Marketing In A Digital Age

A Major Qualify Project Report:

submitted to the faculty of the

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree in Bachelor of Arts

Ву

Katrina Rifenburgh

Date: April 28, 2022

Abstract

The marketing strategy for the mobile games published by MassDiGI, through their internship programs. This includes paid ad campaigns, social media marketing, ad creation, and PAX East. I identified ways to expand the budget to gather users from around the world for the developers to gather data from to improve upon the games, along with getting MassDiGI into the indie developer community on social media.

Acknowledgments

I would like to thank Monty Sharma, my advisor to the project and mentor from MassDiGi for all of his guidance and expertise in marketing. I would also like to thank Brandon Mallory from Clark University for his help in gathering analytics. I want to thank MassDiGI as a whole for allowing me to be their marketing manager for thirteen months and to Jennifer DeWinter, my advisor for your guidance and direction on this project.

Table of Contents

Abstı	ract	2	
Acknowledgments			
1.	Introduction	5	
2.	Marketing Strategy	9	
	2.1. Our Strategy	10	
3.	Summer	14	
4.	Fall	25	
5.	Spring	30	
6.	Future	32	
7.	Sources	33	

1. Introduction

MassDiGI offered me an opportunity to have my Major Qualify Project to be a part of their organization. MassDiGI is an organization that allows college students and recent college graduates an opportunity to get real-world game development experience without the consequences of the real world. MassDiGI was looking for a student to be their marketer who had game developer passions and a willingness to learn marketing. I worked with MassDiGI as their Marketing Student for roughly thirteen months, where I was their sole marketer for their mobile games that were developed by fellow students and graduates.

The games were developed during MassDiGI's internship programs, Summer Internship Program (SIP), and Experience Program (XP). SIP occurred from June 2021 to August 2021, the XP program occurred twice during my time with MassDiGI. The games developed were of different genres, different art styles, and different styles in general.

The games are as follows:

Bewitching Boba - idle clicker game

Clock Out!- classic fighter

Trials of Midnight - deck building rpg

House Haunters- turn-based combat rpg

Crustacean Frustration - brick-breaker

Mochi's Dreamland - puzzle jumper

Teddy Pop - bubble shooter

Kitten Coliseum - wave-base fighter

Bewitching Boba, Clock Out!, Trials of Midnight, and House Haunters were created by undergraduates in SIP. The other games were created across two different XP programs, summer and fall.

Our goals were to gather 500 new users over the course of each semester for each game. This means the games that were determined to continue to be updated and worked on by students would have 500 new users each semester. These users would be gathered within a budget determined by myself and approved by MassDiGI. The games would be promoted through social media, along with paid ad campaigns. We held a target CPI (Cost Per Install) of \$0.18 or less. MassDiGI wanted to expand their social media presence to that of the indie game developers on Twitter and gather a total of 200 new followers. The time frame set for gaining the users was only five weeks in total across the entirety of my thirteen months with MassDiGI. The social media goal was a total across the entire thirteen months I worked with MassDiGI.

As the sole marketer, I was also in charge of working closely with the development teams to make sure they made deadlines for the updates and releases of games along with making sure I had access to their art assets during the summer to create

ads. I was in charge of ad creation for the summer and partial in the fall. I was also the PAX booth manager and coordinator.

Previously MassDiGI would have a group of marketing students, but for the past thirteen months, they had me. To see what I was able to accomplish in comparison to a group of students, we looked at some historical analytics from the Spring of 2021.

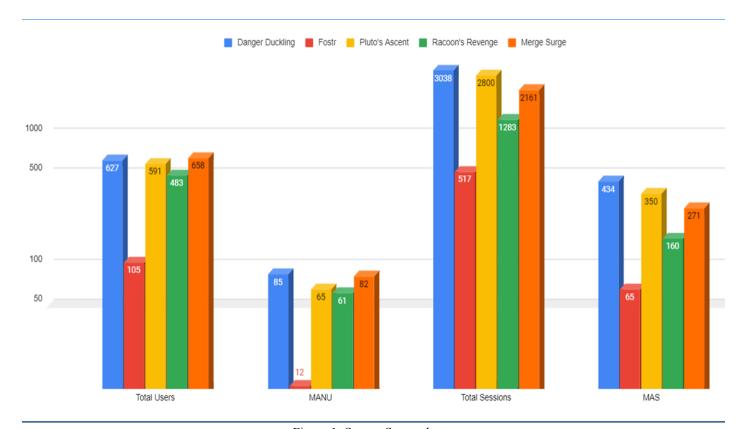


Figure 1: Source Screenshot

Figure 1 shows what the group of students was able to do in a semester with a budget of \$1,500 across five games. The highest total number of users gathered was 658 with a monthly average of new users was 85. They were able to get a lot of sessions out of the users they gathered but those session numbers would be influenced by the developers testing and playing the game, which would in turn affect the monthly average sessions.

