmira we saw the rate was 65.5% which was the second highest from picture 1. With the first highest was only 0.8% off. When looking at the average of the total population we see a weighted average of 57%. Almost 10% lower than Elmira (Corning) NY.
- We found that metro was the best way to determine region, because it had the best balance of session volume and good measures of Bounce Rate and Session Duration. Cities were only marginally worse. See top 2 cities in Picture 2.

Picture 1

	Total Sessions	Weighted Bounce Rate	Weighted Avg. Session Duration	Rank Bounce Rate	Rank Duration	Rank Avg
Metro						
Elmira (Corning) NY	1,887	33.81%	221	1	2	2
Watertown NY	7,045	39.39%	201	6	7	7
Binghamton NY	5,626	35.96%	193	2	14	8
Utica NY	7,534	41.48%	203	15	3	9
Salt Lake City UT	5,099	40.24%	196	8	12	10
Montgomery-Selma, AL	1,111	40.77%	198	11	10	11
Jacksonville FL	5,318	41.65%	201	16	6	11
Macon GA	1,355	43.54%	248	29	1	15

Picture 2 - Runner Up Choice: Due to reasons above did not pick.

Values						
City	Total Sessions	Weighted % New Session	Total New Users	Weighted Bounce Rate	Weighted Pages / Sessions	Weighted Avg. Session Duration
Plattsburgh	1,008	52.08%	525	26.69%	5.22	227
Onondaga County	1,137	47.23%	537	35.62%	4.69	228
<b>Grand Total</b>	<b>2,145</b>	<b>49.51%</b>	<b>1,062</b>	<b>31.42%</b>	<b>4.94</b>	<b>227</b>

3b. What key words would you use? Why?

- We chose to target the “AACSB MBA” keyword based on the number of clicks each keyword generated from 2011 through 2014.
- Even though the keyword CPC was higher than a few other keywords, “AACSB MBA” provided the highest number of clicks within the budget of \$100,000.
- Using the forecasted CPC of \$75.81 multiplied by the number of clicks from 2011 through 2014, we found the two best keywords “online MBA” and “MBA” both would push the budget above the \$100,000 mark.
- Additionally, we dropped keywords like “MBA no GMAT” and “MBA without GMAT” because they both fell outside of our target goal due to attracting people with no GMAT scores. We also dropped keywords where clicks were below 100 due to not driving enough traffic to the site.

2011 - 2014				CPC Forecast: \$75.81	
Keyword	CPC	Clicks	Cost	Total Cost	
online MBA	17.48	6399	111854.31	\$	485,108.19
MBA	14.11	2090	29495.33	\$	158,442.90
AACSB MBA	4.95	558	2760.00	\$	42,301.98
MBA no GMAT	5.31	510	2707.07	\$	38,663.10
AACSB MBA Programs	4.92	353	1735.54	\$	26,760.93
AACSB accredited MBA	4.51	181	815.43	\$	13,721.61
distance learning MBA	11.01	138	1519.34	\$	10,461.78
MBA without GMAT	5.70	136	774.52	\$	10,310.16

Table 3 – Keyword rankings

### 3c. Which days of the week and what time of day would you advertise? Why?

- Data was combined into an average rank. We used bounce rate, average session length, and new user numbers to determine the best time and day of the week to advertise. Our rationale was to pick the time and day when people tend to navigate the site instead of leaving after the first page (low bounce rate), stay a while (highest average session duration) and focus on people who have not visited before (highest new user numbers).
- However, based on our geographic analysis, we should put more weight on time zones which are relevant to New York. The hours in the table below are based on the EST time zone. Because of this, 10pm eastern makes more sense than 12am eastern.
- Although Tuesday and Saturday tied in the average ranking, due to having more time for follow-up actions for enrollment on a Saturday night, it should provide more value to the campaign.
- Based on the above, we would recommend placing ads on Saturday, starting at 10 o'clock.

Hour	Sessions	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Bounce	Avg. Session Rank	New Users Rank	Average Rank
00	248	94.76%	235	74.19%	2.33	58.90	4	5	8	6
01	99	90.91%	90	71.72%	1.88	65.37	1	1	18	7
22	814	95.33%	776	77.64%	2.07	48.71	10	11	2	8
21	822	94.89%	780	79.44%	2.01	53.59	19	6	1	9
03	47	97.87%	46	72.34%	1.85	60.34	2	4	22	9
23	684	95.03%	650	75.58%	1.88	44.00	8	14	7	10
05	26	84.62%	22	73.08%	1.81	61.58	3	2	24	10
20	807	95.54%	771	79.18%	1.79	49.90	18	9	3	10
11	156	95.51%	149	78.21%	1.90	50.47	11	8	11	10

Table 4 – Hours rankings

Day of Week	Sessions	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Bounce Rate Rank	Avg. Session Rank	New Users Rank	Average Rank
2	1138	94.29%	1073	76.54%	1.90	49.87	1	2	3	2
6	1176	95.15%	1119	77.64%	1.89	48.96	2	3	2	2
0	1268	95.58%	1212	79.34%	1.72	41.15	6	6	1	4
5	763	95.02%	725	78.11%	1.84	50.53	5	1	7	4
1	1101	94.01%	1035	78.02%	1.80	41.93	4	5	4	4
4	944	94.92%	896	77.97%	2.01	46.28	3	4	6	4
3	993	94.26%	936	79.56%	1.73	40.44	7	7	5	6

Table 5 – Weekday rankings

## Discussion

Question #4 How would you measure performance of your decisions after implementation?	
Overall campaign:	<ul style="list-style-type: none"> <li>• Performance would be measured by enrollment, and cost. This would be combined to give us a Cost per Person. When performing this analysis, we were provided the enrollment of the different campaigns.</li> <li>• Once are campaign has ended, we would expect to retrieve the same enrollment information.</li> <li>• Staying within our \$100k budget we would hope for more than 132 enrollments to achieve a better performance than the whitman.syr.edu campaign.</li> <li>• With 133 enrollments, our Cost per Person would be \$752, which is slightly better than the whitman.syr.edu campaign of \$754.</li> </ul>
Time:	<ul style="list-style-type: none"> <li>• We would expect a boost in traffic at 10pm on Saturday compared to the current level of traffic. In a successful campaign we would expect bounce rate to stay constant or improve in the targeted time slot.</li> </ul>
Region:	<ul style="list-style-type: none"> <li>• We would expect to see an increase in traffic per month from the targeted region.</li> </ul>
Keyword:	<ul style="list-style-type: none"> <li>• On a successful campaign we would expect at least as many clicks per month as the original campaigns that used the same keywords.</li> </ul>

5. What other factors or considerations are important? What other data would help in developing an Internet advertising strategy, if you could collect it?
- GMAT scores, associated with Regions, would have enabled us to answer the goal of the assignment, which is to attract enrollments from students with high scores.
  - If we had enrollment for each detail view, including Region, Hour, Weekday, and Keyword, then we would not have to rely on Clicks, Bounce Back, or Sessions. These metrics are only valuable if they result in a higher enrollment rate.
  - User behavior, including interest in other universities and other degrees. This would allow us to target preferred users who are most likely to enroll.
  - Bonus: We could also use the in-market segment information to improve the University website to increase enrollments. While the campaign drives traffic, the website itself is instrumental in securing enrollments.



