Live stream gaming on digital platforms

How to attract and engage live streamers on Beam & Twitch

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Abstract

In a world where live streaming is becoming increasingly popular and platforms like Twitch can attract several billion in revenue, it is important to look at what drives live streamers to adopt live streaming sites, and what keeps them engaged.

This thesis focuses on two embedded case studies of live streaming platforms: Beam and Twitch. Throughout this paper it will be investigated what factors influence the adoption of live streaming platforms for live streamers, and furthermore it will be analysed what keeps them engaged. From the literature key concepts have been chosen, and from them a conceptual model has been created in order to structure the thesis. Concepts include, but are not limited to: Online communities, digital customer relationships, user-generated content and social strategies.

The findings showed that several factors impacted the adoption and engagement of live streamers, and not just one element alone. The most significant findings from the analysis were that online communities and digital partnerships were the concepts that mattered the most. Both when it came to the adoption of platforms, but also as regards engagement.

My segment of streamers involved themselves in the community more than anything else, and monetization of their channels didn't play as big a role as one would have expected. If a company or organisation were to create a digital live streaming platform, the focus should be around community and a "VIP" system such as partnerships.

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1. Introduction

Today's athletes are no longer limited to those that master football, basketball, or any other traditional sport. Today stadiums are filled with people, chanting and shouting for their favourite teams and players. However, the players are now wearing sweatpants and headsets sponsored by Red Bull and Coca Cola, I am of course talking about the exploding industry of eSports. On YouTube in 2014 the gaming category exceeded news, movies and education combined in number of followers, and it has only increased since then (Casselman, 2015, ESPN). In 2014 Amazon bought the live streaming platform Twitch for a staggering 970$ dollars because they saw the growth potential in the platform, and they were right. In 2015 Twitch had more than 100 million unique viewers per month in comparison, Yelp had 85 million (Casselman, 2015, ESPN).

In 2014 when the League of Legends video game competition was hosted, it surpassed any other sports event in viewership except for the Super Bowl. It surpassed the Masters Golf Tournament with 2 million viewers, putting it at an overwhelming 27 million viewers (Casselman, 2015, ESPN). And there is money to be made. In 2014 the Dota 2 championship: "The Internationals" had a prize pool higher than the NBA finals championship. That year only the Super Bowl and World Series of Poker had a higher prize pool. It is an industry that grows rapidly. In 2015 the total number of eSports tournaments came close to 2,800 and the total prize pools for these tournaments were 50,000,000$ (Brautigam, 2015, The eSports observer). The eSports industry has seen incredible growth and with it comes the industry of live stream gaming.

The live stream gaming industry has for many years been dominated by Twitch, but as more companies discover the value of live stream gaming, the monopoly slowly decreases. Facebook, YouTube and Microsoft are all attempting to contest the market and gain part of the 1.8 billion $ revenue live stream gaming offers. A research done by Juniper shows that the 1.8 billion $ revenue stream will increase to 3.5$ billion in 2021 (Knapp, 2017, Forbes). The report expects Twitch to capture over 83% of the total eSports viewers compared to YouTube.

One reason is that Twitch "is *frequently more polished and appear better designed to maximize engagement, as well as provide a revenue stream for their owners"* (Juniper, 2017).

Microsoft wants a part of this industry as well, and has in 2016 acquired the live stream gaming company Beam. Beam was founded by the 18-year-old Matt Salsamendi based on the principles of interactive gaming and won the TechCrunch Disrupt Competition in 2016. Juniper predicts that the industry will only increase simultaneously with more people getting access to faster internet, and better hardware.

There have been many reports on the rising popularity of live streams and the potential earnings on the market, but some questions remain unanswered. Why is it that people adopt platforms like Twitch and Beam and start live streaming for hours upon hours? What do the streamers achieve from this, and what keeps them committed? This thesis is motivated by the lack of studies on the live stream gaming industry from the live streamers point of view and aims to provide concrete theory on the adoption and engagement of live streamers.

2. Theoretical framework

In the following chapter I will outline the different theories and concepts used in my analysis. When attempting to define the success criteria of digital live stream gaming platforms, several concepts and theories are important. A case study of Beam and Twitch will be conducted, and I will examine the existing literature on digital platforms and draw upon various concepts that are closely related to the success of digital platforms. The following concepts are either directly or indirectly connected to digital platforms. Initial customer acquisition on digital platforms, social strategies, network effects, platform control, user generated content (UGC) and digital customer relationship management (CRM). Each concept and its connection to digital platforms will be explained in the coming sections.

2.1 Literature review

The existing literature on digital platforms will help shape the theoretical framework. However, it is not all literature on the subject that is accounted for due to the vast amount of different literature on digital platforms. The concepts chosen below (figure 1) are concepts based on my hypothesis of what I find important regarding success with digital platforms and concepts that are often mentioned in related literature. The chosen concepts are also very relevant when looking at the case study of Beam and Twitch. The concepts are; initial customer acquisition on digital platforms, social strategies, network effects, online communities, platform control, user-generated content (UGC) and digital customer relationship management. I will go in-depth with the different concepts and their related literature in the below sections.

Table 1 Concept matrix

	Digital platforms (Platform ecosystem)	Initial customer acquisition	Social strategies	Network effects	Online communities	Platform control	User generated content	Digital customer relations
Meeyoungcha et al. (2007)	X			X			X	
Piskorski (2013)	X		X	X			X	
Pires et al. (2015)	X	X			X	X	X	
Kenny (2015)	X	X					X	X
Weber (2009)	X	X	X					X
Edelman (2015)	X	X	X		X	X	X	
Ghazawneh(2010)			X		X	X	X	
Parker et al (2013)	X				X	X		X
Choudary et al (2007)	X	X	X	X	X	X	X	X
Payne et al (2005)	X	X	X	X	X	X	X	X
Wagner et al (2005)	X	X	X	X	X	X	X	X

2.2 Digital platform

"The platform is likely to effectively define the digital era, with the algorithm and Internet and cloud as the building blocks" (Kenny, 2015).

Digital platforms today are already a big part of many companies' ecosystem. For many companies that started within the digital era, platforms are the core product. Some of the most used examples of companies relying on digital platforms are: Apple, Facebook, Uber, Twitch, Airbnb, Twitch and YouTube. These are different platforms that cater to different needs. But the one thing they have in common is millions of users. Uber disrupted the taxi industry by creating a peer-to-peer solution for high taxi prices by enabling people to be individual contractors instead of regularly employed drivers. YouTube created a platform where people can watch endless user-generated-content, but became so big that it created another form of business within the platform, thereby creating a platform ecosystem. The YouTube phenomenon PewDiePie has 53 million subscribers on YouTube, and it was estimated he earned 43 million dkk in 2015 (Finans, 2016).

"*How can a major business segment be invaded and conquered in a matter of months by a start-up with none of the resources traditionally deemed essential for survival, let alone market dominance? And why is this happening today in one industry after another? The answer is the power of the platform*" (Choudary, 2016). This is essentially the core of the new platform era. Traditional business models are not enough. And as a company you can never be sure that an innovative start-up won't compete or completely take over. Google is one company that are aware of this. Looking at their strategy, they don't want competition, so they simply buy their competitors. In 2017 alone, Google has bought five companies all within the tech industry such as cloud solutions business analytics (Cbinsight, 2017).

"Disruption is the word of the day; the sense that many traditional business models, organizations, and forms of organizing value creation will be either swept aside or

radically transformed." (Kenny, 2015).

The platform technology of today enables changes to many industries. Besides the obvious examples with Uber within the taxi industry and Airbnb for the hotel business, there are many other industries also affected by the digital technology. Etsy.com is bringing creative products online that used to be sold in local stores. Zipcar, which was bought by AVIS, is reducing the need for automobiles across USA. There are already digital platforms for a number of industries and it is important to keep up, if you as a company want to compete in the digital era. Twitch, which is now owned by Amazon, is one of these companies. Starting out as a 24/7 live broadcast by the owner, Justin Kan, it quickly evolved into a live streaming platform with no physical product, catering to millions of excited eSports fans around the world. All this was enabled by the power of the platform.

"If the Industrial Revolution was organized around the factory, today's changes are organized around platforms, algorithms applied to enormous databases running in the cloud." (Kenny, 2015)

2.3 Initial customer acquisition

A challenge when creating a multi-sided platform is always a matter of which segment comes first, and how do you attract one without the other? The chicken or the egg dilemma (Choudary et al, 2016). In the book Platform Revolution, it is explained how PayPal grew from 100,000 to 1 million users in just three months. PayPal was in one way a first-mover because of the frictionless payment method it provided. But besides that, PayPal also paid 10$ to users signing up and 10$ to existing customers for referring others. This created positive feedback loops so that people wanted to use PayPal for payment, and demanded shops to have this option. The more shops that had this option, the more people would be aware of the new payment method, and would thus sign up. Twitch did business in a similar way. Twitch made it very easy and accessible for other developers to integrate Twitch's streaming into their own platform. This resulted in many

websites embedding Twitch streaming instead of developing their own. Thereafter Twitch quickly became the go-to live streaming site.

YouTube on the other hand had a different approach when establishing their initial customer base. YouTube was not a first mover in the online video industry. Websites such as videoegg.com and stupidvideos.com were already fighting for users. YouTube had bigger investors and a faster development team. They let the other companies figure out what to build and how. Then YouTube copied it and made it better. This strategy along with contests for best user generated video created a lot of initial users (Weber, 2009).

Information today is more democratised and competing options are only a click or a swipe away. Creating attention is not enough anymore and normal push marketing won't get you users. The message or content must be attractive in a way that pulls users into orbit (Choudary et al, 2016). The book Platform Revolution suggests there are eight different strategies for launching a platform: The Follow-the-rabbit strategy, the piggyback strategy, the seeding strategy, the marquee strategy, the single-side strategy, the producer evangelism strategy, the big-bang adoption strategy, and the micro-market strategy. Each has a different approach to initial customer acquisition, and each strategy has been seen in the development of major platforms. I will go into depth with the strategies Twitch and Beam are using in the analysis.

2.4 Social strategies

Looking at the most successful digital platforms today, almost all of them utilises social strategy in one way or another. Apple's app store uses a recommendation and review system, allowing users to suggest apps to friends and family. American Express has a digital platform for card holders that connects them and offers discount if they shop together. And we are all aware of Facebook, probably the digital platform that offers most social interaction of all, so much in fact that other companies create digital social strategies for how to act on Facebook.

Piskorski, 2013, suggest that there are three components that all successful social strategies share: (1) reduce costs or increase customers' willingness to pay (2) by helping people establish or strengthen relationships (3) if they do free work on a company's behalf. Looking at four different companies that utilize this strategy backs up his statements. The four companies in his example are eBay, Zynga, Yelp and American Express. However, it is possible to see examples of this strategy in many other companies. Both Beam and Twitch are companies that rely on user-generated content. They rely on the users to provide content while they only act as mediators of that content, a platform where users can broadcast themselves to whatever audience wants to see it.

In Piskorskis research three tests are mentioned to see if you have the right social strategy:

Social utility test: Will the strategy help customers solve a social challenge they can't easily address on their own?

Social solution test: Will the strategy leverage the firm's unique resources and provide a differentiated, hard-to-copy social solution?

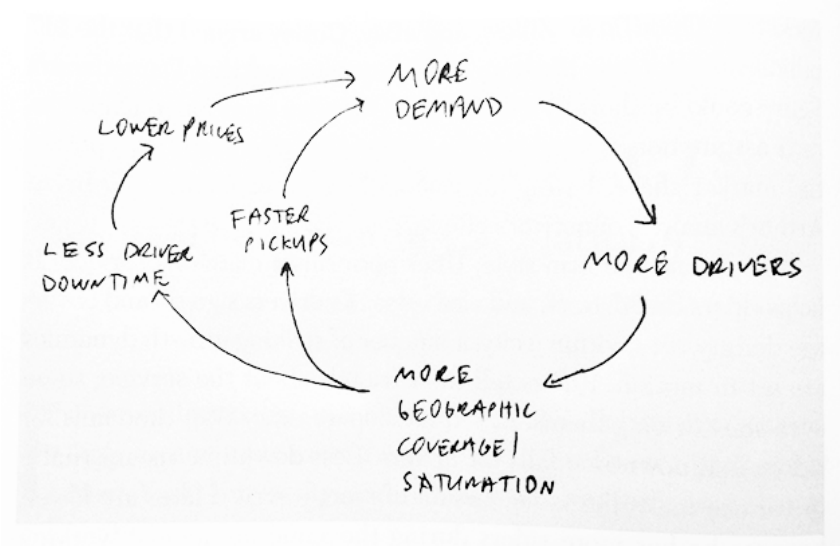
Business value test: Will the social solution directly lead to improved profitability?

Although there are obvious benefits to having a social strategy, not all platforms need it. Looking at research done by Meeyoung et al (2007), YouTube has very low user participation. 54% of all their videos are rated, however only 0.22% of all unique IPs that viewed the videos have rated it, and only 0.16% of total unique IPs have comments on the videos. This leaves us to believe that people don't look to YouTube for the social interaction, but for content itself. When it comes to Twitch, a research was conducted to look at the way people behave on the live streaming site. Manning et al, 2014, writes, "*Their responses express a genuine desire for social interaction*". Perhaps there is a big difference between a VoD site like YouTube, and a live-streaming site like Twitch.

2.5 Network effects

"Network effects refer to the impact that the number of users of a platform has on the value created for each user" (Choudary et all, 2016).

Positive network effects are when having more users on a platform results in added value. However, there can be negative network effects as well due to poor management, or slower processing time directly caused by too many users. The example below is the CEO of Uber illustrating positive network effects for Uber.



Picture 1 David Sack's napkin sketch

A widely used example of network effects is the telephone. If there is only one telephone, it has zero value, because you cannot call anyone. The more people that buy telephones, the bigger value the telephone get – as a result of the network that is created (Choudary et al, 2016).

Today the value comes largely from connecting the resources, and the network effects between them (Gartner, 2016).

