CASE STUDY THE INDIE GAME INDUSTRY AND HELP INDIE DEVELOPERS ACHIEVE THEIR SUCCESS IN DIGITAL MARKETING

A thesis presented to the academic faculty in partial fulfillment of the requirement for the Degree Masters of Science in Game Science and Design in the College of Arts, Media and Design

by

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I would first like to thank my advisors Celia Pearce and Casper Harteveld for helping me finish this paper, giving me advice, and finding useful resources. I would also like to thank my colleagues for giving me thoughtful feedback and critiques. Last but not least, my family, I feel grateful that my family supported me while I finished my Master’s degree, I could not have succeeded without their support.

I hope my readers will enjoy my research.
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Introduction

With the rapid growth of the digital game industry, publishing a game has become easier and faster than in any other period in history. More and more students, programmers, and artists have decided to join the game industry. Although the number of games is briskly increasing, most of the indie games in the past few years have flopped, and the developers usually lost a lot of money. At the same time, as a new graduate student from the Game Design program, I can heartily feel the pressure of finding an entry-level job in the game industry in the U.S. Now, game companies are seeking talented candidates who can do multiple roles and have more work experience. Thus, many of the students who recently graduated from college decided to go for a higher education or spend a few years on their own game projects. I want to help the indie game community develop successful games. To accomplish this goal, this paper will share effective methods to develop digital marketing skills as well as methods to build connections with players. In addition, the burst of the independent game (indie game) bubble has become a non-negligible issue in the market, the demand and the flooding number of games are totally unbalanced and it caught my attention. In 2014, 40% of the indie games bought on Steam did not get played, and this number doubled in 2016. (Vogel J, 2014) Reporting the unstable indie game market issues and finding solutions for developers will be the key parts of this paper. To facilitate this research, I will be interviewing different indie game studio cofounders as well as delving into existing publications of indie game research.

The paper will be divided into three parts: 1) The overview of the game market in the past decade, the status of the indie game market, and the influences of video game programs at different institutions. 2) Review of the digital game promotion platforms, and the introduction of major game festivals. 3) Case studies and interviews with the co-founders of various indie game studios like Fullbright, thatgamecompany, Noodlecake and Die Gute Fabrik.

Overall, the successful indie developers gave suggestions to other developers such as: actively attending game events, keep their design goal small, build connections with other potential investors, players at events/online forums.
Background

The goal of this thesis is to help indie game developers find solutions to difficult questions many of them have - “What are the most effective methods to promote games?” and “How can a developer fund an indie game?” Just a few years ago, digital marketing was ignored by the indie game market. The sales and growth of the game industry hit record every year and continued to rocket higher (Christopher, 2016). AAA games' publishing numbers are relatively stable over the past two decades; conversely the indie games publishing count has grown rapidly since 2008. However, the growth of video gamers will not greatly affect the amount of time each player puts into an indie game and free to play games and indie games. On the contrary, players have no time to pay attention to many new released indie games. To ease the saturation of the indie game market, game publishing platforms like Steam, Greenlight, and itch.io are seeking a way to increase the standards of releasable games and decrease the number of free to play games.

On the other hand, games under development need to seek attention to be recognized, get ahead of the growing competition, and raise funding for their creation. “An indie studio that raised $37,000 on Kickstarter got to use $4000 for actual game development, but the team quickly whittled down their budget and dedicate $32,000 to publishing fee & advertising." (Chalk, 2012) Currently, most indie developers are struggling to finance themselves while supporting the development and promotion of their games. It is never easy to fundraise, and even if a project is lucky enough to reach its crowdsourcing goal on a website; the majority of the time, developers underestimate the costs of their pledge donations. (Reichert, 2012) It is hard to predict the budget for the development of a game. What we could do is encourage indie developers to pay attention to commercialization and to research what players and the market are demanding because without getting noticed, a game will ultimately fail.
METHODOLOGY

Approach

The paper will discuss the development of independent games in the past decade, particularly marketing development. This will review the publishing model for games, including how the relationship between the publisher and the game creator has changed over time as well as the relationship between game market and audiences.

As an indie developer myself, I am aware of the indie game industry’s difficulties and the kind of guidance designers seek. Many game marketing experts post game sales data, indie game development recommendations, and problem analysis articles on forums and blogs such as Gamasutra and Gamespot. These articles update frequently and they will help readers such as myself to build up an intuitive grasp of the indie market.

This past summer, Professor Celia Pearce and I collaborated on a paper about how the game design education at colleges has influenced the game industry, especially indie developers. In addition, we aimed to discover how the involvement in conferences, game jams, and festivals could help indie game developers in their careers. For this part, the research about game course design and game program review will collect data from the game programs’ websites at many institutes, alumnus’ interviews, and game design students’ thesis reports. Readers will learn how to build connections with school alumnus, the value of an excellent game design study, or find a suitable program for themselves.

Game festivals and crowdfunding websites are committed to help indie game developers thrive and promote their selected projects. Many former and current Independent Games Festival finalists and winners such as thatgamecompany, Glitchnap, and Playdead developed connections with many big game companies and get new players to try out their games from the festivals. For this section, I will list the major game festivals and provide the benefits of attending a game festival, how to get players at a festival, etc. The sales of an indie game before and after participating in a game festival will be the most convincing evidence of the festival’s value. In this paper, I will use the game festivals’ awarded games to show how to promote games as an indie developer. The limitations of game festivals and crowdfunding websites are that there are too many games presented at the same time and developers need to show off the unique selling points to the audiences and catch their attention. Then, the research focus will be an analysis of the game funding website - Kickstarter. The research will look into a number of questions: What is Kickstarter? At what stage of the game development should the developer start to use this website? On top of its obvious utility as a funding source, how effective is a Kickstarter as a promotion tool?

Data Collection

In order to find out the stories behind small indie studios which did well in the market, I interviewed developers from 5 selected companies that come from the Indie top-selling games chart. The inspirations behind finding these successful developers were the top-selling 30 games’ trailers, development blogs, and sale reports. The interviews were held with the selected indie studios below which had the ability to share game development experiences and marketing skills with my readers.
(GameSpy, 2016) The reason why the interviews will be valuable is because all but one participants did not start their projects with a lot of funding nor a contract with a game console, so indie developers reading the paper will have many commonalities with the interviewees. Their answers will provide references for exploring how to develop and promote an indie game. Unfortunately, I have tried to contact some female designers from various companies but none of them respond my emails.

- Jenova Chen from thatgamecompany
- Christoffer Holmgård, Nils Deneken from Die Gute Fabrik
- Steve Gaynor from Fullbright
- Arlin Schaffel from Noodlecake

For this research, I contacted all the participants via email and invited them for a Google Hangout/Skype interview. The questionnaire used was written by me and shared with the developers in the email; it is included below. To record the participants’ responses, I used OBS. OBS is a software with a recorder module which captures all screen interaction including voice, video, and screen action. The participant video will recorded using a laptop webcam. The participants were be encouraged to talk with the researcher who directed them with specific topics to note down their understanding of indie development. These questions were designed to get developers to talk about how their education influenced their design styles and what kind of marketing strategies they used for promoting their games.