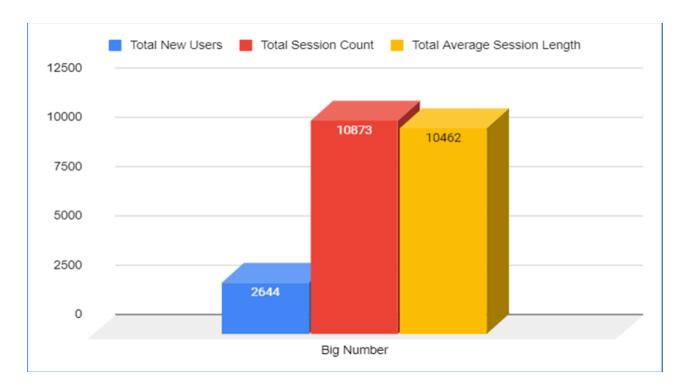


Figure 2: source screenshot

Figure 2 is an overall look at what the previous group of students could do with the budget of \$1,500 over the course of five months, a college semester. For the five games they worked on, they were able to gather 2,644 new users for the five games in total. The users they were able to gather had good retention rates, I hoped to either reach those retention rates or improve upon them.

2. Marketing Strategy

There is always some type of general approach to marketing for certain industries and the video game industry is no different. Some advice websites give in terms of general marketing strategies is social media campaigns like Facebook, Instagram, Twitter, and Reddit, along with influencers to stream or promote the games [5]. Other strategies deal with app store optimization, meaning to make the app store page look appealing and stand out in comparison to other apps that are similar [4]. Other advice is video marketing, like that of YouTube videos and YouTube ads along with having a blog to get the information out [4]. Of course, we have to start out by figuring out what type of marketing strategy we have on our hands, Top-Down or Bottom-Up [3]. Top-Down is finding a market that has a hole in it and creating an app/game around that market [3]. Bottom-Up is creating an app/game first for the passion of creating it, then marketing the app, which is the type of strategy we will be dealing with [3].

With all of these ideas and advice on general things people and companies can do for marketing their games to players, we had to narrow down and decide what works best for our budget and needs. We decided the best course of action would be paid ad campaigns through either Facebook Ads or Google Ads, have the trailers of the games up on YouTube, social media outreach (posting on social media about the games' releases and updates), and app store optimization along with a PAX East booth. This strategy was decided based upon our budget and the needs MassDiGI wanted on social media along with our limitation of only one person.

2.1. Our Strategy

I narrowed our marketing strategy down to six different points and each point would be handled either by myself or through the developers or a combination of the two. The points are as follows:

- Social Media Twitter, Facebook, Instagram, TikTok, Reddit
- Paid Ad Campaigns Google Ads or Facebook Ads
- App Store Optimization
- Ad Creation/Post-Creation
- Video Marketing YouTube Videos
- PAX East Booth

For my strategy to work well, we needed to get the brand of MassDiGI under the same umbrella. The student-run social medias was under a different name than that of MassDiGI, they were under the name Games Guild. After some talk with Monty Sharma, we decided it would be best to change the social media names to something that would fit under the MassDiGI umbrella. With some thought on different names, I came to the name MassDiGI Studios. It encompassed what the students were doing during their internships along with including what I did with marketing. I pitched the name to Monty, with his approval I changed all the social media platforms from Games Guild to MassDiGI Studios.