The term 'two-sided network effects' is also mentioned in the Platform Revolution and is something you see in many of the major digital platforms today. Examples can be Airbnb where guests attract hosts, and hosts attract

guests. It goes for Uber, Android app store, Facebook and so on. *"Thus, in a two-sided market, it can sometimes make economic sense to accept financial losses—not just temporarily, but permanently! In Market A, if growing that market enables growth in a related Market B. The only prove is that the profits to be earned in Market B must outweigh the losses incurred in Market A"* (Choudary et al, 2016).

2.6 Online communities

Over the last couple of years, it has been clear to see that online communities play a large role when it comes to the digital platform industry. In 2001 the American company AOL reached 34 million users, which would rank the digital platform as number 34 if it were compared to the population size of regular countries (Wagner et al, 2005). Controlling a community of that size can have impact on many industries. Especially when it comes to multi-sided platforms, this kind of communities are important. The users are both customers and content creators, so what happens in these communities can mean the success or downfall for a digital platform. "Virtual communities are about aggregating people. People are drawn to virtual communities because they provide an engaging environment in which to connect with other people. Sometimes only once, but more often in an ongoing series of interactions that create an atmosphere of trust and real insight" (Carver, 1999). Looking at this definition of virtual communities, it is emphasized that it is the social connection between people that matters. Especially if it's in an ongoing series of interactions. Christian Wagner, 2005 gives an example of four different characteristics for different types of communities.

The four different characteristics mentioned are: Motive, cardinality of interaction, source of content and autonomy. In most online communities you will see some of these different characteristics. However, it should be noted that the work is from 2005, and a lot has happened since.

Back in 2005 there were no public websites for live streaming, and broadband in most areas would not have been able to support it. Despite the age of the work, it would be safe to say that many of the characteristics are still relevant and can be seen in online communities today. The work offers seven different principles and

seven different lessons for building successful online communities.
The seven principles are: Many-to-many exchange, Strong champion to build the community, Build around a need and with social capital, Provision of rules and regulations, Critical mass, Community role and membership life cycle, Community stages of development. The seven different lessons are: Adapt many-to-many network design. Cultivate your champion and develop future champions. Need to have a cause. Develop an explicit and clear governance structure. Keep the critical mass of members. Monitor the mix of roles. Renew, refresh and refine the community.

Hamilton et al, 2013 has investigated what the online community means for live streamers and writes: *"We found that people engage in live streaming for two reasons: They are drawn to the unique content of a particular stream, and they like being interacted with and participating in that stream's community."* Hamilton's research looked at live streaming on Twitch from a viewer's perspective, but the viewer and the streamer might have something in common: *"A major theme that merged through our analysis is that streams develop an atmosphere that reflects the streamer's attitude and values. This projection of the streamer's personality then influences those who stay, because their attitudes and values are shared not only by the streamer, but by the community that emerges."* According to Hamilton, one of the key concepts when it comes to the adoption of live streaming sites are online communities, and this will be analyzed further in the thesis.

2.7 Platform control

Platform control is the balance of opening your digital platform to users or third-party stakeholders, thus creating a larger ecosystem. There are both pro's and con's for choosing an open or closed platform.

"A platform is "open" to the extent that (1) no restrictions are placed on participation in its development, commercialization, or use; or (2) any restrictions—for example, requirements to conform with technical standards or pay licensing fees—are reasonable and non-discriminatory, that is, they are applied uniformly to all potential platform participants." (Choudary, 2016).

If you look at Google (Android) and Apple (IOS), both have created digital platforms within the mobile industry. But the companies are managing the platforms completely different. Apple has a closed ecosystem where you need to be a certified developer. You only have certain API's to choose from whereas Google with the Android software keeps it open source. Android however, is currently dominating the mobile phone market, but that has a lot to do with customer segments and pricing for the two companies, and less to do with platform control (IOS 8 vs Google Inc. 2014).

An example of the dilemma you are facing when choosing whether to open or close a digital platform.

"*On the one hand, these developers can extend the platform's utility to end-users and can thus create revenue streams that the sponsor can tax. On the other hand, loss of control over open technology creates a loss of revenue through the threat of more intense competition*" (Parker et al, 2013).
It is a fine balance whether to open up digital platforms and harvest the benefits of third-party content, or to close digital platforms to maintain control and reduce the risk of competition. A case study by Ahmad Ghazawneh and Ola Henfridsson 2010, investigates how Apple successfully went ahead and created a very popular, but very limited, digital platform for app development. Below the process and guidelines for being on the first Apple app store is described.

"Application review: As to ensure platform integrity, Apple set up an application review process. Each application had to be submitted to the App Store Review Team, assuring its compatibility with Apple's guidelines and rules. For instance, restricted application types included porn, bandwidth hogs, illegal content, malicious and applications that could cause 'unforeseen' problems. Moreover, voice over Internet protocol (VoIP) applications were only allowed over wireless LAN connections. Demonstrating that Apple was serious about these restrictions, the App Store Review Team rejected several applications. In fact, they even pulled out applications that were originally accepted for distribution via the App Store" (Ghazawneh et al, 2010).

One of the reasons for developers to accept all these terms, on top of only being able to create applications in Apple approved coding languages, was that it reached all IPhone users through the app store.

Despite being a closed system it was very practical to work with, and Apple made sure developers would have all the technical support they needed. Apple went from having 1,000 apps on the app store in February 2008, to having more than 185,000 in April 2010 (Ghazawneh et al, 2010). Thus despite having a closed environment there were plenty of third parties developing for IOS.

2.8 User-generated-content

User-generated-content referred to as UGC plays a big role when it comes to the major digital platforms we use today such as YouTube, Twitch and Facebook. With YouTube having more than one billion users (Statistics, YouTube, 2017) and an estimated 65,000 daily video uploads it only takes YouTube 15 days to reproduce the entire catalogue of IMDB which has more than 900,000 different titles dating back to 1888 (Meeyoung Cha et al, 2007). YouTube, however, is an entity of its own, though numbers show UGC is not to be ignored when building a digital platform for public use.

UGC however, is harder to control than regular videos on demand (VoDs). Just 10 years ago people were more or less watching the same shows at the same time on TV. Now most barriers for becoming a self-publisher has been eliminated and

millions have tried creating and uploading their own videos (Meeyoung Cha et al, 2007). Although it is today harder to control what people watch and when, UGC also provides many possibilities for the ecosystem of digital platforms.
Like YouTube, you can create a platform that is self-sustainable, where users create content, publish and advertise their content and generate more users to your platform without you, as the platform owner have to do much other than provide the online storage and information filtering. The same goes for Twitch and Beam. The main difference is that Beam and Twitch focuses in their content on being streamed live.

Meeyoung Cha et al conducted a research showing that user participation is actually quite low on UGC. Using YouTube for the study, numbers show that 54% of all YouTube videos are ranked. However only 0.22% of all unique viewers have rated the video and only 0.16% of all unique viewers have commented on the video. These are, however, average numbers and does not account for the more popular videos that have more people rating and commenting. Meeyoung Cha et al identified the top five websites sending traffic to YouTube as being myspace.com, blogspot.com, orkut.com, Qooqle.jp, and friendster.com. Four of these sites are social networking sites, and one of them is a video recommendation site.

Enabling UGC on different platforms also creates a new type of "mini-entrepreneurs," and bigger platforms create its own ecosystems where it is possible for these "mini-entrepreneurs" to generate revenue. Several people are able to make a living from producing content for YouTube. The same goes for Google or Apple's app store. Also Lyft, Uber and Airbnb are good examples of these digital platforms that create new job opportunities (Kenny, 2015). The review site Yelp is another example of a company that grew exponentially from UGC. Yelp has more than 18 million reviews created by users and is visited 50 million times a month. The interesting concept here is how Yelp rewards its users. For the elite users Yelp hosts different events across USA that only elite yelpers can attend. This creates hype around being an elite yelper, an "honor" only the best contributors will have. A stamp of approval (Piskorski, 2013).

Twitch and Beam both consist on UGC only, as the platform only works as a mediator between content creators and viewers. Throughout the analysis I will look into the user participation on the UGC seeing as it was very low on YouTube.

2.9 Digital customer relations

As the digital technology evolves and more information is accessible via the Internet, industries are getting more transparent and traditional push marketing is less viable than before (Payne et al, 2005). One of the reasons customer relations are important is as Payne mentions: "*Nowadays, customers represent a moving target and even the most established market leaders can be ousted quickly from their dominant positions.*"

Because of the digital technologies, customer relationship management (CRM) can be done very efficiently and it is possible to communicate with thousands of customers at once via new technology. "*CRM is aimed at increasing the acquisition and retention of profitable customers by respectively initiating and improving relationships with them.*" (Payne et al, 2015).
Because the market can change in an instant it is no longer viable to put your trust in low prices and convenience as your competitive advantage. Customers want to build relationships and they want to know you as a company and care about them specifically.

Payne mentions seven new trends arriving with the era of relationship marketing. Those seven are:

1. The shift in business focus from transactional marketing to relationship marketing

2. The realization that customers are a business asset and not simply a commercial audience

3. The transition in structuring organizations on a strategic basis from functions to processes

4. The recognition of the benefits of using information proactively rather than solely reactively

5. The greater utilization of technology in managing and maximizing the value of information

6. The acceptance of the need for trade-off between delivering and extracting customer value

7. The development of one-to-one marketing approaches.

In the analysis I will investigate which, if any of these points Beam and Twitch are utilizing.

2.2 Summary

All concepts shown in table 1 have been examined and their relevance to digital platforms has been explained. Looking at the literature on the subject of digital platforms, it is clear to see there are many factors to account for when it comes succeeding in the platform era. When one wants to create a digital platform it is important to acquire an (1) initial customer base, which can be done through (2) social strategies. Once a platform has its initial customer base, it needs to utilise (3) network effects to grow the amount of users and engage the users to create their (4) own content and to keep streamers engaged, platforms need to be functioning (5) online community or communities depending on the situation.
While this process is happening, it is important to regulate platform control and keep the question in mind. Do you want an open or a closed platform? Furthermore, your CRM strategy as a digital platform can be the difference between success and failure. The reason I distinguish customer relationship management and digital customer relationship management is that there is no physical presence for a digital platform. There is no flagship store or

accommodating personnel, only what you see online. Beam and Twitch will be examined in a case study further ahead in the paper. Below I have created the conceptual framework derived from the literature.

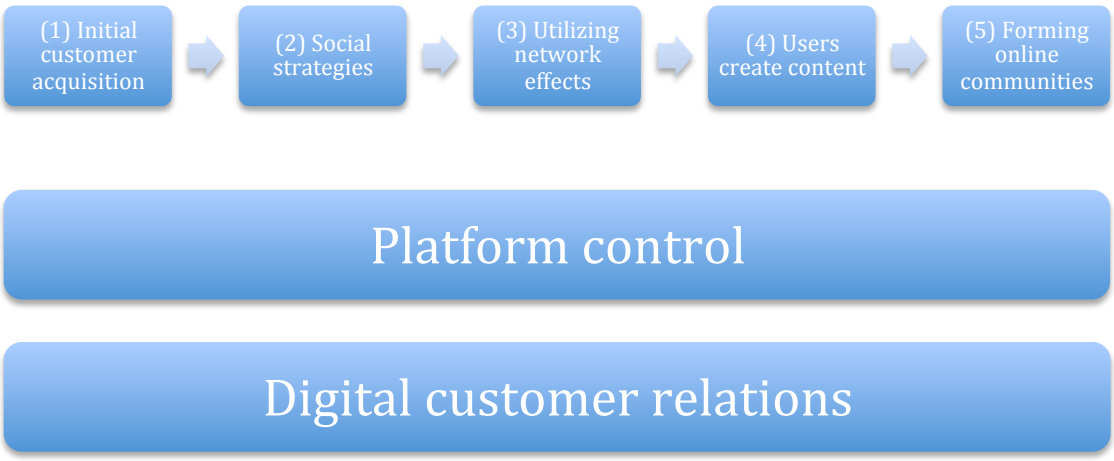


Figure 1 Conceptual framework

The main goal is to find out what makes a successful platform in terms of initial customer acquisition, and how to keep users engaged on the platform. The seven concepts will be analysed using the literature and eight qualitative interviews with live streamers.

3. Hypothesis

My research question builds on a better understanding of digital platforms and how to successfully launch and maintain such a platform. There are several factors for success. My main focus in this thesis will be how to get hold of the initial live streamers and how to keep them committed.

After my initial research into the subject, I have several hypotheses I wish to confirm or deny.

"Community matters:" Having a strong community will help keep live streamers engaged and in time more will join the community. Thereby the adoption of live streamers is connected with a functioning community.

"*Platform control needs to be limited:*" You have to give up some control of your digital platform in order to become a success. You can't have a completely closed ecosystem. You need third-party developers if you wish to grow and stay relevant.

"*Rich get richer*" As soon as you have the initial active users, your platform will grow in size organically. Getting the first users will be the hardest part. Once you reach critical mass and it is attractive for users to be on your platform, these users will automatically generate new users via blogs, social media and word of mouth.

This hypothesis has been reached by looking at the digital platforms Beam and Twitch, the literature and my own personal experience with both platforms.

4. Methodology

This chapter goes in depth with my choices of methodology. The methodology chapter is important because it guides my research and makes sure I don't get lost in my own bias. It accounts for my research philosophy and research paradigm.

Throughout the chapter I will explain my embedded case studies to give a better understanding of why they are chosen. Furthermore, I will explain my philosophy and approach to this thesis to give the reader a better understanding of my methodology choices and research design. My data collection and data analysis will be explained while also clarifying which interview participants I've chosen and why. I will explain my research question and the underlying reason for choosing this research, and also giving the reader insight into my interview guide. In the end I will be reflecting upon the reliability and validity of my research to make sure I write a trustworthy thesis.

4.1 Choice of case and organization

Throughout this thesis I am studying two different cases. The first case is Twitch, a live streaming platform. Twitch is relevant because they have been a market dominator when it comes to live streaming of gaming, and are now working on expanding their "creative" and music live streaming as well. Twitch as a live streaming gaming site sets the standard for the eSports streaming industry and have partnerships with several industry giants when it comes to hardware and software. Twitch was a stand-alone company a few years ago, but was bought by Amazon for 970$ million dollars and has over 100 million monthly unique users (TechCrunch, 2014).