**Interview Questionnaire**

1. What was the most useful thing you got from your game design degree?
2. How did the game program you enrolled change the way you think, see and do things? How did your view of games change as a result of your experience there?
3. How did your teachers influence you? What experiences did you have while working with faculty?
4. What was the impact on your career of participating in your school’s game showcase?
5. What role did your program and/or professors have, if any, in finding a job, getting a publishing deal, or starting a studio?
6. How did your school encourage and/or facilitate your involvement in conferences, game jams, and festivals?
7. What was the impact on your career of participating in game jams?
8. What was the impact on your career of participating in festivals, either as a volunteer or exhibitor?
9. How have you funded your projects? Did you ever get external funding for a student project, either from a publisher, through crowdsourcing or investors?
10. Are there any other relevant activities or experiences related to your student time, such as being a student volunteer at GDC, that influenced your trajectory?
11. How have you found support from Sony/Xbox/Steam?
12. How has your experience been working with Sony/Xbox/Steam?
13. How supportive are they in terms of hardware and development support for an indie studio?
14. What were your inspirations?
15. What was your budget for the first game of your studio and what have you done marketing wise?
16. What lessons have you learned from developing your game?
17. How did you fund your game? Did you or the other team members have a second job to support the living cost while developing a game?
18. Did your title game make profits?
19. How your thoughts of XXX (name of the studio’s title game/first game) have evolved as continued making games?
20. What indie games did you enjoy playing in the past few years?
21. Any recommendations you would like to share with other indie developers?
CHAPTER 1

Short History of U.S. game development

“Independent videogame development is the business of making games without the support of publishers.” (Parker, 2010) Indie game development is a process of creating games without significant financial support and the indie community is an environment in which individuals or small teams of people make games. The indie game industry started in the 1980s, but there were not many games which made it through to being published. Before the mid-1990s, commercial games were largely controlled by big companies; publishing a game was quite difficult in these years. (Irwin, 2008) The creator of Steam (Valve Corporation) broke the significant publishing barrier for releasing a game in 2003. Since the late 2000s, rising stores like Steam, gog.com and the Humble store have helped many indie developers find new ways to publish their projects. (Wawro, 2016)

In 2005, big game publishers and game development engine companies boosted a vast number of indie games in the market. Since then, major game engines (most of which are free or inexpensive) like Unity, Unreal, and authoring environments like GameMaker and RPG Maker are available for all developers. (Borst, 2009) In the same year, Xbox, PlayStation Network and Nintendo Network built up online services for players, the convenient services and multiple platforms spread the number of online game players. Meanwhile, game console companies started to find talented indie developers and new graduates to sign one or multiple game contracts with them and also provide funding & technical support for their teams. (McGuire, 2008)

Crowdfunding websites boosted the number of indie games in the game market after 2008. (McGuire, 2008) Gog.com was established in 2008, and Kickstarter started in early 2009. Games has been one of the biggest Kickstarter categories. The benefits of using a fundraising site are not just getting more financial support from audiences, it is also about promoting a new game while showing the progress of developing the game online and increasing the social awareness of indie games. Players can leave their comments on a crowdfunding website saying where they wish the developers to improve in their project, or just simply say what kind of game they want to play in the future, so it is also a great community forum for searching game market desires.

The relationship change of publishers and developers

In the old days, the game market was primarily controlled by large companies with substantial budgets, as Brightman points out, “the major game publishers controlled the consoles or were large enough to fund the manufacturing and distribution of game cartridges, and thus, the content maker and publisher relationship made for one happy family.” The games were sold in packages at physical stores and were made to be compatible with specific consoles; to have presence in the market a game designer had to have funding to get their product into stores. This structure has changed with the growth of the internet and home computers: “Today, the publisher no longer entirely controls digital distribution channels and, even worse, distribution is readily available to content holders.” (Brightman J, 2012) Trending social platforms like Facebook, Google, and mobile app stores are boosting the digital download service for video games, which have changed the way of approaching a customer. The effect of the
relationship change of publisher and developers allowed developers to have more freedom to choose which engine/platform they want to put their games on. The major change in Publishing media/game is distribution. (Ritter, 2012) The positive side is putting a game on multiple platforms will boost a lot of chances of gaining more audiences, and they do not need to restrict by game console companies. The negative side is publishing an indie game on multiple platforms will still cost a lot of money, and the initiative to make it “easier to publish a game on platforms” has made indie app stores crowded and competitive. (Ritter, 2012) Also, the more indie games published, the more competitors you will have, and the games’ target audiences will spread into more categories, indie bubbles are a hard rock for indie game marketing.

The Changes in the digital game market and challenges

Nowadays, digital marketing methods can be really flexible, most of the game developers will do a game development blog, posts at online indie community forums, or live streaming of the game development progress online to get some social attention. For finding resources to supporting the statement about indie bubbles and sales problems, I reviewed many game marketing experts’ blog posts and game publishers’ yearly reports. Steam Greenlight and itch.io are great platforms for all the indie developers from new graduates to experienced designers, and the sale ranking charts are pretty competitive there. The main sales data I collected are from Steam and itch.io’s sale database pages. (itch.io’s sale chart: https://itch.io/sales, Steam sale chart: https://steamdb.info/sales/) Furthermore, Gamasutra and Gamespot are online websites that focus on all aspects of videogame development, and they helped a lot with researching historical development of indie games, marketing strategies, brainstorming, and searching for indie developers’ interviews.

Free and inexpensive game engines and authoring tools such as Unity Engine Plus, RPG Maker, Unreal Engine 4 and many online open resources have helped indie developers and students. Additionally, online game stores like Steam, itch.io, and mobile game stores have made it easy for developers to get a distribution platform. With these advances in technology, the requirements of publishing a game became more accessible, and the process of fulfilling these requirements became more natural. “There have already been more new games released on Steam in 2014 than were in all of 2013, And it is only May. It is not just a problem for Steam, and it is a problem for the entire industry. “(Plunkett, 2014) The status of the indie game market is that it is oversaturated and appears chaotic to end users. While the AAA games have been a long-term oligopoly with a relatively high barrier, indie games’ blooming has brought the market more diversity and energy. However, there still is a gap between an AAA game and an indie game. Indie games are the glut of Steam and mobile game stores. In July of 2016, just the Steam Greenlight channel had more than 3,400 titles of games submitted and lined up for the service to release their game, only 536 games got the chance to put their game there. The cruel fact is, only 20 indie games or less will survive (make profit) every month on Steam from the aggressive war of getting enough users’ to play. The rest of the games are just sitting there, and it is disheartening for the developers to watch their products get no attention. (James, 2017) “If a developer is famous on YouTube or Twitch, he can get up to 3 million sales, and it is probably not likely to happen to an ordinary designer, but you can dream!” (Graft, 2015) In the highly competitive environment of the indie game market, if the
developers cannot find the unique selling points for their games, indie bubbles are likely to bury these games.

Not only the PC/console indie game market had a challenge with the blooming of the games, but the indie mobile game market also faced the same problem. There are 500 + games released on iOS platform every day. (Graft, 2015) Mobile game applications have generated 23 billion dollars in revenue each year, and the top 10 selling games typically account for 25% of that. (Danielson, 2015) Currently, 83% of the mobile games are free to play games. (Hill, 2015) And Google store & Apple store have their freemium models to keep their “pay to win” players, the model estimated 0.15 percent of players accounted for half of in-game revenue. (Thongkham, 2015) Because of the limitation of the free-to-play game, many designers move on fast from one game to another to keep the freshness of their games, but the fast-paced product chain caused the games in poor quality; thus, mobile games have a relatively low perceived value. (Hill, 2015) The challenge for mobile indie developers is how to make free to play games entertaining and high quality. They need to keep their players engaged while simultaneously getting returns through either in-game purchases or ads. There are two major revenue models for free to play games - in-game purchases and advertisements. Looking at the successful indie games’ marketing, they keep one important principle - the in-game purchases or ads should be completely optional (it should be a temporary game boost only), and if a player continues playing a game, eventually, he/her will get the same level as the paid players. The question for game developers to think about is how does a free game stay entertaining when it comes to ads and in-game purchases?

Angry Birds: in-game purchases are optional, a player can still be a viable player without purchasing, it is just fun to get them because of cool things like additional chances for solving puzzles.

What to keep players keep playing Angry Birds? 1. Challenge: Each level allows players to structure an error correction strategy to improve performance on the next shot. 2. Timeless: To reach a higher score, a player needs to respond fast, and give an accurate shot in a short time. Players feel more intense and addicted when they are running out of time.

Everwing: advertisements are entirely optional, they're just a way to get more benefits. The game boosts will only affect players in the very early stage of each regular game, to get a higher score, player's skill is the key.

What motivates players to keep playing Everwing? 1. By inviting new friends to play this game a player will get a rare benefit reward. 2. There is motivation to keep challenging your Facebook friends: every record a player breaks in an Everwing players’ group will cause the other group members to receive a notification. It is a reminder for people to go back to the game.

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Mobile games sales (left) vs. PC game sales (right) needed for developers to make profit.
Figure 1: Most of the games on iOS and Android are from $0.99 to $3, except a tiny percentage of players are willing to pay in-app purchases, direct sale income is still the primary income for paid game developers. The figures above show a PC game or iOS game’s expected sales to support a developer’s living and develop cost. Joining the indie PC market is harder than the iOS market, it requires higher performance for games, but this market is more stable and tends to be more natural with marketing promotions.

