MG Instagram EOQ Report

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Introduction

Throughout this quarter we have spent a significant amount of time on a social media campaign centered around Instagram. The goal was to engage students and build brand awareness in the student communities. Here I will attempt to give a gauge of where the campaign was successful and where it came up short. Secondly, I will give some possible objectives for future quarters based on our performance this quarter.

Overall Performance

As I have come to learn more about marketing and the goals of our social media campaign I have decided to focus to three key indicators of success: Likes, Profile Visits, and reach. I chose these because likes is the best indicator we have of how well individual pieces of content are resonating with our audience. From this we can hope to gain insight into how to make better posts. I chose profile visits because it shows not just whether the post was liked, but if it connected in a way that made the user want to check out our entire page. This is also a good way of estimating the success of individual posts as well. Finally reach. This is the total number of accounts that saw each post. The reach does not, and should not, change very much for each individual post. It is better used for us to judge how our audience is changing over time.

Likes

First we will take a looks at likes. Figure 1 is a graph of the amount of likes each post has gotten, ordered by the post number (0 is the first post, 50 is the 50th post). From the figure we can see that after a period of string growth at the very beginning the likes leveled off at around 20 likes per post. However at the far right of the chart we can see that since about October 10 (around post 35) we have begun a steady upward trajectory. This bodes well for the performance of this quarter because I think this quarter's Instagram campaign began on October 1st (post 30). Before this post we had not posted since August. If we look at only the post from this quarter we have not only has the likes trend line
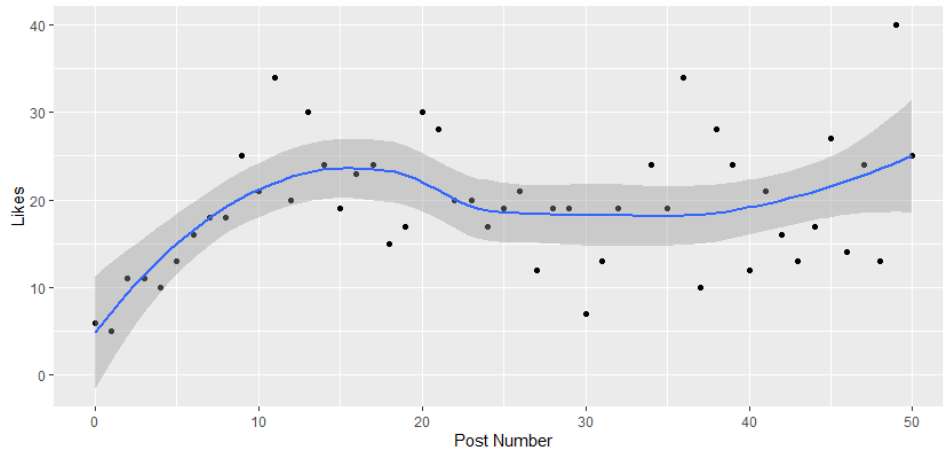
Figure 1: Likes over time

(blue line) been strictly increasing, it also seems to have an exponential form (the amount that likes are increasing is increasing).

It is my opinion this is a good sign that we are achieving some sort of word of mouth advertising and are beginning to really build a community. My reasoning is that the exponential model for growth is often the preferred starting point for modelling the spread of ideas (If you are interested Malcolm Gladwell's book "The Tipping Point" is really interesting exploration of this idea). If this continues to be the case (big if), the next few months and next quarter could be a sort of "breakout quarter". The reason this is a big if is that there will likely be some attrition within the community as quarters pass. This can be seen at the end of last quarter with the drop off occurring around post 20. My guess as to why this attrition is occurring is that as students complete quarters in school, they move on from their intro to business class and become less engages with Market Games as it is associated with their now completed class. This theory presents one possible objective for future quarter, to hold engagement past the end of their class. This could be challenging but perhaps we could consider something like "where are they now" checkups on past market leaders. This would keep some past students engaged and, if past market leaders go on to have future success, offer some evidence of the effectiveness of the market games program.