The second case is Beam. Beam is a live streaming site for gaming that has operated since 2016. Beam was recently bought by Microsoft for an undisclosed amount, and is a direct competitor to Twitch. Beam is an interesting case because they are trying to conquer a market already heavily contested by Twitch. Looking at both cases can give me a better understanding of how to get the initial customers, and how both platforms keep them engaged from live streamers point of view. Throughout my interviews I will interview people who have been either streaming on both platforms, or are regular viewers on one and streaming to the other.

4.2 Philosophy and approach

The research philosophy adopted in this thesis is interpretive research paradigm, and I am undertaking a subjectivism point of view. Saunders et al, 2012 mentions: "*The subjectivist view is that social phenomena are created from the perceptions and consequent actions of social actors*". I use a deductive method of thinking, which works from a general view, ending up in very specific observations. My theory on the basis of my own knowledge about the subject along with my literature review, enable me to create hypotheses that I can investigate through qualitative interviews with live streamers. It is my intention that these interviews along with data found on the subject discovered elsewhere, will end up in a confirmation or denial of the initial hypotheses and provide

answers to the research question. I conduct a cross-sectional research due to the time constraints of the thesis. However, it could be interesting to interview the same people about some of the same concepts after Beam have had time to grow.

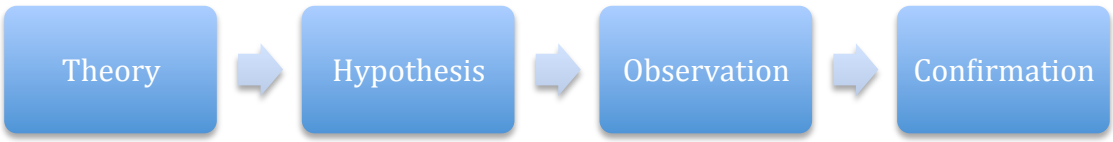


Figure 2 Deductive research approach

4.3 Research design

The research design is focused around multiple case studies of Twitch and Beam. A case study is defined as "*a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence*" (Yin, 2003). The reasoning for studying multiple cases is to compare and evaluate. It is important for the thesis to see if users of Twitch are using it for the same reason as users of Beam. Twitch was founded long before Beam, and it is interesting to see why streamers would choose Beam over Twitch. Furthermore, Beam and Twitch uses two different approaches to their UI design and level of viewer participation, and it is, therefore, relevant to look at both cases to see what works and what doesn't.

4.4 Data collection

When conducting the semi-structured interviews, I used audio recording and took notes. Some interview subjects were interviewed via Skype and some in person. It would be too hard to find streamers with relevant experience in Denmark only. That is why I conducted most of the interviews via Skype and interview participants were chosen from the USA as well. The question I asked would vary a bit from the interviewee's answer, but the overall topics stayed the same. "*In semi-structured interviews the researcher will have a list of themes and questions to be covered, although these may vary from interview to interview*"

(Saunders et al, 2012). I asked every participant to introduce him or herself in order to get some more detailed background information before starting the interview. Before initiating the interview, all interview participants were briefed on the overall topics and told to include as many examples from their own streaming experience as possible. The emphasis in my semi-structured interviews was more on the "why" than on "what" and "how" (Saunders et al, 2012). Overall I ended up with eight interviews with eight different streamers. Four streamers from Denmark and four from USA. I attempted to get hold of employees from both Beam and Twitch, but was unsuccessful. Beam is still in its start-up phase and they were all too busy for interviews. Twitch does not participate in interviews, but referred to their pressroom site instead.

4.5 Data analysis

In order to analyse my qualitative data, I transcribed all oral interviews to make it easier to access. After transcribing the interviews, I was able to look through each interview, searching for the concepts from the theoretical framework: Platform economy, initial customer acquisition, social strategies, network effects, online communities, platform control, digital customer relationships and user-generated-content. I went through each transcribed interview and divided sentences and important statements into the eight concepts. Some sentences and statements would prove to involve several concepts, and would therefore reoccur twice or more for the same person.

Brent Reise states: "*If you get the initial followers on the stream it will rank higher and more will come, and eventually people started watching and following. I jumped up to like 20 subscribers after my friends have helped me in my first stream. In my second stream I got 60 followers just in that day so now I have 85 followers. These people who are following me and talking to me, they are messaging me and I feel a little bit famous even with only 85 followers. I feel I'm a part of something.*"

As an example this sentence involves network effects. The more people that are on your stream the higher you will rank, and thus it will be easier for other

people to notice your stream. Value through numbers. On the other hand, it also involves online communities because he feels a bit famous even with only 85 followers. And as he says he "feels like he's part of something". In that case the sentence would occur in both concepts. The full coding can be found in the appendix. During my interviews I was made aware of a new concept that were mentioned several times: Digital Partnerships. This concept is not a part of the conceptual framework, but because it appeared to play a big role in the adoption and engagement of digital platforms, I have chosen to include it in my analysis.

4.6 Interview participants

My interview participants consist of 8 live streamers on Twitch and Beam. The interviewees are mixed nationalities because it proved too difficult to find enough relevant live streamers from Denmark who were willing to participate. A description of each interview participant and their relevance to the live streaming community can be found below.

Interview person Andreas Lagersted, age 27. Andreas is studying on ITU and is working with online radio. He has been streaming music production and other creative content to Twitch and YouTube and has tried Beam out as a streamer, but mostly as a viewer. Andreas has been streaming for two years and watching streams since Twitch was Justin.tv back in 2011. The interview with Andreas was conducted face-to-face in Copenhagen.

Interview person Claudio Saavedra, age 26. Claudio is a Danish live streamer who has been streaming on Beam, but is currently only streaming on Twitch. Claudio goes by the name CauCauTV when he streams the computer game Hearthstone. He is studying anthropology, and is streaming for 50+ viewers three days a week on a consistent schedule and has been doing this on and off for a bit over two years. The interview with Claudio was conducted face-to-face in Copenhagen.

Interview person Michael Caras, age 30, New York. Michael has been streaming for several years both on Twitch and recently Beam. Michael has worked for ESL which is known for hosting different eSports tournaments, and is usually streaming CS:GO on Twitch or X-box games on Beam. Michael has streamed for up to 1,000 players at the same time and has been a moderator on different other Twitch channels. The interview with Michael was conducted via Skype due to his geographical location.

Interview person Matt Franklin, age 32. Matt is living in Atlanta, Georgia, USA and is currently working for the Georgia Game Association also know and referred to as GGDA. Matt and his wife run the streaming channel "Most Uniquest" and he came to Beam from YouTube where they normally used to upload videos. Matt discovered Beam through his work that wanted to go into live video streaming in order to get a broader audience. Matt along with his wife streams on a schedule three times a week. Sometimes more, depending on how much more time they have. The interview with Matt was conducted via Skype due to his geographical location.

Interview person John "Shufunk" Shufelt, age 29. John works at a hotel. He has been live streaming for eight years. John spends most of his free time live streaming at different live streaming sites and has tried them all. John has been engaged in the different live streaming communities for eight years and has written several blog posts about being a live streamer and how the scene has evolved throughout the years. The interview with John was conducted via Skype due to his graphical location.

Interview person Lasse "Brixen," age 27. Lasse is a part of the gaming community Gamerhuset that closed in November 2016. Gamerhuset was when it was still running, the sixth most viewed live stream gaming channel on Twitch. Gamerhuset was a collective of four people playing computer games 24/7, 7 days a week. Currently he is working as an eSports consultant and is discussing job opportunities with Twitch. Lasse has been streaming since 2013, and has tried

many different live streaming sites including Beam, Twitch and Hitbox TV. The interview with Lasse was conducted via Skype due to his geographical location.

Interview person Andreas "Jern" Hjort Thomsen, age 27. Andreas has, like Lasse, been a part of Gamerhuset. Andreas has been streaming since 2011 when Twitch was known as Justin.tv. Currently Andreas is studying, and has still been streaming since Gamerhuset closed down in November 2016. Andreas has experience with both Beam and Twitch, however, he mostly uses Twitch. The interview with Andreas was conducted via Skype due to his geographical location.

Interview Person Brent Reise, age 22. Brent is a relatively new streamer from Nevada, USA. Brent was chosen by the fact that he recently adopted streaming on Beam and previously had experience with Twitch. Brent has been streaming for up to 100 people simultaneously, and knows his way around the live streaming environment. Brent provides insight into why someone would stream to Beam instead of Twitch even though Twitch is the market dominator. Brent is streaming from both console and PC. The interview with Brent was conducted via Skype due to his geographical location.

4.7 Research question

What drives people to adopt and stream to live streaming gaming platforms and what keeps them engaged in streaming?

4.8 Interview guide

I have conducted eight semi-structured interviews allowing for answers to more complex questions, and allowing for open-ended questions so that the interview subjects could elaborate. I used probing questions such as "why do you choose Twitch over Beam?" to explore response and gain greater insight into the behaviour of my interview participants, since my study mostly focuses on the behaviour of live streamers. I choose 8 streamers with different amounts of viewers. However, all live streamers that I interviewed were in the viewer range

from total unique views 20,000 – 200,000. A more detailed description of my interview participants can be found in the section "interview participants". The initially planned interview can be seen below.

4.9 Interview for streamers

1. How long have you been streaming for?

    1.1. On which platforms?

2. Why did you begin streaming?

3. How were you introduced to the streaming platform of your choice?

    3.1. Did you at that time know about other streaming sites?

    3.2. Why did you choose the one you ended up with over the other options?

4. Have you tried other live streaming sites than the one you currently are using?

    4.1 If yes, what are your experiences with the other sites?

5. Was it easy to get started, or were there any barriers you had to overcome?

6. What were your considerations when choosing a live-streaming platform?

7. Does the social aspect mean anything to you? Interaction with viewers, community, gameplay interaction etc.

    7.1 How much does donations matter to you?

8. What do you think keeps you engaged? Why do you keep streaming?

    8.1 What do you think keeps people engaged?

    8.2 What do you think drives people to donate money?

9. Does the amount of UGC matter to you as a streamer?

10. Does it matter how many people are using the same platform as you?

11. How are the customer relations on the platform? And does this matter to you?

12. What could make you change platform?

13. Do you feel you are in charge of your own stream?

13.1. How is the platform control? Can you integrate the things you want? Third party applications and so on?

13.2. Who has the legal rights to the content you produce and does it matter?

14. Do you have any predictions for the live-streaming platform industry within the next couple of years?

This order was not followed in the actual interviews due to the fact that interviewees often answered several questions at once. I encouraged them to talk as much as possible on the subject. These were, however, the subjects that were important to cover in order to get data for my analysis.

4.10 Data quality

When conducting interviews, and in general having to deal with any sort of qualitative or quantitative data, it is important to assess the data quality. There can be different important factors to look at when assessing data quality such as interviewer bias, or the reliability of the findings. When conducting the interviews, the five P's are important: Prior planning prevents poor performance (Saunders et al, 2012). The level of knowledge you as an interviewer possess can help to show your credibility, and can lead to more detailed answers from the interview subjects. When it comes to live streaming platforms I have myself used many different sites and have personal extensive knowledge on the topic of interest. When it comes to interview locations, it was difficult for me to impact

because of the geographical locations of my interview participants, and therefore I was not able to control if the interview would be disturbed by other events. After conducting the first couple of interviews, it seemed as if it was a good setting for the live streamers to be interviewed via Skype. It is their natural habitat to be stationary in front of a computer talking via their microphone. That is after all what they do, when they are live streaming. The first few minutes of the Skype conversation was small talk. This in order to ensure the interviewee was relaxed in my company, and in order to properly brief the person on the topics at hand. All interview participants had prior to my call received information regarding the theme of the interview, but to make sure everyone understood the context, I spend some time on it at the beginning of each interview.

4.11 Reliability, generalizability & validity

For me next to becoming credible towards the interviewees, important factors for data quality are; reliability, generalizability and validity. It is not intended for non-standardised research methods to be reliable in the sense that another research can't achieve the exact same results. But neither is it meant to be. The non-standardised research methods reflect the reality of the time when they were collected (Saunders et al, 2012). For my research one of the questions regards current satisfaction of live streamers, which can essentially change from day to day. One event that leads to reduced satisfaction for the interview subject can lead to other data than what I have collected, and is therefore not reliable – and not meant to be. My research questions are based on what drives people to adopt and stream to live stream gaming platforms, and what keeps live streamers committed to doing so. This is an ever-changing subject, and you will most likely get different answers to many of the questions, depending on the day you conduct the interview. When it comes to the generalizability of the findings, it is possible to show more general data by comparing it to the existing literature and theories. For this research I am focusing on two different cases: Twitch and Beam. Through my research I can confirm or deny existing theory. Should my findings be relatable to the existing theory, it is safe to say that it might be more

general than you would think, having interviewed only a small sample of live streamers.

Validity is the concern that the findings you get from your data really are about what you think they are about. You can encounter different threats to validity throughout your data collection: History, testing, instrumentation, mortality, maturation and ambiguity about casual direction. In my interviews I made sure that all interviewees were fully informed about the topics and the focus of the study, before conducting the actual interviews. When I then met the interview participants or called them on Skype, I made sure to double check that they knew the focus of this thesis: Why people would adopt live streaming platforms and what kept them engaged. Thus I tried to avoid challenges with validity. However, one challenge that I encountered throughout my interviews was the fact that my interviewees might not be able to remember the actual situations accurately. The interview subjects were chosen also because they originated back to when Twitch started, but that was back in 2011, and some might not recall exactly what engaged them in the first place. This could prove to be a problem for data validity, but it is something I can't control as an interviewer.

5. Case description

In this chapter I will go through the companies that my case study focus on in order to make sure the reader has the same understanding of the cases as I do. I will introduce Twitch and Beam and touch upon their history in the live-streaming platform industry.