Figure 2: When Steam is offering a discount, the indie gameplay time increases almost twofold in comparison to regular seasons, the engagement of indie game grow higher intensity around sale time. It is a little disappointing to see that after the sale period, players would not play games as much as before.
Figure 3: The figure above shows that saturation decreases a lot for more popular genres and with a higher average price. Additionally, more than 50% of the indie games are free-to-play games on Steam. (Weber, 2015) The indie game genre is one of the leading effects causing Steam’s oversaturation, and it will also be a deleterious effect to delay indie game development.
Figure 4: “The average indie game on Steam costs about $10 and sells few copies.” (Wiltshire, 2017) Indie game is the cheapest genre on the graph, while most of the paid games in other categories have an average 20 dollars sale price. During Steam Summer/Winter sales, indie games usually have a massive discount between 40% to 60%, and the average paid indie game will have a $4.63 sale price. (Wiltshire, 2017)

An indie game will sale average 35,000 copies on Steam. (Weber) This picture is a Steam 2008 - 2015 sale report. Photo credit: Sebastian Weber (2015)

Figure 5
Technically, there is no “best timing” for indie developers in releasing a game, because we could not predict how many games are in development right now. 2014 was remarkable to indie market with the highest number of game released and lowest rate of return. When indie game market overflowed, the PR and marketing strategies will have less guarantee of success.
CHAPTER 2

Overview of the game design programs’ development

Looking back to 1988, The DigiPen Institute of Technology (DigiPen) was founded by Claude Comair, he was also the co-founder of Nintendo Software Technology. (Bray, 2013) DigiPen established a Game Software Design program, and enrolled 1084 students with different backgrounds from all around the world. It was the first game design program in the United States and also one of the first universities in the world to offer video game development. (The best schools, 2016) Different than computer graphic and pure programming classes in the Engineering colleges, game design programs under the Arts colleges are more focused on art creation, level design, production, storytelling, and art programming. In addition, students with various backgrounds are all welcomed to joining a game program. The goal of a game program is to encourage students to embrace a broader development community and to provide innovative lectures for training the way students think of games. Game design students often work in teams for projects and programs provide them with a professional studio environment so that they can gain experience from developing games as well as achieve a solid portfolio. In different team projects, students can pick various roles in the group, such as producer, music & SFX composer, programmer, graphic designer, and animator. Thus, after students have graduated from a game program, they are experienced with multiple roles in game development and are more valuable to potential employers. Now, many indie studios or indie game developers can undertake the tasks alone in the game industry after a few years of training at school, where they would have gained a decent amount of developing experience. Additionally, many top indie developers will have an academic teaching job to support them while they are developing a project, this will enable them to keep afloat despite the generally low income of indie games. (Doctor Christoffer Holmgård from Die Gute Fabrik used to be a visiting professor at an university.)

The influence of the game education

“The most important resource I got from my game program was the networking; the professors and classmates really helped me a lot with connecting to other designers and spread my games,” says Christoffer Holmgård, the co-founder of Die Gute Fabrik. The game community is relatively small and intimate compared to business companies, so it takes new designers and developers a short time to be recognized and known. Developers who work in the game industry will normally like new designers for their sincerity and they simply just want to hang out with cool people. Going into a game program is one of the most straightforward ways of meeting other designers, joining game development enthusiast groups, and getting support to go to game jams and events. (Derosa G, 2015) At the indie studio case study interviews, I asked the developers how did they get introduced to a publisher or other designers, their answers were “I got to know many talented designers from my professors/program alumni.” or “I had fun talks after I ran into someone at game festivals.” Furthermore, game recruiters prefer to meet new people at game events and have a beer and chat about developer’s opinions about games. (Derosa G, 2015) The game industry is a heavily network-based industry, and attending game programs is a safe way to boost a designers’ interpersonal relationship with people who work in the industry.
In the past few years, game institutes and significant numbers of game companies have developed many strong connections, programs like Digipen, USC, NYU, CMU, Georgia Tech, University of Utah have successfully sent their students to Riot, Microsoft, and Activision. (Digipen News, 2017) Different than traditional college job fairs, game design job hunting has typically a much smaller scope. There are not that many companies that are hiring game programmers or artists and they do not go to career forums often. Where is the best way to hand in your resume to a game company? Most of the answers will be “go to game events/festivals” or “when a company has a partnership with your game program, and have an on-campus recruit talk, pass your resume to the recruiter!” Northeastern University (NEU) has held a game cooperative (co-op) placements at some of the most popular companies. Every undergraduate student and graduate student will have multiple opportunities to talk with their signed career advisor and discuss how to build their resume, cover letter, and portfolio. NEU On-campus graduate students will receive a weekly co-op information update email, and I have found three interested positions, got two interviews from my program’s help. Carnegie Mellon University (CMU) has a “long-term global commercial and creative program” with Disney Music Publishing for over 30 years. CMU has been sending talented engineering students to Disney for making commercial plans and collaborating with musicians. (Cooke, 2013) In 2005, Electronic Arts (EA) funded an endowed chair at USC, the motivation of funding endowed chair was to improve film, media, interactive art’s impact in society and develop new technical & artistic applications. The chair donors have been playing an essential role in sustaining USC’s position at the leading edge of media & game development college. (Zollinger, 2005)

Northeastern Game design co-op partner companies:
https://camd.northeastern.edu/gamedesign/experiential-learning-co-op/partners/

Disney College Programs for CMU students:
https://www.cmich.edu/colleges/ehs/dept/rpl/Pages/CMU-Disney.aspx

Game programs have been sending thousands of students to game festivals. Now, international festivals which attracts global wise designers, start to set event location at university’s campuses. (Chaffee, 2016) In 2016, IndieCade International Festival was hosted by USC, and the festival provided students various games from traditional to fully immersive experience. For game design major students, going to a game festival is one of the most direct ways to get involved with developers’ talks, build connections with other people, and showcase their works. Additionally, at USC’s Advanced Game Project (AGP) course, professors will increase students’ points for volunteering and submit to game festivals. (Malamed L, AGP course syllabus) In Digipen’s student handbook, it says that the game program encourages students to submit games and school will pay the submission fee other expenses for going to game events. Furthermore, IndieCade established University Game Program (GameU) in 2010, it is a special conference at the IndieCade Festival of informing game students what the work that game designers do. The GameU talk topics including game programming types, design techniques, game art showcase, and tips for what to get from a game program and forming long-term career plans. Thus, going to a game program is necessary for young developers and people who are seeking to increase technical skills, expand networks, collaborate with other people to practice being different roles, and boost career chances.
CHAPTER 3

When to join Game Events and Crowdfunding sites

When game developers are seeking a new market standard, new networks, work opportunities, or a place to showcase their works in a very short time, the best places to go are game festivals. The Game Hub team thinks that there are loads to be gained from attending gaming festivals, especially for people who are working on indie games. (Game Hub, 2017) There are three main categories of game events including online forums, game festivals, and crowdfunding websites. Indie developers should consider going through each of these groups depending on the stage of development of their work.

**Early Stage:** Game developers who already have an idea about what they want to create for the next project could look into game blogs to find out what the market would like to see and then incorporate that information into their plans, this would be an excellent start for their project.

Game jams and Slack/Facebook indie developer groups are the right places for developers to find partners to work on an existing project or for brainstorming a bunch of ideas and then working together. Three Carleton University alumnus Ben Kane, Brian Fetter, and Allen Pestaluky grouped up at the 2014 Global Game Jam (GGJ) in Canada; that is where they thought of the original game concept and developed a prototype for Keep Talking and Nobody Explodes (KTNE).

**Middle Stage:** There is no accurate time for indie developers to promote their games, but it never hurts to post a game on a crowdfunding website. Luckily, indie games do not require AAA budget for marketing, and a crowdfunding website is a useful tool for indie developers’ to be promoting and getting help for a financial problem at the same time. When developers already have a decent amount of work done it is a good time to have a brief presentation and show off a game with a prototype/game trailer to impress their potential audiences. In this stage, developers are asking help with raising money to polish their projects, and the more money they are asking for, the more backers they will need to find. Looking at one of the most successful examples on Kickstarter, Exploding Kittens (EK), which raised 8.7 million dollars out of their $20,000 initial goal. The Exploding Kittens developers presented the game in a very creative way, showing an idea for unique Russian Roulette-style cards while giving the website visitors a glimpse of their outgoing personalities by including some of the failed attempts for card designs, like making a human sized card named the “cone of shame.” And the most important thing to note is that the EK team always keep updating their campaign page, answering questions, and interacting with their audience. The crowdfunding backers who donated to a project/purchased a pledge will be interested in the development stories and want to see how well you spent the donations on your project to make it better. The current problem with crowdfunding site is that many gamers get discouraged and vow never to fund an early access game, and this will hurt the developers in the near future. (Vogel, 2014) Thus, it is important to plan out a timeline and be responsible for your backers when you have a campaign on a crowdfunding site, and you should keep posting updates and communication.