Profile Visits

In figure 2 we have a graph of the profile visits. This shows constant and remarkably consistent growth. The posts that have incredibly high profile visits are all posts that highlight specific people. As to why some have very large numbers and other are pretty pedestrian, my best guess would be it comes
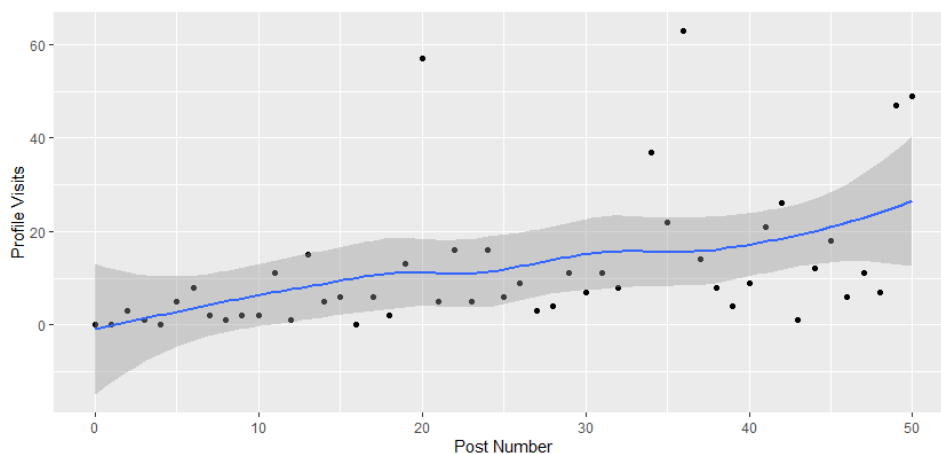
Figure 2: Profile Visits over time

down to the popularity of the specific person spotlighted. We will go more into the specifics of the posts later. It is also apparent that this number is more resilient to the up and downs of other measurements. It seems this is because in the beginning most values were at zero or very close to it (under 20). Thus the lack of variability was due to simply a lack of profile visits at all. So the lack of clear declines in the trend line (blue line) is due to zero being the absolute bound for this measure (meaning you can't have less than 0 profile visits). As the account switched the type of content toward more people focused content the profile visits grew as well. We also see that the variability has also grown. As the profile visits hopefully continues to grow we can expect more up and downs. The gains we have seen is something I would cautiously attribute to a change in the type of content released (more on this later).

Reach

Figure 3 and 4 both relate to the amount of accounts our content is reaching. The first (figure 3) shows the total amount of accounts reached by the posts during this quarter only (notice it begins on October 1st). The higher line is the grand total and the lower line is the total of accounts reached that are not following Market Games. The second figure (figure 4) really drills down on the non followers. It is the number of non follower accounts reached as a proportion of the total accounts reached. Looking at figure 3 first we see that after some rapid gains at the beginning of the quarter the reach fell off approaching the size that it started at. I have two theories for why this is.

First is that people do not frequently return to the Market Games Instagram account if they choose not to follow. If this is correct, we should expect to see an increase in reach at the beginning of each quarter when we introduce ourselves
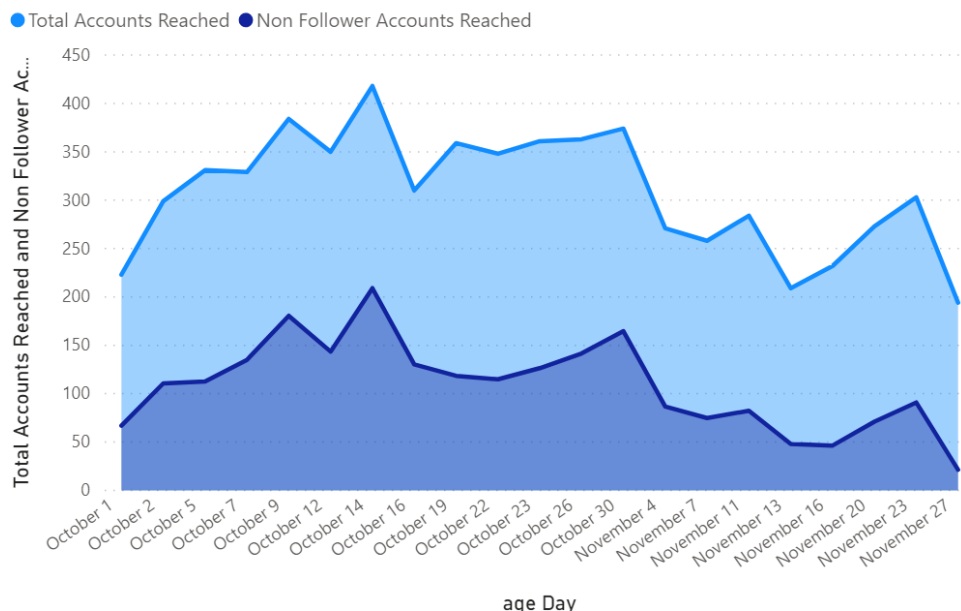
Figure 3: Reach over time (followers and non followers)

