

A woman with short blonde hair and glasses, wearing a yellow sleeveless top, is sitting and holding a notebook and pen. A man with a shaved head, wearing a light blue shirt and a grey vest, is standing and holding a coffee cup, gesturing with his hands as if in a meeting. The background is a blurred office or meeting space.

Project 6: Evaluate a Display Ad Campaign

Assumptions

Marketing Objective: You are running an advertising campaign with the goal of signing up students for the Digital Marketing Nanodegree

Cost: The cost of the degree is \$999

Profit: For the purpose of this assignment, assume a profit margin of 30%, meaning that Udacity makes \$299 in profit per student that signs up.

Campaigns: We want to aggressively grow the program, but, we want to do it without losing money. We ran two different advertising campaigns. One was a display advertising campaign, one a video advertising campaign.



Formulas:

Conversion Assumption: 0.2% Conversion via Landing page

Calculating #of Sign Ups: Clicks to the landing page * 0.002 = # of Student Sign Ups

Note: Please round to the nearest whole number

CPA: Cost of Campaign / # sign ups = CPA

Note: Please round to the nearest cent

ROI: [(299 Profit) - CPA] * # of Student Sign Ups = ROI

Part 1: Evaluate a Display Image Campaign

Display Image Campaign: Overall Results

<input type="checkbox"/>	● ↑	Ad group	Status ?	Default Max. CPC ?	Clicks ?	Impr. ?	CTR ?	Avg. CPC ?	Cost ?	Avg. CPM ?
<input type="checkbox"/>		Keyword Targeted	Campaign paused	\$3.00 (enhanced) ?	1,973	282,066	0.70%	\$0.44	\$872.51	\$3.09
		Total - all but removed ad groups			1,973	282,066	0.70%	\$0.44	\$872.51	\$3.09
Total - all ad groups					1,973	282,066	0.70%	\$0.44	\$872.51	\$3.09
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Results: Calculate the ROI

1. The campaign results are summarized in the table below.
2. Based on the conversion assumption of 0.2%, the overall ROI is \$323.48, which is positive.

Creative	Clicks	Impressions	CTR	Avg CPC
<i>Campaign Results</i>	1,973	282,066	0.70%	\$0.44
Cost	Conversion Rate	# New Students	CPA	ROI +/-
\$872.51	0.2%	4	\$218.13	\$323.48



Display Image Campaign: Ad Results

<input type="checkbox"/>	●	Ad	Status <small>?</small>	Campaign type <small>?</small>	Campaign subtype	Clicks <small>?</small>	Impr. <small>?</small>	CTR <small>?</small>	Avg. CPC <small>?</small>	Cost <small>?</small>
<input type="checkbox"/>	II	<p>Become a Digital Marketer Become a Digital Marketer, learn through real-live advertising projects Learn from the biggest names in the industry, and gain experience with real-live projects Udacity</p>  <p>Preview ad</p>	Campaign paused	Display Network only	Drive action	1,531	216,199	0.71%	\$0.45	\$686.27
<input type="checkbox"/>	II	<p>Become a Digital Marketer Become a Digital Marketer, learn through real-live advertising projects Learn from the biggest names in the industry and gain experience with real-live projects Udacity</p>  <p>Preview ad</p>	Campaign paused	Display Network only	Drive action	442	65,867	0.67%	\$0.42	\$186.24

A

B

Which Ad Group Performed Better?

1. The campaign results are summarized in the table below.
2. Creative-A outperformed Creative-B because of its higher # of clicks, CTR, and impressions. Since higher CTR will generate more profit for both advertiser and Google, Google will show Creative-A more often than Creative-B, resulting in the higher impressions and clicks.