The trending marketing method that has helped immensely with games finding popularity and success is online streaming channels, such as Twitch and YouTube. (Vogel, 2014) There are many game reviewers like videogamedonkey, Totalbiscuit and others who helped with getting new games noticed. This year, Player’s Unknown Battle Grand (PUBG) has sold 20 million copies on Steam in less than eight months, it is an indie game miracle! The creator of PUBG - Bluehole Studio is a company that was
established this year. They were very concerned about the marketing budget and put PUBG on early access despite knowing that many games failed during an early access phase. They took this risk because Bluehole thought of a cheap and effective marketing strategy for PUBG - they trickled out minor details for the game over a few months and then paid popular streamers like Lirik to show their gameplay videos online. (Feldman, 2017) Many streamers found out PUBG was fun and challenging to play, so the game got to spread by word of mouth and became the most popular game of the year on Steam.

**Before shipping a game:** Today, it is hard to imagine the game industry without indie games. Game conferences, conventions, and expos are more welcoming to indie game studios and allow them to showcase games more often than a decade ago. Game festivals like IndieCade, PAX’s, GDC Play, IGF, and megabooth are aiming to provide indie game developers a presence in a space previously dominated by big publishers. (Lien, 2013) In the past few years, Microsoft and Sony showed their support for indie games by bringing them to press conferences like GDC and E3 and devoting space for indie titles. Furthermore, game software and equipment companies like Unity, Unreal, and Oculus sponsored developers tools like Oculus Rift kits, free Unity/Unreal Accelerator Pack for professional game development. (GDC keynote) “USC exposed students in game festivals, by going to festivals I got to know what kind of game the market wants and then make the games to fit in the market more.” Jenova Chen said in the interview with me. New college graduates, who do not have many industry networks, make up for an increasing number of today’s indie developers. They are recommended to go to game festivals to gain important network connections. And indie developers who are curious about the current market taste are also recommended to go to festivals to find out the results. An indie game competition will receive a couple hundred of games with no repeats every year, and selected works with best performances in various categories will achieve rewards. For game competitions like IndieCade and IGF which have a close relationship with some of the big publishers, the awarded game titles will have a better chance to receive funding or build connections with game platforms. A game festival is a unique event that welcomes everyone with a broad interest, and a heart of that loves games. Regardless of the size of the game festival, to the indie developers who showcase their work before shipping, the audience is a treasure. Game festivals provide an excellent platform for developers to get connected with other developers/audiences and received feedback directly. Developers can also ask questions to the audience members after they finish playtesting, this will facilitate growth in both budding and completed work. For a list of game festivals and their submission deadlines a great resource is provided by Promoter at [https://www.promoterapp.com/calendar](https://www.promoterapp.com/calendar).

**All Stages:** There are many financial things for indie game developers to stress about: living cost, software licenses, marketing promotions, etc. Luckily, there are low and no cost ways for indie developers to improve their game experience. They can join local game developers meetups and participate in online forums. Event schedule websites like Eventbrite will provide lists of events, which are location and time based, for developers with a simple search term. Additionally, if developers do not have a specific event in mind to go to, they can just type in the city name and “game developer meetup” in Google or Facebook because many event organizers will post event information on a Facebook page or a website. My classmates and I used to go to an MIT game developer meetup for people living in and around Boston. We made friends with many talented designers there and invited them to test a game we were working on for a class. The experience we had at the local game developer event was precious; we received honest feedback about functionality and playability in our game, as well as possible plans to improve our project. Playtesters are unfamiliar with the game they are going to evaluate, so they provide valuable insight about
if the game’s rules, objectives and controls are clear, and most importantly, if it is enjoyable to play or not. (MaybeLaterx, 2014) Finally, if developers have a problem with finding local game events, there are a lot of game forums out there for them to check out such as StackOverflow, Reddit indie games, Indie Game Developers on Facebook and TigSource. Online forums allow developers to post any development questions in playtesting, art, audio, design, technical and marketing fields. A comprehensive list of game events, forums, and festivals is included in the Appendix B of the paper at the end.
CHAPTER 4

Overview

While I was writing the paper about educational programs’ influences for game development, my advisor Celia Pearce suggested that I look into indie studios which have participated in Global Game Jam and IndieCade events. Professor Pearce recommended most of the studios to me and helped me contact some of the co-founders of the companies I interviewed with. The purpose of the case studies section is to share some successful indie studios’ stories and development skills with readers.

Case Studies

thatgamecompany

Thatgamecompany is considered one of the industry's most successful indie studios, and it was co-founded by Jenova Chen and Kellee Santiago in 2006 before they graduated from the University of Southern California’s game design program.

In 2005, Jenova Chen and Kelly Santiago received $20,000 from USC to made a game - Cloud, their mentor Tracy Fullerton helped them to put the game on the school website in October, and the game got over 6 million visits in 7 months. (Chen’s first game) Cloud was presented at IGF 2006, and received Student Showcase Reward there. Chen decided to remake Flow instead of Cloud for thatgamecompany’s first title in 2007.

Kellee Santiago responded to my interview questions about the influences of game education via email and Jenova Chen and I had a Skype interview. Chen is preparing for the release of thatgamecompany’s newest title, Sky, on the iOS platform. Thatgamecompany decided to shift game platforms after the three contracts with Sony Playstation expired, “we are trying to get players from the mobile game market, which will have many potential users that never played our games before, they are our target audiences.” says Chen. In the talk, we mainly discussed the influence of the game program at USC which he attended and the back stories of developing Flow which was Chen’s graduate thesis and the first game published by thatgamecompany. Both Jenova Chen and Kellee Santiago said that they were not a game designer before they entered USC. “I had been looking for a higher education with a mix of different disciplines, and constantly tackling different challenges that require creative problem-solving. By the time I left USC, I was a game designer,” says Santiago.
Inspired by professor Tracy Fullerton, the creator of *The Night Journey*, Chen and Santiago agreed that they have changed the way of understanding art and creating experiences for players. Many of the students who got selected into the USC interactive program have an art background; Santiago said that Professor Fullerton was instrumental in appreciating students’ backgrounds in arts, and how could it be relevant to game design. Fullerton believed that video games could be an experience which allows players to immerse in a feeling of energized focus, full involvement, and enjoyment in the process of the activity. When Chen and Santiago started their thesis project *Flow*, Fullerton recommended her students to read “Flow Theory” books to understand what it means to be a positive influence to your audience and accomplish something challenging and worthwhile. (Csikszentmihalyi, 2016)

Just like many other game design students, Chen and his partner Kellee Santiago both wanted to work full time in the game industry after graduation, so they put most of their time in developing their thesis project - *Flow*. This would give them a solid portfolio entry to highlight their skills during job interviews. Both Chen and Santiago prepared the thesis project for a long time to bring their game to the USC graduation game showcase (required for all the USC game major students) and GDC. They agreed that attending game festivals/showcases is a critical tool for students and they collected feedback from people who did their playtesting during the events. Another benefit from attending game festivals is that the developers will have opportunities to walk around to test other designers’ games, talk to audiences, and get to know what kind of game the market is currently demanding. Chen said that he advanced his career at game festivals and that the USC game showcase helped him and Santiago build a connection with Sony PlayStation.

“Sony helped out a lot with our project funding and sending people to do QA testing, our studio could not have shipped three games without their help,” said Chen. If an indie studio has a contract with a big game console company, it could be a strength for its game development. However, when Chen and Santiago first started their game *Flow*, they had no funding, and they were getting paid a minimum wage at USC’s game program to support their live spendings. The only cost for Flow was the $500 to an LA local composer to make theme music for the game. Back in 2006 when Kickstarter was not released yet, Chen put the flash version of *Flow* on a PC game online website and got 100,000 downloads within its first two weeks of release.