MassDiGI had four different social media platforms they were on, Twitter, Facebook, Instagram, and TikTok. Historically the groups of students would have one person on each of the platforms, posting daily and communicating with the followers. Now just having one person, meant I had to figure out what social media platform would best fit the needs of MassDiGI as a

whole and what they were looking to get out of their social media presence. MassDiGI wanted to present itself among the indie developer community, instead of trying to reach the players. Upon looking back on the Spring 2021 postmortem from the last group of students, Twitter did the best overall. Facebook wasn't used much, Instagram had some good numbers but was skewed with paid post data, and TikTok had some good traction. Instagram and Twitter were the ones the students were able to post basically on the daily, and they had just started up a TikTok.

I looked over what it would take to run Instagram, Twitter, and TikTok and found that it would take a lot to run all those platforms on a daily basis with only one person. I also searched through the platforms themselves to see which one had a strong indie developer community and Twitter has a strong community, whereas TikTok and Instagram are more for the player base. With all this in mind, I decided it would be best to remain absent from Facebook and no longer post on Instagram or TikTok, and start planning for a daily Twitter schedule. This is where marketing and community management overlap and start to blend together. Being on social media is about creating that connection to the community you are trying to reach and marketing is getting that community to buy/use your product. Being on Twitter allowed for more community-based building within the indie developer community and asking them to try out the games the students created along with spreading what MassDiGI does for students.

Another example of the overlap between a community manager and marketing is when I managed and worked at MassDiGI's PAX East booth from April 21 to April 24. During this, I gathered student volunteers who were part of the teams updating the games and scheduled time for them to work the booth along with exploring all that PAX East had to offer. We showed off the mobile games that were currently being updated by the students and spread the word about

what MassDiGI does, which is "an organization that allows undergraduates and recent college graduates to get real-world experience without the real-world consequences." We created business cards with a QR code that linked to our LinkTree, we were able to track how many people scanned the code. The LinkTree has links to the games that are currently being worked on along with our Twitter.

Prior to PAX East, I was able to run paid ad campaigns. I had to first figure out the budget that would be used each semester (Summer, Fall, and Spring) based on the previous budgets. I would pitch these budgets to Monty for approval. To start I had to figure out what platform would work best for the budget I determined, Google Ads or Facebook Ads. Each platform had its' own pros and cons to it, in the end, I went with Google Ads. Facebook Ads has the great benefit of matching the ads created to a target audience based on likes and dislikes [6]. The big con to Facebook is the Cost Per Click (CPC) which is \$1.80 on average [6]. The CPI on Facebook Ads is roughly \$1.00 which was surpassing my goal of a CPI of \$0.18 or less [6]. Google Ads allows the users to pick geographical locations which affect both CPI and CPC, and it allows you to bid on how much you are willing to spend on CPI [7]. Google Ads has different types of ads they can run, search and display ads, along with pre-registration for games [7]. Due to the fact I chose to go with Google Ads, I would be able to compare geographical location CPIs with the type of mobile games that are popular there or art styles that might do well in said location i.e. China's most popular mobile games are fighters [10].

For the paid ad campaigns to do well, we needed ad creation. I created the ads that were used in the summer campaigns, and I created rough drafts of the fall ads for the dev teams to create using their assets. In the spring I allowed the teams to create their own ad assets. I did this

to get the teams more involved with the marketing side of things, and the best way to do that was to allow the artists to create fun ads and assets that could be used in posts on social media. Another point I left to the teams was the app store optimization, I did all the research for them and allowed them to take a document I created to optimize their app store pages. The teams were already involved in the app store set-up, it made sense to allow them to optimize it with the helpful tips I found. I also left video making to the teams. They created their own trailers for the MassDiGI YouTube, which would be a part of the Google Ad campaigns. They created rough drafts, which I gave feedback on, and then I would post the videos on YouTube after they were edited and complete.

Our goals overall were to gain 500 new users through paid ad campaigns each semester (Summer, Fall, and Spring) with a target CPI of \$0.18 or less, gain a total of 200 new followers on social media over the entire MQP, and have a successful PAX East.

3. Summer

During the months of June 2021 to August 2021, I ran seven paid ad campaigns, ran a Twitter account, created ads, and kept seven different development teams on track for the release of their games.

The budget for the summer was \$1,500.

The budget would get split evenly between each game, meaning each game got \$214 to spend.

Then \$214 would get split by a daily budget for how many days I thought would be best to run the ads, which was 2 weeks.

The daily budget for each game was \$17. I kept it lower due to the fact that Google Ads has a reputation for overspending on a budget. I gave the daily budget of \$15.