to a new class of students. Then we would see a decline in non follower accounts reached and an increase in follower accounts reached. Looking at figure 3 this is more or less what we see. A spike in non followers reached at then beginning of the school quarter (up to about mid October) then a steady decline after. With this interpretation the decline in reach is not super concerning as we should expect to see it rise again at the beginning of next quarter. If this continues to be a problem I would again suggest looking into ways to keep students engaged after they finish the intro to business class where the game is used.

Second, there is almost certainly some "reverse" carryover effect in the data. By this I mean that because posts stay in our profile each posts will continue to get views long after its posting. This could be by people scrolling through our profile, seeing a post on the explore page, etc. The size of this effect seems to be pretty moderate. For example a post from October 5 had reached 205 accounts when I first checked on October 12 and now has reached 331 accounts. This would imply that the reach of past posts is being sort of artificially bolstered by people viewing the post long after it was originally posted. Thus some of the apparent decrease in audience size is due to this effect. There is nothing really to be done about this except keep it in mind when thinking about the data.

Turning our attention to figure 4 we see the proportion of non followers in the reach. The first thing to notice is that the proportion of non followers is
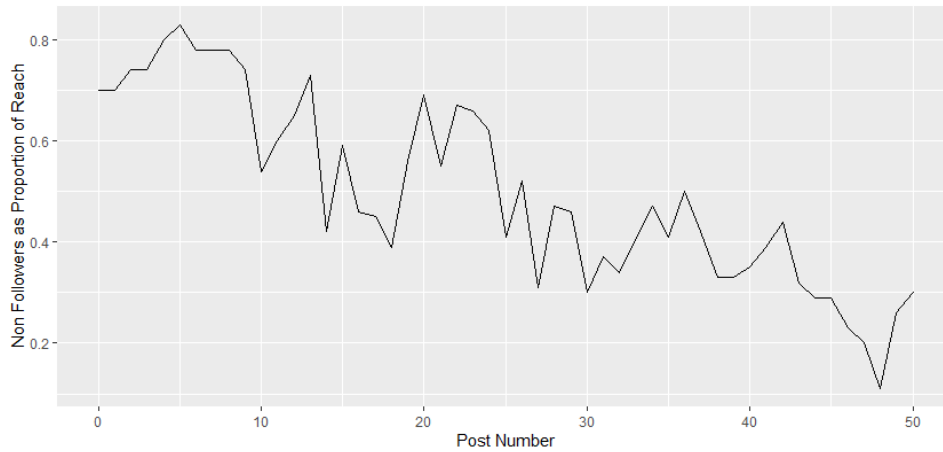
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Figure 4: Reach to non followers over time

clearly trending downward, reaching an all time low very recently. Furthermore it has been (generally) downward trending since the beginning of the Instagram accounts creation. This is somewhat encouraging as in order for this to be true we must be capturing some of the non followers and converting them to followers. However, sometime in the near future this trend could be cause for concern. I view this number as a sort of "audience market cap". By this I mean that it is the maximum new followers currently available. As this number gets lower it means the less new people are seeing the content and our potential for growth is also likely lower. I believe that the number we are at right now (20% non followers) is probably not cause for concern but if this number continues to decrease (especially if it is decreasing faster than we are gaining followers) then some action should be taken to promote the account, bringing in more possible followers.

Specific Content

In the previous section we looked at more broad trends. In this section we will look into the types of posts we have and their performance. To begin I grouped each of the posts into one of 8 categories describing what I felt was the main point of the post. The categories are as follows:

Definitions

1. Giveaway: We only had one of these but it did not fit well in another category so it is its own category.

2. MG spotlight: This is Market Games spotlight and I used this for posts that highlighted people on the market games team.

3. Peer spotlight: I used this to indicate when a posts was used to highlight students.

4. Professor spotlight: This is for posts that highlight professors.

5. Promotion: I used this for posts that had the primary purpose of advertising for market games. These were the posts that commented on the benefits of market games or advertised an event being put on by market games.