“What made thatgamecompany's games stand out in the competitive market? I can see the connections between these games and is what the key principle for your games?” I believe these two questions are what other indie developers wanted to hear too, so I asked Chen during the interview. Chen listed the goals of his games:

*Flow* - Showcase flow psychology and methodology  
*Flower* - Lead player, guide him/her in a game  
*Journey* - Get people to experience the loneliness (cinematic)  
*Sky* - Let two players connect together and have different experiences (interactions)

Chen feels very lucky to get support from Sony, which helped Chen and Santiago’s indie studio a lot with funding and marketing. “I appreciate many developers have great ideas and passion for what they are doing, but not many indie games made it to publish, due to lack of support and funding. Big publishers are aiming to create something meaningful, so they will always put you in a spot that rushing your development, but you will grow a lot under these pressures, it was amazing how Sony and other publishers can adopt a new indie business model so quickly!” Big publishers know how and where to get players and lead them and kindly guide them with game introductions. Generally, artists did not particularly like the idea of patronage but depended on it to survive in the indie game ecosystem. The relationship is that it is in the nature of indie developers to keep a distance from publishers, but the truth is without leading publishers’ like Sony, Apple, or Nintendo’s promotion, the indie movement could not have reached today’s high. Furthermore, Chen shared his game principle “We create what kind of game as a gamer we would like to play with a sense of soul and personality for our players.” In the talk, Chen
told me that he did not feel excited about most of the indie games in the past five years because they were either too similar with the ones that already famous (low quality) or too complicated and it is easy for players to lose interest.

“What kind of game players want to play, I will try to make it happen, but do not dream big, keep your goal very small.” this is my favorite quote from the interview with Jenova Chen. Chen states that the level of completion is more valuable than a high complexity - it is reasonable to show all your abilities in your game, but it does not mean that your game should be complicated. When it comes to game development, every stage will need a lot of playtesting to polish the project. Thus, game developers have to decide what is the essential mechanic in their games and focus on how to make it perfect.

![Sky](image)

**Fullbright**

Fullbright is a game studio that was co-founded by Steve Gaynor, Johnnemann Nordhagen, and Karla Zimonja in 2012. The three Fullbright co-founders have all worked on the 2K Marin team before. At the very end of 2011, they decided to rent a house in Portland, OR to live together in order to stay closely connected and focus on developing Gone Home. The studio has shipped two titles including Gone Home and Tacoma, both games received mostly positive reviews across different platforms.

Steve Gaynor graduated from Portland State University with a degree in Sculpture and an Art History minor. He was not planning to get into game development when he started college because he never explicitly studied game design in school. Gaynor agreed that the art history and film courses he took had been a positive effect on his game development though, they helped him with understanding digital arts and film. They also helped him develop strong skills with writing narrative scripts and storytelling.

Gaynor attended GDC for many years before he was in the game industry, he was a tester at a studio and had not started to design games at that time. After Gaynor formed a team, he started to go to
IndieCade; the most important reason for him to go to game conferences and events was to meet other people. Developers that were doing interesting work could help him build his networks, he could ask for advice, and he could look for opportunities for collaboration. Conferences like GDC and IndieCade have the value of putting designers’ games in front of people, they allow some selected developers to exhibit their projects at the events to get additional attention.

_Gone Home_ was a very small project, so Fullbright did not ask people outside of the studio for funding. For the newest game, _Tacoma_, they have a partnership with Microsoft and Xbox. In the middle stage of developing _Tacoma_, Gaynor went to GDC and met many developers after the conference introduced his new project. That was how Fullbright built the partnership with these large publishers.

The Fullbright team brought _Gone Home_ to IGF 2012 and showed the game trailer there. The indie game bubble was not a serious issue a few years ago, so when an indie game was a finalist at IGF, it could get a distribution deal from Steam. Consistently attending game festivals like IGF and GDC helped Fullbright maintain the connection with Steam. “For my understanding of the indie bubble, before that period (2014), the challenge was just getting onto Steam, if a game gets on to steam, it will have a better chance to sell more copies. Now, getting onto Steam is not that hard but it is difficult to get people to buy your game. I do not feel a huge difference in before and now, but the problem is more obvious to all the designers nowadays” said Gaynor. Gaynor believes that the best solution for the indie bubble problem is to reduce the number of games that could be put on Steam and other game platforms “If a game comes out now on Steam and nobody buys it, maybe it should not have been put on Steam in the first place.” It is positive to see that Steam is allowing more potential games to be put on their website, but there are too many games to compete with at the same time (including AAA games). If game publishers increase the standard for games to be put on their platforms, the bubble problem will improve. During the interview Gaynor and I discussed that _itch.io_ is one of the best places for smaller games to be put online. Even though _itch.io_ does not have many critical audiences and discover features that bigger platforms have, it requires less overhead for shipping a game. A game platform is more of a place for developers to expand their audiences, and receive feedback, it has no guarantee for helping a game get off of the ground.

The goal for _Gone Home_ was to put the strengths of first person games into an immersive environment without combat. Gaynor said that his inspirations for _Gone Home_ came after he played a lot of first person games, he like the idea but wanted to build a different kind of user experience. The constraint of building _Gone Home_ was that Fullbright is a small indie studio, three members were afraid that they did not have enough people and money to create something worth playing. _Gone Home_ was Fullbright’s answer to what is a first person game with mystery elements, narrative lines and no violence. For _Tacoma_, Fullbright designers wanted to upgrade the user experience in the game, it is not a first person game, it is about how to bring players to comprehend different characters’ feelings.

_Gone Home_ took 17 months to develop, and the budget for _Gone Home_ was just the Fullbright team members’ living costs plus voice recording fees and software licenses. The final cost of developing _Gone Home_ was a little bit over 150,000 dollars. Before the three members teamed up for Fullbright, all of them had working experience in the game industry. For saving money to develop _Gone Home_, they decided to live together and spent all of their savings on the project. At the late stage of _Gone Home_ development, team members had to ask their parents to borrow money and tried hard to keep the expense as cheap as possible, because because in order to entirely focus on work they did not have part-time side jobs. Gaynor feels very lucky about the timing of shipping _Gone Home_ because they finished _Gone Home_ earlier than they expected and the team managed to do self-funding for the project. _Gone Home_’s high
popularity before Gaynor brought the game to IGF or Steam was a miracle because Fullbright did not try any marketing promotion or even a Kickstarter page. “Gone Home came out at the time when people were looking for a more creative game type that could give them a new visual experience because many of them felt tired of competitive games or shooting games,” Gaynor shared his feeling about Gone Home’s success. Furthermore, Gaynor talked about his opinion about indie game marketing: a high-quality game will have some types of audiences approval, but if the developer is not willing to pay money to do marketing then there are not many people who will be aware of the game. Encouraging players to share their play experience is an excellent way to spread a game, and the interactions between audiences and developers are important. Additionally, developers have limited force to deal with people’s reactions, and it is very tough to gauge audiences’ taste when the market is always changing. Gone Home is one indie game which did not put a lot of effort in marketing got pretty successful in the market like Fez and Super Meat Boy, that means it met the market’s need. This challenge of market gauging is apparent because a few years later, if other developers want to repeat what has already been done, it usually will not be popular again. The principle for Fullbright to create games is to use the strengths team members have and then find out what kind of game they are good at making. The games from Fullbright in the future will not look exactly like Gone Home or Tacoma. They are still discussing their next game’s concept; the team always wants to surprise their fans.

Gaynor shared his recommendations to indie developers at the end of the interview, “I think it is very valuable to make it playable early if you can and get people’s reactions to it. Because developers often cannot see all the perspectives, they need to get the game critiques. I think this also is a good way to start helping to build your audiences.” Like what Jenova Chen mentioned in thatgamecompany’s interview, game testing is essential in every stage of the development. The game testers can be professional QA testers or players online. Either way, if they get excited and would be willing to play the next version of a game, it means the developers are on the right track. Furthermore, people that participate in alpha or beta version of a game testing could help bring the game to their communities and get more people involved in the project, and it is also an opportunity for designers to know better what people want to see from their work.