I would then do research on what game would do best in locations other than then our two base cases, one being the United States, and the other being India. We chose the United States due to that being where the games were created, and India had a low CPI, and at one point that is where MassDiGI got users from the past. I first gathered all the CPI I could from other countries [9]. I also gathered the retention rates for the users in each area/ continent. The teams wanted users with high retention rates, which was something I needed to account for.

Europe Retention Rates	D1- 18.86%	D7- 10.24%	D14- 7.91%
European Countries	Google Play- CPI	iOS- CPI	
Austria	0.39	0.8	
Belgium	0.22	0.43	
Czech Republic	0.18	0.35	
Denmark	0.37	0.56	
Finland	0.19	0.64	
France	0.26	0.57	
Germany	0.41	0.79	
Greece	0.13	0.3	
Hungary	0.12	0.26	
Ireland	0.22	0.6	
Italy	0.14	0.39	
Netherlands	0.22	0.64	
Norway	0.38	0.75	
Poland	0.16	0.28	
Portugal	0.13	0.29	
Romania	0.08	0.16	
Russia	0.1	0.34	
Spain	0.16	0.42	
Sweden	0.35	0.75	
Switzerland	0.48	1.31	
Ukraine	0.17	0.19	
United Kingdom	0.5	0.96	
Asia-Pacific Retention Rates	D1- 18.82%	D7- 9.66%	D14- 7.31%
Asia-Pacific Countries	Google Play- CPI	iOS- CPI	
Australia	0.54	1.11	
China	0.27	0.51	
Hong Kong	0.31	0.82	
India	0.04	0.22	
Indonesia	0.09	0.16	
Japan	0.69	1.36	
Malaysia	0.12	0.66	
Philippines	0.07	0.84	
Russia	0.1	0.34	
Singapore	0.27	0.91	
South Korea	0.32	0.61	

Taiwan	0.22	0.66	
Thailand	0.09	0.26	
Vietnam	0.06	0.15	
	0.00	0.12	
North America Retention Rates	D1- 17.86%	D7- 9.79%	D14- 7.65%
North America Countries	Google Play- CPI	iOS- CPI	
Canada	0.59	1.15	
Mexico	0.08	0.23	
United States	1.05	1.45	
Latin America Retention Rates	D1- 16.41%	D7- 8.07	D14- 6.00%
Latin America Countries	Google Play- CPI	iOS- CPI	
Argentina	0.08	0.18	
Brazil	0.06	0.25	
Chile	0.1	0.29	
Colombia	0.07	0.16	
Peru	0.08	0.23	
Middle East & Africa Retention			
Rates	D1- 18.28%	D7- 9.24%	D14- 6.87%
Middle East & Africa Countries	Google Play - CPI	iOS - CPI	
Egypt	0.06	0.21	
Israel	0.19	0.4	
Kenya	0.07	0.14	
Nigeria	0.1	0.15	
Saudi Arabia	0.11	0.21	
South Africa	0.19	0.49	
Turkey	0.08	0.24	
United Arab Emirates	0.14	0.25	
	E: 2 C	1 .	

Figure 3 - Source screenshot

I used the above table to analyze which countries would be best for testing alongside which countries to look closer at, as far as what mobile games are popular in that location.

For the summer, I chose the United States, India, Romania, Thailand, China, Vietnam, and Turkey. For Bewitching Boba, I chose Romania and Thailand for the locations

outside of the base. For Clock Out! I chose China for the extra location. For House Haunters I chose Vietnam for the extra location. For Trials of Midnight, I chose Turkey for the extra location. For the three XP games, Mochi's Dreamland, Crustrean Frustration, and Teddy Pop I chose China.

I released the SIP games at the same time, then waited and released the XP games at the same time, by then I had some data on what countries were performing the best for us.

China had performed great for Clock Out! and I wanted to see if that would be replicated with the other games.