5.1 Twitch

To get an idea of where Twitch originated we have to go back to 2005 with the creation of Justin.tv.

Justin.tv was a website where you could follow the creator Justin Kan live-stream himself and what he was doing. His vision for Justin.tv back then was to create a "big-brother-like reality show" (Kan, 2014). Soon after launching Justin.tv, the team behind it, however, realized that people weren't that interested in just

watching what Justin did. But according to Justin Kan, they got a lot of interesting feedback. One of the things they noticed was thousands of requests from people who wanted to create their own live streams. In 2005 live streaming was not as easy as it is today. The right hardware and software were not as commonly available. And back then the broadband speed also proved to be a barrier. Therefore, it wasn't until 2007 that Justin.tv became a platform where everyone could live stream. From 2007-2011 Justin.tv was becoming more and more popular and was often featured in the news. In 2011, Justin.tv separated its gaming section into a sister site, the one we know today as Twitch.

Since then Twitch has only seen exponential growth. In 2013 the digital platform had reached 45 million unique visitors (Ewalt, 2013). In 2013 Twitch almost had monopoly in the live streaming gaming industry (Popper, 2013). In April 2014 Twitch was responsible for 43% of all live video streaming in USA (Qwilt, 2014), and in August 2014 Amazon bought the company for a stunning 970$ million.

Picture 2 Justin.tv in 2005

Twitch's business model is built around serving a multi-sided market, and mostly works as a facilitator of content. One side of the market is the viewers who watch live streams and interact with the streamers. It is not unusual to see several thousand viewers online at the same time. When the bigger eSports tournaments are played, viewer numbers can amass to a staggering amount, reaching almost a million at the same time. The viewers are able to donate money and subscribe to streamers. Twitch's revenue model revolves around commercial fees and taking a small percentage of the subscriber fee. For donations Twitch does not receive any money but recently the company rolled out something called 'bits,' a virtual currency for tipping streamers. When payments are done, Twitch takes a small cut. Had Twich purely operated through

donations, a small cut should have been paid to PayPal. Thus it does not change the cost for the viewer.

The other segment on Twitch is the streamers. The streamers are the content creators for Twitch, and often the ones that are bringing in viewers as well. Twitch has made it possible for the streamers with most consistent viewers to make a living of playing video games. As stated in many of my interviews, being a full time streamer is hard, and a very uncertain business. But the reward can for some be a lot of money and fame. Many other eSports organisations look to Twitch to find new talents or find gamers they wish to sponsor. The more eSports grow in popularity the more Twitch will grow in popularity.
Twitch has been a market dominator for several years but recently several new companies are trying to get a share of the live streaming gaming market. New companies are being founded such as Beam, and established companies such as YouTube are beginning the see the value and the potential in the live streaming gaming market.

Twitch has with their very open platform become a go-to for other websites that want to show streaming as well, because it is so easy to embed a Twitch stream into your own website. Many websites such as Gosugamers, Joindota and FACEit transmits live streaming but they use the Twitch client.

On the US version of Twitch, you are now able to purchase games as well. Thus Twitch is moving from a mediator of content to a market place for everything that is gaming related. Twitch was originally a channel on Justin.tv dedicated to gaming, until it simply took over and became so huge that it was decided to make it a new stand-alone company (Popper, 2013).

5.2 Beam

Beam is a Seattle based live stream gaming company founded in 2016 by the only 18-year-old, Matt Salsamendi.

Beam was founded on the belief that live streaming was mostly about the social interactivity and the online communities, but that it was too hard to control on Twitch (Salsamendi, 2016). Beam, only one-year-old has not had much of a history yet. However, the start-up won the TechCrunch Disrupt Competition, and recently, after Microsoft bought the company for an undisclosed amount (TechCrunch, 2016) Beam will be integrated with both the X-box and Windows 10, making it very accessible to all Microsoft users.

Beam is utilizing new technology to try to bring delay from streamer to viewer down to as little as two seconds, while simultaneously increasing the interactivity between viewer and streamer through some in-platform controls that are integrated with the games' streamers play. The Beam business model is identical to Twitch with a multi-sided market catering to two different segments. Basically, as some interviewees mentioned as well, Beam is just a more interactive copy of Twitch. Since Microsoft bought the company, they must have seen a potential in conquering some of Twitch's market share.

Picture 3 Beam Interactive

6. Analysis

In this chapter I will attempt to answer what drives people to stream to live stream gaming platforms and what keeps them committed to streaming. I will do so by comparing data provided by the interviewees and looking at existing

theory on the subject. I will go in-depth with each concept from the theoretical framework, thereby dividing the analysis part into different segments. Digital platform economy, initial customer acquisition, social strategies, network effects, online communities, platform control, user generated content and digital relationships. In addition, I will also go through the newly discovered concept; digital partnerships. The relationship between existing theory and data, derived from the interview subjects will be examined to build upon or create new theory. Hopefully this will result in answers to my hypothesis as well. My research question is seen from a live streamer perspective, which is why all my interview participants are streamers.

6.1 Digital platforms – the platform ecosystem

Digital platforms are a wide term. When looking at the platform ecosystem in this thesis, I will be analysing how Twitch and Beam are creating jobs within their respective platforms. Jobs are not meant to be interpreted as how Twitch hires an infrastructure manager or a programmer, but how the platform ecosystem enables their streamers to monetize their channels and what value it adds to their platforms.

"In fact, rather than charging users to join the platform, the founders should be subsidizing their participation—perhaps by providing tools and services to make it easy, fast, and effective for them to complete their profiles" (Choudary, 2016).

This excerpt from the Platform revolution perfectly describes how you need to open up your platform for new users, making barriers of entry as low as possible. Twitch and Beam built their platform with this in mind, making new entry as easy as possible, within the limits of technology. On both platforms you don't need to pay or even sign up to watch, but if you want to stream you will need to create a free account. None of the platforms have any forced payments, but utilise a freemium and premium user model instead. With the premium account you have more features, but none of the essentials are left out in the free version.

When it comes to convenience, Beam has taken it a step further integrating Beam in the most essential Microsoft products such as the X-box and Windows 10, enabling easy access for users as well as streamers.

Twitch and Beam enable streamers to create their own "jobs" so to say, on the platform. The more the streamers advertise and lure in viewers with special events, give-aways and what else they can think of, the more they are able to make from it. The majority of my interview participants said they didn't do it for the money they could make, but they still accepted the money and some of them even bought new hardware from the donations alone.

"I have used my donation money to buy a new webcam, keyboard, mouse and headset only from donations." (Saavedra, 2017)
Even though making money isn't the main reason for many streamers to use the platforms, it can't be ignored. Besides receiving donations, the streamers get 90% of the subscriber fee their channel generates, and the minimum subscriber fee is 4.99$ (Twitch, 2017).

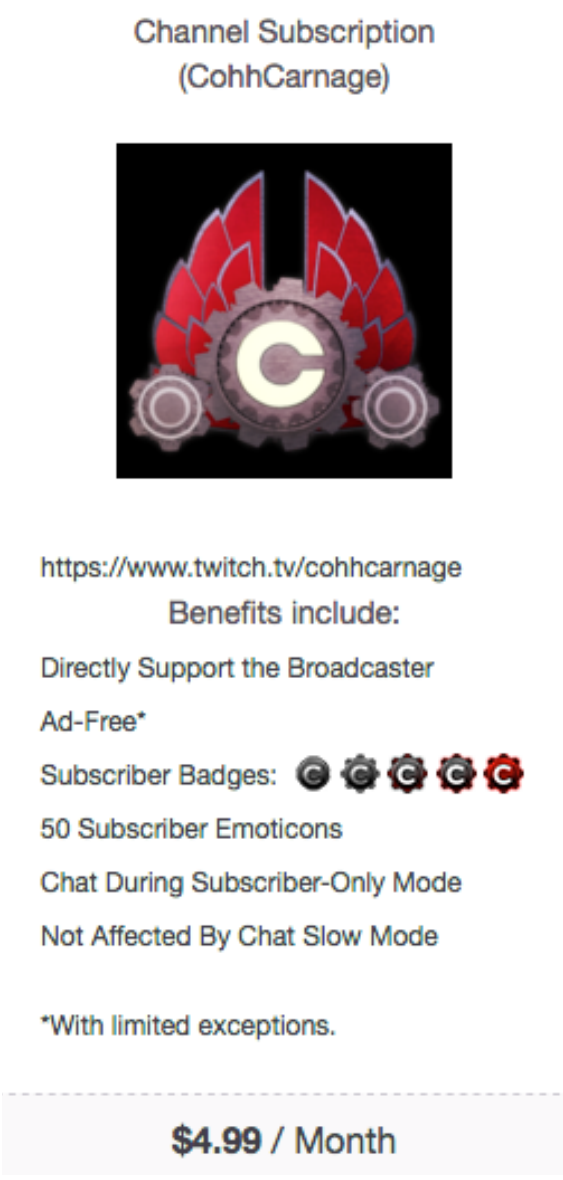
"We have made more money with Beam then we have with YouTube. I can't go into numbers but I can tell you that it being live helps a lot. The interaction between the audience and me seems like it makes people more willing to tip us." (Franklin, 2017).

As Matt states, for him and his wife the money does matter. Switching from YouTube, a place where he has been for several years and to Beam, a relatively new platform, has already made him earn more money.

"We have done some call to actions where we said, "Hey, if you tip us tonight send us your address and we will mail you a thank you note" and we got some money from that" (Franklin, 2017).

Looking at the interview with Matt Franklin, it is obvious that he and his wife go that extra mile to earn revenue from the platform. This extra call to action was

done on Beam, and it clearly means a lot to him that he can make money from it. Below can be seen an example of another streamer going that extra mile to compete for attention. (See figure 5).



Picture 4 Subscriber benefits

On both Beam and Twitch streamers are allowed to have advertisement deals when you reach the level of partner. I will go into detail with the partnership feature in one of the later sections.

"A platform requires continuous innovation in terms of value proposition and business model to create superior value for users, suppliers and partners in the Ecosystem." (Accenture, 2016)

As stated above a digital platform should always be evolving to create new value. In Twitch's case it has not so much been the platform that has been evolving, but the streamers and the developers of third-party applications. Looking at figure 5, it is clear how the streamer himself has evolved.

CohhCarnage in this example has created his own visual logo to support his profile, and he has even worked on developing subscriber badges. The "50 subscriber emoticon" pack is something that Twitch has developed beforehand, but the rest is not. In a competitive ecosystem with many streamers fighting for attention, streamers are pushed to evolve and create new initiatives to create and maintain attention, something Twitch partially reaps the benefits of.

The book Platform Revolution describes four broad categories of value for multi-sided markets. The category Twitch and Beam fits under are:

"For producers or third-party providers: Access to a community or market" (Choudary, 2016). The assumption that Twitch and Beam creates value by giving people access to a community fits well with the data collected from the interviewees. And John Shufelt describes his first experience with online live streaming as *"this new technology just enabled everyone to create their own broadcast"* (Shufelt, 2017). The key words here are "enabled" and "everyone". The platforms provide users the opportunities to unfold creativity within the community.

Important findings for this section is that Twitch and Beam both have created environments where streamers are able to do business and even employ themselves creating their own revenue streams, and decide their own level of interaction with users. If you are engaged as a streamer, you have the option to optimize your stream in many ways, creating your own designs and giving viewers a unique experience, which may lead to an increased revenue stream. On the other hand, Twitch and Beam does not close the platform for the more casual streamer who wants to live stream once in a while without making any substantial money of it. For my interviewees it seemed only Matt Franklin was very concerned about making money on Twitch and Beam. However, everyone had received donations. In the section "online communities" I will investigate further if people would do it if money was not involved.

6.2 Initial customer acquisition

In this section I will look at what Twitch and Beam did to gain initial traction to their platforms and through the interview data I will look at why the eight streamers I have interviewed started streaming on the platforms they selected. I will start by analysing the way Beam got initial traction, then Twitch and then compare the data given from the interview participants.

Beam launched in 2016 at the TechCrunch competition "NYdisrupt". The digital live streaming platform praised itself at being a much more interactive experience, and with new technology the platform would be able to reduce the delay from streamer to viewer to maximum two seconds. At that time in 2016 the time between streamer and viewer could be up to 20 seconds on Twitch (Shufeldt, 2017). Behind the platform was a very young CEO, Matt Salsemendi, who were only 18 years old at the time of launch. Beam eventually won the competition and not long after, Microsoft bought it for an undisclosed amount (TechCrunch, 2016). Beam used social media to promote the platform, and because of the victory in the tech competition, it got a lot of attention on different tech forums. After Microsoft bought the platform, it got a lot more resources to work with, and the real customer base started appearing after Microsoft opened the direct access to Xbox, the "one-click access" (Franklin, 2017). Also Beam will be integrated with Microsoft 10, giving Xbox and computer users one-click access in the near future as well. The one-click action was the reason interviewee Brent Reise choose Beam over Twitch *"I started on Beam because it was easy, you don't need a capture card, you don't need anything. So I think that's really cool about Beam."*

Another way Beam is trying to draw users from Twitch is by focusing on the interaction, Matt Salsamendi the Beam CEO states:

"The service allows gamers to contribute directly to onscreen gameplay through crowdsourced controls. Broadcasters can have viewers pick the weapon they use before heading into battle. The service also supports fully group-autonomous gameplay, where the viewers are the only ones controlling a character. This

seemed a bit dizzying for adventure games, but certain genres certainly work better."

The phenomenon of interactivity in gameplay and controlling the flow of the game as multiple people is not new. An anonyms Australian programmer created a version of the classic Pokémon Red game where everyone could enter input controls at the same time. The Twitch recap from 2014 describes it best:

"*In total, the army totalling 1,165,140 of you furiously entered chat commands to guide our Hero through the perilous trials of Pokémon Red and brought the world a thrilling conclusion. Nine million onlookers watched, enthralled and perplexed, as millions of "up", "down", "right", "left", "democracy" and "anarchy" orders flooded the battlefield. No giant amorphic General has ever fought so inefficiently yet so effectively. As a result, the Event has far transcended the gameplay itself, generating life-important discussions about religion, politics, mythology, and the importance of collaboration across cultural boundaries."* (Twitch, 2014).