Noodlecake

Noodlecake was founded in 2011 with the release of their first game, Super Stickman Golf, which was pretty successful. The company has since expanded into mobile game publishing as well. The location of the studio is in Saskatoon, Canada which is a bit of an outlier compared to other studios in Toronto, Montreal, and Vancouver. Noodlecake is good at finding other small indie studios’ games and operating remotely to help them publish their games. Noodlecake has helped launch more than 100 mobile games in the past six years. (Sapieha, 2017)

I chatted with Arlin Schaffel and Ryan Holowaty over Gmail to learn more about Noodlecake and their individual experience. Most of the employees at Noodlecake graduated from the University of Saskatchewan (U of S) in Saskatoon, Canada. Interestingly, no one at Noodlecake has a "game design" degree; they are primarily Computer Science or Commerce Design majors because their college did not have a digital media program when they were at school. Schaffel had a degree in Computer Science, and
he thought the most useful things he learned from college were learning how to use multiple technologies and not getting stuck on one single obstacle (learning to move on when unable to solve one problem). The Computer Science program at Saskatchewan asked students to work with various techniques over the years, and being able to pick up new skills and not feel frightfully overwhelmed was a useful talent to learn. Schaffel said he was lucky to have a couple professors that helped him with coursework, taught him to be responsible with teamwork, and more importantly, had him think about important things like life balance. “I think I am not only a better developer because of some of my professors, but I am a more well-rounded person.” Additionally, Schaffel took classes such as Advanced Algorithms, Databases, and Computer Networking in the past; these skills have been absolutely essential in game development. Although, while the common challenges for indie developers are to deal with technical issues and optimize a game, Schaffel said that the biggest challenge for him in game development was to get a game released to market. This is harder than just reaching a finished playable state; the requirements are always changing in the game market, developers need to quickly realize that and tailored their game to popular taste.

Even though the University of Saskatchewan did not organize game jams or send students to game festivals when Schaffel and Holowaty attended, it now runs game jams twice a year. Schaffel recommended students and developers to participate in game jams, the primary benefits in his mind are to be better at prototyping and quickly get comfortable with having new developers in a team. Also U of S now has more internship programs for putting students into the real world. Schaffel had an internship during school and said the his internship had a lasting impression on his life. Due to the fact that the office location is far away from other major cities that often host game festivals, Noodlecake does not get opportunities to attend games related festivals.

Noodlecake has not received funding from other publishers or backers online. The co-founders Jordan Schidlowsky and Ty Bader made Super Stickman Golf (SSG) in their spare time while working full-time jobs and grew the company from that. Even though Schidlowsky and Bader found success with the first game, they continued to work full time for several months before starting the studio. Noodlecake has launched several games in the SSG series. Every iteration has been better than the last, both from a code standpoint as well as a design standpoint. The goal for the game development of the studio is to keep evolving and iterating the series for years to come. Additionally, the success of SSG brought Noodlecake to the public’s attention and allowed them to work with other excellent developers. Most of Noodlecake’s titles have made a profit and through that, they built a publishing company to go alongside their ongoing game development to help other indie devs port their games.

For development tips, Schaffel found inspiration from many places - nature, art, fashion, culture, and other game studios. Schaffel said that Noodlecake developers like to put themselves in a relaxing environment and they also feel more inspired while working out, letting their mind wander rather than necessarily playing games by other developers. Furthermore, Schaffel suggested developers should not over-engineer their work, the priority is to make sure the game is fun. Moreover, silo information is not favorable for game development - it is important to playtest early and continue to playtest with external people whenever possible. Last but not least, developers should not be afraid of cutting features, shipping is essential and difficult, it is worth it to spend more time on polishing a project and trying not to show bugs or half-finished features with audiences unless you have to.

Arlin Schaffel shared recommendations for other indie developers, “Keep your expectations in check and start small. Spending all of your time on the first game may not be the best use of your time
and could set you up for a huge disappointment. Don't be afraid to let go and move on, then focus on the next game!” Developers who first start with making smaller games will need shorter timelines and will get less stressful with failures when there has not been too much time and effort spent on one project. After a developer becomes familiar with multiple roles and processes of a small game development, they will achieve success and can move up into larger projects. Additionally, it is okay to have a failed project, because not every game will be a success in the market. Being patient and open to new starts is a good mindset for developers to keep.

**Die Gute Fabrik**

Die Gute Fabrik is a small indie company based in Copenhagen and New York City. Die Gute Fabrik was founded by Nils Deneken in 2008 as a one-man studio to focus on Danish and Nordic game support. Later in 2011, Douglas Wilson and Christoffer Holmgård joined the company and worked on Mutazione, J.S Joust, and Sportsfriends. Die Gute Fabrik has published many games in the past few years; their games do not particularly have a consistent style, and players always get excited about what will be the next game from this company. The game type may be physical games to play with a group of friends or RPG adventure games, of style and storytelling. (Nils Deneken)

Holmgård was always a big fan of video games. He decided to pursue a degree different than a computer or art design, so he enrolled in a psychology degree program in his undergraduate study. After two years, he realized that he did not want to be a psychologist, and he was still more passionate about video game design, so he entered an IT college for a Digital Media and Games degree at IT-Universitetet i København. Holmgård wished that he started with a game design program earlier in school so he would not have had to take a long time to first study psychology then switch to game design, but a psychology background was super useful when it came to game development. Holmgård is much better at writing scripts and creating narrative stories compared to the time before he started college. Additionally, a psychology background helped Holmgård figure out players’ decision makings, motivations, expectations, and what kind of things players think is the challenging part in a game. This solid understanding of user experience is a strength when developers are building a game.

Before Holmgård joined Die Gute Fabrik in 2009, he had tried many different jobs; like business development and management jobs. He ran a consulting company before and was a statistical consultant at the company. Holmgård admitted that consulting companies get to pay much better than indie game companies, but he is more excited to do game development. The idea of becoming a game designer came out after Holmgård participated in his first Nordic Game Jam in 2006. Holmgård went to a game jam alone and partnered with two people he just met over there. At night, the team’s programmer suddenly left the event and disconnected with the other members. There was a game display bug with the game code, so Holmgård had to bring the code home and figured out the solution alone. Holmgård looked up online troubleshoot solutions and fixed the bug in a few hours; that was the first time he felt like he could be a technical person and that he belonged to the game industry! Furthermore, the game jam helped many students and indie developers form connections, Holmgård said that was the first time he had game social networking, and he decided to join a game program after the game jam.

The master’s game program helped Holmgård get a much sharper perspective of what games are in a logical perspective - what kind of components should be included in games and why. Furthermore,
professors provided many game development case studies in class and asked students to think and write games seriously in a scholarly way. Holmgård believes the most important thing he got from the game degree is his network, program alumni shared game development experiences with him, and professors there who had been working in the game industry and game education for many years expanded his network with more game companies. Also, Holmgård met his future business partner, Douglas Wilson, at a study exchange program, and then they started to work together and lived together after college.

Back in the days before Holmgård joined Die Gute Fabrik, he said that they made business connections from different game events, festivals and Twitter. And after Die Gute Fabrik staff built relationships with players and other developers, they just send them emails and responded to them on Twitter. Moreover, Holmgård suggested indie developers practice classic pitches, if they want to publish a larger project, it is better to start an introduction about their work and get a network early than only focus on coding or art design. Based on Holmgård’s experience, giving people talks and preparing something interesting to say is an important skill to have for game developers. This allows a developer to get more people to participate in his or her project and will engage listeners so they can give advice on how to keep polishing the idea.

Regarding publishing and some portions of funding, Die Gute Fabrik has been mostly working with Sony. With the exception that their first and second games, Rückblende and B.U.T.T.O.N respectively, came out before communicating with Sony. Die Gute Fabrik has been working actively in the golden age of PlayStation 4, Holmgård said that they were lucky to work with Sony, so they did not have to really care about many things especially getting more funding rather than their side jobs and players. Back a few years ago, there were not many people making games, when there was a new game released, players were curious about what indie developers are building, it was absolutely easier to get attention from people.