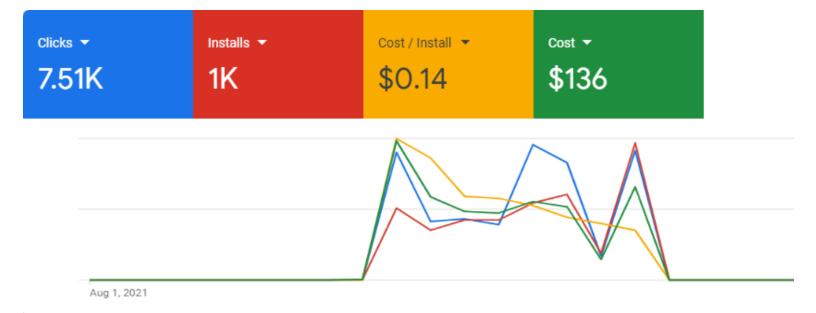


Figure 4 - source screenshot

Clock Out! had gathered a thousand installs within 2 weeks with a CPI below our target and didn't even spend its full budget of \$214. China was popular with action games, and fighting games, which is what Clock Out! is. I wanted to see if I get similar results in China with games that were not action or fighting games. I tried China with all three XP

games, one was a brick breaker, a jumping puzzle game, and a bubble shooter. First I looked at what Crustean Frustration was able to do.

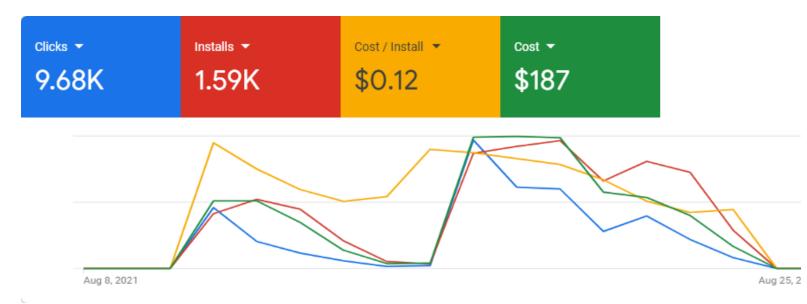


Figure 5 - source screenshot

These are the numbers Crustacean Frustration was able to create with 2 weeks of a paid ad campaign in China, India, and the United States. Crustacean Frustration was not a fighter or an action game it is a casual brick breaker, which according to the research wouldn't do well in China but it was able to gather users. This even surpasses what Clock Out! was able to do with the same budget and locations.



Figure 6 - source screenshot

The table shown in Figure 6 is what Bewitching Boba was able to gather up together with the same budget as the previous games but with different locations outside of the base. Bewitching Boba was able to gather 132 users from Romania, and 15 from Thailand the remaining came from India and the United States. Again this surpasses the goal of 500 new users and was below both the CPI target and budget.

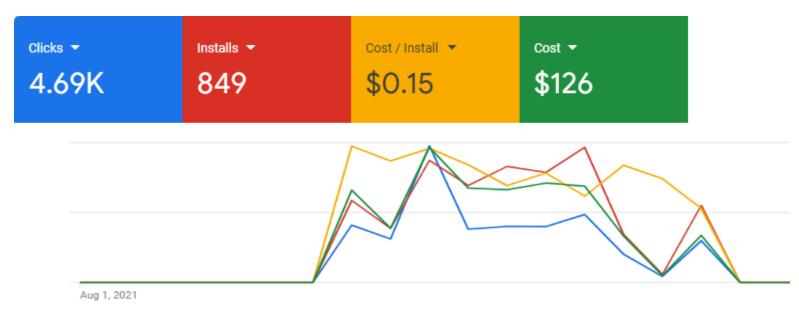


Figure 7- source screenshot

Figure 7 is what House Haunters was able to gather from Vietnam, India, and the United States over two weeks in the summer. While most of their users came from India they were able to gather some users from Vietnam. This also surpasses the goals set at the beginning of the summer.



Figure 8 - Source Screenshot

Figure 8 shows what Trials of Midnight were able to gather from its' locations of Turkey, India, and the United States. This was also through the same 2 weeks of the summer as the other SIP games and the same daily budget.