To sum it up here are the numbers the co-operation version of the game brought to Twitch. The stats below are from Twitch's website, 2014.

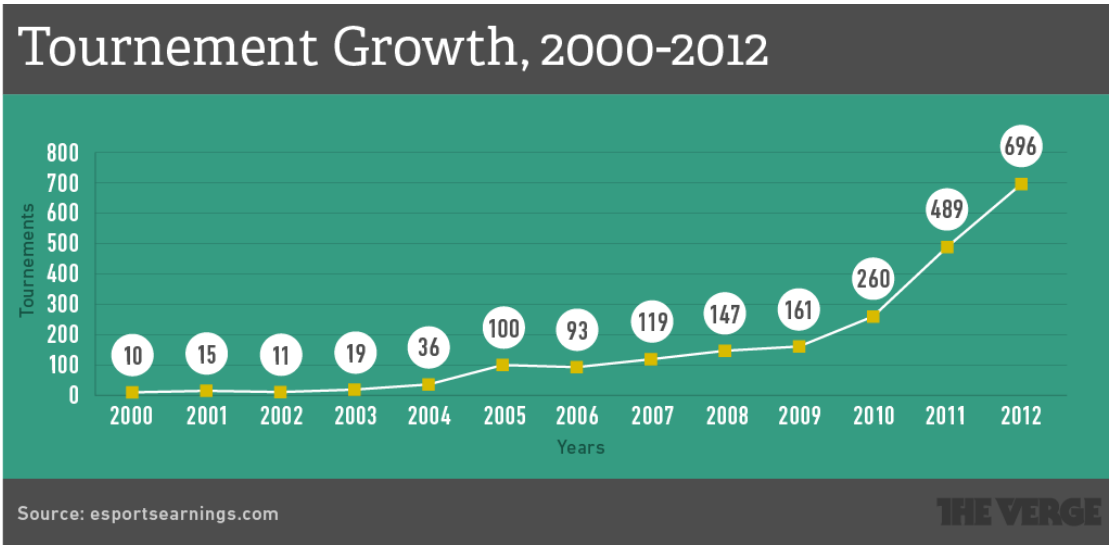
- The unfolding of the Story: 16 days, 7 hours, 45 minutes and 30 seconds.
- Pokémasters who mashed their keyboards: 1,165,140
- Commands issued: 122+ million
- Peak Pokémasters watching: 121,000
- Onlookers: 9+ million
- Total views: 36+ million
- Minutes watched: 1+ billion

This leads us to how Twitch got initial traction. I won't go into detail with the background story for Twitch as it was explained earlier in the thesis, but all the attention was generated at the launch of Justin.tv when inventor Justin Kan wore

a baseball cap with a camera attached, that live streamed his everyday life. That stunt alone gave Justin.tv a lot of media attention, and he was even featured on CNN (CNN, 2009). Back then live streaming was something new for the general public and Justin.tv got a lot of requests on how people could set up their own streams. Eventually Justin.tv was made accessible to all, and people were flocking in to try this new technology. Twitch was originally a channel dedicated to gaming on Justin.tv, but at some point the channel outgrew the original company and the current CTO of Justin.tv, Emmett Shear, decided to make it a stand-alone company. One of the reasons why Twitch became so popular were all the eSports tournaments it was broadcasting. Twitch, with its new technology made it much easier and affordable to live stream gaming and therefore tournaments choose Twitch as their live streaming platform.

"Twitch has given tournament promoters the ability to cheaply and easily push live streams to millions of viewers with minimal lag. On the consumer side, it's now possible for anyone with a PC to get in on the action. On average, more than 600,000 different players broadcast several million hours of gameplay on Twitch each month. And the number of potential streamers is about to get much bigger. With Twitch being integrated into the Xbox One and PlayStation 4, anyone, even with no technical sophistication, can be playing a game, and with the press of a button, be broadcasting their action live" (Breslau, 2013).

Breslau describes Twitch's monopoly on the live streaming market in 2013 like this: *"When it comes to the broadcast of big events, they have a stranglehold on the market, at this point folks just refer to them as the ESPN of eSports."*



Picture 5 Tournament growth

To sum up this section I found out it is difficult to provide any concrete answers to why people initially adopted Twitch and Beam from the interview data alone. Some of the interview participants tried it out because it was "new and free" (Lagersted, 2017), while others tried it out mainly because it was the only live stream gaming site they knew at the time (Shufelt, 2017). When looking at the history of Twitch, it is clear that the platform had the first-mover advantage and brought a new and convenient way for eSports tournaments to show what that was all about. Since then it is apparent that streamers do a lot to attract an audience to Twitch by using social media and partnerships to create hype around their channels. To provide an example, the streamer Nightblu3 who streams League of Legends has 264,319 followers on Facebook. If he just brings 10% of those to Twitch it's still a big audience. Twitch has been very successful at getting other brands to embed the Twitch streaming tools, and thereby generated a lot of attention.

6.3 Social strategies

This section focuses on which social strategies Twitch and Beam are using to acquire streamers, and how social strategies can be a part of keeping streamers engaged. I will look at existing theory and compare with the data provided by the interviewees.

Social strategies are often seen around the web on digital platforms. Airbnb amongst other uses the "recruit a friend" to get users to acquire customers for the platform. eBay uses the "people who bought this also bought xx" in the attempt to make the communication from user to user instead of company to user.

"The primary advantage of a social strategy over a purely digital one is in tapping into how people really want to connect—with other people, not with a company." (Piskorski, 2013)

This is the essence of Beam and Twitch. Create an environment where you connect viewers and streamers and let them unfold without too much interference from the platform owners. Brent Reise, one of the interviewees, got his friends to come and watch him play because he needed the initial viewers to get noticed among the other streams and as he says:

"I jumped up to like 20 subscribers after my friends have helped me in my first stream. My second stream I got 60 followers just in that day so now I have 85 followers" (Reise, 2017).

That is him, asking friends to join him on the platform and not the Twitch or Beam. And the social aspect has been working for both platforms. When Lasse Brixen was asked about his time live streaming on Twitch from Gamerhuset he said:

"Never in my life have I been talking to more new people than I did in that period and never in my life have I been having so much fun with my friends" (Brixen, 2017).

For a live streamer it is important to have the initial backup of your friends. And if you interact in social settings where there are other gamers, it will be natural for the streamer to get his friends on Twitch as well. It is safe to say that the social strategy has worked. Connecting people with people is one of the essential parts of a successful social strategy (Piskorski, 2013).

Viral growth can be a complementor to different strategies, but most likely it will happen as a positive side effect of a successful social strategy. Viral growth can drastically improve the user base of a digital platform, and can change the traditional B2C pull marketing to C2C. "*When users themselves encourage others to join the network, the network becomes the driver of its own growth*" (Choudary, 2016).
Choudary also mentions four key elements that are necessary for viral growth to occur. These four are: The sender, the value unit, the external network, and the recipient. These four elements will be analysed using Matt Franklin, the interviewee, as example.

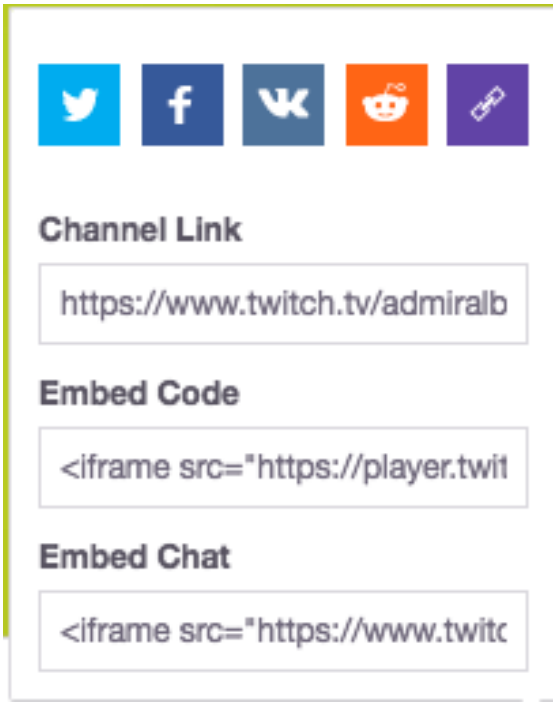
The sender: Matt shares his stream asking people to watch him live stream at 8 pm.

The value unit: Is the content Matt is sharing, in this example this would be his live stream channel "Most uniquest". Where he and his wife are broadcasting a drawing class.

The external network: In this example the external networks are social media as Matt describes, using Twitter, Facebook and Instagram to advertise for his live stream.

The recipient: Is someone who sees Matt's post on Facebook, goes to Twitch or Beam. Watches, and eventually that person creates his own stream and the process repeats itself. When Matt talked about his followers on Beam he said the following *"Those who love it will share everything and almost "work" as advertisers for your stream they will share everything on their own social media*" (Franklin, 2017). In this case it is not Matt himself who generates the viral growth, but his followers. Twitch and Beam are designed on purpose to encourage sharing of content. One of the most accessible buttons on Twitch streams is shown below.

On the right is an example of the sharing function of Twitch linking to Twitter, Facebook, Reddit and other social media sites. Also there are embedding links for both the chat and the video streamer making it incredibly accessible to embed to other websites. If you browse through Twitch and Beams' streamers it is almost impossible to find someone without several active social media profiles. Sometimes the social media accounts are the private accounts of the streamer, but mostly the streamer has a gamer tag or an online identity they use for advertising on social media.



Picture 6 Sharing options on Twitch

"*In general, users spread self-created value units to get social feedback, which in turn may bring them fun, fame, fulfilment, or fortune—or some combination of these rewards*" (Choudary, 2016).

This excerpt from The Platform Revolution describes it perfectly. For the interview subjects the goal of streaming varies a bit. Some does it for fun, some for the fame or allure of success as Matt Franklin says. Some fulfilment in that

they can show others how good they are, or find fulfilment by helping others becoming better, and some for fortune, making enough money on donations to sustain a living.
When joining a stream on Twitch it is also made very visible how much the streamer has earned, and how much is being donated to him right now. This can encourage active viewers to become streamers, watching someone else succeed and earning money from it. Several of my interviewees were drawn to Twitch by their friends, either by asking them to join, or by sharing something from Twitch or Beam.

"*Actually it was my little brother who introduced me to Twitch*" (Brixen, 2017).

"*I began streaming myself because I felt I had something to offer. Watching these streams I felt that I could do the same or better than people who are already streaming*" (Saavedra, 2017).

"*Also I was used to watching other people stream their games and thought "Why not*" (Caras, 2017).

To sum up this section it is apparent that both Twitch and Beam are utilizing social strategies. Both platforms encourage viral growth by focusing on easy ways to share content and by "rewarding" streamers for sharing their content via other social medias. Social strategies have been a part of both platforms initial customer acquisition as several interviewees said they started streaming because they saw others doing the same and was introduced to it that way. Twitch is working on a friend function that allows you to compare earnings and audience amongst friends, to create a level of competitiveness between friends. This can help keep streamers engaged, striving to be the best.
Beam has an exciting feature called "Teams" where streamers from the same organisation can team up and earn rewards or team rewards. Each individual earns "team points" for their streaming team, and it will show up how many points each team has. This is another way of keeping streamers motivated to do their best and be consistent.

6.4 Network effects

In this section I will analyse how network effects have affected the adoption of Beam and Twitch, and also if this has had any role to play in the engagement of streamers.

Network effects are in short the theory of value or disvalue in numbers. If a high number of users increase the value of a product, it is called positive network effects. And on the other hand if a large number of users causes a product to lose value, we refer to it as negative network effects. Parallels can be drawn to other sections of the analysis since network effects occur in several sections of Twitch and Beam.

I will analyse if network effects are purely positive or if there can be negative impact as well when looking at Beam and Twitch. For platforms like Twitch and Beam I am investigating two sided network effects (Choudary, 2016). I will, however, only go in depth with the elements that relate to the platform adoption of streamers and engagement of streamers.

For the analysis of this section I have taken quotes from the interviewees that highlights the positive outcome of network effects below. Further down I will examine the negative comments about network effects and in the end I will compare what the streamers think are important, what's good and what's bad.

"*The user base here is so enormous and I don't think you find that anywhere else. I would be surprised to see any other live streaming site with as much content as Twitch*" (Caras, 2017).

"Twitch has a bigger potential because there are more viewers, but the issue is getting there. Beam's viewers seem to be a bit more experimental" (Reise, 2017).

"It's about building your own audience so it doesn't help showing your product somewhere if there are no people. It is like giving free samples of your product in

the middle of the woods, it does nothing for you if there are no customers" (Hjort, 2017).

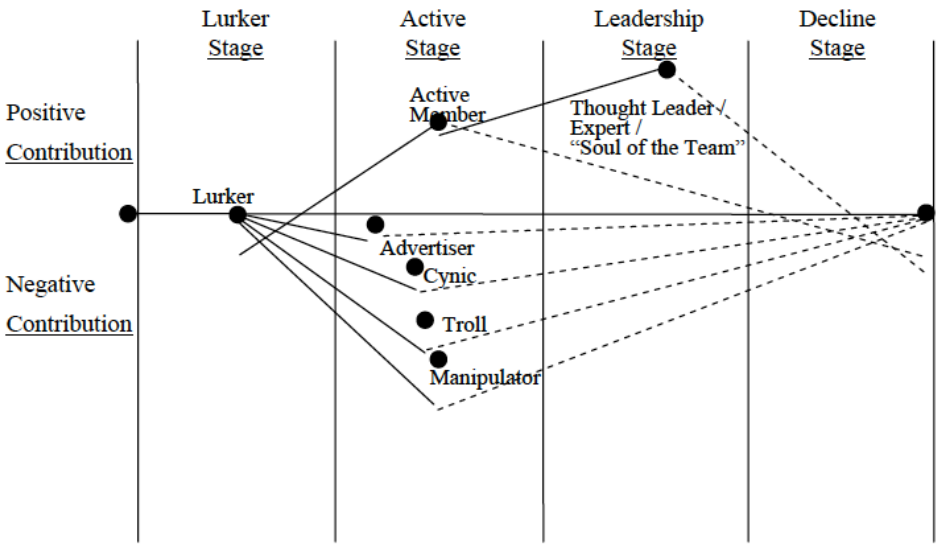
"With Beam if the audience isn't right there with you, the show dies. We don't stream video game content we stream 3 different shows. One is an art/drawing show my wife does, one is us playing live chess and one is me doing a comedy show with audience participation and in all of those if you don't have an audience there with us you have 1 – 2 hours of people sitting there looking very bored, not having anything to say, and no one is going to come back to that." (Franklin, 2017)

"*I see Twitch a bit like Facebook today. There are many other companies who want to create Facebook 2.0 but as long as Facebook has all the users you won't get people to migrate to another site"* (Saavedra, 2017).