Creative	Clicks	Impressions	CTR	Avg CPC	Cost	Conversion Rate	# of New Students	CPA	ROI +/-
Creative - A	1,531	216,699	0.71%	\$0.45	\$686.27	.2%	3	\$228.76	\$210.72
Creative - B	442	65,867	0.67%	\$0.42	\$186.24	.2%	1	\$186.24	\$112.76

Display Image Campaign: Keywords

<input type="checkbox"/>		Keyword	Ad group	Status	Max. CPC	Clicks	Impr.	CTR	Avg. CPC	Cost
<input type="checkbox"/>		facebook marketing course	Keyword Targeted	Campaign paused	\$3.00 (enhanced)	0	4	0.00%	\$0.00	\$0.00
<input type="checkbox"/>		digital analytics training	Keyword Targeted	Campaign paused	\$3.00 (enhanced)	0	0	0.00%	\$0.00	\$0.00
<input type="checkbox"/>		digital analytics course	Keyword Targeted	Campaign paused	\$3.00 (enhanced)	0	0	0.00%	\$0.00	\$0.00
<input type="checkbox"/>		social media marketing online course	Keyword Targeted	Campaign paused	\$3.00 (enhanced)	0	14	0.00%	\$0.00	\$0.00
<input type="checkbox"/>		adwords course	Keyword Targeted	Campaign paused	\$3.00 (enhanced)	0	8	0.00%	\$0.00	\$0.00

	Keyword	Clicks	Impressions	CTR	Avg CPC	Cost
1	<i>marketing online</i>	236	20750	1.14%	0.5	\$118.64
2	<i>online marketing course</i>	226	38259	0.59%	0.28	\$63
3	<i>digital marketing training</i>	57	8224	0.69%	0.54	\$30.75
4	<i>marketing courses</i>	19	1999	0.95%	0.27	\$5.14
5	<i>marketing careers</i>	14	2998	0.47%	1.68	\$23.5



How would you optimize this campaign?

Suggestion 1: I will review and refine my keyword lists to replace the keywords of zero impressions with new keywords. There might be other keywords also suitable for this campaign but are not yet used.

Suggestion 2: The CTR results for Creative-A and Creative-B reveal that images matter. I will try to replace the image for Creative-B and run the A/B testing to see if there are better options.

Suggestion 3: Perform cost analysis on keyword lists. Although some keywords contribute to # of clicks, the CPC might be higher than other keywords. I will calculate the costs based on different keyword combination and select the most efficient keyword list.



Part 2: Evaluate a Display Video Campaign

Display Video Campaign: Overall Results



<input type="checkbox"/>	● ↓	Ad group	Status [?]	Max. CPV [?]	Ad group type [?]	Impr. [?]	Views [?]	View rate [?]	Cost [?]	Avg. CPV [?]	Clicks [?]	CTR [?]	Avg. CPC [?]
<input type="checkbox"/>		short trailer DM education keywords	Campaign paused	\$0.10 <input checked="" type="checkbox"/>	In-stream	54,312	10,622	19.56%	\$290.21	\$0.03	453	0.83%	\$0.64
<input type="checkbox"/>		short trailer DM large keyword list	Campaign paused	\$0.10 <input checked="" type="checkbox"/>	In-stream	103,205	19,261	18.66%	\$535.40	\$0.03	1,439	1.39%	\$0.37
		Total - all but removed ad groups				157,517	29,883	18.97%	\$825.61	\$0.03	1,892	1.20%	\$0.44
Total - all ad groups						157,517	29,883	18.97%	\$825.61	\$0.03	1,892	1.20%	\$0.44
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Results: Calculate the ROI

1. The campaign results are summarized in the table below.
2. Based on the conversion assumption of 0.2%, the overall ROI is \$370.40, which is positive.

Creative	Clicks	Impressions	CTR	Avg CPC
<i>Campaign Results</i>	1,892	157,517	1.20%	\$0.44
Cost	Conversion Rate	# New Students	CPA	ROI +/-
\$825.61	0.2%	4	\$206.40	\$370.40

Display Video Campaign: Ad Results

<input type="checkbox"/>	<input type="radio"/>	Ad	Ad group	Status [?]	Video	Impr. [?]	Views [?]	View rate [?]	Avg. CPV [?]	Cost [?]	Clicks [?]	CTR [?]	Avg. CPC [?]
<input type="checkbox"/>	<input checked="" type="radio"/>	Short trailer 	short trailer DM education keywords	Campaign paused	Become a Digital Marketer	54,312	10,622	19.56%	\$0.03	\$290.21	453	0.83%	\$0.64
<input type="checkbox"/>	<input checked="" type="radio"/>	Short trailer 2 	short trailer DM large keyword list	Campaign paused	Become a Digital Marketer	103,205	19,261	18.66%	\$0.03	\$535.40	1,439	1.39%	\$0.37

A

B

Campaign A - Short Keyword List

Campaign B - Large Keyword List

Which Ad Group Performed Better?