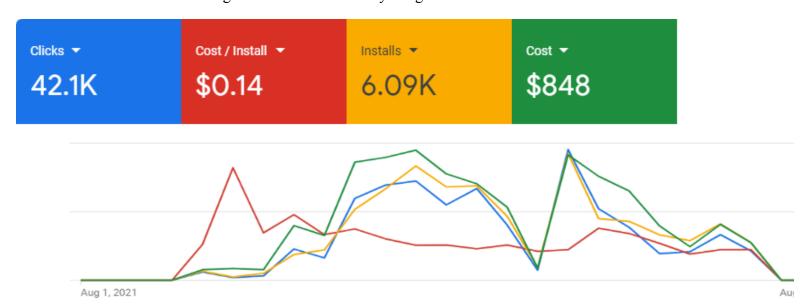


Figure 9 - Source Screenshot

Figure 9 is an overlook of the whole summer between the 7 games and the 7 ad campaigns. I choose to do separate ad campaigns instead of a combined ad campaign of all the games because I would be able to promote the games in certain countries that would do the best based on the research of the location.

Social media for the summer consisted of me posting almost daily on Twitter. I posted everything from gifs created by the teams to pictures of the actual teams working. Over the summer I was able to gather up to 104 followers in total. Figure 10 shows all the analytics gathered by Twitter over the course of the summer. I was able to engage heavily with the indie development community, especially through their Wishlist Wednesdays. Wishlist Wednesday was a community gathering of posting about upcoming releases to allow people to wishlist them or download them right away if they were released.

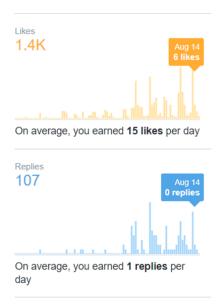
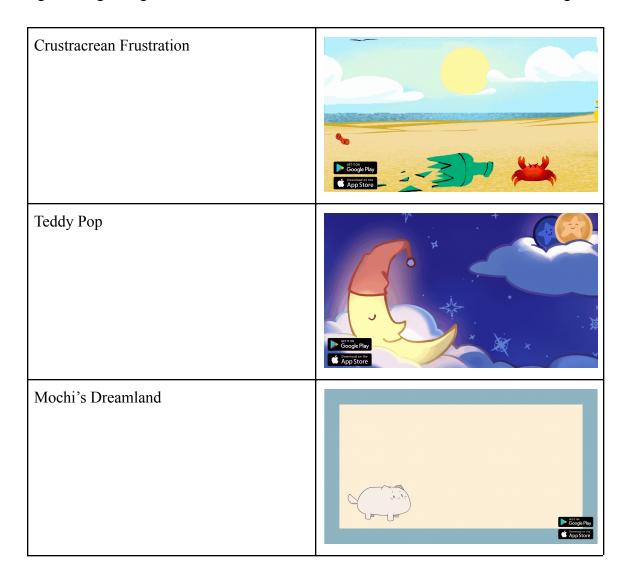


Figure 10 - Source Screenshot



I was able to create all the ads used in the summer ad campaigns. I would create rough drafts of the ads, then send them to the development teams for feedback. I would then take their feedback and rework the ad to a common ground between the two groups.

Bewitching Boba	Manual App Store Coogle Pay App Store DPEN Coogle Pay Coogle
Clock Out!	Circoge Play App Store
House Haunters	© Groot Play Google Play Destinate as the App Store
Trials of Midnight	Poster of the App Stole



4. Fall

For the fall I had a similar plan with the approach of the paid ad campaigns. The games that were being worked on were the following: Clock Out!, Bewitching Boba, House Haunters, Crustacean Frustration, Mochi's Dreamland, and Teddy Pop. I also had 3 new XP games that were being released at the same time. I was now also balancing school work along with this. Communication between myself and nine team leads was challenging to say the least, and things fell through the cracks.

For the Fall the budget would remain the same with \$1,500, but would now be split among 9 games, not 7. Which meant that each game got \$166 to spend on their ad campaigns.

The games that were able to get out ad campaigns were the following Clock Out!,

Bewitching Boba, House Haunters, Crustacean Frustration, Mochi's Dreamland, and Teddy Pop.

The three new XP games were unable to get paid ad campaigns out, but they were released onto the app stores and had YouTube videos up.