These are just five examples of streamers who believe that network effects are important for the platform. If there are no audiences, in the end, there will be no streamers. It is safe to assume that people does not go online and set everything up just to stream without an audience. Therefore, the network effects are important for these platforms. The more different content there is on the platforms, the more value there is for the audience, and vice versa. The more audiences there are for the streamers the more people they can interact with. For the streamers, an audience is alpha omega however it does not necessarily need to be a big audience.

Lasse Brixen states: "*It's not about how many viewers you have, but which viewers you have, that's really important to know, at least for me. You can have 2,000 viewers who are all idiots and then have 25 viewers who are the best people in the world, for me I would much rather have the 25 people."*

For my interviewees audience matters and I think it's safe to assume that everyone cares about an audience when live streaming. Otherwise you might as well just be playing alone. However, as Lasse says, the right audience is key. As a streamer it is obvious you want the audience with positive contributions.



Picture 7 Development of successful on-line Communities (Wagner, 2005)

The above figure shows different types of people who can be part of your community. As a streamer you want to get as many active members as possible and as few of the types below the line. Each type of negative contributor always drives away the ones you want, the active members (Wagner, 2005). Unfortunately, the bigger the community the harder it is to control and can result in negative network effects.

"With a big audience you get a bad community I think. That's a shame but that's my experience so far. I am afraid a great community is hard to preserve with great numbers." (Franklin, 2017).

And numbers do matter. The once popular live stream gaming site X-fire shut down late 2016. As described in the article "What happened to X-fire" (Gazette review, Rogers, 2016) it was a downward spiral competing with Twitch and YouTube. Audience started to leave for other sites such as Twitch and that meant a decline in streamers. It continued like that until the end of X-fire and this serves as an example of negative network effects.

To sum up the findings of this section it is clear to see that an audience matters. Nobody would live stream if there were no people watching. However, the audience does not have to be enormous. It seems as if the streamers are more interested in having the right audience then a large audience. Positive network effects have been a part of the initial adoption, since streamers seek the platform(s) with an audience. The network effects of having an audience and having other streamers present seem to impact the engagement as well, as a streamer you don't want to stream on an empty platform.

Negative network effects can be a threat to Twitch and Beam if streamers leave the platform for a new place to live stream. However, for a new place to be attractive for streamers it would require an audience and it would seem that Twitch will keep its almost monopoly on live streaming for now.

6.5 Online communities

Online communities were one of the concepts that chosen interviewees talked most passionate about, and in this section I will go through what it means for the initial adoption of live streaming sites, and what role it plays in keeping live streamers engaged.

All eight interviewees had one thing in common; they wouldn't do it if it weren't for the social interaction.

"*It is insanely important that there is a good community when I stream*" (Saavedra, 2017).

"*I know money comes with it if you get a lot of viewers, but my goal here is to be able to share this with people and become a bigger part of the community, and it just seems like a really cool thing*" (Reise, 2017).

Brent Reise, along with the other interviewees had a lot to say when it came to the online community. Brent started out streaming because he wanted to join the Call of Duty community on Twitch: *"I just thought they seemed really cool you know what? I want to join. But I couldn't join unless I had my own content to stream so I started doing that."* Beam as a platform puts a lot of emphasis into the community with an active forum and the "team" feature, which rewards you if you play as a team of streamers. Also the community on Twitch and Beam can function as lock-ins to prevent live streamers from switching platform. *"Right now I just have a small following on Beam and migrating that to Twitch would be difficult."* It is not guaranteed that viewers follow streamers from one platform to another.

When asked how much the social aspect of live streaming meant to him, Andreas Hjort said *"It is about 90% for me, it's what drives it; it's what makes it fun. I can interact with people so it's not just me sitting there playing. I actually started making YouTube videos as well, but I quickly found out there wasn't the same interaction. That's why I choose Twitch as well."*

When I asked Lasse Brixen what kept him engaged he replied: *"It is hard to say, but I think it is kind of like if I would stop talking to my friends for 14 days, that's a pretty douchebag move. I feel like people rely on me to stream and they enjoy my content. It's hard to explain, but it's my friends I stream to. Many of these people are people I have met in real-life as well. The gaming part is 20% and the social community is 80%.*

From the data collected through the interviews it is obvious that a social community means everything to the live streamers. Some have adopted Beam and Twitch to join community, and some seek to create their own.

"*It makes me really happy to see people communicate in my stream. I don't have to read it out loud, but that people actually interact between each other while I play – That's the dream. It's not about me but that people can come and have a good time in my stream"* (Saavedra, 2017).

For Matt Franklin it was the community that made him choose Beam over Twitch: *"I think in the beginning Beam's community was very open and welcoming and that was partly why we choose this platform over Twitch as well, but I think it's about the law of large numbers. With a big audience you get a bad community I think."* Matt believes that with a big audience you get a bad community and despite the interviewees positive comments about Twitch's community there are some problems it seems. Claudio was very passionate about the topic of racism and describes the problem with Twitch as follows:

"*I think Twitch has some problems with their community. Especially the use of emotes and being racist. The community can be really racist and I don't like that at all. I have zero tolerance for that. I think it is insane that Twitch is that bad at handling that. Even in big tournaments people are trying to put racist emotes and I just want people to ban them."*

Clearly the community on either Beam or Twitch aren't perfect, but it seems like the main reason people start to live stream and join these online platforms are the community. It seems as if it is only recently that Twitch and Beam have become aware of the impact that the online community has for their users. Twitch has launched a new beta initiative called "communities." A site dedicated to finding and creating communities.
Beam has a section called "community" as well, where the focus is on a forum and contact in between gamers. Not as much contact from business to consumer. On Beam you can even be rewarded with their currency 'sparks', for consistently helping out people on the forum. And it appears that a healthy community isn't only benefiting Twitch and Beam as companies in that they acquire and maintain streamers. Audiences are also more willing to pay when they are engaged. A study conducted by Streamlabs, the leading company within third-party applications for live streaming, shows that viewers who have been signed up for Twitch for 24+ months spend 253% more on the site than new viewers who have been signed up for less than 3 months. New viewers donated on average 22.92$ where older users on average spend 81.10$ each. "*Fans not only continue*

to spend, but actually spend nearly 3X more as they get more engaged" (Moiz, 2017, Streamlabs).

It is also interesting to see that viewers choose their way of payment to maximize profit to the streamer when it comes to larger amounts. In the same report by Streamlabs it says: *"For larger transactions, viewers tend to pick tips over other methods since there are no additional fees for streamers. Streamlabs keeps 0% fees, and all proceeds go directly to broadcasters."* With smaller amounts, viewers choses what's most convenient, but with larger amounts they care that the streamer gets it all.

To sum up this section it is obvious that live streamers are driven by the social communities built or being built around gaming. Every live streamer I have interviewed stated that the reason they live streamed was mainly the community and that they had made friends for life through Twitch and Beam. Some have even connected outside the live streaming environment and met in real life. Live streamers are driven by the social interaction on sites whether it is discussing gaming, sports or other matters. Communities are strong drivers of adoption.

Beam was built upon the foundation that live streaming was an interactive profession (Salsamendi, 2016), and Twitch has during the last couple of years realised that the driver was more the social interaction than the games themselves, and they are therefore doing more and more for the community every day.

It seems as if a new platform should try to compete with the monopoly Twitch has. Community should be prioritized; however, it is hard to keep a positive community with a large user base. As Matt Franklin says:

"It's like watching a child grow; as it gets bigger it learns bad words. I don't think there's any way around it, it's adapt or die."

6.6 User generated content

In this section I will look at the role user generated content plays when it comes to adoption of live stream gaming sites, and the role it plays in order to keep

streamers engaged. How does Twitch and Beam encourage users to create content? And does the amount of user-generated content matter? Some of this information has already been covered in the other sections, but I will briefly go through what user-generated content means to the adoption and engagement for live streamers.

Looking at Twitch and Beam, both platforms wouldn't exist without user-generated content as both platforms only acts as mediators between viewers and streamers.
When asked about how easy it was to get started on Twitch, Claudio said *"It was not a barrier for me, but I think it could easily be for others if they don't have the same technical background."*
You do require some technical skills to set up your live streaming. Twitch provides free plugins that can help you set up your streaming. But there are very few in-house tutorials. If you want guidelines you need to visit YouTube. For Beam they have the one-click streaming for Xbox, and soon for PC's running Windows 10, so they definitely have focused on convenience for the streamers, trying to get as many new users on board as possible.
On Twitch it appears that streamers have figured out how to set it up, having more than 250,000 monthly active streamers in January 2017 (Moiz, 2017, live streaming Twitch vs YouTube).

Many of the interviewees started out by watching live streams before they started streaming themselves. Andreas Hjort describes how he began streaming:

"First time I saw Twitch I was watching professional counter strike. It was back just around Justin.tv switched to Twitch. Until I started out streaming it was mostly to watch how professionals was playing."

And his story is not unique. When looking at my other interviewees, everyone started out watching someone else's stream, and if you look at different guides to becoming a live streamer, it states almost everywhere that you need to spend a lot of time watching others to find out what suits you.

There are various sites like Tom's guide, Reddit, and other pc magazines that offer guides on how to start your live streaming career. The theory of user-generated content is closely related to network effects. The more content is put up, the more value there are for viewers. Many of the streamers today began watching Twitch and then turned into live streamers themselves, thus user-generated content has been a big part of the initial user acquisition.
What you can view on Twitch and Beam is entirely up to the users within the code of conduct. It appears that user-generated content have attracted a lot of streamers and made them strive to do it better. However, it would be safe to assume that streamers don't join live streaming sites just for content. Ronan Harris, managing director of Google in the UK says that 400 hours of video is uploaded to YouTube every minute (Harris, 2017, Improving our brand safety control) so when it comes to user-generated content, Twitch and Beam are being heavily outnumbered.

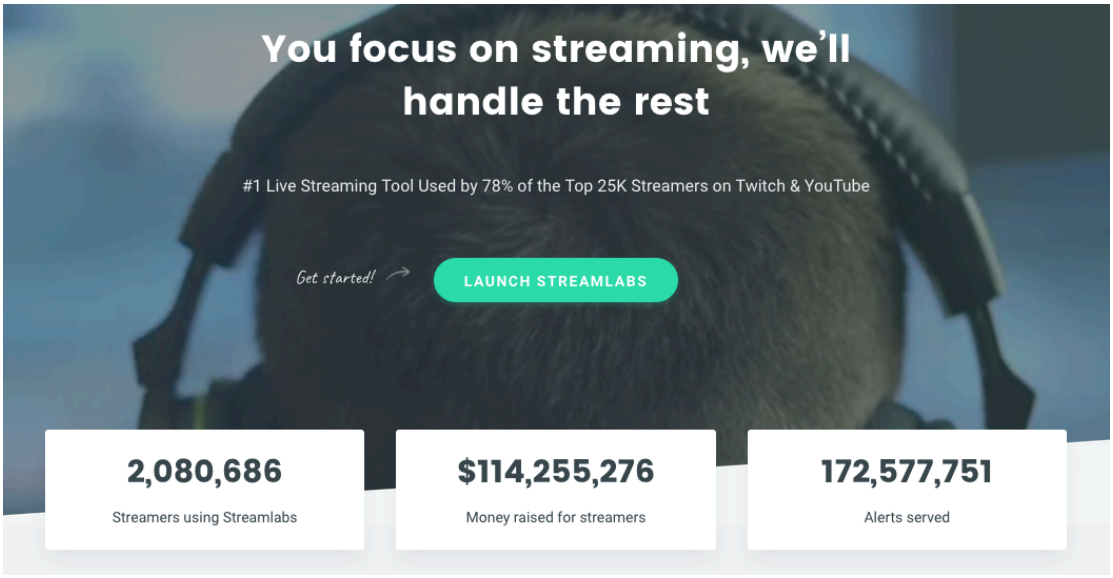
To sum up this section, it is clear that the amount of user-generated content does matter when it comes to acquiring the initial live streamer user base. It is closely related to the positive network effects: Streamers don't want to stream to an empty platform. And viewers don't want to use an empty platform. It does not seem like the technology is a barrier preventing people from creating their own content, since Twitch had more than 250,000 active monthly streamers in January 2017. It did not appear as though there were any connection between engagement and user-generated content: If there are viewers, there will be streamers.

6.7 Platform control

In this section I will look at the role platform control plays when it comes to the adoption of live streaming platforms. I will investigate if a strict or open platform control policy has any effect on the engagement of live streamers.

Choudary explains what it means to have an open platform control policy in The Platform Revolution, 2016: *"A platform is "open" to the extent that (1) no restrictions are placed on participation in its development, commercialization, or use; or (2) any restrictions, for example; requirements to conform with technical standards, payment of licensing fees is reasonable and non-discriminatory, that is, they are applied uniformly to all potential platform participants"* (Choudary, 2016).

Both Twitch and Beam are open platforms and both heavily rely on third-party applications in order to provide full value for the users. Until recently both platforms relied on PayPal integration to pay streamers. Twitch just opened up for the possibility to pay with 'bits,' Twitch's own currency, and are therefore not reliant on PayPal anymore, but as mentioned earlier, viewers like to donate larger amounts via PayPal to give as much profit to the streamer as possible. Twitch has also given birth to companies dedicated to helping live streamers on live streaming platforms. An example is Streamlabs, the leading site for third-party applications for live streaming platforms.