Rückblende (which means flashback in English) was the first game from Die Gute Fabrik and attracted players’ attention; it was also co-founder Nils Deneken’s thesis project. Deneken was not very excited about creating something successful, but to make an interactive project, and have a good excuse to make music for his thesis (which was the part Deneken is most proud of developing). The experience of developing Rückblende gave Deneken an opportunity to go through all parts of a production process, from concept to finish all by himself. While Deneken was doing job searching, he coincidentally found out about the IGF and send Rückblende there for the student competition. At IGF’s showcase, Rückblende was presented along with other worldwide independent games, and it was the first time that the indie game world opened for Deneken. Sam Roberts approached Deneken at the IGF show floor and invited him to apply for the Indiecade festival. Luckily, Rückblende got picked for the first Indiecade festival which had an important impact on Deneken’s career. Deneken met game developers from other colleges in Copenhagen at IndieCade (Lau Korsgård, Dajana Dimovska, and Douglas Wilson), who were showing Dark Room Sex Game. Deneken and the developers he met at IndieCade decided to work together in Copenhagen after the event.

Die Gute Fabrik developers came up with the idea of a party game at a competition hosted by the Kokoromi collective. “In the collective, there was a strong interest in games that take the game out of the screen and into physical space, and B.U.T.T.O.N was a consequence of that way of designing games. B.U.T.T.O.N was a group effort – an idea born out of a group dynamic, which was a lot of fun,” said Deneken. As a party game, B.U.T.T.O.N. allows a group of people to control a keyboard or controller to race in a physical place, the treasure of interacting with friends got a positive reaction from a lot of
players who attended IndieCade. Douglas Wilson said that “We would like to let players focus less on inconsequential things like obstacles in the game and pay attention to how to challenge another player, I believe abusive game design can help humanize gameplay.” (Alexander, 2011) The mostly positive reviews B.U.T.T.O.N. got from IndieCade encouraged Die Gute Fabrik developers to keep making more game projects, and they have participated in couple years of the IndieCade and IGF events and have been rewarded many times over there. Holmgård shared his thoughts about bringing games to game festivals here “Some of the smaller games we made were involved with IndieCade. Attending IndieCade is a great opportunity to get more people to know your project, and we love to give small pitches to our audiences, every introduction of your game is a new practice of your communication skill, the more confidence you show, people will be more willing to try it.”

How to choose which platform an indie game should be released on has been a long debate question. Holmgård believed that there are pros and cons of releasing a game on PC or console. Sometimes it is a prerequisite to getting funding if a developer wants to make a game, so that could be a reason to make games for game consoles. Creating console game is good if a designer already knows what kind of gamers are on a console, it is easier to approach players, and be familiar with players’ favorite game type(s). Designers should do more marketing research and prepare for the technical challenges. The PC indie game market is broader, and the production has to be more prominent to put on PC & Mac. Die Gute Fabrik is working on their newest game and plan to support multiple platforms for the first time, including PC, Mac, and PlayStation. Supporting various platforms has led to having to face a lot of challenges for various target platforms. Holmgård said that “I think console games will be more financially successful than PC games, but when a studio wants to get more people to play their games, we will need to put more time and money on PC.” Thus, it is more comfortable for indie developers to start building a game with a console, and when the studio is more financially prepared and have more technical support, they could ship their game on multiple platforms to get more players involved in their games.

“What we have done in game development are what we care about, what we want to build is more important than the market needs, we are lucky because we started building games early.” Holmgård said. Die Gute Fabrik is pretty flexible with what kind of games they want to create, everyone in the team could be a role in their game development, so the games come with their personalization. However, when an indie studio wants to focus on what they want to create instead of what the market demands, the funding problem always comes first. The budget for Rückblende (the company’s first game that won game festival awards - Wildecard Award 2010 at IndieCade Festival) was low, they had no budget, and all the developers were mostly spending spare time to work on it. Everyone in Die Gute Fabrik wishes to work with creative freedom but also get the funding for that, so they kept their side jobs until last year. Sometimes, the project had to pause because either developer had no time or they ran out of budget for a period and had to work to renew funds. Holmgård said that based on his experiences, when everyone in the team is having a side job and have insufficient time to group together, it is easy for designers to come up with prototypes, but nearly impossible for them to polish an idea to a sellable level. Luckily, B.U.T.T.O.N. was helped by Kickstarter and had $150,000 for funding, although they only barely made that goal. Additionally, Holmgård mentioned that Kickstarter is one of the primary tools for marketing, even though the indie bubble is getting bigger now, but there are still not many games which have been kickstarted yet.

“Game development takes longer than you expect. Your budget will be too small, and your timeline will be too short. It is a real challenge, and I think it is a real challenge for every studio.” This is
the thoughts Holmgård would like to share with other developers. After I finished the interview with Die Gute Fabrik, I think this is a studio that I recommended young developers who just graduated from school to learn from. The newest title from Die Gute Fabrik started development in 2009, everyone during this period had opportunities to create other smaller projects, and had second careers to support the cost of studios and game development. I appreciate that all the stuff at Die Gute Fabrik has been really patient about changing the deadline of the finish date to get a better final result, and never give up on their goals.
CHAPTER 5

Conclusion

The rise of indie gaming over the last few years has been incredible. It has allowed many small studios to have chances to make creative games. Big publishers like Sony, Microsoft, Steam and mobile stores have been pretty supportive with sponsoring some of the indie games too. We have seen how thatgamecompany had three contracts with Sony PlayStation and that Steam helped promote Gone Home. Indie studios that have released a successful title before already have a fan base, as long as these companies keep making top-quality work on a reasonable schedule, they will continue to be successful. The problem with the current indie market is the existence of too many games, so many games go unnoticed without a fan base. It will not be a problem if players keep buying new ones. The numbers of games released on Steam, Greenlight, and itch.io are increasing every year, but it has not changed user behavior - people mostly do not play these excess games because there is no demand here or they are not marketed enough. The flood of indie games on Steam is inevitable because there is no control over how many developers are working on and planning to release, games. Even Steam has tried to open gates for indie games and get out of the mess. However, an unnoticed crowd of games on Steam is still there, and it is always pretty unmanageable. What I learned from interviews with successful indie developers is they did not plan to make something big or complicated at first because new developers lack experience with game developing. One good example is Gone Home; the team built this game based on what budget/timeline is, wisely spent money on right development tools and kept polishing the game. Furthermore, the interviewees did not say that they made games to get rich; they make games because they are so passionate about games! And they are willing to spend bank savings or have a side job to support their dream. Thus, for developers who aim for making a lot of profit from the game industry, the indie game market may not be a right field for them to enter now.

Before I conducted case study interviews with indie studios, I guessed that maybe successful indies had a more substantial budget or put more time in development than others. But the results turned out to be different than that hypothesis. The results were pretty surprising to me, the majority of games from the studios I interviewed did not take longer than two years to develop nor had a massive budget. None of the developers said that they thought about making a lot of money out from creating their first game. Instead, they recommended developers to keep their goals small and optimize the game experience by doing a lot of playtests. Additionally, not all the indie developers started their career holding a game design degree, but the skills they gained from school are still useful in that they can be applied in different fields of game design, like programming, networking skills, narrative writing, etc. Steve Gaynor studied art history and Sculpture in college. He said that even though he did not get a lot of game design practices in school, but he builds a great understanding arts in various periods and developed strong skills with writing narrative scripts and storytelling. Moreover, the indie game industry is a small and friendly community in which people can quickly get along with other developers by having conversations at game events and festivals. Networking is another crucial element for indie developers to achieve their goals in developing and publishing. By going to game jams and festivals, indie developers will have a chance to introduce themselves to potential buyers, pitch their product, and get feedback on how to improve the product. Nils Deneken met his team members at the first IndieCade and worked on B.U.T.T.O.N. after the
event. Douglas Wilson from Die Gute Fabrik helped his studio found many business partners from game events like IndieCade and GDC.

Game testings and QA testings are also necessary for all stages of a game’s development that help developers shape the outcome as well. Developers might need to pay professionals for doing a QA test, but it is free to get people that are interested in testing your game at a game festival, players at the events just purely want to have fun and their advice will help the game out! If a game is not in good shape, the conversations with potential investors, work partners, and audiences will help to make the problems clear to developers. Furthermore, crowdfunding websites are another useful tool for developers. They can advertise their games and gain some funding. This is an opportunity to start getting more people aware of a game, where it is both developers’ and backers’ responsibility to turn dreams into reality. For developers who already have a decent product, based on my research I recommend keeping audiences up-to-date on projects and responding frequently to questions; this should give their projects an excellent chance to meet with success.