6. Pun: These are posts that are business puns.

7. School highlight: I believe there are only two of these. They are the posts that primarily spotlight a school as a whole. An example is:
https://www.instagram.com/p/CGtI_9PBG4L/

8. Tip: These were posts where the primary purpose is to share a tip or piece of knowledge.

To see the all the classifications here is an excel sheet with the classifications I used
https://drive.google.com/file/d/164bqO0kAmcVz_rKMYQQOuMMsks1YnhOW/view?usp=sharing

Likes

First, in figures 5 and 4 we look at likes by post type. The first graph shows the amount of likes each type of post has gotten graphed as a line so we can see temporally how things have progressed. The second figure is chart of the percent of people who like the post out of those who saw the post. The black bars are error bars. They represent the variability of measurements. Most of the individual posts in each post type have averages within the black bar. So a larger bar means that the number of likes was very different between individual posts within the same group. A smaller bar means that most of the individual posts within each post tended to have similar like values. For figure 5 I will draw attention to is the recent success of peer and professor spotlights. We also should notice the falling success of pun posts. One other thing to notice is that most post types go up then back down. It appears that people respond well to content and as the same type of content is repeated people begin to lose interest (as with the pun posts). The consistently high performance of personal posts (peer and professor spotlights) are good but we should be careful not overdo it because that will likely lead to diminishing returns. Turning to figure 6 we can see that most post types are drawing around a 5% like rate except for the giveaway. According to website I read (I will not link it because its probably no the best source but I could not find a better one) the average like ratio for businesses is 4.8% so we are right on target.
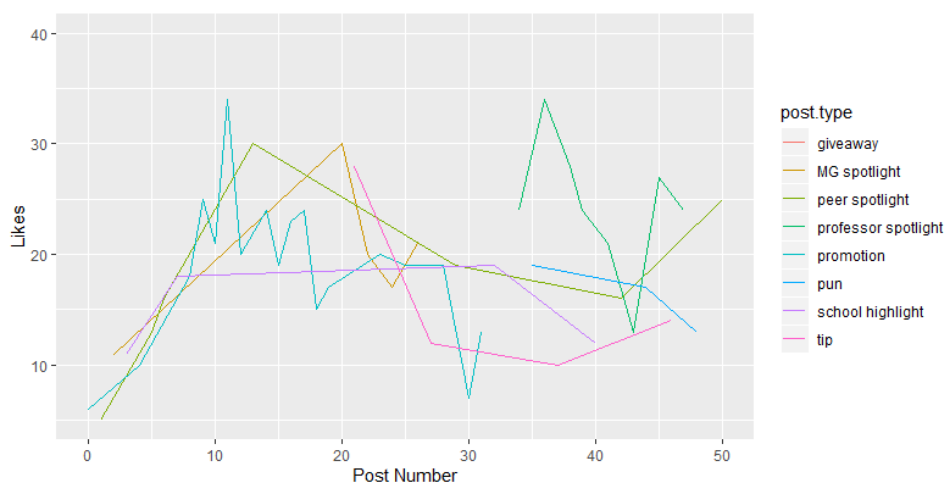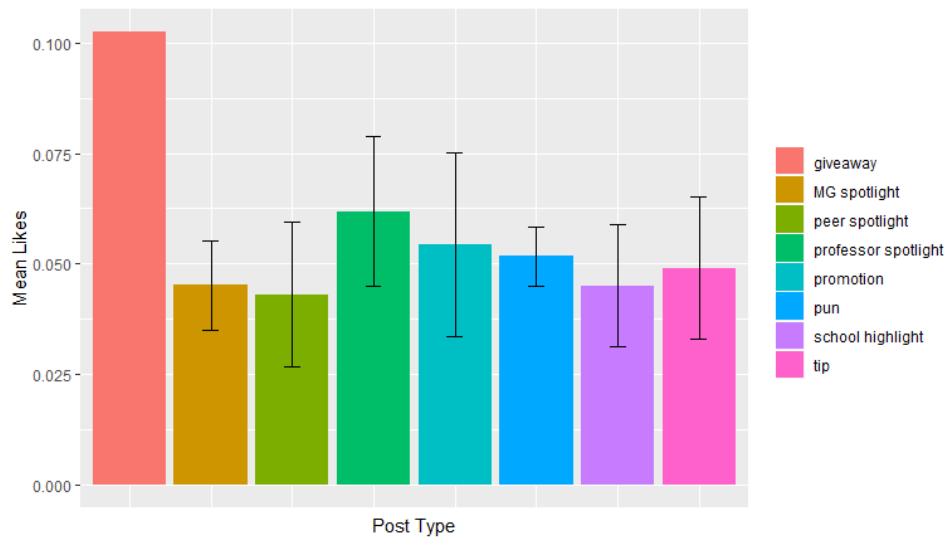