Picture 8 Streamlabs stats

When asked about platform control, Andreas Hjort said the following: *"I don't think Twitch is limiting the streamers at all, they also help you with their API and you can get almost all data for free, such as geographical locations of your viewers etc."*

He continued talking about the new 'bits system', Twitch's own currency. If you donate through 'bits,' Twitch will get a small percentage, and if you donate through PayPal, PayPal get a small percentage. Twitch does not enforce the use of their currency only, but let viewers and streamers choose for themselves. Also when it comes to broadcasting software, Twitch is compatible with many different programs. On Twitch's platform they let you choose from eight different broadcasting applications, none of which are their own and three different broadcasting tools such as Streamlabs. Currently Beam is not compatible with Streamlabs, but as it says on their website, they are working on it (Streamlabs, 2017).

When asked about the third-party applications and how it was compatible with Twitch and Beam and what it meant to him, John Shufelt answered: *"When I was streaming to xfire.com I could only use applications that were specifically made to xfire.com, and that is one reason for not being there anymore."*

When talking further about the subject, John told me that it was important that he could set something up on one live streaming platform and then keep the

settings if he wanted to use another site as well. John knew about Streamlabs, but used something called Tipjar instead, since Streamlabs's weren't currently usable with Beam. As it appears on Streamlabs's website they are currently working with Beam to make their third-party applications compatible. However, Beam is also putting a lot of work into their own system called "Interactive 2.0".

You could speculate that the reason why Beam isn't compatible with Streamlabs is that they want viewers and streamers to use Interactive 2.0 instead. Interactive 2.0 will be a program available to everyone, and you can code in different languages such as C++, Unity / #C and JavaScript, more will be presented later on. Interactive 2.0 will be free to use and as user-friendly as possible. However, it will only be compatible with Beam. You can't develop third-party applications in Interactive 2.0 for Twitch or YouTube. This could be a clever lock-in mechanism for Beam. If you create with Interactive 2.0 you stay on Beam.

Interactive 2.0 were scheduled to be released March 2nd but was delayed. When I talked to Matt Franklin, it had not yet been released. When talking about Interactive 2.0 and the new possibilities he said: *"As far as I can see you might even be able to create your own games on top of the Beam overlay that will be in your streams. If you think of the possibilities and are a bit creative, it has the potential to become amazing. I can create a game on Beam that my audience can play, while I narrate it. The field of possibilities opens up when they get there."*
He continued talking about the possibilities of creating a D&D (Dungeons and Dragons) game on Beam where he as a game master would create a map and the viewers would be the players in his world. It was easy to hear that he was very excited about it.

When I brought up the subject of copyrighted material it didn't have any importance for the streamers. Matt said he knew that on Beam you had copyright on the content you stream, however he didn't know for how long they kept it. On Twitch the content is kept for a week if you aren't partnered, but as Claudio said

he had no idea if Twitch has the rights to use it for commercial purposes and he didn't really care.

To sum up this section, it appears that both Twitch and Beam are open platforms. Both platforms let third-party developers build programs for their interface without additional costs or strict regulations. Beam is not yet integrated with Streamlabs, but will become so in the future. John Shufelt said very specifically that he left Xfire because they didn't allow many of the global third-party applications that were available for Twitch. It was obvious that all the streamers I have interviewed used these third-party applications in one way or another, and some more than others. It is hard to say if the openness of the platforms has had anything to do with the adoption of the platforms. But it seems as if use of these third-party applications make live streaming a better experience.

If platforms such as Twitch decided only to use programs designed in-house and not to co-operate with Streamlabs, it would harm the engagement of live streamers, and would definitely be a reason to change platform. Beam is working hard on creating their own developer lab labelled "Interactive 2.0" which could increase engagement for live streamers on Beam, due to the variety of new possibilities this developer lab could bring.

6.7 Digital customer relationship & Digital partnerships

In this section I will look at the role of digital customer relationships & digital partnerships when it comes to adoption of live stream gaming platforms and how it affects engagement of live streamers. The concept of digital partnerships is not included in the theoretical framework as I discovered it through interviews. The reason I choose to include this concept was that almost all of my interviewees talked about digital partnership, and the concept has been very present on both Twitch and Beams platforms.

The digital customer relationship on both Beam and Twitch varies a lot depending on whether you are a partner or not. When asked about the relationship, Andreas Hjort had Twitch he said:

"The structure of the company means that if you are a small streamer and want to have some influence, it's a hard ladder to climb. So that is definitely a downside."

He went on to talk about the fact that there is only one Danish representative, and as a Danish streamer you are a very small part of Twitch's business and therefore it is hard to get a say.

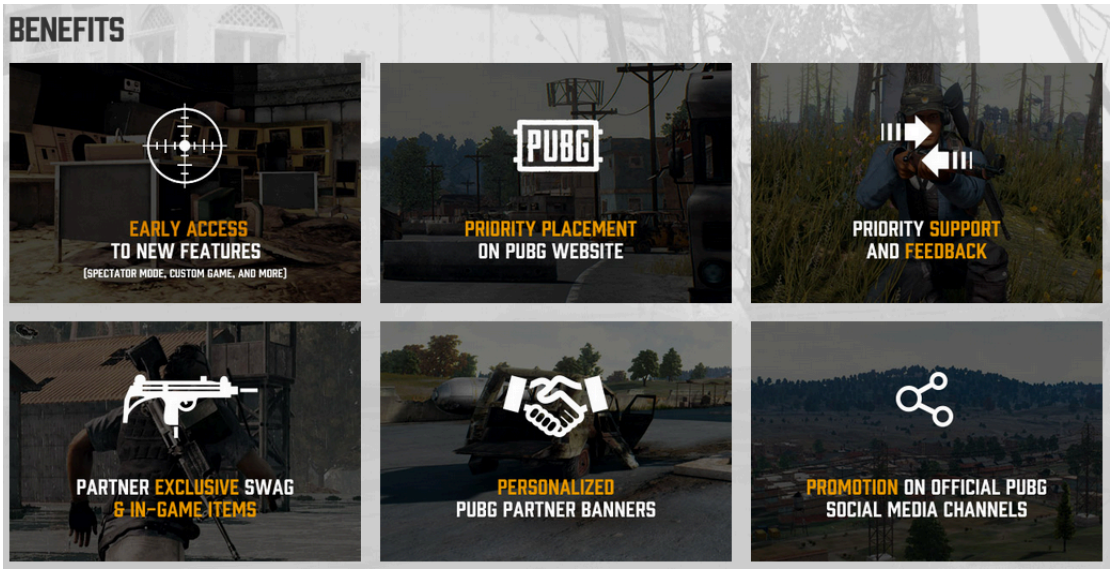
"There is only one person assigned to the Danish streamers so it can take some time if you want to discuss something." (Hjort, 2017)

Andreas was part of Gamerhuset, and that community had partner status. Andreas were able to bring along his partnership status to his own channel when Gamerhuset disbanded. As a partner you have a guarantee that if you send a request via e-mail, Twitch will at the latest answer within 24 hours.

Lasse Brixen is also a partner with Twitch and when asked about the customer relations he said: *"If you are a partner like I am they have a specific mail you can send inquires to. If you send a mail to that address they answer within 24 hours. As a partner I would say it's very good."*
Lasse went on talking about the other benefits there is being a partner with Twitch. He explained: "*if you aren't a partner your viewers can't decide what quality they want to see it in, they can only stream the same quality as you show it in as a streamer."*
This means that you as a streamer have to adjust to the quality in which your audience can watch streams. Otherwise you won't have an audience. He explained that to become a partner you need a certain amount of viewers and you need to be consistent. You would have to stream at least three times a week on a schedule: *"Once you have reached partnership you can lose it again if you don't keep streaming and keep being committed."* (Hjort, 2017)

Andreas said he had talked to Killjoy, Twitch's Danish administrator, who said that being a partner with Twitch was a "stamp of approval" for your content.

Being a partner with Beam and Twitch does not only give you advantages when streaming on their sites. In some cases, other game developers are looking for Twitch and Beam partners to promote their games, which can lead to advantages in the computer games. An example can be seen below from the early access computer game "Player Unknowns Battlegrounds".



Picture 9 Benefits of being a Beam / Twitch partner

The picture above is an example of the benefits you can archive in an actual game, if you are partner with Twitch or Beam and are able to broadcast the games' content to these channels. Being a partner on these live streaming sites is no longer only an advantage because you get better customer service or rank higher when people are looking for streams, but also an advantage in the games itself. Game companies realise that the best advertisement for their games are live streamers with a large amount of followers.

Twitch is no longer just a live streaming platform, but aims to be a marketplace for games as well. Starting in the US, streamers will be able to advertise for

games on their stream, and if a viewer buys a game through that channel the streamer earn 5% of the games' value (Byrne, 2017).

"Many of our streamers want to make a living doing what they love," said Matt McCloskey, VP of commerce at Twitch.

Also SVP at Telltale Games said: *"The Twitch community is a key part of everything we do, from getting the word out about a game we're launching to maintaining an on-going dialogue with our fans. By allowing viewers to help support their favourite streamer just by buying a game on Twitch, we're able to help strengthen the community that has done so much for us."*

When asked about Partnerships on Twitch and Beam, Claudio Saavedra said: "*I am not Twitch partner now, but that is my goal for 2017, but I have to really put in some work. I recently purchased a new computer for that goal. I have used my donation money to buy a new webcam, keyboard, mouse and headset only from donations. That's really nice that you can do that. All donations I have ever received have been aimed at getting a better setup and improving my stream."*
He continued about how you have to be consistent, and if you want to be a partner you have to really show you are committed. As a partner with Twitch you have certain advantages most notably, however, is that you have several ways to monetize your channel. Two key ways to do this are:

Monetize Your Content: As you use Twitch to grow your audience, you'll also earn a share of the revenue generated from all broadcasts on your channel! Partners can determine the length and frequency of mid-roll advertisements through their dashboards.

Channel Subscriptions: Twitch Partners can earn even more revenue through channel subscriptions. If you choose to enable this feature, viewers can purchase a monthly subscription to your channel in exchange for access to special perks.

The benefits are almost exactly the same for Twitch and Beam partners. Besides the two advantages above you get access to custom emotes and other small perks.

Matt Franklin has a dream of becoming a partner on Beam. He said the following when asked about partnership: *"So far we have 3 scheduled broadcasts that is what you need to become partner, and that is what we are going for. Despite it being very hard. We use web cams and we work really hard on our branding. Three times a week with anything else I can throw at it, as time permits."*

It is not an easy task to become partner at either platform, but if you make it, there are several things you can gain from it. Number one being the option to monetize your channel in different ways.
To sum up this section it shows that it can be a big advantage being a partner with either platform. As a streamer you gain several perks both when it comes to the platform experience and monetization, but it can also be an advantage when playing computer games such as the example with Player Unknowns Battlegrounds. Becoming a partner is not an easy task and is definitely a part of keeping streamers engaged as they are striving to archive something. Something that takes time and consistency, but always rewards them.
Beam and Twitch have almost the exact same requirements and benefits from becoming partnered, and it would be safe to assume Beam has learned from Twitch. With the new initiative of streamers getting paid for computer games sold through their channel, there is an even bigger reason to become partnered. Not only because you will be able to earn 5% of the game price, but also to be featured higher on the front page and get even more viewers who potentially could buy a game through your channel. Twitch has also gone the extra mile by promoting one of their partner channels on the front banner of their landing page every week, making it even more lucrative to become a partner.
There is no doubt that aiming for partnership status and having to maintain it by being consistent is crucial for the streamers engagement.

7. Discussion

Throughout this thesis the adoption of live stream gaming platforms and the engagement of live streamers have been studied and analysed. There is very limited theory on the concept of adoption of live streaming platforms and the engagement of live streamers from the streamers point of view. However, several concepts were discovered when looking at related literature. These concepts are the ones analysed in the theoretical framework and throughout my interviews, another concept was identified, digital partnerships. Hamilton, et al, 2013, suggests that people are drawn to live streams for two reasons: *"They are drawn to the unique content of a particular stream, and they like being interacted with and participating in that stream's community."* Hamilton, et al, 2013, provides a theory for why people in general seek to engage in live streaming. Building upon that I have been analyzing why the segment that creates the content, the live streamers, adopt streaming sites and what keeps them engaged. In order to specify the findings of this thesis, the theoretical implications will be discussed around the conceptual framework, followed by a discussion of the practical implications. These discussions will be followed by the thesis limitations ending in a suggestion for further research.

7.1 Theoretical implications

In order to discuss the theoretical implications, we will have to revisit the conceptual framework.

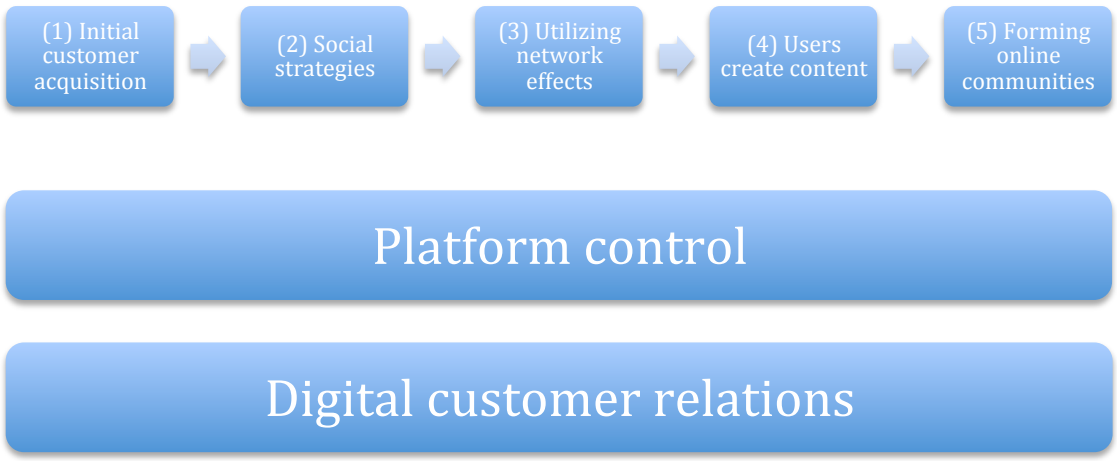


Figure 2 Conceptual framework

The process as seen above suggests that the adoption of live streaming platforms and the process of keeping streamers engaged is divided into five steps while two underlying concepts should be present at all time.