1. The campaign results are summarized in the table below.
2. Campaign-B performed better than Campaign-A because of the significant higher CTR (1.39% versus 0.83%). Large keyword list works better than short keyword list.

Creative	Clicks	Impressions	CTR	Avg CPC	Cost	Conversion Rate	# New Student	CPA	ROI +/-
Campaign A	453	54,312	0.83%	\$0.64	\$290.21	.2%	1	\$290.21	\$8.79
Campaign B	1,439	103,205	1.39%	\$0.37	\$535.40	.2%	3	\$178.47	\$361.59

Display Video Campaign: Keywords

<input type="checkbox"/>	●	Keywords [?]	Max CPV	Ad group	Status	Impr.	Views [?]	View rate [?]	Avg. CPV [?] ↑	Cost [?]	Clicks [?]	CTR [?]
<input type="checkbox"/>	●	internet marketing program	\$0.10	Video DMDN Launch	Campaign paused	0	0	0.00%	\$0.00	\$0.00	0	0.00%
<input type="checkbox"/>	●	online marketing course	\$0.10	Video DMDN Launch	Campaign paused	1	0	0.00%	\$0.00	\$0.00	0	0.00%
<input type="checkbox"/>	●	web metrics	\$0.10	Video DMDN Launch	Campaign paused	0	0	0.00%	\$0.00	\$0.00	0	0.00%
<input type="checkbox"/>	●	web analysis	\$0.10	Video DMDN Launch	Campaign paused	2	0	0.00%	\$0.00	\$0.00	0	0.00%
<input type="checkbox"/>	●	online marketing strategies	\$0.10	Video DMDN Launch	Campaign paused	0	0	0.00%	\$0.00	\$0.00	0	0.00%

Key Campaign Results (Keywords)

1. The following five keywords are considered the most successful ones based on the # of clicks.

ad advertisement – 510 clicks

online marketing video – 495 clicks

digital learning courses – 207 clicks

business training course – 163 clicks

course digital marketing – 106 clicks

2. The keyword ad advertisement is the best performing one. This keyword not only have highest number of clicks, but also has lowest CPA(\$85.58).



Keyword	Clicks	Impressions	CTR	Avg CPC	Cost	Conversion Rate	CPA	# New Students	ROI +/-
<i>online marketing video</i>	495	42440	1.17%	\$0.51	\$253.23	.2%	253.23	1	45.77
<i>ad advertisement</i>	510	24172	2.11%	\$0.17	\$85.58	.2%	85.58	1	213.42
<i>business training course</i>	163	17437	0.93%	\$0.63	\$103.43	.2%	0	0	0
<i>digital learning courses</i>	207	14198	1.46%	\$0.31	\$64.99	.2%	0	0	0
<i>course digital marketing</i>	106	8726	1.21%	\$0.43	\$45.50	.2%	0	0	0



How would you optimize this campaign?

Suggestion 1: I will remove keywords that might have CPA larger than \$299 based on the data, since there would be no profit at all. Some of those keywords are “*google seo*”, “*google analytics*”, and “*search engine marketing*”.

Suggestion 2: I will try more keyword combinations and run A/B testing several times to find the best keyword set for this campaign.

Suggestion 3: Perform cost analysis on keyword lists. After collecting enough keywords that can attract audience and have CPA lower than \$299, we still need to do cost analysis to find the keywords that are most effective for the campaign and therefore further increase ROI.



Part 3: Results, Analysis and Recommendations

Recommendations for future campaigns

- Based on the summary below, *Display Video Campaign* perform better because of its lower CPA and higher ROI. So if I would consider investing more on video campaign in the future.

Channel	Cost	Conversion Rate	# New Students	CPA	ROI +/-
Image	\$872.51	0.2%	4	\$218.13	\$323.48
Video	\$825.61	0.2%	4	\$206.40	\$370.40

- Based on the analysis in the part 2, the first thing I will do to improve the campaign is to optimize the keyword lists. The keywords with higher CPA than \$299 should be deleted, and we need more keywords that can achieve good performance.
- I would create one or more video trailers for the campaign and perform the A/B testing. Since we only have one trailer, we have no way to know that it is a good one for the campaign,