Near Future of Indie Games

The world of indie gaming has become more popular with the passage of time due to the integration of technology. And with that technology, we should keep in mind that currently the flood of new games remains and it is a problem for smaller games to gain recognition. (Shannon, 2017) Thinking on the bright side, the rapid growth of indie games helped expand the game world and left thoughts with future designers to ponder what kind of games became successful by reaching market taste. For the games that failed, designers can analyze and learn from the mistakes to be more successful in future projects. For solving the indie bubble problem, publishing platforms need to put effort into getting games more organized as well as reach out to new audiences. One company trying to get new audiences involved is Indie Megabooth. Kelly Wallick, the leader of Indie Megabooth, said that “Our initial goal was to expose new audiences to indie games and show them that there was this whole other side to game creation.” (Conditt, 2017) It is still challenging to get more people involved with games, but it does not hurt to try hosting monthly local game events for indie games, the goal is just to attract some new audiences to be aware of this community.

Cloud collaborations with game projects will become more popular in the future, websites like Zooniverse, Slack, and Gamedoora allow people to volunteer and collaborate together on a project or research topic. At a collaboration website, developers can leave and receive comments for each project, and it is a more straightforward way to build connections with other developers. You show your development progress with them, then your both are able to help each other out. With the cloud collaborations, developers will have a chance to work on games more frequently; it provides designers the chance to be more familiarized with various game types and have a sense about what other people are creating.

For potential future research, I would like to see how game makers promote indie games. I would want to answer questions like: “Why did they set up a specific price for a game?” and “How effective were their promotion plans and did they do anything aside from regular commercial advertisements?” Additionally, there are many indie game developers starting to design games for new game consoles like the Nintendo Switch or VR headsets. I am interested in how the new platforms approach new audiences
when the cost of Nintendo Switch and some of the VR headsets are already expensive. I would want to discover the influences indie developers’ games have in the latest technology trends.

APPENDICES

Appendix A - University Game Programs

The Princeton Review’s 2017 Rankings: Top 50 Undergraduate & Top 50 Graduate Schools to Study Game Design. All the information below are directly from each school’s official website.

Selected Game Design Programs

CMU (Entertainment Technology Center) - No.1 at interactive design in the U.S.
The link for all the nominated games they submitted to IndieCade:
https://www.etc.cmu.edu/blog/etc-at-indiecade/
https://www.etc.cmu.edu/learn/students/ Student works

DIGIPEN - No. 4 Undergrad & No. 7 Graduate program in the U.S.
https://www.digipen.edu/gallery/ student works

Georgia Tech - No.9 Undergraduate &
http://www.games.gatech.edu/ Student works

MIT Massachusetts Institute of Technology - No.9 Undergraduate & No.22 Graduate program in the U.S.
MIT Gambit Lab (Akrasia, Elude, a couple of others) http://gambit.mit.edu/
MIT Media Lab (Fracture) https://www.media.mit.edu/
https://www.media.mit.edu/research/?filter=groups Current projects

Northeastern University - No.12 Undergraduate program in the U.S.
Gillian Smith - Thread Steading (won best technology Award at IndieCade 2016)
https://www.disneyresearch.com/project/threadsteading/
Jonathan Bobrow (MIT) - Fracture (Celia was co-designer on this)
http://fab.cba.mit.edu/classes/863.14/people/jonathan_bobrow/ His work at MIT
How to Make (Almost) Anything
http://www.indiecade.com/games/selected/fracture-automatiles

NYU - No.7 Undergraduate & No. 6 Graduate program in the U.S.
IndieCade page
http://gamecenter.nyu.edu/indiecade/
http://gamecenter.nyu.edu/games/ The games made at NYU
NYU game innovation lab http://game.engineering.nyu.edu/about/
Utah University - No. 3 Undergrad & No. 3 Graduate program in the U.S.
Utah students in Kickstarter and promote themselves in the Indie industry
Student game portfolio: https://eae.utah.edu/portfolio/

UT Austin - No.29 Undergraduate & No. 17 Graduate program in the U.S.
Student game work list by class and year:
https://gammaprogram.utexas.edu/student-work/capstone-games/

RIT - No. 2 Undergrad & No. 4 Graduate program in the U.S.
Student works: https://magic.rit.edu/?page_id=51
Research lab: MAGIC Center Initiative in Religion, Culture, and Policy, cultivates new research, focused on games, religious literacy, the acquisition of cultural practices, and the implications on policy and politics.

Savannah College of Art and Design (SCAD) - No. 24 Undergrad & No. 15 Graduate program in the U.S.
Student works
https://www.scad.edu/academics/programs/interactive-design-and-game-development/student-work

SMU Guildhall - No. 1 Graduate program in the U.S.
Student works https://www.smu.edu/Guildhall/Academics/Student-Work/Team-Game-Projects
Student labs and studios https://www.smu.edu/Guildhall/Campus/Game-Studio-Environment
Highlight of students’ sucess at SMU https://www.smu.edu/Guildhall/About/History-of-Success

UCF - No.16 Undergraduate & No. 2 Graduate program in the U.S.
Selected student works and final projects https://fiea.ucf.edu/student-work/final-projects/
UCF Games lab http://sciences.ucf.edu/biology/games/
UCF Game research lab https://gamesresearch.cah.ucf.edu/

UCLA - No.27 Undergraduate &
UCLA’s Game Lab students participated in IndieCade from year 2012 to 2016
Student works http://games.ucla.edu/games/ The game program hosts by the UCLA game lab

University of California (UC), Irvine - No. 26 Undergraduate program in the U.S.
UCI eSports program http://www.esports.uci.edu/about.php

University of California, Santa Cruz - No. 21 Undergrad & No. 13 Graduate program in the U.S.
(Facade, Save The Date, Coffee: A Misunderstanding, Katherine Isbister, Prom Week)
Games and playable media center at UC Santa Cruz https://games.soe.ucsc.edu/
Student games: https://games.soe.ucsc.edu/games
Student & faculty publications: https://games.soe.ucsc.edu/biblio

USC - No. 1 Undergrad & No. 5 Graduate program in the U.S.
IndieCade page: http://games.usc.edu/indiecade-usc/
Game list: http://games.usc.edu/
Research labs: https://cinema.usc.edu/interactive/research/

Appendix B - Game Events & Online Indie Forums

The resources here are a collection by Matthew S. Stenquist from the article “What Are The Worldwide Events For Indie Game Developers?”

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<th>Game Jams</th>
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<td>Ludum Darae - 48 hour game jam.</td>
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<tr>
<td>Games 4 Health Game Jam - 48 hours game jam.</td>
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<tr>
<td>GitHub Game Jam (Online) - Not really for Networking, but you can get some exposure this way and win cool prizes!</td>
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<tr>
<td>Global Game Jam - Another Game Jam. Meet with other devs, build games, and have fun.</td>
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<tr>
<td>7DFPS - A seven day first person shooter game jam.</td>
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<th>Conferences - Events - Talks</th>
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<td>IndieCade</td>
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<td>IGF - International Games Festival</td>
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<td>IGF Website Entry</td>
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<tr>
<td>GDC - Game Developers Conference</td>
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<td>GDC - China</td>
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<tr>
<td>GDC - NEXT Los Angeles</td>
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<tr>
<td>Games City</td>
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<tr>
<td>SXSWI South by Southwest Interactive (Austin Texas)</td>
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<tr>
<td>E3 (Los Angeles) - Indiecade Floor.</td>
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MobileCon - More IT, but it's another space to tap into.

PAX

WWDC - For Apple developers.

The London Smartphone & Tablets Game Summit - For mobile developer.

TigSource (The Indie Games Source) Meetups

IGDA International Game Developers Association - Local Chapter Meetups

IXDA Interaction Design Association - UI/UX developers meetups.

Copenhagen Game Collective - For experimental games.

SGC - Swedish Game Conference

Build Conference

**On the Internet (for PR / Exposure / Help / Critiques)**

Reddit / R/ GameDev

Reddit / R/ IndieGames

Reddit / R/ Programming

Reddit Indie game Bundle

Humble Indie Bundle

Steam Greenlight

TigSource

Killscreen

Venus Patrol

Gamesbeat - VB

Kotaku

Indie Games

Gamasutra
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<th>The Indie Game Gold Miner</th>
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<td>Stackoverflow</td>
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<td>Gamedev- Stackoverflow</td>
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