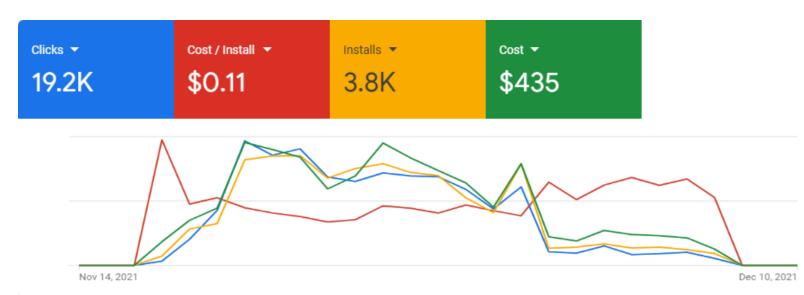


Figure 11 - Source Screenshot

Figure 11 gives an overview of what the paid ads were able to accomplish with the limited budget. I was able to come in under budget and with a lower CPI than that of the summer. I was also able to reach just about half the number of installs as I did in the summer. In the fall we explored different geographical locations to expand the representative demographic. I tried the following locations in the Fall: South Africa, the Philippines, and Taiwan as new locations.

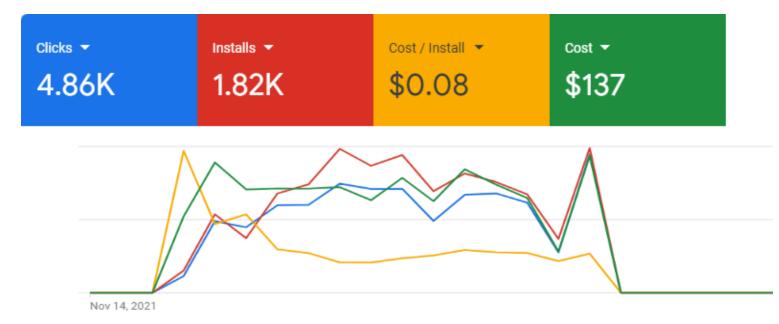


Figure 12 - source screenshot

Figure 12 is was Clock Out! was able to gather from their fall paid ad campaign. The locations used were Vietnam and the United States. They were able to gather another thousand downloads and a very low CPI. This could be because of the ads created or the location with the enjoyment of fighter games.

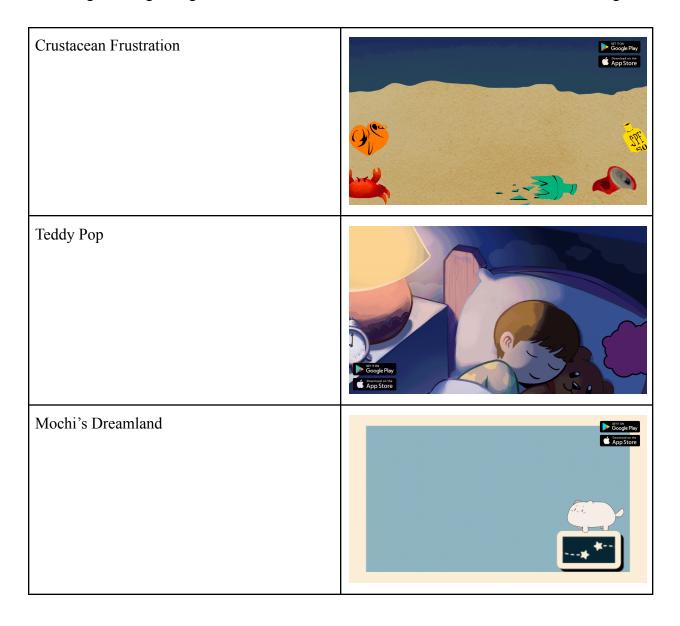


Figure 13 - source screenshot

The table above shows what Mochi's Dreamland was able to do in a new location in the Philippines. Mochi's Dreamland was able to gather all 132 users from the Philippines. This is a bit expensive as far the CPI goes, but with only 421 clicks, more than a third of those clicks lead to installs of the game.

I was also able to help the teams create some ads in the Fall. They gave me rough drafts of ads, I gave feedback then once the ads were complete they would be put in the ad campaigns.

Bewitching Boba Clock Out! House Haunters



For social media in the fall I fell short of posting daily or even weekly. The lack of posting on Twitter left me with not great numbers for the fall. I was still able to engage with the indie community when I could with gifs created by the teams, but it was nothing like what happened over the summer.

5. Spring

The spring would follow something very similar to the past semesters. The budget remains the same. The games that are being worked on are Clock Out!, Bewitching Boba, Crustacean Frustration, and Kitten Coliseum. Kitten Coliseum is a previous XP game from the fall XP group. I now also had to plan for PAX East, along with the paid ads. I gave full ad creation to the teams to allow their artists full freedom. I gave them all the dimensions needed for Google Ads and encouraged them to create gifs for Twitter.



