DATASET ANSWERS:

- 1. The age group with the lowest cost per fan (connection) is 25-59. The cost per fan in that age group was .2618 with 255 spent and 974 connections.
- 2. The keyword(s) with the highest click-to-connection rate was #Burlington Coat Factory. The click-to-connection rate was .9435 with 167 connections and 177 clicks.
- 3. The Keyword category with the cheapest clicks is eCom with 58.54 spent and 256 clicks for a cost-per-click of .2287. On average, 1047.23 was spent with 3460 click for a cost-per-click of .3027. The cost-per-click for eCom is .0740 cheaper than the average. From the cheapest Keyword Category, the day that got the cheapest clicks was 3/27/2013 with a cost-per-click of .1605 (17.65 spent for 110 clicks).
 - (used VLOOKUP to add column to the dataset that matched the Keyword Category to the Keyword(s) and then made Pivot Table -- attached)
- 4. I would say that the element that has the biggest impact on performance is Keywords because within the Keywords, there is the widest range of any of the other elements. For example, the clicks-to-connection range is .9435 to .6581 and the range for the cost per connection is .1611 to .8715. No other element has this wide a range when measuring performance.
- 5. Since the goal of the campaign is to increase the number of fans (connections), the campaign should optimize toward the Cost Per Connection metric in order to ensure that they are efficiently getting fans without spending too much money.
- 6. For the Photo Post Ad Type, there were 3 unique images used.
- 7. The Photo Post Ads are cheaper than the Link Post Ad Type and have far more engagement. Within the Photo Posts, the age range with the most engagement is 40-49 with the greatest number of Shares and Video Plays. The phrase in the body of the ads with the most engagement is "Share your favorite fresh Spring looks on our Facebook page. Click "Like" now!" this is effective because the viewer is urged to look through the Facebook account to share favorite looks, not simply told to like the account. To optimize toward cheap and engaged fans, I would advocate for more Photo Post ads aimed toward 40-49 year old's with the body of the ads urging further engagement rather than to simply like the account page.
- 8. For this campaign, a Photo Post ad type was shows almost three times as much as a Link Post ad type. Although the Link Post had around one third the amount of impression as the Photo Post (272,140 vs 874,826), the amount Spent was greater for the Link Post (585.45 vs 461.78) suggesting that Link Posts are far more expensive than Photo Posts. However, the number of connections made from the Link Posts are over twice as much as the connections made from the Photo Post (2048 vs 820). The Cost Per Connection of the Link Post Ad Type is about half of the Cost Per Connection of the Photo Post Ad Type (.2859 vs .5631). Moving forward, I would do more Link Post ad types because although they do cost more, they are far more efficient at generating fans than the Photo Post ad types are.
- 9. If I was running this campaign, I would do far more Link Post Ad Types than Photo Post Ad Types because they are significantly more effective. For example, the cost-per-

connection is cheaper with the Link Posts even though the total spent is more expensive. The younger age groups 25-29 and 30-39 generate the most fans so I would target them more than the older age groups. Also, the Keywords that performed the worse were #Lululemon Athletica, #Banana Republic (clothing retailer), #Shopping, and #Lucky Brand Jeans so I would use those keywords less. Additionally, ads that are placed on the mobile generate far more connections that those on a desktop so I would aim to do more mobile-placed ads.

10. The most interesting thing for me is that the age groups that generated the most fans with the cheapest cost-per-connection is 25-39; however, they are also the weakest on engagement. The age range 40-59 is more expensive to target with less efficient cost-per-connection, but they engage far more than the younger age group. Therefore, there is a tradeoff between wanting cheap fans and more engagement.