From the theoretical framework it was discovered that one of the biggest issues concerning the initial customer acquisition when it came to multi-sided platforms was the "chicken or the egg" dilemma (Choudary, 2016). In my case, do you attract viewers or live streamers first? As discovered in the interviews the audience is a big part of the live streaming experience.
Twitch was one of the first options when it came to live stream gaming and started out by enabling people to become their own broadcasters. Twitch had an obvious advantage by being a first mover and most of my interviewees have tried Twitch because it was the only option they knew about at the time.

Beam solved the "chicken or the egg" dilemma by making live streaming easier with a one-click stream and integration with other products such as Xbox and Windows 10. Products many people already had. This strategy is known as the piggyback strategy (Choudary, 2016). It is safe to say that it would be a hard

market to enter for a new live streaming site now that YouTube, Twitch and Beam are already there. Most likely we will see Facebook moving in on the live stream gaming market in the near future judging from the revenue that this market possibly can generate.

Piskorski, 2013, suggests three components that all social strategies share. (1) Reduce costs or increase customers' willingness to pay (2) by helping people establish or strengthen relationships (3) if they do free work on a company's behalf. It is now clear to see that both Twitch and Beam utilizes social strategies and those three components matter. They reduce cost and increase customer willingness to pay by mediating free content and letting people pay whatever they feel like. Most content comes included with a free Twitch or Beam user. The platforms help establish or strengthen relationships by making live streaming an interactive experience, having features like chatting, encouraging forming of communities, emotes and other features. And they do free work on the companies' behalf. The live streamers create hours upon hours of content and the viewers advertise to other social medias for their favorite channels, increasing the revenue for both streamers and the platforms. The analysis of the interviews showed that this social interaction was a big part of keeping streamers engaged.

Throughout the interviews it was clear to see that network effects mattered. Choudary, 2016, best explained the theory of network effects: "Network effects refer to the impact that the number of users of a platform has on the value created for each user." It was found that there existed both positive and negative network effects on Beam and Twitch. A positive feedback loop was discovered within the platforms: The more the live streamers could earn, the more content they create. The more content they create, the more viewers will at some point be in your channel, and the more viewers in the channel, the bigger chance of earning money.

There were however also negative network effects as the interviewee Matt Franklin described it: "*It's like watching a child grow; as it gets bigger it learns bad words. I don't think there's any way around it, it's adapt or die.*" The more

people that joined the live streaming sites, the worse became the communities. This size of the platforms audience could seem to impact engagement in both a positive way and a negative way depending on the interviewee. Several interviewees preferred a smaller amount of viewers because it gave a better tone of voice and it was more manageable. Some were more engaged with larger audiences and some with smaller. But all interviewees had in common that the audiences mattered a lot to their engagement.

Network effects and audience size are closely related to online communities, which were discovered to be one of the most important concepts for the initial adoption and engagement of live streamers. This concept was the one that my interviewees showed most passion for as well. Carver, 1999, said: *"Virtual communities are about aggregating people. People are drawn to virtual communities because they provide an engaging environment in which to connect with other people – sometimes only once, but more often in an ongoing series of interactions that create an atmosphere of trust and real insight"* This is the key of online communities, engaging environment in which to connect with other people. This environment is Twitch and Beam partly creators of, but more than creators, they are moderators giving viewers and streamers the same opportunity to build their own communities. As mentioned, both platforms are aiming at improving the online community and making it easier and more accessible for people to become a part of a community. On Twitch they call it what it is "Communities" and on Beam they call it "Teams".

"One-to-many communities are hubs. They can be relationship, informational, or transactional hubs" (Wagner, 2005). In the case of Twitch and Beam one-to-many communities work as all three, with the main focus varying from streamer to streamer. People are live streaming looking, for personal relationships with people – friends. People are watching live streams to become better at a certain game – informational, and some people are live streaming to earn money – transactional. The platforms can act as all three.

It was very obvious from the interview data that live streamers were kept

engaged due to the relationships they formed and the transactional value. Also many of the interviewees started live streaming to become a part of a community and, therefore, it had direct influence on the adoption of live streaming platforms. The informational focus was mostly for the viewers, however, streamers could occasionally learn a thing or two from the chat as well.

In 2013 Parker et al wrote: "*On the one hand, these developers can extend the platform's utility to end-users and can thus create revenue streams that the sponsor can tax. On the other hand, loss of control over open technology creates a loss of revenue through the threat of more intense competition*." Beam and Twitch are both very open platforms. They allow for the extraction of data through their APIs, and both can be integrated with most live streaming tools available on the Internet today. The biggest live streaming third-party site, Streamlabs served several hundred thousands of users and was at the moment only compatible with Twitch. However, in the future it will be functional with Beam as well. Looking at the adoption of live streaming platforms, platform control did not seem to have a significant role. When people chose to adopt a live streaming site, they did not look at what options there were for third-party applications beforehand. When it came to the engagement of live streamers, it was safe to say that platform control played a role. The third-party applications made for a more convenient and interactive experience resulted in increased engagement from the live streamers. Before Twitch invented their currency "bits" the only way for a streamer to receive money was through a third-party application such as PayPal.

Seeing how Beam and Twitch enable everyone with a webcam and an Internet connection to become their own broadcaster, user-generated content has had a big influence on the adoption of live streaming sites. Seven of eight interviewees stated that they have adopted Twitch because they saw other content being live streamed on Twitch. Whether the continuing engagement of live streamers had anything to do with other content on Twitch and Beam was hard to say, however, the general approach was that if you are live streaming, you are watching live streams as well.

When looking at the relationship Beam and Twitch have with their customers, you might initially say it's down prioritized due to almost non-existing focus of customer support on their site. You can write a mail or chat online, but mostly both platforms aim to move the traditional customer support away from the companies themselves, and into the hands of other community members. Creating a forum where people can help each other is a leaner way of doing customer support, and it saves companies lots of money by hiring fewer customer supporters. Payne mentions 7 new approaches to marketing. Specifically Twitch and Beam utilizes number 2 and 5. "The realization that customers are a business asset and not simply a commercial audience" and "The greater utilization of technology in managing and maximizing the value of information" Customers are a business asset, especially streamers who attract viewers. Also Beam and Twitch utilizes information technology making data available for the streamers so they can become better at marketing their channels and thereby creating more awareness for the platforms. That there are very limited customer support does not mean they do not nourish their customer relationships. "*CRM is aimed at increasing the acquisition and retention of profitable customers by respectively initiating and improving relationships with them*" (Payne et al, 2015). Twitch and Beam does listen and try to constantly improve their relationships with customers, but especially one segment is being catered to – the partners.

The Twitch and Beam partners are the channels that gross the biggest number of viewers and thereby the biggest income. Until you are a partner it can be hard to get a say. However, when you become a partner a lot of new opportunities open up to you, one example being the Twitch partner mail where the response time is maximum 24 hours and new ways to monetize your channel. The customer support relationship did not appear to have any influence on the adoption of live streaming platforms nor the engagement of streamers. However striving to reach the partnership goals and get the stamp of approval seemed to be a major factor when it came to the engagement of live streamers.

7.2 Practical implications

When studying the adoption of live streaming platforms and the engagement of live streamers, there were several findings mentioned in the theoretical implications above. For this section I will go through the most important findings, - and the ones I would suggest anyone either trying to start or maintain a digital live streaming platform - to focus on.

7.3 Online communities are the essence of live stream gaming

Throughout the analysis it becomes obvious that the concept most interviewees were passionate about was online communities. It was by far the main driver for engagement and had a big role to play in the adoption of live streaming platforms. Interviewees like Lasse Brixen and Andreas Hjort even made friends online and also met outside the gaming world. It seems as if Twitch and Beam have realised that the community is what's keeping live streamers committed, and therefore they are increasing the focus and the convenience of being part of a community on their platforms. If you as a platform developer are to gain traction and maintain live streamers on your platform, you have to focus on community building.

7.4 Aiming for the stamp of approval increase engagement

A concept that was discovered throughout the interviews and wasn't a part of the theoretical framework was partnerships. Not traditional B2B partnerships, but becoming a partner with either Beam or Twitch. It was something that seemed like a carrot at the end of the stick and most streamers aimed for it if they were not there already.

Killjoy, the Danish Twitch administrator, said it was a stamp of approval and besides improving your status amongst streamers there were several benefits of becoming a partner, not only on the platforms, but also in the different computer games such as Player Unknowns Battlegrounds. Game developers are beginning to realise that platforms like Beam and Twitch are where the people are finding out what to play next, and if popular live streamers like or dislike your game, it can result in a successful business or the downfall. If you are a platform

developer, you have to keep in mind the "carrot on the end of the stick" effect. Once you become a partner you can lose your status as quickly as you gained it. Therefore, it is important to keep creating content or you can quickly lose the status again.

7.5 Engaged streamers can create positive feedback loops

If you as a live streaming platform get the streamers they can produce ambassadors to market your platform. As Matt Franklin said, when he creates content that is worth sharing his viewers will share it to their social media as well. This creates a positive feedback loop where viewers will advertise for your platform in turn, creating new viewers and streamers. As long as you have engaged streamers that are broadcasting good quality content the mentioned positive feedback loop can occur, reducing the marketing cost for your company.

7.6 Limitations

One limitation with this thesis was the sheer amount of live streamers. I have interviewed eight and there are on Twitch alone 250,000 live streamers. The live streamers were hard people to reach and very busy people. Originally I would interview only Danish streamers to have matching geographical locations, but it appeared to be hard to get enough Danish streamers to participate, and I wanted streamers who had tried to have an audience of more than five people.

Furthermore, both the developers at Beam and Twitch were very busy and unable to participate for an online interview. It would have been beneficial to hear their site of the story as well, understanding what they as platform developers aimed to do and how.

Another limitation is to the concept of reliability and validity. The online live streaming platform industry is moving incredibly fast and new things are developed on a weekly basis. Furthermore, many of the interviewees were interviewed via Skype due to their geographical location, and I was unable to get a read on the situation as you would in a face-to-face sitting. Despite having

webcam access during the interview, it is another experience conducting an interview face-to-face.

7.7 Future research

Despite concluding some important results, there are several areas that could benefit from future research.

It would be interesting to analyse if the geographical factors had anything to do with the adoption of live streaming and engagement of streamers. Throughout my research it seemed as if the geographical location did not matter to the answers, since interviewees in Denmark and USA had many of the same points. Also conducting the same analysis with 200 streamers instead of eight could be interesting.

Furthermore, it would be interesting to divide the interviewees into different economic groups and see if the adoption and the engagement changed the more revenue a live streamer would generate. If you earn more than 1,000$ a month on live streaming does your priorities change? Claudio Saavedra hinted at this in his interview saying he hated larger live stream channels where everyone was a racist and people spammed the chat. Despite this fact, the channel owner made a lot of money.

8. Conclusion

The goal of this thesis was to answer the research question and the hypothesis through the conceptual framework created from existing literature and concepts related to the research question. Throughout this last chapter I will reveal the key conclusion that my research has exposed.

First I will conclude on my three hypotheses.

"Community matters:" When it comes to online communities it has been proven it matters a lot. It was one of the concepts my interviewees were most passionate about. Nine of nine said communities were their reason for live streaming.

"Platform control needs to be limited:" Twitch and Beam have both accepted limited platform control and enable many third-party developers to build programs that work with their platforms. Furthermore, it is possible for streamers to extract all the data they want from the platforms, including geographical location of their streamers, peak hours, languages, average donations etc. However, if platform control really needs to be limited, it is hard to say since there only was one competitor who had a closed ecosystem and the shutdown. There was no reliable data provided to judge whether the reason to the shutdown was connected with their closed platform policy.

"Rich get richer:" Both platforms have had each their own advantage when it comes to initial customer acquisition. Twitch was a first mover on the market and Microsoft now owns Beam, enabling economic stability. Being bought by Microsoft also enabled easy integration with Xbox and Windows 10, providing a huge user-base. However, it is possible to say that all interviewees found audience to be very important and therefore would not live stream on an empty platform.

It would be safe to assume that once you hit critical mass on your digital live streaming platform, it will continue to grow.

To conclude on the research questions it is hard to say exactly what concepts mattered the most to the adoption of live streaming platforms. Both platforms have had unique opportunities when launching, and it is difficult to say which

platforms streamers would have chosen, if it weren't for these opportunities. The live streamers I interviewed had begun on Twitch because that was the first place where they could watch live eSports and it had more to do with a first mover advantage than anything else. It is important to notice, that none of the concepts can stand-alone. You can't have user-generated content unless you have content creators. And today you won't get content creators unless you have a functioning online community. Back when Twitch became Twitch from Justin.tv, it was different because there were very few if any alternatives. People didn't demand a functioning online community, partnerships or customer relations. Today, if people aren't satisfied with one live streaming platform, they can change to another, overcoming few soft lock-ins such as knowledge of the interface and audience.

When it comes to the engagement of live streamers, it was clear there was a connection between engagement and community. It played a big role for the interviewees that they had a functioning community, and that they shared their experiences with their online friends. The constant fight for approval amongst other streamers by becoming a partner was also something closely related to engagement. Live streamers would require new hardware as well as software to improve their streaming and in order to reach the level of partner where new opportunities unfolded and it seemed like the interviewees aimed for this status. Not only in respect of monetizing your channel, but also as regards in-game benefits in different computer games and other lesser features such as new emotes. The two biggest drivers of engagement uncovered in this thesis are clearly and beyond doubt: Digital partnerships and online communities.

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