Figure 14- source screenshot

Figure 14 is what the paid ad campaigns have done so far this Spring. The first set is from Bewitching Boba, and the second set of spikes is from Kitten Coliseum. Between the two games, we have been able to stay under budget and under my target CPI of \$0.18.

For social media, I wanted to post at least twice a week but was unable to do so, due to my own time management.

For PAX East I gathered up volunteers to work the four-day convention. We showed the four games the teams are working on. We handed out business cards with a QR code that was linked to our LinkTree which has links to our games and Twitter. PAX East was a decent success. We had 47 people scan our QR code. We saw a spike in links clicked on our LinkTree, Figure 15.

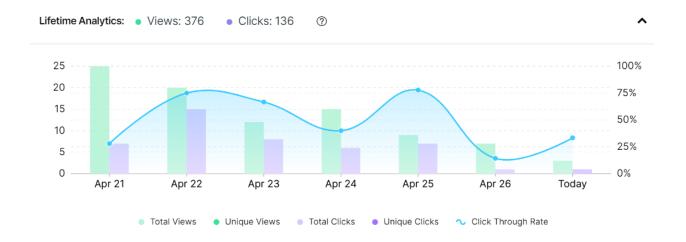


Figure 15 - source screenshot

6. Future

For the future, I would recommend the continuous use of Google Ads, but I would do AB testing for a game between Google Ads and Facebook Ads. I put more research into what countries play what type of mobile games and compare that to an updated CPI list. Something else to try is the type of ads, search vs display. Also trying a pre-install ad campaign to get the hype up for a game. Twitter did great for getting involved with the indie dev community, but if you are after player bases and have the people, I would recommend Instagram and TikTok. Also try getting the dev teams involved with TikTok, getting the "behind the scenes" is what does great for any social media following. People love seeing what is happening behind the scenes. The only way working with the dev teams works well is if there is clear communication between you and them.

Future research questions would be how can we figure out if the users we are getting are bots or actual people? How are these bots affecting our data and devs data? Is there a way to separate the bots data from the people data?

7. Sources

[1]eMarketer. (2020, March). Forecasts: Insider intelligence estimates and historical data. Retrieved April 11, 2022, from

https://www.emarketer.com/forecasts/performance/channel/5a04b768f45a9a0d20adae32

[2] Fischer, J. (2017, November 16). *Game marketing strategy: Mapping out your path to success*. Breaking The Wheel. Retrieved April 11, 2022, from https://www.breakingthewheel.com/game-marketing-strategy/

[3] Genie, G. M. (2018, June 18). *11 video game marketing strategies you can use right now*. Full-Service Digital Agency. Retrieved April 11, 2022, from https://www.gamemarketinggenie.com/blog/11-video-game-marketing-strategies

[4] Pervez, H. (2022, January 27). *How to level up your video game marketing*. TechAcute. Retrieved April 11, 2022, from https://techacute.com/how-to-level-up-vour-video-game-marketing/

[5]Televičiūtė, J. (2021, December 18).

facebook ads cost: How to spend less in 2022. sixads. Retrieved April 11, 2022, from https://sixads.net/blog/facebook-ads-cost/

[6] *Google Ads App Campaigns Complete Guide 2021-2022*. Marketium Club. (2022, January 10). Retrieved April 28, 2022, from https://marketium.club/google-ads-app-campaign-guide.html#set

[7] *CPI rates*. Business of Apps. (2022, April 26). Retrieved April 28, 2022, from https://www.businessofapps.com/ads/cpi/research/cost-per-install/

[8] Investis Digital. (n.d.). *Search vs. display advertising*. Investis Digital. Retrieved April 28, 2022, from https://www.investisdigital.com/blog/paid-media/search-vs-display-advertising

[9]eMarketer. (n.d.). Forecasts: Insider intelligence estimates and historical data. Retrieved April 28, 2022, from

[10] *Action games - worldwide: Statista market forecast.* Statista. (n.d.). Retrieved April 28, 2022, from https://www.statista.com/outlook/dmo/app/games/action-games/worldwide#revenue