Figure 5: Likes by post number

Figure 6: Likes by post type

Profile Visits

Beginning with figure 7 the most interesting thin I noticed was that as of late, the peer spotlights seems to be drawing a lot of people to our profile. I'm guessing this is because people are told they are being featured so they go to our profile to see. This could continue to be a good way to draw new people to the account. For figure 8 there is not much that can be said due too the very high variance. One thing to notice about the variance is that it is much higher on personal posts, this underlines the fact that the amount of success personal posts have depends largely on the individual being highlighted. This is one thing I have noticed and can not emphasize enough. Great benefits can be had if the right people are chosen to be featured. I don't know how we would do this as I imagine it would require insider knowledge about each schools community but it is worth it to think about. Finally, as seen in the previous chart too, the giveaway was very successful. Because there was only one giveaway there is not much that I can confidently say about giveaways going forward besides there should be at least one more to see if the previous success can be repeated.
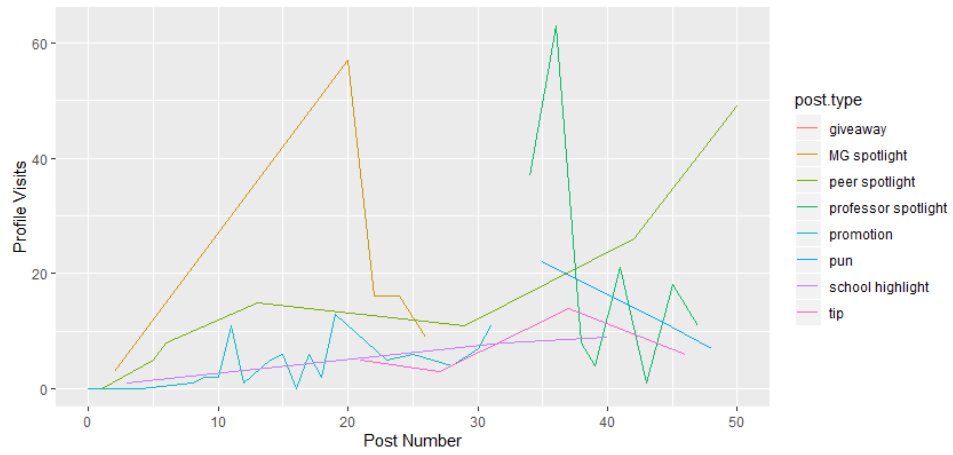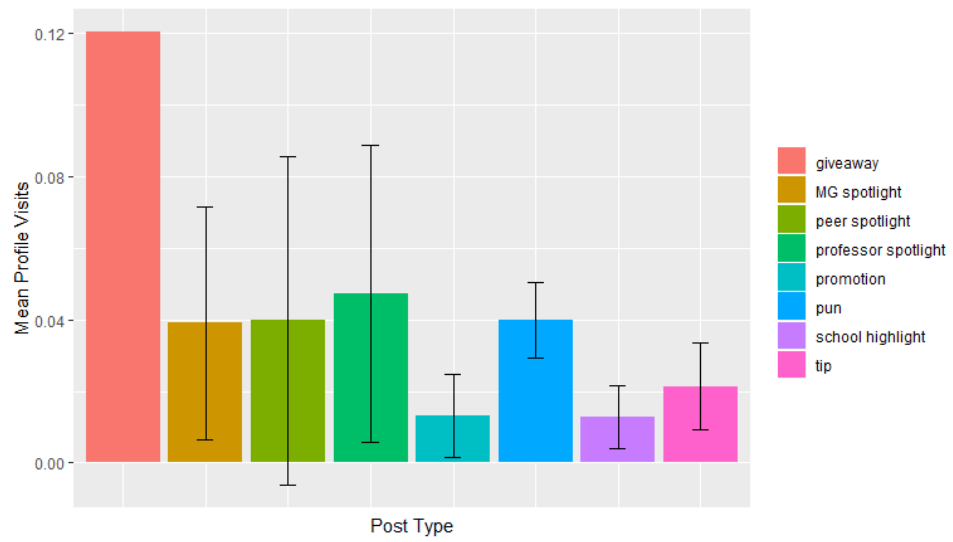
Figure 7: Profile visits by post number

Figure 8: Profile visits by post type